

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION

Washington, DC 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, 2017

Commission file number 0-24531



CoStar Group™

**CoStar Group, Inc.**

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

**Delaware**

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

**52-2091509**

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

**1331 L Street, NW, Washington, DC 20005**

*(Address of principal executive offices) (zip code)*

**(202) 346-6500**

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

**(877) 739-0486**

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

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

<u>Title of Each Class</u>	<u>Name of Each Exchange on Which Registered</u>
Common Stock, \$.01 par value	NASDAQ Global Select Market

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

None

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

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

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Securities Exchange Act of 1934.

Large accelerated filer

Non-accelerated filer

Accelerated filer

Smaller reporting company

Emerging growth company

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

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

Based on the closing price of the common stock on June 30, 2017 on the Nasdaq Global Select Market, the aggregate market value of registrant's common stock held by non-affiliates of the registrant as of June 30, 2017 was approximately \$8 billion.

As of February 16, 2018, there were 36,094,701 shares of the registrant's common stock outstanding.

## **DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the registrant's definitive proxy statement, which is expected to be filed with the Securities and Exchange Commission within 120 days after the end of the registrant's fiscal year ended December 31, 2017, are incorporated by reference into Part III of this Report.

## TABLE OF CONTENTS

### PART I

Item 1.	<a href="#">Business</a>	<a href="#">4</a>
Item 1A.	<a href="#">Risk Factors</a>	<a href="#">18</a>
Item 1B.	<a href="#">Unresolved Staff Comments</a>	<a href="#">31</a>
Item 2.	<a href="#">Properties</a>	<a href="#">31</a>
Item 3.	<a href="#">Legal Proceedings</a>	<a href="#">31</a>
Item 4.	<a href="#">Mine Safety Disclosures</a>	<a href="#">31</a>

### PART II

Item 5.	<a href="#">Market for the Registrant's Common Stock, Related Stockholder Matters and Issuer Purchases of Equity Securities</a>	<a href="#">32</a>
Item 6.	<a href="#">Selected Consolidated Financial and Operating Data</a>	<a href="#">34</a>
Item 7.	<a href="#">Management's Discussion and Analysis of Financial Condition and Results of Operations</a>	<a href="#">35</a>
Item 7A.	<a href="#">Quantitative and Qualitative Disclosures about Market Risk</a>	<a href="#">55</a>
Item 8.	<a href="#">Financial Statements and Supplementary Data</a>	<a href="#">56</a>
Item 9.	<a href="#">Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</a>	<a href="#">56</a>
Item 9A.	<a href="#">Controls and Procedures</a>	<a href="#">56</a>
Item 9B.	<a href="#">Other Information</a>	<a href="#">58</a>

### PART III

Item 10.	<a href="#">Directors, Executive Officers and Corporate Governance</a>	<a href="#">58</a>
Item 11.	<a href="#">Executive Compensation</a>	<a href="#">58</a>
Item 12.	<a href="#">Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</a>	<a href="#">58</a>
Item 13.	<a href="#">Certain Relationships and Related Transactions, and Director Independence</a>	<a href="#">58</a>
Item 14.	<a href="#">Principal Accountant Fees and Services</a>	<a href="#">58</a>

### PART IV

Item 15.	<a href="#">Exhibits and Financial Statement Schedules</a>	<a href="#">59</a>
	<a href="#">Signatures</a>	<a href="#">63</a>
	<a href="#">Index to Consolidated Financial Statements</a>	<a href="#">F-1</a>
Item 16.	<a href="#">Form 10-K Summary</a>	<a href="#">62</a>

## PART I

### Item 1. Business

In this report, the words “we,” “our,” “us,” “CoStar” or the “Company” refer to CoStar Group, Inc. and its direct and indirect wholly owned subsidiaries. This report also refers to our websites, but information contained on those sites is not part of this report.

CoStar Group, Inc., a Delaware corporation, founded in 1987, is the number one provider of information, analytics and online marketplaces to the commercial real estate industry in the United States (“U.S.”) and United Kingdom (“U.K.”) based on the fact that we offer the most comprehensive commercial real estate database available; have the largest research department in the industry; own and operate leading online marketplaces for commercial real estate and apartment listings in the U.S. based on the numbers of unique visitors and site visits per month; provide more information, analytics and marketing services than any of our competitors and believe that we generate more revenues than any of our commercial real estate information and online marketplace competitors. We created and compiled our standardized platform of information, analytics and online marketplace services where industry professionals and consumers of commercial real estate, including apartments, and the related business communities, can continuously interact and facilitate transactions by efficiently accessing and exchanging accurate and standardized real estate-related information. Our service offerings span all commercial property types, including office, retail, industrial, multifamily, commercial land, mixed-use and hospitality. We manage our business geographically in two operating segments, with our primary areas of measurement and decision-making being North America, which includes the U.S. and Canada, and International, which includes the U.K., Spain, Germany and France.

### Strategy

Our strategy is to provide industry professionals and consumers of commercial real estate and apartments with critical knowledge to explore and complete transactions by offering the most comprehensive, timely and standardized information on commercial real estate and apartments and the right tools to be able to effectively utilize that information. Over time, we have expanded our services for commercial real estate information, analytics and online marketplaces in an effort to continue to meet the needs of the industry as it grows and evolves. We have also extended our offering of comprehensive commercial real estate information geographically to include the U.K., Canada, Spain, Germany and France, through acquisitions and internal growth and development. Information about CoStar’s revenues from, and long-lived assets and total assets located in, foreign countries is included in Notes 2 and 11 of the Notes to Consolidated Financial Statements included in this Annual Report on Form 10-K. Revenues; net income (loss) before interest and other income (expense), income taxes, depreciation and amortization (“EBITDA”); and total assets and liabilities for each of our segments are set forth in Note 11 to our consolidated financial statements. Information about risks associated with our foreign operations is included in “Item 1A. Risk Factors” and “Item 7A. Quantitative and Qualitative Disclosures about Market Risk.”

We deliver our commercial real estate information content to our U.S. customers primarily via an integrated suite of online service offerings that includes information about space available for lease, comparable sales information, information about properties for sale, tenant information, Internet marketing services, analytical capabilities, information for clients’ websites, information about industry professionals and their business relationships, data integration and industry news. We also operate complementary online marketplaces for commercial real estate listings and apartment rentals. We strive to cross-sell our services to our customers and to upsell services that may best suit their needs.

We have five flagship brands - CoStar®, LoopNet®, Apartments.com™, BizBuySell® and LandsofAmerica™. Our subscription-based services consist primarily of information, analytics and online marketplace services offered over the Internet to commercial real estate industry and related professionals. Our subscription-based information services consist primarily of CoStar Suite® services. CoStar Suite is sold as a platform of service offerings consisting of CoStar Property Professional®, CoStar COMPS Professional® and CoStar Tenant® and through our mobile application, CoStar Go®. CoStar Suite is our primary service offering in our North America and International operating segments.

Our LoopNet subscription-based online marketplace enables commercial property owners, landlords, and real estate agents working on their behalf to list properties for sale or for lease and to submit detailed information about property listings. Commercial real estate agents, buyers and tenants use LoopNet extensively to search for available property listings that meet their criteria.

Apartments.com<sup>™</sup> is part of our network of apartment marketing sites, which also includes ApartmentFinder.com<sup>™</sup>, ForRent.com®, ApartmentHomeLiving.com<sup>™</sup>, WestsideRentals.com®, AFTER55.com®, CorporateHousing.com<sup>™</sup>, ForRentUniversity.com® and Apartamentos.com<sup>™</sup>, our apartment-listing site offered exclusively in Spanish. Our apartment marketing network of subscription-based services offers renters a searchable database of apartment listings and provides professional property management companies and landlords with an advertising destination. Our apartment marketing network draws on and leverages CoStar's multifamily database, which contains detailed information on apartment properties. We designed the Apartments.com, ApartmentFinder.com and Apartamentos.com websites, which were launched in February 2015, December 2015 and February 2017, respectively, to meet renter preferences and demands, which we believe drives traffic to those sites and attract advertisers who prefer to advertise on heavily trafficked apartment websites. We acquired the ForRent.com, AFTER55.com, CorporateHousing.com and ForRentUniversity.com sites when we completed the acquisition of ForRent, a division of Dominion Enterprises, on February 21, 2018. Our network of apartment marketing sites provide a comprehensive selection of rentals, information on actual availabilities and rents, and in-depth data on neighborhoods, including restaurants, nightlife, history, schools and other facts important to renters. To help renters find the information that meets their needs, the sites also offer innovative search tools such as the Polygon<sup>™</sup> Search tool, which allows renters to specifically define the area in which they want to find an apartment. Apartments.com and Apartamentos.com also offer Plan Commute tools, which allow renters to search property listings that meet their transportation needs. The Screening Pros<sup>™</sup> is our online apartment leasing platform that includes tenant screening services, rental applications and payments processing and lease renewals.

Our BizBuySell services, which include BizQuest®, provide an online marketplace for businesses for sale. Our LandsofAmerica services, which include LandAndFarm and LandWatch®, provide an online marketplace for rural lands for sale that is also accessible via our Land.com domain.

We provide market research, consulting and analysis for commercial real estate investors and lenders via our CoStar Portfolio Strategy and CoStar Suite service offerings; portfolio and debt analysis, management and reporting capabilities through our CoStar Investment Analysis and CoStar Risk Analytics service offerings; and real estate and lease management solutions, including lease administration and abstraction services, through our CoStar Real Estate Manager service offerings. We have created and are continually improving our standardized platform of information, analytics and online marketplaces where members of the commercial real estate and related business community can continuously interact and facilitate transactions by efficiently accessing and exchanging accurate and standardized commercial real estate information.

Our standardized platform includes the most comprehensive proprietary database in the industry; the largest research department in the industry; proprietary data collection, information management and quality control systems; a large in-house product development team; a broad suite of web-based information, analytics and online marketplace services; a large team of analysts and economists; and a large, diverse base of clients. Our database has been developed and enhanced for more than 30 years by a research department that makes thousands of daily database updates. In addition to our internal efforts to grow the database, we have obtained and assimilated approximately 106 proprietary databases. Our comprehensive commercial real estate database powers our information services, sources data used in our analytic services and provides content for most of our online marketplace services. Our ability to utilize the same commercial real estate information across our standardized platform creates efficiencies in operations and improves data for our customers.

Our subscription-based services consist primarily of information, analytics, and online marketplace services offered over the Internet to commercial real estate industry and related professionals. Our services are typically distributed to our clients under subscription-based license agreements that renew automatically, a majority of which have a term of one year. Upon renewal, many of the subscription contract rates may change in accordance with contract provisions or as a result of contract renegotiations. To encourage clients to use our services regularly, we generally charge a fixed monthly amount for our subscription-based services rather than charging fees based on actual system usage or number of paid clicks. Depending on the type of service, contract rates are generally based on the number of sites, number of users, organization size, the client's business focus, geography, the number and types of services to which a client subscribes, the number of properties a client advertises and the prominence and placement of a client's advertised properties in the search results. Our subscription clients generally pay contract fees on a monthly basis, but in some cases may pay us on a quarterly or annual basis.

## Expansion and Growth

### Acquisitions

We have continually expanded the geographical coverage of our existing information services and developed new information, analytics and online marketplace services. In addition to internal growth, we have grown our business through strategic acquisitions. Our more recent acquisitions include the June 1, 2015 acquisition of Network Communications, Inc. (“NCF”), including its Apartment Finder business (collectively referred to as “Apartment Finder”), to further support our expansion into the multifamily vertical. Apartment Finder provides lead generation, advertising, and Internet marketing solutions to property managers and owners through its main service, ApartmentFinder.com. On July 1, 2015, we acquired the assets of Belbex Corporate, S.L. (“Belbex”), a small commercial real estate information provider operating in Madrid, Spain. On May 3, 2016, we acquired Thomas Daily GmbH (“Thomas Daily”), a commercial real estate news and information provider operating in Freiburg, Germany. On January 31, 2017, we acquired Koa Lei, Inc. (doing business as Westside Rentals and now known as Westside Rentals, LLC), an online marketplace specializing in Southern California real estate rentals, and its affiliated entity Westside Credit Services, LLC, a provider of credit checks and tenant screening for landlords in the Southern California real estate rental market. On May 10, 2017, we added LandWatch.com to our network of land-dedicated sites through our acquisition of LandWatch. On July 18, 2017, we acquired The Screening Pros, LLC, an online apartment leasing platform that includes tenant screening services, rental applications and payments processing and lease renewals. Most recently, on February 21, 2018, we completed the acquisition of ForRent, a division of Dominion Enterprises, ForRent’s primary service is digital advertising through a network of four multifamily websites - which includes ForRent.com, AFTER55.com, CorporateHousing.com and ForRentUniversity.com. We plan to integrate, develop and cross-sell the services offered by ForRent. ForRent.com is expected to remain a distinct, complementary brand to Apartments.com, giving property managers and owners more exposure for their listings.

### Development and Expansion

We expect to continue our software development efforts to improve existing services, introduce new services, integrate and cross-sell existing services, and expand and develop supporting technologies for our research, sales and marketing organizations. We are committed to supporting and improving our information, news, analytic and online marketplace solutions.

The launch of the Apartments.com website and the ApartmentFinder.com website in 2015 are examples of our software development efforts to improve existing services, introduce new services, and integrate and cross-sell existing services. We believe the improved sites, enhanced search capabilities, availability of information regarding real-time vacancies and our continued development and introduction of enhancements to our online apartment rental marketplaces have attracted more consumers, making the sites more attractive to property managers, which has also increased our cross-selling opportunities. In 2017, we launched Apartamentos.com, an apartment-listing site offered exclusively in Spanish and built and tailored to meet the needs of Spanish language households in the U.S., which is believed to represent approximately 20 percent of the U.S. renter population. We believe greater functionality makes our services valuable to an even broader audience and helps us increase sales of our services to brokers, banks, owners, institutional investors and other industry participants. We expect technology enhancements to drive continued revenue growth in 2018.

We evaluate potential changes to our service offerings from time to time in order to better align the services we offer with customers’ needs. Further, in some cases, when integrating and coordinating our services and assessing industry and client needs, we may decide to combine, shift focus from, de-emphasize, phase out, or eliminate a service that, among other things, overlaps or is redundant with other services we offer. In the event that we eliminate or phase out particular service offerings, we may experience reduced revenues and earnings. The decision to eliminate or phase out a service offering may also ultimately result in increased revenues and earnings from sales of other services we offer in lieu of the eliminated or phased out services. In 2017, we began to transition the LoopNet marketplace to a pure pay-to-list/free-to-search marketing site for commercial real estate, and to convert LoopNet information customers to higher value CoStar Suite information services. We completed integrating the backend systems of the LoopNet and CoStar databases during the second half of 2017; the two services now share a unified database of information, creating operating efficiencies and improving the data available to our customers. We also introduced new enhancements on the CoStar homepage, including a Listing Manager feature that we believe will increase the quantity and quality of the listing information available by enabling brokers and other industry participants to load information directly into the integrated system. In turn, we expect this feature will reduce the time and costs associated with researching and maintaining our comprehensive database of commercial real estate information.

We continue to assess the potential impact of the transition of the LoopNet marketplace to a pure marketing site for commercial real estate where all listings are paid and users can search the site for free. We are currently focused on converting LoopNet information customers to higher value, more profitable annual subscription information services, which should increase revenues and earnings over time. However, we cannot predict with certainty the amount or timing of any reductions in revenues and earnings

or subsequent increases in revenues and earnings, if any, resulting from the elimination or phasing out of the LoopNet information services or any other service offering.

Our revenues have increased as a result of revenues from acquired businesses and from cross-selling opportunities among the customers of CoStar and the acquired companies. We expect to continue to increase revenues as a result of such cross-selling opportunities. We may incur increased expenses in connection with any marketing and sales campaigns involving cross-selling opportunities and initiatives, and in connection with promotion of our new services and brands.

We are expanding the geographic reach of our North America services. In 2014, we began our Canadian research operations in Toronto; in 2015 we expanded into Calgary and Vancouver. In 2016, we began offering services in Ottawa and Edmonton. On July 1, 2015, we expanded our International services into Madrid, Spain through the acquisition of the assets of Belbex, a small commercial real estate information provider operating in Madrid, Spain. Further, on May 3, 2016, we expanded our International services into key markets in Germany, through the acquisition of Thomas Daily, a commercial real estate news and information provider operating in Freiburg, Germany. We believe that our integration efforts and continued investments in our services, including expansion of our existing service offerings, have created a platform for long-term revenue growth. We expect these investments to result in further penetration of our subscription-based services and the successful cross-selling of our services to customers in existing markets.

We have invested in the expansion and development of our field sales force to support the growth and expansion of our company and our service offerings in North America and internationally. We plan to continue to invest in, evaluate and strategically position our sales force as the Company continues to develop and grow. We also continue to invest in our research operations to support continued growth of our information and analytics offerings, to support the Apartments.com network, to expand into additional Canadian markets and to provide services in Madrid, Spain and key markets in Germany. We established our research operations headquarters in Richmond, Virginia, which is developing into a technology innovation hub, powering the software development necessary to support the content within our information, analytics and marketing services. In connection with the opening of the Richmond research headquarters, we expanded our research team to continue to meet the growing content needs of our clients. In addition, we expect to continue to invest in our International research operations in Madrid, Spain and the U.K. While we believe investments we make in our business create a platform for growth, those investments may reduce our profitability and adversely affect our financial position.

We intend to continue to assess the need for additional investments in our business, in addition to the investments discussed above, in order to develop and distribute new services within our current platform or expand the reach of our current service offerings. Any future product development or expansion of services, combination and coordination of services or elimination of services or corporate expansion, development or restructuring efforts could reduce our profitability and increase our capital expenditures. Any new investments, changes to our service offerings or other unforeseen events could cause us to generate losses and negative cash flow from operations in the future. We expect to continue our software development efforts to improve existing services, introduce new services, integrate products and services, cross-sell existing services, and expand and develop supporting technologies for our research and sales and marketing organizations. We are committed to continuing to support and improve our information, analytics and online marketplace solutions.

## **Industry Overview**

The market for commercial real estate information and analysis is vast based on the variety, volume and value of transactions related to commercial real estate. Each transaction has multiple participants and multiple information requirements, and in order to facilitate transactions, industry participants must have extensive, accurate and current information and analysis. Members of the commercial real estate and related business community require daily access to current data such as space availability, properties for sale, rental units available, rental rates, vacancy rates, tenant movements, sales comparables, supply, new construction, absorption rates and other important market developments to carry out their businesses effectively. Market research (including historical and forecast conditions) and applied analytics have also become instrumental to the success of commercial real estate industry participants operating in the current economic environment. There is a strong need for an efficient marketplace, where commercial real estate professionals can exchange information, evaluate opportunities using standardized data and interpretive analyses, and interact with each other on a continuous basis.



A large number of parties involved in the commercial real estate and related business community make use of the services we provide in order to obtain information they need to conduct their businesses, including:

- Sales and leasing brokers
- Property owners
- Property managers
- Design and construction professionals
- Real estate developers
- Real estate investment trust managers
- Investment bankers
- Commercial bankers
- Mortgage bankers
- Mortgage brokers
- Retailers
- Government agencies
- Mortgage-backed security issuers
- Appraisers
- Pension fund managers
- Reporters
- Tenant vendors
- Building services vendors
- Communications providers
- Insurance companies' managers
- Institutional advisors
- Investors and asset managers

The commercial real estate and related business community historically operated in an inefficient marketplace because of the fragmented approach to gathering and exchanging information within the marketplace. Various organizations, including hundreds of brokerage firms, directory publishers and local research companies, collected data on specific markets and developed software to analyze the information they independently gathered. This highly fragmented methodology resulted in duplication of effort in the collection and analysis of information, excessive internal cost and the creation of non-standardized data containing varying degrees of accuracy and comprehensiveness, resulting in a formidable information gap.

The creation and maintenance of a standardized information platform for commercial real estate requires infrastructure including a standardized database, accurate and comprehensive research capabilities, experienced analysts, easy to use technology and intensive participant interaction. By combining our extensive database, researchers, our experienced team of analysts and economists, technological expertise and broad customer base, we believe that we have created such a platform.

Within the apartment rental community, most apartment listing websites primarily supply only the listings that property owners pay to advertise and often return results that are inconsistent with the renter's search criteria. These limited results generally do not provide information about the actual rental availabilities. We believe that consumers expect accurate, actionable and comprehensive apartment rental information. To create the Apartments.com, ApartmentFinder.com, and Apartamentos.com websites, we drew on our multifamily database and undertook a research effort collecting and verifying information and visiting and photographing properties. With the Apartments.com, ApartmentFinder.com and Apartamentos.com websites, we believe that we created easily searchable sites with a comprehensive selection of rentals, information on actual rental availabilities and rents, and in-depth data on neighborhoods, including restaurants, nightlife, history, schools and other important facts.

### **CoStar's Comprehensive Database**

CoStar has spent more than 30 years building and acquiring a database of commercial real estate information, which includes information on leasing, sales, comparable sales, tenants, and demand statistics, as well as digital images. This highly complex database is comprised of hundreds of data fields, tracking such categories as location, site and zoning information, building characteristics, space and unit availability, tax assessments, ownership, sales and lease comparables, space requirements, number of retail stores, number of listings, mortgage and deed information, for-sale and for-lease listings, income and expense histories, tenant names, lease expirations, contact information, historical trends, demographic information and retail sales per square foot. The database also includes building photographs, aerial photographs, 3D virtual apartment tours, plat maps and floor plans.

### **CoStar Research**

We have developed a sophisticated data collection organization utilizing a multi-faceted research process. In 2017, our full time researchers and contractors conducted millions of interviews of brokers, owners, tenants, apartment community owners and property managers. We recently established our research operations headquarters in Richmond, Virginia, which is developing into a technology innovation hub, powering the software development necessary to support the content within our information, analytics and marketing services.

*Research Department.* Our research professionals undergo an extensive training program so that we can maintain consistent research methods and processes throughout our research department. Our researchers collect and analyze commercial real estate information through millions of phone calls, e-mails and Internet updates each year, in addition to field inspections, public records review, news monitoring and direct mail. We have also set up direct feeds from larger apartment sites and have put in place an automated system that compiles information sourced from the Internet in order to provide the most up-to-date information on rental availabilities.

Our researchers are responsible for maintaining the accuracy and reliability of our database information. As part of their update process, researchers develop cooperative relationships with industry professionals that allow them to gather useful information. Because of the importance commercial real estate professionals place on our data and our prominent position in the industry, many of these professionals routinely take the initiative and proactively report available space and transactions to our researchers.

CoStar has an extensive field research effort that includes physical inspection of properties in order to research new availabilities, find additional property inventory, photograph properties, collect tenant information, and verify existing information. In 2017, our field researchers drove millions of miles and conducted hundreds of thousands of on-site building inspections. CoStar's field research effort also includes creating high quality videos of interior spaces (including walk-through videos and 3D virtual tours), amenities and exterior features of properties. CoStar utilizes high-tech, field research vehicles across the U.S., Canada, the U.K. and Spain. A significant majority of these vehicles are customized, energy efficient hybrid cars that are equipped with computers, Global Positioning System tracking software, high resolution digital cameras and handheld laser instruments to help precisely measure buildings, geo-code them and position them on digital maps. Each CoStar vehicle uses wireless technology to track and transmit field data. A typical site inspection consists of photographing the building, measuring the building, geo-coding the building, capturing "For Sale" or "For Lease" sign information, counting parking spaces, assessing property condition and construction, and gathering tenant information. Field researchers also canvass properties, collecting tenant data suite by suite. We also utilize a low-flying airplane and a fleet of drones to conduct aerial research of commercial real estate. We place researchers on the low-flying aircraft to scout additional commercial developments and take aerial photographs and videos. Our drone operators are FAA certified and trained to capture aerial photographs and videos of commercial real estate.

*Data and Image Providers.* We license a small portion of our data and images from public record providers and third-party data sources. Licensing agreements with these entities allow us to use a variety of commercial real estate information, including property ownership, tenant information, demographic information, maps, aerial photographs and 3D virtual apartment tours of apartment communities, all of which enhance various CoStar services. These license agreements generally grant us a non-exclusive license to use the data and images in the creation and supplementation of our information, analytics and online marketplaces and include what we believe are standard terms, such as a contract term ranging from one to five years, automatic renewal of the contract and fixed periodic license fees or a combination of fixed periodic license fees plus additional fees based upon our usage.

*Management and Quality Control Systems.* Our research processes include automated and non-automated controls to ensure the integrity of the data collection process. A large number of automated data quality tests check for potential errors, including occupancy date conflicts, available square footage greater than building area, typical floor space greater than land area and expired leases. We also monitor changes to critical fields of information to ensure all information is kept in compliance with our standard definitions and methodology. Our non-automated quality control procedures include:

- calling our information sources on recently updated properties to re-verify information;
- performing periodic research audits and field checks to determine if we correctly canvassed buildings;
- providing training and retraining to our research professionals to ensure accurate and standardized data compilation; and
- compiling measurable performance metrics for research teams and managers for feedback on data quality.

Finally, one of the most important and effective quality control measures we rely on is feedback provided by the commercial real estate professionals using our data every day.

## **Proprietary Technology**

CoStar's information technology professionals focus on developing new services for our customers, improving and maintaining existing services, integrating our current services, securing our comprehensive database of commercial real estate information and delivering research automation tools that improve the quality of our data and increase the efficiency of our research analysts.

Our information technology team is responsible for developing, improving and maintaining CoStar's information, analytics and online marketplace services. Our information technology team is also responsible for developing the infrastructure necessary to support CoStar's business processes, our comprehensive database of commercial real estate information, analytics and online marketplaces and our extensive image library. The team implements technologies and systems that introduce efficient workflows and controls designed to increase the production capacity of our research teams and improve the quality of our data. Over the years, the team has developed data collection and quality control mechanisms that we believe are unique within the commercial real estate industry. The team continues to develop and modify our enterprise information management system that integrates CoStar's sales, research, field research, customer support and accounting information. We use this system to maintain our commercial real estate research information, manage contacts with the commercial real estate community, provide research workflow automation and conduct daily automated quality assurance checks. In addition, our information technology team has also developed fraud-detection technology to detect and prevent unauthorized access to our services. To supplement the measures we take to prevent misuse of our information, we recently added state of the art adaptive authentication technology to the login process of our CoStar Suite product.

Our information technology professionals maintain the servers and network components necessary to support CoStar services and research systems. CoStar's core services are served from multiple data centers to support uninterrupted service for our customers. CoStar's services are continually monitored in an effort to ensure our customers fast and reliable access.

CoStar's comprehensive data protection policy provides for use of secure networks, strong passwords, encrypted data fields, off-site storage and other protective measures in an effort to ensure the availability and security of all core systems.

## Services

Our suite of information, analytics and online marketplaces is branded and marketed to our customers. Our services are primarily derived from a database of building-specific information and offer customers specialized tools for accessing, analyzing and using our information. Over time, we have enhanced and expect to continue to enhance our existing information, analytics and online marketplaces and we have developed and expect to continue to develop additional services that make use of our comprehensive database to meet the needs of our existing customers as well as potential new categories of customers.

Our principal information, analytics and online marketplace services as of January 31, 2018, are described in the following paragraphs:

### CoStar

*CoStar Suite*® is our platform of service offerings consisting of *CoStar Property Professional*®, *CoStar COMPS Professional*® and *CoStar Tenant*® and is accessible via the Internet or through our mobile application, *CoStar Go*®.

*CoStar Property Professional*® *CoStar Property Professional*, or “*CoStar Property*,” is the Company's flagship service. It provides subscribers a comprehensive inventory of office, industrial, retail and multifamily properties and land in markets throughout the U.S., the U.K. and parts of Canada, including for-lease and for-sale listings, historical data, building photographs, maps and floor plans. Commercial real estate professionals use *CoStar Property* to identify available space for lease, evaluate leasing and sale opportunities, value assets and position properties in the marketplace. Our clients also use *CoStar Property* to analyze market conditions by calculating current vacancy rates, absorption rates or average rental rates, and forecasting future trends based on user selected variables. *CoStar Property* provides subscribers with powerful map-based search capabilities as well as a user controlled, password protected extranet (or electronic “file cabinet”) where brokers may share space surveys and transaction-related documents online, in real time, with team members. When used together with *CoStar Connect*®, *CoStar Property* enables subscribers to share space surveys and transaction-related documents with their clients, accessed through their corporate website. *CoStar Property*, along with all of CoStar's other core information, analytics and online marketplaces, is delivered solely via the Internet.

- *CoStar Lease Analysis*® *CoStar Lease Analysis* is an integrated workflow tool that allows subscribers to incorporate CoStar data with their own data to perform in-depth lease analyses. *CoStar Lease Analysis* can be used to produce an understandable cash flow analysis as well as key metrics about any proposed or existing lease. It combines financial modeling with CoStar's comprehensive property information, enabling the subscriber to compare lease alternatives.

*CoStar COMPS Professional*® *CoStar COMPS Professional*, or “*CoStar COMPS*,” provides comprehensive coverage of comparable commercial real estate sales information in the U.S., the U.K. and parts of Canada. It is the industry's most comprehensive database of comparable sales transactions and is designed for professionals who need to research property

comparables, identify market trends, expedite the appraisal process and support property valuations. CoStar COMPS offers subscribers numerous fields of property information, access to support documents (e.g., deeds of trust) for new comparables, demographics and the ability to view for-sale properties alongside sold properties in three formats – plotted on a map, aerial image or in a table.

*CoStar Tenant®* CoStar Tenant is a detailed online business-to-business prospecting and analytical tool providing commercial real estate professionals with the most comprehensive commercial real estate-related tenant information available in the U.S., the U.K. and parts of Canada. CoStar Tenant profiles tenants occupying space in commercial buildings and provides updates on lease expirations - one of the service's key features - as well as occupancy levels, growth rates and numerous other facts. Delivering this information via the Internet allows users to target prospective clients quickly through a searchable database that identifies only those tenants meeting certain criteria.

*CoStar Go®* CoStar Go is an iPad and Android application that integrates and provides subscribers of CoStar Suite mobile access to our comprehensive property, comparable sales and tenant information in our suite of online service offerings – consisting of CoStar Property Professional, CoStar COMPS Professional and CoStar Tenant. CoStar Go provides a single, location-centric mobile interface that allows users to access and display comprehensive information on millions of properties and gain instant access to analytic data and demographic information from the field.

*CoStar Lease Comps* CoStar Lease Comps, included as part of CoStar Suite® services, provides subscribers an integrated solution that captures, manages and maintains their lease data. CoStar Lease Comps also analyzes lease data.

*CoStar Advertising®* CoStar Advertising offers property owners and brokers a highly targeted and cost effective way to market a space for lease or a property for sale directly to CoStar subscribers looking for that type of space through interactive advertising. Our advertising model is based on varying levels of exposure, enabling the advertiser to target as narrowly or broadly as its budget permits. With the CoStar Advertising program, when the advertiser's listings appear in a results set, they receive priority positioning and are enhanced to stand out. The advertiser can also purchase exposure in additional submarkets, or the entire market area so that this ad will appear even when this listing would not be returned in a results set.

*CoStar Portfolio Strategy®* CoStar Portfolio Strategy services are designed to meet the research and risk management needs of commercial real estate owners, investors, lenders and government regulators. CoStar Portfolio Strategy leverages its staff of analysts, economists, and strategists to consult with clients on investment and lending strategies, including custom strategic research and portfolio strategy, target market selection, capital-raising initiatives, relative value and custom scenario analyses, and acquisition and disposition studies.

- *CoStar Risk Analytics® COMPASS* CoStar Risk Analytics COMPASS is a commercial real estate risk management tool. It allows users to calculate Probability of Default, Loss Given Default, Expected Loss and Unexpected Loss at various confidence levels for a loan or a portfolio. It provides direct comparisons of credit risk and refinance risk across Time, Market, Property Type and Loan Structure for all macroeconomic forecast (including Federal Stress Testing / Comprehensive Capital Analysis and Review (“CCAR”)) scenarios. CoStar Risk Analytics COMPASS is used by lenders, issuers, servicers, ratings agencies and regulators to estimate required loss reserves, economic capital and regulatory capital, target lending opportunities, set pricing strategy, objectively compare/price loans, more effectively allocate capital, manage refinance risk and conduct stress testing. Clients for CoStar Risk Analytics COMPASS services or data include most of the Systemically Important Financial Institutions (“SIFIs”) as well as a large number of other top-500 banks, insurance companies, hedge funds and government financial regulators.

*CoStar Investment Analysis® Portfolio Maximizer* CoStar Investment Analysis Portfolio Maximizer is an industry leading real estate portfolio management software solution. CoStar Investment Analysis Portfolio Maximizer allows users to model partnership structures, calculate waterfall distributions and fees, model and analyze debt obligations and create multiple “what if” scenarios for alternative investment decisions.

*CoStar Investment Analysis® Request* CoStar Investment Analysis Request is the first business intelligence software solution built specifically for managing commercial real estate investments. CoStar Investment Analysis Request helps users eliminate some of the difficulties of consolidating real estate investment data from disparate sources and facilitates standardization of information presentation and reporting across an organization. CoStar Investment Analysis Request also provides a platform for users to develop business intelligence and reporting capabilities.

*CoStar Real Estate Manager® Corporate Edition* CoStar Real Estate Manager Corporate Edition is a real estate management software solution designed for corporate real estate managers, company executives, business unit directors, brokers and project managers. CoStar Real Estate Manager Corporate Edition helps users connect real estate initiatives with company strategic goals, streamline portfolio operations, automate the process for collecting and managing space requests, reduce occupancy costs with analytics that track location performance against targets, and maximize location performance through proactive portfolio management. CoStar Real Estate Manager also provides lease abstraction and data review services in order to facilitate the effective implementation of this software solution.

*CoStar Real Estate Manager® Retail Edition* CoStar Real Estate Manager Retail Edition is a real estate management software solution designed for company executives, real estate dealmakers and store planning and construction managers. CoStar Real Estate Manager Retail Edition helps users to utilize comprehensive and real-time data to establish goals and store strategies, manage the execution of real estate strategies, summarize critical portfolio data to drive cost-saving decisions and benchmark prerequisite store-level information and metrics for maximizing location performance through proactive portfolio management. CoStar Real Estate Manager also provides lease abstraction and data review services in order to facilitate the effective implementation of this software solution.

*CoStar Private Sale Network®* CoStar Private Sale Network provides clients with custom-designed and branded websites to market their listings directly to investors. CoStar Private Sale Network allows investors to customize a commercial real estate website and build and send email communications to announce listings, calls for offers and bid deadlines.

*CoStar Brokerage Applications®* CoStar Brokerage Applications provides users with access to the latest tools to effectively manage and optimize business operations. These structured and consistent project management tools allow users to track critical dates, employee or organization-wide results and current and prospective projects.

## LoopNet

*LoopNet Premium Lister®* LoopNet Premium Lister is designed for commercial real estate professionals and other customers who seek the broadest possible exposure for their listings, access to leads lists, and advanced marketing and searching tools. LoopNet Premium Lister provides subscribers with the ability to market their listings to all LoopNet.com visitors, as well as numerous other features. LoopNet Premium Lister is available for a quarterly or annual subscription.

*LoopNet Premium Searcher™* LoopNet Premium Searcher is designed for members searching for commercial real estate who need commercial real estate marketplace searching access, reports and other marketing and searching tools. LoopNet Premium Searcher provides subscribers with full access to all LoopNet property listings, including Premium and Basic Listings, as well as numerous other features. LoopNet Premium Searcher is available for a monthly, quarterly or annual subscription.

*LoopNet Power Listings* LoopNet Power Listings is designed for commercial real estate professionals and other customers who seek the broadest possible exposure for their listings, access to leads lists, and advanced marketing and searching tools. LoopNet Power Listings provides subscribers with full access to the industry's top three commercial real estate marketplaces: LoopNet, Cityfeet and Showcase, as well as 200+ online newspaper websites including the Wall Street Journal. LoopNet Power Listings is available for a quarterly or annual subscription.

*LoopLink®* LoopLink is an online real estate marketing and database services suite that enables commercial real estate firms to showcase their available properties both on the LoopNet marketplace and on the brokerage firm's own website using hosted search software. Within LoopNet, each LoopLink listing is branded with the client's logo and is hyperlinked to the client's website. Additionally, the LoopLink service provides customizable, branded property search and results screens that can be integrated into the client's website. The LoopNet import service offers the opportunity to simplify the process of submitting listings to LoopNet from the client's internal databases, and features advanced data matching and data integrity rules and file conversion capabilities. LoopNet charges a monthly subscription fee to commercial real estate firms for the LoopLink service. Key features of LoopLink include comprehensive reporting and listing administration tools, property mapping for geographic and feasibility analysis, thumbnail photos and expanded property descriptions in search results.

## Apartments.com

*Apartments.com*<sup>™</sup> Apartments.com, part of our network of apartment marketing sites, provides a variety of ad packages and enhancements that allow property managers and owners to fully showcase their apartment community through increased exposure and interactions that allow renters to view, engage and connect with the community, including featured community listings, customized flyers and brochures, and special offer coupons.

*ApartmentFinder.com*<sup>™</sup> ApartmentFinder.com, part of our network of apartment marketing sites, provides lead generation, advertising and Internet marketing solutions to property managers and owners through its main service, ApartmentFinder.com.

*ForRent.com*<sup>®</sup> ForRent.com, part of our network of apartment marketing sites, provides digital advertising through a network of four multifamily websites - which includes ForRent.com, AFTER55.com, CorporateHousing.com and ForRentUniversity.com

*ApartmentHomeLiving.com*<sup>™</sup> ApartmentHomeLiving.com, part of our network of apartment marketing sites, provides renters with another national online apartment rentals resource that showcases apartments for rent with official prices, pictures, floor plans and detailed information on each apartment.

*Apartamentos.com*<sup>™</sup> Apartamentos.com, part of our network of apartment marketing sites, provides Spanish speaking renters with a national online apartment rentals resource offered exclusively in Spanish, with the same primary features found on Apartments.com.

*WestsideRentals.com*<sup>®</sup> WestsideRentals.com, part of our network of apartment marketing sites, specializes in Southern California real estate rentals.

*The Screening Pros*<sup>™</sup> The Screening Pros, part of our network of apartment marketing sites, provides an online apartment leasing platform that includes tenant screening services, rental applications and payments processing and lease renewals.

## LandsOfAmerica

*LandsOfAmerica*<sup>™</sup>, *LandAndFarm*<sup>™</sup>, and *LandWatch*<sup>®</sup> LandsOfAmerica.com, LandAndFarm.com, and LandWatch.com are leading online marketplaces for rural land for sale. Sellers pay a fee to list their land for sale, and interested buyers can search the respective sites' listings for free. The LandsOfAmerica.com and LandAndFarm.com websites are also accessible via our Land.com domain.

## BizBuySell

*BizBuySell*<sup>®</sup> and *BizQuest*<sup>®</sup> BizBuySell.com and BizQuest.com are leading online marketplaces for operating businesses for sale. Business sellers pay a fee to list their operating businesses for sale, and interested buyers can search the respective sites' listings for free. The BizBuySell and BizQuest Franchise Directories allow interested business buyers to search hundreds of franchise opportunities, and franchisors can list their availabilities in the directory on a cost per lead basis.

## Clients

We draw clients from across the commercial real estate and related business community, including commercial real estate brokers, owners, developers, landlords, property managers, financial institutions, retailers, vendors, appraisers, investment banks, government agencies and other parties involved in commercial real estate. For the years ended December 31, 2015, 2016 and 2017, no single client accounted for more than 5% of our revenues.

## Sales and Marketing

Our sales teams are primarily located in field sales offices throughout the U.S. and in offices outside of the U.S., including, among others, London, England; Madrid, Spain; and Freiburg, Germany. Our inside sales teams are primarily located in our Washington, DC office. These teams prospect for new clients and perform product and service demonstrations exclusively by telephone and over the Internet to support the direct sales force.

Our local offices typically serve as the platform for our in-market sales, customer support and field research operations for their respective regions. The sales force is responsible for selling to new prospects, training new and existing clients, providing ongoing customer support, renewing existing client contracts and identifying cross-selling opportunities. In addition, the sales

force has primary front line responsibility for customer care. Our customer service and support staff is charged with ensuring high client satisfaction by providing ongoing customer support. In 2016, we formed a customer relationship team consisting of client relationship managers in the sales organization, to drive even greater usage of our products and services. The client relationship managers are responsible for training existing users, sharing market specific research with clients, ensuring accurate and timely listings and ensuring client driven product enhancement ideas are shared with our product development team.

Our sales strategy is to aggressively attract new clients, while providing ongoing incentives for existing clients to subscribe to additional products and services in order to achieve high renewal rates. We actively manage client accounts in order to retain clients by providing frequent service demonstrations as well as company-client contact and communication. In January 2018, we launched a two-week, 30-city road show to showcase CoStar's technologies to customers and prospective users. The presentations focused on how technological change is impacting the commercial real estate industry, including presentations on tools such as 3D cameras, infrared drones and augmented reality. We place a premium on training new and existing client personnel on the use of our services so as to promote maximum client utilization and satisfaction with our services. Our strategy also involves entering into multi-year, multi-market license agreements with our larger clients.

We seek to make our services essential to our clients' businesses. To encourage clients to use our services regularly, we generally charge a fixed monthly amount for our subscription-based information services rather than fees based on actual system usage. Contract rates for subscription-based services are generally based on the number of sites, number of users, organization size, the client's business focus, geography, the number and types of services to which a client subscribes, the number of properties a client advertises and the prominence and placement of a client's advertised properties in the search results. Our subscription clients generally pay contract fees on a monthly basis, but in some cases may pay us on a quarterly or annual basis.

Our primary marketing methods include: service demonstrations; face-to-face networking; web-based marketing; direct marketing; communication via our corporate website and news services; participation in trade show and industry events; Company-sponsored events; print advertising in trade magazines and other business publications; client referrals; and CoStar Advisor™, LoopNews™ and other company newsletters distributed via email to our clients and prospects. In 2017, we integrated the CoStar and LoopNet databases in order to enhance CoStar information services as information tools and LoopNet marketplace services as marketing tools. This integration provides clients the ability to enter listings into a new Listing Manager, and to subsequently update their listings in CoStar and LoopNet simultaneously. To generate awareness of the integration, we provided video tutorials and hosted numerous webinars, in addition to web-based marketing and direct marketing efforts.

In 2017, we expanded the Apartments.com network with the launch of Apartamentos.com and acquisition of WestsideRentals.com. In February 2018, we further expanded the Apartments.com network with the acquisition of ForRent.com. To generate brand awareness and site traffic for the Apartments.com network, we utilize a multi-channel marketing campaign featuring television and radio ads, online and digital advertising impressions, social media, public relations, out-of-home and paid search marketing, all of which are reinforced with Search Engine Marketing efforts. We plan to continue to utilize these marketing methods and will continue to work to determine the optimal level of marketing investment for our services for future periods.

Web-based marketing and direct marketing are effective means for us to find prospective clients. Our web-based marketing efforts include search engine optimization, paid advertising with major search engines, social media and display advertising on commercial real estate news and business websites and mobile applications, and our direct marketing efforts include television, radio, out-of-home ads, direct mail, email and telemarketing, and, when applicable, make extensive use of our unique, proprietary database. Once we have identified a prospective client, our most effective sales method is a service demonstration. We use various forms of advertising to build brand identity and reinforce the value and benefits of our services. We also sponsor and attend local association activities and events, including industry-leading events for commercial real estate brokers, owner/investors and retail and financial services institutions, and attend and/or exhibit at industry trade shows and conferences to reinforce our relationships with our core user groups.

News has always been a valuable part of CoStar's core subscription offering. CoStar's news teams report on the latest deals and developments across our markets, keeping subscribers informed and driving higher usage in our core product. In 2018, we plan to add more options for subscribers to customize the specific topics and types of news they are most interested in. To enhance this aspect of our subscription offering, we redesigned our homepage during the fourth quarter of 2017 to present an engaging and continuously updated interface. This year, we are adding news talent, upgrading technology, and making our service more relevant for subscribers, by delivering specific news based on their individual preferences.

We believe the ability to customize and personalize news for the user's specific interests should make our news service even more relevant and valuable to subscribers. In addition to encouraging more engagement through logins and time on site, we believe a more robust news operation will also provide more options and formats for advertising to the commercial real estate audience.

We currently offer dozens of webinars each year aimed at helping customers learn more about the commercial real estate industry and how to use our services. The webinars are available both as live presentations and as on-demand programs hosted on our website. On a monthly basis, we issue the CoStar Commercial Repeat Sales Index ("CCRSI"), a comprehensive set of benchmarks that investors and other market participants can use to better understand commercial real estate price movements. CCRSI is produced using our underlying data and is publicly distributed by CoStar through the news media and made available online at <http://www.costargroup.com/costar-news/ccrsi>.

Our sales and marketing efforts have focused and will continue to focus on cross-selling and marketing our services. Similar to our prior acquisitions, we have been cross-selling, and plan to continue to cross-sell, the services offered by Apartments.com and ApartmentFinder.com and the other services we offer, including, but not limited to CoStar Suite. Now that we have completed the ForRent acquisition, we plan to develop and cross-sell the services offered by ForRent. We will also continue to focus on converting LoopNet information users to CoStar as we phase out the LoopNet information service offerings.



## Competition

The market for information, analytics and online marketplaces generally is competitive and rapidly changing. In the commercial real estate and apartment rentals industries, we believe the principal competitive factors affecting these services and providers are:

- quality and depth of the underlying databases;
- ease of use, flexibility and functionality of the software;
- intuitiveness and appeal of the user interface;
- timeliness of the data, including listings;
- breadth of geographic coverage and services offered;
- completeness and accuracy of content;
- client service and support;
- perception that the service offered is the industry standard;
- price;
- effectiveness of marketing and sales efforts;
- proprietary nature of methodologies, databases and technical resources;
- vendor reputation;
- brand loyalty among customers; and
- capital resources.

We compete directly and indirectly for customers with the following categories of companies:

- online marketing services or websites targeted to commercial real estate brokers, buyers and sellers of commercial real estate properties, insurance companies, mortgage brokers and lenders, such as PropertyLine.com, Reed Business Information Limited, officespace.com, 42floors, MrOfficeSpace.com, TenantWise, www.propertyshark.com, Rofo, BuildingSearch.com, CIMLS, CompStak, Rightmove, estatesgazette.com, CommercialCafe, CREXi, TotalCommercial.com, and DebtX;
- publishers and distributors of information, analytics and marketing services, including regional providers and national print publications, such as CBRE Economic Advisors, Marshall & Swift, Yale Robbins, Reis, Real Capital Analytics, The Smith Guide, Yardi Matrix, RealPage and its Axiometrics business, ReScour, Inc. and RealMassive;
- Internet listing services featuring apartments for rent, such as ApartmentGuide.com, Rent.com, Zillow Rentals, Trulia Rent, NakedApartments.com, MyNewPlace.com, Zumper, Craigslist, ApartmentList.com, Move.com, Realtor.com, and Doorsteps.com;
- locally controlled real estate boards, exchanges or associations sponsoring property listing services and the companies with whom they partner, such as Catylist, the National Association of Realtors, CCIM Institute, Society of Industrial and Office Realtors, the Commercial Association of Realtors Data Services and the Association of Industrial Realtors;
- real estate portfolio management software solutions, such as Cougar Software, MRI Software, Altus and Intuit;
- real estate lease management and administration software solutions, such as Accruent, Tririga, Manhattan Software, Lucemex and AMT;
- in-house research departments operated by commercial real estate brokers; and
- public record providers.

As the market for information, analytics and online marketplaces develops, additional competitors (including companies which could have greater access to data, financial, product development, technical, analytic or marketing resources than we do) may enter the market and competition may intensify. For example, a company like Bloomberg L.P. has the resources, and has previously announced an intention, to move into the commercial real estate information business. Further, a company like Google, which has a far-reaching web presence and substantial data aggregation capabilities, could enter the commercial real estate marketing arena. A company like Zillow, which already has a presence in residential real estate and the apartment rentals industry, could use its resources to further expand in the online apartment rentals industry creating greater competition among Internet listing services for the marketing budgets of property managers and property owners. While we believe that we have successfully differentiated ourselves from existing competitors, current or future competitors could materially harm our business.

## **Proprietary Rights**

To protect our proprietary rights in our methodologies, database, software, trademarks and other intellectual property, we depend upon a combination of:

- trade secret, misappropriation, copyright, trademark, computer fraud, database protection and other laws;
- registration of copyrights and trademarks;
- nondisclosure, noncompetition and other contractual provisions with employees and consultants;
- license agreements with customers;
- patent protection; and
- technical measures.

We seek to protect our software's source code, our database and our photography as trade secrets and under copyright law. Although copyright registration is not a prerequisite for copyright protection, we have filed for copyright registration for many of our databases, photographs, software and other materials. Under current U.S. copyright law, the arrangement and selection of data may be protected, but the actual data itself may not be. Certain U.K. database protection laws provide additional protections for our U.K. databases. We license our services under license agreements that grant our clients non-exclusive, non-transferable rights. These agreements restrict the disclosure and use of our information and prohibit the unauthorized reproduction or transfer of any of our proprietary information, methodologies or analytics.

We also attempt to protect our proprietary databases, our trade secrets and our proprietary information through confidentiality and noncompetition agreements with our employees and consultants. Our services also include technical measures designed to detect, discourage and prevent unauthorized copying of our intellectual property. We have established an internal antipiracy team that uses fraud-detection technology to continually monitor use of our services to detect and prevent unauthorized access, and we actively prosecute individuals and firms that engage in this unlawful activity.

We maintain U.S. and international trademark registrations for CoStar's core service names and proactively file U.S. and international trademark applications covering our new and planned service names. Our federally registered trademarks include CoStar®, CoStar Property®, CoStar COMPS Professional®, CoStar Tenant®, CoStar Go®, CoStar Lease Analysis®, CoStar Showcase®, and LoopNet®, among many others. In the U.S., trademarks are generally valid as long as they are in use and have not been found to be generic. We consider our trademarks in the aggregate to constitute a valuable asset. In addition, we maintain a patent portfolio that protects certain of our systems and methodologies. We currently have one granted patent in the U.K., which expires in 2021, covering, among other things, certain of our field research methodologies and seven patents in the U.S. which expire in 2020, 2021 (2 patents), 2022 (2 patents), 2025 and 2032, respectively, covering, among other things, critical elements of CoStar's proprietary field research technology and mapping tools. We regard the rights protected by our patents as valuable to our business, but do not believe that our business is materially dependent on any single patent or on our portfolio of patents as a whole.

## **Employees**

As of January 31, 2018, we employed 3,711 employees. None of our employees are represented by a labor union. We have experienced no work stoppages. We believe that our employee relations are excellent. In common with many German companies, employees in our German subsidiary, Thomas Daily GmbH, have elected three fellow employees to form a Works Council, which represents our employees at the location and has certain rights to receive information from us and engage us in discussions under applicable law.

## **Available Information**

Our investor relations Internet website is <http://www.costargroup.com/investors>. The reports we file with or furnish to the Securities and Exchange Commission, including our annual report, quarterly reports and current reports, as well as amendments to those reports, are available free of charge on our Internet website as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission. You may review and copy any of the information we file with the Securities and Exchange Commission at the Commission's Public Reference Room at 100 F Street, NE, Washington, DC 20549. You may obtain information regarding the operation of the Public Reference Room by calling the Securities and Exchange Commission at 1-800-SEC-0330. The Securities and Exchange Commission maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the Commission at <http://www.sec.gov>.

## Item 1A. Risk Factors

### Cautionary Statement Concerning Forward-Looking Statements

We have made forward-looking statements in this Report and make forward-looking statements in our press releases and conference calls that are subject to risks and uncertainties. Forward-looking statements include information that is not purely historic fact and include, without limitation, statements concerning our financial outlook for 2018 and beyond, our possible or assumed future results of operations generally, and other statements and information regarding assumptions about our revenues, revenue growth rates, gross margin percentage, net income, net income per share, fully diluted net income per share, EBITDA, adjusted EBITDA, non-generally accepted accounting principles (“GAAP”) net income, non-GAAP net income per share, weighted-average outstanding shares, taxable income (loss), cash flow from operating activities, available cash, operating costs, amortization expense, intangible asset recovery, capital and other expenditures, legal proceedings and claims, legal costs, effective tax rate, equity compensation charges, future taxable income, pending acquisitions, the anticipated benefits of completed or proposed acquisitions, the anticipated timing of acquisition closings, the anticipated benefits of cross-selling efforts, product development and release, planned product enhancements, sales and marketing campaigns, product integrations, elimination and de-emphasizing of services, contract renewal rate, the timing of future payments of principal under our \$750 million credit facility available to us under the amended and restated credit agreement dated October 19, 2017 (the “2017 Credit Agreement”), expectations regarding our compliance with financial and restrictive covenants in the 2017 Credit Agreement, financing plans, geographic expansion, capital structure, contractual obligations, our database, database growth, services and facilities, employee relations, future economic performance, our ability to liquidate or realize our long-term investments, management’s plans, goals and objectives for future operations, and growth and markets for our stock. Sections of this Report which contain forward-looking statements include “Business,” “Risk Factors,” “Properties,” “Legal Proceedings,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” “Quantitative and Qualitative Disclosures About Market Risk,” “Controls and Procedures” and the Financial Statements and related Notes.

Our forward-looking statements are also identified by words such as “hope,” “anticipate,” “may,” “believe,” “expect,” “intend,” “will,” “should,” “plan,” “estimate,” “predict,” “continue” and “potential” or the negative of these terms or other comparable terminology. You should understand that these forward-looking statements are estimates reflecting our judgment, beliefs and expectations, not guarantees of future performance. They are subject to a number of assumptions, risks and uncertainties that could cause actual results to differ materially from those expressed or implied in the forward-looking statements. The following important factors, in addition to those discussed or referred to under the heading “Risk Factors,” and other unforeseen events or circumstances, could affect our future results and could cause those results or other outcomes to differ materially from those expressed or implied in our forward-looking statements: commercial real estate market conditions; general economic conditions, both domestic and international; our ability to identify, acquire and integrate acquisition candidates; our ability to realize the expected benefits, cost savings or other synergies from acquisitions, including ForRent, on a timely basis or at all; our ability to combine acquired businesses successfully or in a timely and cost-efficient manner; business disruption relating to integration of acquired businesses or other business initiatives; the businesses of CoStar, Apartments.com and ForRent may not be combined successfully or in a timely and cost-efficient manner; business disruption relating to the ForRent acquisition may be greater than expected; our ability to transition acquired service platforms to our model in a timely manner or at all; changes and developments in business plans; theft of any personally identifiable information we maintain or process; any actual or perceived failure to comply with privacy or data protection laws, regulations or standards; the amount of investment for sales and marketing and our ability to realize a return on investments in sales and marketing; our ability to effectively and strategically combine, eliminate or de-emphasize service offerings; reductions in revenues as a result of service changes; the time and resources required to develop upgraded or new services and to expand service offerings; changes or consolidations within the commercial real estate industry; customer retention; our ability to attract new clients; our ability to sell additional services to existing clients; our ability to integrate our North America and International product offerings; our ability to successfully transition LoopNet to a pure marketing site, where all listings are paid and searches are free, in a timely manner and minimize the impact of that transition on revenue; our ability to successfully introduce and cross-sell new products or upgraded services in U.S. and foreign markets; our ability to attract consumers to our online marketplaces; our ability to increase traffic on our network of sites; the success of our marketing campaigns in generating brand awareness and site traffic; competition; foreign currency fluctuations; global credit market conditions affecting investments; our ability to continue to expand successfully, timely and in a cost-efficient manner, including internationally; our ability to effectively penetrate and gain acceptance in new sectors and geographies; our ability to control costs; our ability to establish our research operations headquarters in Richmond, Virginia as a technology innovation hub; litigation or government investigations in which we become involved; changes in accounting policies or practices; release of new and upgraded services or entry into new markets by us or our competitors; data quality; expansion, growth, development or reorganization of our sales force; employee retention; technical problems with our services; managerial execution; changes in relationships with real estate brokers, property managers and other strategic partners; legal and regulatory issues; and successful adoption of and training on our services.

Accordingly, you should not place undue reliance on forward-looking statements, which speak only as of, and are based on information available to us on, the date of this Report. All subsequent written and oral forward-looking statements attributable to us or any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. We do not undertake any obligation to update any such statements or release publicly any revisions to these forward-looking statements to reflect new information or events or circumstances after the date of this Report or to reflect the occurrence of unanticipated events.

## **Risk Factors**

*Our revenues and financial position will be adversely affected if we are not able to attract and retain clients.* Our success and revenues depend on attracting and retaining subscribers to our information, analytics and online marketplaces. Our subscription-based information, analytics and online marketplaces generate the largest portion of our revenues. However, we may be unable to attract new clients, and our existing clients may decide not to add, not to renew or to cancel subscription services. In addition, in order to increase our revenue, we must continue to attract new customers, continue to keep our cancellation rate low and continue to sell new services to our existing customers. We may not be able to continue to grow our customer base, keep the cancellation rate for customers and services low or sell new services to existing customers as a result of several factors, including without limitation: economic pressures; the business failure of a current client or clients; a decision that customers have no need for our services; a decision to use alternative services; customers' and potential customers' pricing and budgetary constraints; consolidation in the real estate and/or financial services industries; data quality; technical problems; or competitive pressures. We compete against many other commercial real estate information, analytics, and marketing service providers for business, including competitors that offer their services through rapidly changing methods of delivering real estate information. If clients cancel services or decide not to renew their subscription agreements, and we do not sell new services to our existing clients or attract new clients, then our renewal rate and revenues may decline.

*We may not be able to successfully introduce new or upgraded information, analytics and online marketplace services or combine or shift focus from services with less demand, which could decrease our revenues and our profitability.* Our future business and financial success will depend on our ability to continue to anticipate the needs of customers and potential customers, and to introduce new and upgraded services into the marketplace. To be successful, we must adapt to changes in the industry, as well as rapid technological changes by continually enhancing our information, analytics and online marketplace services. Developing new services and upgrades to services, as well as integrating and coordinating current services, imposes heavy burdens on our systems department, management and researchers. The processes are costly, and our efforts to develop, integrate and enhance our services may not be successful. As we continue to combine our operations with those that we have acquired, we must continue to assess the purposes for which various services may be used alone or together, and how we can best address those uses through stand-alone services or combinations of coordinating applications thereof. In addition, successfully launching and selling a new or upgraded service puts pressure on our sales and marketing resources. In 2015, we launched the current Apartments.com and the ApartmentFinder.com websites, both after completing extensive product development. To generate brand awareness and site traffic for Apartments.com, we utilize a multi-channel marketing campaign. The launch of the sites and/or the marketing campaign may not continue to increase brand awareness, site traffic and/or revenues. If we are unsuccessful in obtaining greater market share, we may not be able to offset the expenses associated with the launch and marketing campaign, which could have a material adverse effect on our financial results.

If we are unable to develop new or upgraded services or decide to combine, shift focus from, or phase out a service that overlaps or is redundant with other services we offer, then our customers may choose a competitive service over ours and our revenues may decline and our profitability may be reduced. For example, we continue to assess the impact of transitioning the LoopNet marketplace to a pure marketing site for commercial real estate where all listings are paid and users can search the site for free. We expect to see a short-term reduction in revenues and earnings, as well as reduced search engine optimization. We are working to convert customers to higher value, more profitable annual subscription information services, which should increase revenues and earnings over time, however we cannot predict with certainty whether we will be successful in shifting customers to higher value, more profitable subscriptions and, consequently, in offsetting any reduction in revenues and earnings. Therefore, our revenues and earnings may ultimately decline as a result of the LoopNet conversion to a pure marketing site. In addition, if we incur significant costs in developing new or upgraded services or combining and coordinating existing services, if we are not successful in marketing and selling these new services or upgrades, or if our customers fail to accept these new or combined and coordinating services, then there could be a material adverse effect on our results of operations due to a decrease of our revenues and a reduction of our profitability.

*A downturn or consolidation in the commercial real estate industry may decrease customer demand for our services.* The commercial real estate market may be adversely impacted by many different factors, including lower than expected job growth or job losses resulting in reduced real estate demand; rising interest rates and slowing transaction volumes that negatively impact investment returns; excessive speculative new construction in localized markets resulting in increased vacancy rates and diminished rent growth; and unanticipated disasters and other adverse events such as slowing of the growth in the working age population resulting in reduced demand for all types of real estate. A reversal of improvements in the commercial real estate industry's leasing activity and absorption rates or a renewed downturn in the commercial real estate market may affect our ability to generate revenues and may lead to more cancellations by our current or future customers, either of which could cause our revenues or our revenue growth rate to decline and reduce our profitability. A depressed commercial real estate market has a negative impact on our core customer base, which could decrease demand for our information, analytics and online marketplaces. Also, companies in this industry may consolidate, often in order to reduce expenses. Consolidation, or other cost-cutting measures by our customers, may lead to cancellations of our information, analytics and online marketplace services by our customers, reduce the number of our existing clients, reduce the size of our target market or increase our clients' bargaining power, all of which could cause our revenues to decline and reduce our profitability. If cancellations, reductions of services, and failures to pay increase, and we are unable to offset the resulting decrease in revenues by increasing sales to new or existing customers, our revenues may decline or grow at lower rates.

*Negative general economic conditions could increase our expenses and reduce our revenues.* Our business and the commercial real estate industry are particularly affected by negative trends in the general economy. The success of our business depends on a number of factors relating to general global, national, regional and local economic conditions, including perceived and actual economic conditions, recessions, inflation, deflation, exchange rates, interest rates, taxation policies, availability of credit, employment levels, and wage and salary levels. Negative general economic conditions could adversely affect our business by reducing our revenues and profitability. If we experience greater cancellations or reductions of services and failures to timely pay, and we do not acquire new clients or sell new services to our existing clients, our revenues may decline and our financial position would be adversely affected. Adverse national and global economic events, as well as any significant terrorist attack, are likely to have a dampening effect on the economy in general, which could negatively affect our financial performance and our stock price. Further actions or inactions of the U.S. or other major national governments may also impact economic conditions, which could result in financial market disruptions or an economic downturn. Market disruptions may also contribute to extreme price and volume fluctuations in the stock market that may affect our stock price for reasons unrelated to our operating performance. In addition, a significant increase in inflation could increase our expenses more rapidly than expected, the effect of which may not be offset by corresponding increases in revenue. Conversely, deflation resulting in a decline of prices could reduce our revenues. In the current economic environment, it is difficult to predict whether we will experience significant inflation or deflation in the near future. A significant increase in either could have an adverse effect on our results of operations.

*If we are unable to hire qualified persons for, or retain and continue to develop, our sales force, or if our sales force is unproductive, our revenues could be adversely affected.* In order to support revenues and future revenue growth, we need to continue to develop, train and retain our sales force. Our ability to build and develop a strong sales force may be affected by a number of factors, including: our ability to attract, integrate and motivate sales personnel; our ability to effectively train our sales force; the ability of our sales force to sell an increased number and different types of services; our ability to manage effectively an outbound telesales group; the length of time it takes new sales personnel to become productive; the competition we face from other companies in hiring and retaining sales personnel; our ability to effectively structure our sales force; and our ability to effectively manage a multi-location sales organization, including field sales personnel. If we are unable to hire qualified sales personnel and develop and retain the members of our sales force, including sales force management, or if our sales force is unproductive, our revenues or growth rate could decline and our expenses could increase.

*We may not be able to compete successfully against existing or future competitors in attracting advertisers, which could harm our business, results of operations and financial condition.* We compete to attract advertisers. Our competition for advertisers may have significant brand recognition as well as greater numbers of direct sales personnel than we have and may generate more web traffic than we do, which may provide a competitive advantage. To compete successfully for advertisers against future and existing competitors, we must continue to invest resources in developing our advertising platform and proving the effectiveness and relevance of our advertising services. Pressure from competitors seeking to acquire a greater share of our advertisers' overall marketing budget could adversely affect our pricing and margins, lower our revenue, and increase our research and development and marketing expenses. If we are unable to compete successfully against our existing or future competitors, our business, results of operations or financial condition could be adversely affected.

*We may be unable to increase awareness of our brands, including CoStar, LoopNet, Apartments.com, BizBuySell and LandsofAmerica, which could adversely affect our business.* We rely heavily on our brands, which we believe are key assets of our company. Awareness and differentiation of our brands are important for attracting and expanding the number of users of, and subscribers to, our online marketplaces, such as LoopNet, the Apartments.com network of rental websites, CoStar Showcase, and the Land.com network of rural lands for sale. We expect to continue to invest in sales and marketing, including sales and marketing for our other brands as we seek to grow the numbers of subscribers to, and advertisers on, our marketplaces. Our methods of advertising may not be successful in increasing brand awareness or, ultimately, be cost-effective. If we are unable to maintain or enhance user and advertiser awareness of our brands, or if we are unable to recover our marketing and advertising costs through increased usage of our services and increased advertising on the Apartments.com network of rental websites, our business, results of operations and financial condition could be adversely affected.

*We rely on Internet search engines to drive traffic to our websites. If search results do not feature our websites prominently, traffic to our websites would decrease and our business could be adversely affected.* Google, Bing, Yahoo! and other Internet search websites drive traffic to our websites, including CoStar.com, the Apartments.com network of rental websites, LoopNet.com, BizBuySell.com and LandsofAmerica.com. For example, when a user types an apartment building address into an Internet search engine, organic search ranking of our Apartments.com webpages will determine how prominently such webpages are displayed in the search results. However, our ability to maintain high organic search result rankings is not entirely within our control. Our competitors' search engine optimization, or SEO, efforts may result in their websites receiving a higher search result page ranking than the rankings our websites receive, or Internet search engines could revise their methodologies in a way that would adversely affect our search result rankings, each of which could slow the growth of our user base. Further, search engine providers could align with our competitors, which could adversely affect traffic to our websites. Our websites have experienced fluctuations in search result rankings in the past, and we anticipate similar fluctuations in the future. If we experience a material reduction in the number of users directed to our websites through Internet search engines, our business, results of operations and financial condition could be adversely affected.

*If we are unable to maintain or increase traffic to our marketplaces, our business and operating results could be adversely affected.* Our ability to generate revenues from our marketplace businesses depends, in part, on our ability to attract users to our websites. If we fail to maintain or increase traffic to our marketplaces, our ability to acquire additional subscribers or advertisers and deliver leads to existing subscribers and advertisers could be adversely affected. Our marketing expenses may increase in connection with our efforts to maintain or increase traffic to our websites. Our efforts to maintain or generate additional traffic to our marketplaces may not be successful. Even if we are able to attract additional users, increases in our operating expenses could negatively impact our operating results if we are unable to generate more revenues through increased sales of subscriptions to our marketplace products. We face competition to attract users to our marketplace websites. Our existing and potential competitors include companies that could devote greater technical and other resources than we have available to provide services that users might view as superior to our offerings. Any of our future or existing competitors may introduce different solutions that attract users away from our services or provide solutions similar to our own that have the advantage of better branding or marketing resources. If we are unable to increase traffic to our marketplaces, or if we are unable to generate enough additional revenues to offset increases in expenses related to increasing traffic to our marketplaces, our business and operating results could be adversely affected.

*If real estate professionals or other advertisers reduce or cancel their advertising spending with us and we are unable to attract new advertisers, our operating results would be harmed.* Our marketplace businesses, including LoopNet, the Apartments.com network of rental websites, CoStar Showcase, and the Land.com network of rural lands for sale, depend on advertising revenues generated primarily through sales to persons in the real estate industry, including property managers and owners, and other advertisers. Our ability to attract and retain advertisers, and ultimately to generate advertising revenue, depends on a number of factors, including:

- increasing the number of unique visitors to, and users of, our websites and mobile applications;
- the quantity and quality of the leads that we provide to our advertisers;
- the success of any marketing and product development efforts directed at attracting additional users and advertisers to our marketplaces;
- keeping pace with changes in technology and with our competitors; and
- offering an attractive return on investment to our advertisers for their advertising dollars spent with us.

Further, with respect to the Apartments.com network of rental websites, our ability to attract and retain advertisers also depends on the current apartment rental market and apartment vacancy rates. If vacancy rates are too high or too low, advertisers may not need to utilize our marketplace services.

Many of the advertisers who advertise on our marketplaces do not have long-term contracts. These advertisers could choose to modify or discontinue their relationships with us with little or no advance notice. In addition, as existing subscriptions for advertising expire, we may not be successful in renewing these subscriptions or securing new subscriptions. We may not succeed in retaining existing advertisers' spending or capturing a greater share of such spending if we are unable to convince advertisers of the effectiveness of our services as compared to alternatives. In addition, future changes to our pricing methodology for advertising services may cause advertisers to reduce or discontinue their advertising with us. If current advertisers reduce or end their advertising spending with us and we are unable to attract new advertisers, our advertising revenues and business, results of operations and financial condition could be adversely affected.

*If we do not invest in product development and provide services that are attractive to our users and to our advertisers, our business could be adversely affected.* Our success depends on our continued improvements to provide services that make our marketplaces useful for users, and attractive to our advertisers. As a result, we must continually invest resources in research and development to improve the appeal and comprehensiveness of our services and effectively incorporate new technologies. If we are unable to provide services that users want to use, then users may become dissatisfied and use competitors' websites. If we are unable to continue offering innovative services, we may be unable to attract additional users and advertisers or retain our current users and advertisers, which could harm our business, results of operations and financial condition.

*If we are not able to successfully identify, finance and/or integrate acquisitions, our business operations and financial position could be adversely affected.* We have expanded our markets and services in part through acquisitions of complementary businesses, services, databases and technologies, and expect to continue to do so in the future. Our strategy to acquire complementary companies or assets depends on our ability to identify, and the availability of, suitable acquisition candidates. We may incur costs in the preliminary stages of an acquisition, but may ultimately be unable or unwilling to consummate the proposed transaction for various reasons. In addition, acquisitions involve numerous risks, including the ability to realize or capitalize on synergies created through combinations; managing the integration of personnel and products or services; managing the integration of acquired infrastructure and controls; potential increases in operating costs; managing geographically remote operations; the diversion of management's attention from other business concerns and potential disruptions in ongoing operations during integration; the inherent risks in entering markets and sectors in which we have either limited or no direct experience; and the potential loss of key employees, clients or vendors and other business partners of the acquired companies. We may not successfully integrate acquired businesses or assets and may not achieve anticipated benefits of an acquisition, including expected synergies. External factors, such as compliance with laws and regulations, and shifting market preferences, may also impact the successful integration of an acquired business. An acquired business could strain our system of internal controls and diminish its effectiveness. Acquisitions could result in dilutive issuances of equity securities, the incurrence of debt, one-time write-offs of goodwill and substantial amortization expenses of other intangible assets. We may be unable to obtain financing on favorable terms, or at all, if necessary to finance future acquisitions making it impossible or more costly to acquire complementary businesses. If we are able to obtain financing, the terms may be onerous and restrict our operations. Further, certain acquisitions may be subject to regulatory approval, which can be time consuming and costly to obtain or may be denied, and if obtained, the terms of such regulatory approvals may impose limitations on our ongoing operations or require us to divest assets or lines of business.

*Market volatility may have an adverse effect on our stock price.* The trading price of our common stock has fluctuated widely in the past, and we expect that it will continue to fluctuate in the future. The price could fluctuate widely based on numerous factors, including: economic factors or conditions; quarter-to-quarter variations in our operating results; changes in analysts' estimates of our earnings; announcements by us or our competitors of technological innovations, new services, or other significant or strategic information; general conditions in the commercial real estate industry; general conditions of local, national or global economies; developments or disputes concerning copyrights or proprietary rights or other legal proceedings; and regulatory developments. In addition, the stock market in general, and the shares of Internet-related and other technology companies in particular, have historically experienced extreme price fluctuations. This volatility has had a substantial effect on the market prices of securities issued by many companies for reasons unrelated to the operating performance of the specific companies and may have the same effect on the market price of our common stock.

*If we are not able to obtain and maintain accurate, comprehensive or reliable data, we could experience reduced demand for our information, analytics and online marketplace services.* Our success depends on our clients' confidence in the comprehensiveness, accuracy and reliability of the data and analysis we provide. The task of establishing and maintaining accurate and reliable data and analysis is challenging. If our data, including the data we obtain from third parties or directly from brokers through the Listing Manager feature on CoStar, or analysis is not current, accurate, comprehensive or reliable, we could experience reduced demand for our services or legal claims by our customers, which could result in lower revenues and higher expenses.

*Competition could render our services uncompetitive.* The markets for information systems and services and for online marketplaces in general is highly competitive and rapidly changing. Competition in these markets may increase further if economic conditions or other circumstances cause customer bases and customer spending to decrease and service providers to compete for fewer customer resources. Our existing competitors, or future competitors, may have greater name recognition, larger customer bases, better technology or data, lower prices, easier access to data, greater user traffic or greater financial, technical or marketing resources than we have. Our competitors may be able to undertake more effective marketing campaigns, obtain more data, adopt more aggressive pricing policies, make more attractive offers to potential employees, subscribers, advertisers, distribution partners and content providers or may be able to respond more quickly to new or emerging technologies or changes in user requirements. If we are unable to retain customers or obtain new customers, our revenues could decline. Increased competition could result in lower revenues and higher expenses, which would reduce our profitability.

*Our focus on internal and external investments may place downward pressure on our operating margins.* Over the past few years, we have increased the rate of investments in our business, including internal investments in product development to expand the breadth and depth of services we provide to our customers and investments in sales and marketing to generate brand awareness. Our investment strategy is intended to increase our revenue growth in the future. Our operating margins may experience downward pressure in the short term as a result of investments. Furthermore, our investments may not have their intended effect. In addition, our external investments may lose value and we may incur impairment charges with respect to such investments. Such impairment charges may negatively impact our profitability. If we are unable to successfully execute our investment strategy or if we fail to adequately anticipate and address potential problems, we may experience decreases in our revenues and operating margins.

*If we are unable to enforce or defend our ownership and use of intellectual property, our business, brands, competitive position and operating results could be harmed.* The success of our business depends in large part on our intellectual property, including intellectual property involved in our methodologies, database, services and software. We rely on a combination of trademark, trade secret, patent, copyright and other laws, nondisclosure and noncompetition provisions, license agreements and other contractual provisions and technical measures to protect our intellectual property rights. However, current law may not provide for adequate protection of our databases and the actual data. In addition, legal standards relating to the validity, enforceability and scope of protection of proprietary rights in Internet-related businesses are uncertain and evolving, and changes in these standards may adversely impact the viability or value of our proprietary rights. If we are not successful in protecting our intellectual property, including our content, our brands and our business, results of operations and financial condition could be harmed. The same would be true if a court found that our services infringe other persons' intellectual property rights. Any intellectual property lawsuits or threatened lawsuits in which we are involved, either as a plaintiff or as a defendant, could cost us a significant amount of time and money and distract management's attention from operating our business. In addition, if we do not prevail on an intellectual property claim, this could result in a change to our methodology or information, analytics and online marketplace services and could reduce our profitability.

Effective trademark, trade secret, patent, and copyright protection may not be available in every country in which our services may be provided. The laws of certain countries do not protect proprietary rights to the same extent as the laws of the United States and, therefore, in certain jurisdictions, we may be unable to protect our intellectual property and our proprietary technology adequately against unauthorized third-party copying or use, which could harm our competitive position.

We seek to enforce our rights against people and entities that infringe our intellectual property, including through legal action. Taking such action may be costly, and we cannot ensure that such actions will be successful. Any increase in the unauthorized use of our intellectual property could make it more expensive for us to do business and harm our results of operations or financial condition.

*We may not be able to successfully halt the operation of websites that aggregate our data, as well as data from other companies, such as copycat websites that may misappropriate our data.* Third parties may misappropriate our data through website scraping, robots or other means and aggregate this data on their websites with data from other companies. In addition, "copycat" websites may misappropriate data on our website and attempt to imitate our brands or the functionality of our website. We may not be able to detect all such websites in a timely manner and, even if we could, technological and legal measures may be insufficient to stop their operations. In some cases, particularly in the case of websites operating outside of the U.S., our available remedies may not be adequate to protect us against the misappropriation of our data. Regardless of whether we can successfully enforce our rights against the operators of these websites, any measures that we may take could require us to expend significant financial or other resources.



*Third party claims, litigation or government investigations to which we are subject or in which we become involved may significantly increase our expenses and adversely affect our stock price.* Currently and from time to time, we are a party to various third party claims, lawsuits, or government investigations. Any lawsuits, threatened lawsuits or government investigations in which we are involved, whether as plaintiff or defendant, could cost us a significant amount of time and money, could distract management's attention away from operating our business, could result in negative publicity and could adversely affect our stock price. In addition, if any claims are determined against us or if a settlement requires us to pay a large monetary amount or take other action that materially restricts or impedes our operations, our profitability could be significantly reduced and our financial position could be adversely affected. Our insurance may not be sufficient to cover any losses we incur in connection with litigation claims.

*We may be subject to legal liability for collecting, displaying or distributing information.* Because the content in our database is collected from various sources and distributed to others, we may be subject to claims for breach of contract, defamation, negligence, unfair competition or copyright or trademark infringement or claims based on other theories. We could also be subject to claims based upon the content that is accessible from our website through links to other websites or information on our website supplied by third parties. We could also be subject to claims that the collection or provision of certain information breached laws and regulations relating to privacy and data protection. Even if these claims do not result in liability to us, we could incur significant costs in investigating and defending against any claims and we could be subject to public notice requirements that may affect our reputation in the marketplace. Our potential liability for information distributed by us to others could require us to implement measures to reduce our exposure to such liability, which may require us to expend substantial resources and limit the attractiveness of our information, analytics and online marketplaces to users.

*Our actual or perceived failure to comply with privacy laws and standards could adversely affect our business, financial condition and results of operations.* We are dependent on information technology networks and systems to process, transmit and store electronic information and to communicate between our locations around the world and with our clients. We collect, use and disclose personally identifiable information, including among other things names, addresses, phone numbers and email addresses. We collect, store and use biometric data, sensitive or confidential transaction information and, in certain circumstances, credit card information. In addition, we collect personal information from tenants and landlords, including social security numbers, dates of birth, financial information, tax returns, employment information, background checks and credit scores, which is used in the apartment rental application process and for the verification of landlords. As a result, we are subject to a variety of state, national, and international laws and regulations that apply to the collection, use, retention, protection, disclosure, transfer and other processing of personal data, including the Fair Credit Reporting Act. Laws and regulations related to privacy and data protection are evolving, with new or modified laws and regulations proposed and implemented frequently and existing laws and regulations subject to new or different interpretations. For example, in 2016, the EU formally adopted the General Data Protection Regulation, or GDPR, which will apply in all EU member states effective May 25, 2018 and will replace the current EU Data Protection Directive effective on that date. The GDPR introduces new data protection requirements in the EU and substantial fines for breaches of the data protection rules. The GDPR will increase our responsibility and liability in relation to personal data that we process, and we may be required to put in place additional mechanisms to ensure compliance with the new EU data protection rules. Any failure to comply with the rules arising from the EU Data Protection Directive, the GDPR, and related national laws of EU member states, could lead to government enforcement actions and significant penalties against us, and could adversely affect our business, financial condition, cash flows and results of operations. Compliance with any of the foregoing laws and regulations can be costly and can delay or impede the development of new products. A violation of any laws or regulations relating to the collection or use of personal information could result in the imposition of fines against us.

We have undertaken efforts to conform transfers of personal data from the EEA based on current regulatory obligations, the guidance of data protection authorities and evolving best practices. We continue to review our business practices and the evolving regulations and may find it necessary or desirable to make further changes to our personal data handling or engage in additional efforts to cause our transfer and receipt of EEA residents' personal data to be legitimized under applicable law. As a result of the adoption of GDPR, we may find it necessary to establish systems to maintain EU-origin data in the European Economic Area, or EEA, which may involve substantial expense and distraction from other aspects of our business. Despite our efforts, we may be unsuccessful in establishing legitimate means of transferring certain data from the EEA, which may vary the current data protection landscape.

Our actual or alleged failure to comply with applicable privacy or data security laws, regulations and policies, or to protect personal data, could result in enforcement actions and significant penalties against us, which could result in negative publicity, increase our operating costs, subject us to claims or other remedies and have a material adverse effect on our business, financial condition and results of operations.

Because the interpretation and application of many privacy and data protection laws are uncertain, it is possible that these laws may be interpreted and applied in a manner that is inconsistent with our existing data management practices or the features

of our products. If so, in addition to the possibility of fines, lawsuits and other claims and penalties, we could be required to fundamentally change our business activities and practices or modify our products, which could harm our business.

We expect that there will continue to be new proposed laws, regulations and industry standards concerning privacy, data protection and information security in the United States and other jurisdictions, and we cannot yet determine the impact such future laws, regulations and standards may have on our business. Our policies concerning the collection, use and disclosure of personally identifiable information are described on our websites. While we believe that our policies are appropriate and that we are in compliance with our policies, we could be subject to legal claims, government action, harm to our reputation or experience significant remediation costs if we experience a security breach or our practices fail, or are seen as failing, to comply with our policies or with applicable laws concerning personally identifiable information.

Concern of prospective customers regarding our use of the personal information collected on our websites or collected when performing our services could keep prospective customers from subscribing to our services. Industry-wide incidents or incidents with respect to our websites, including misappropriation of third-party information, security breaches or changes in industry standards, regulations or laws, could deter people from using the Internet or our websites to conduct transactions that involve the transmission of confidential information, which could harm our business.

*We are subject to a number of risks related to acceptance of credit cards and debit cards for customer payments.* We accept payments for our services through credit and debit card transactions. For credit and debit card payments, we pay interchange and other fees, which may increase over time. An increase in those fees may require us to increase the prices we charge and would increase our cost of revenues, either of which could harm our business, financial condition or results of operations.

We depend on processing vendors to complete credit and debit card transactions. If we or our processing vendors fail to maintain adequate systems for the authorization and processing of credit card transactions, it could cause one or more of the major credit card companies to disallow our continued use of their payment products. We could lose customers if we are not able to continue to use payment products of the major credit card companies. In addition, if the systems for the authorization and processing of credit card transactions fail to work properly and, as a result, we do not charge our customers' credit cards on a timely basis or at all, our business, revenue, results of operations and financial condition could be harmed.

We are also subject to payment card association operating rules, certification requirements and rules governing electronic funds transfers, which could change or be reinterpreted in ways that make it more difficult for us to comply. We are required to comply with payment card industry security standards. Failing to comply with those standards may violate payment card association operating rules, federal and state laws and regulations, and the terms of our contracts with payment processors. Any failure to comply also may subject us to fines, penalties, damages and civil liability, and may result in the loss of our ability to accept credit and debit card payments. Further, there is no guarantee that such compliance will prevent illegal or improper use of our payment systems or the theft, loss, or misuse of data pertaining to credit and debit cards, cardholders and transactions. If we fail to adequately control fraudulent credit card transactions, we may face civil liability, diminished public perception of our security measures and significantly higher credit card-related costs, each of which could harm our business, results of operations and financial condition.

If we are unable to maintain our chargeback rate or refund rates at acceptable levels, our processing vendors may increase our transaction fees or terminate their relationships with us. Any increases in our credit and debit card fees could harm our results of operations, particularly if we elect not to raise our rates for our services to offset the increase. The termination of our ability to process payments on any major credit or debit card would significantly impair our ability to operate our business.

*Our business depends on retaining and attracting highly capable management and operating personnel.* Our success depends in large part on our ability to retain and attract management and operating personnel, including our President and Chief Executive Officer, Andrew Florance, and our other officers and key employees. Our business requires highly skilled technical, sales, management, web product and development, marketing and research personnel, who are in high demand and are often subject to competing offers. To retain and attract key personnel, we use various measures, including employment agreements, awards under a stock incentive plan and incentive bonuses for key employees. These measures may not be enough to retain and attract the personnel we need or to offset the impact on our business of the loss of the services of Mr. Florance or other key officers or employees.

*An impairment in the carrying value of goodwill could negatively impact our consolidated results of operations and net worth.* Goodwill and identifiable intangible assets not subject to amortization are tested annually by each reporting unit on October 1 of each year for impairment and are tested for impairment more frequently based upon the existence of one or more indicators. We assess the impairment of long-lived assets, identifiable intangibles and goodwill whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Judgments made by management relate to the expected useful lives of long-lived assets and our ability to realize undiscounted cash flows of the carrying amounts of such assets. The accuracy of these judgments may be adversely affected by several factors, including the factors listed below:

- Significant underperformance relative to historical or projected future operating results;
- Significant changes in the manner of our use of acquired assets or the strategy for our overall business;
- Significant negative industry or economic trends; or
- Significant decline in our market capitalization relative to net book value for a sustained period.

These types of events or indicators and the resulting impairment analysis could result in goodwill impairment charges in the future, which would reduce our profitability. Impairment charges could negatively affect our financial results in the periods of such charges, which may reduce our profitability. As of December 31, 2017, we had approximately \$1.3 billion of goodwill, including \$1 billion in our North America operating segment and \$30 million in our International operating segment.

*If we are unable to obtain or retain listings from commercial real estate brokers, agents, property owners and apartment property managers, our commercial real estate ("CRE") marketplace services, including but not limited to LoopNet, the Apartments.com network of rental websites, CoStar Showcase, LandandFarm.com and LandsofAmerica.com, could be less attractive to current or potential customers, which could reduce our revenues.* The value of our CRE marketplace services to our customers depends on our ability to increase the number of property listings provided and searches conducted. The success of our CRE marketplace services depends substantially on the number of property listings submitted by brokers, agents, property owners and, in the case of apartment rentals, property managers. This is because an increase in the number of listings increases the utility of the online service and of its associated search, listing and marketing services. If agents marketing large numbers of property listings, such as large brokers in key real estate markets, choose not to continue their listings with us, or choose to list them with a competitor, our CRE marketplace services could be less attractive to other real estate industry transaction participants, resulting in reduced revenue. Similarly, the value and utility of our other marketplaces, including BizBuySell and BizQuest, are also dependent on attracting and retaining listings.

*If we are unable to convince commercial real estate professionals that our CRE marketplace services are superior to traditional methods of listing, searching and marketing commercial real estate, they could choose not to use those services, which could reduce our revenues or increase our expenses.* The primary source of new customers for our CRE marketplace services is participants in the commercial real estate community. Many commercial real estate professionals are used to listing, searching and marketing real estate in traditional and off-line ways, such as by distributing print brochures, sharing written lists, placing signs on properties, word-of-mouth and newspaper advertisements. Commercial real estate and investment professionals may prefer to continue to use traditional methods or may be slow to adopt and accept our online products and services. If we are not able to persuade commercial real estate participants of the efficacy of our online products and services, they may choose not to use our CRE marketplace services, which could negatively impact our business. Similarly, if we are unable to convince the business and investment community to utilize our online business for sale marketplaces rather than traditional methods of listing and marketing businesses for sale, our revenues could be negatively affected.

*If we are unable to increase our revenues or our operating costs are higher than expected, our profitability may decline and our operating results may fluctuate significantly.* We may not be able to accurately forecast our revenues or future revenue growth rate. Many of our expenses, particularly personnel costs and occupancy costs, are relatively fixed. As a result, we may not be able to adjust spending quickly enough to offset any unexpected increase in expenses or revenue shortfall. We may experience higher than expected operating costs, including increased personnel costs, occupancy costs, selling and marketing costs, investments in geographic expansion, acquisition costs, communications costs, travel costs, software development costs, professional fees and other costs. If operating costs exceed our expectations and cannot be adjusted accordingly, our profitability may be reduced and our results of operations and financial position will be adversely affected. Additionally, we may not be able to sustain our revenue growth rates, and our percentage revenue growth rates may decline. Our ability to increase our revenues and operating profit will depend on increased demand for our services. Our sales are affected by, among other things, general economic and commercial real estate conditions. Reduced demand, whether due to changes in customer preference, a weakening of the U.S. or global economy, competition or other reasons, may result in decreased revenues and growth, adversely affecting our operating results.

*Our current or future geographic expansion plans may not result in increased revenues, which may negatively impact our business, results of operations and financial position.* Expanding into new markets and investing resources towards increasing the depth of our coverage within existing markets imposes additional burdens on our research, systems development, sales, marketing

and general managerial resources. If we are unable to manage our expansion efforts effectively, if our expansion efforts take longer than planned or if our costs for these efforts exceed our expectations, our financial position could be adversely affected. In addition, if we incur significant costs to improve data quality within existing markets, or are not successful in marketing and selling our services in these markets or in new markets, our expansion may have a material adverse effect on our financial position by increasing our expenses without increasing our revenues, adversely affecting our profitability.

*International operations expose us to additional business risks, which may reduce our profitability.* Our international operations and expansion subject us to additional business risks, including: currency exchange rate fluctuations; adapting to the differing business practices and laws in foreign countries; including differing laws regarding privacy and data protection; difficulties in managing foreign operations; limited protection for intellectual property rights in some countries; difficulty in collecting accounts receivable and longer collection periods; costs of enforcing contractual obligations; impact of recessions in economies outside the U.S.; and potentially adverse tax consequences. In addition, international expansion imposes additional burdens on our executive and administrative personnel, systems development, research and sales departments, and general managerial resources. If we are not able to manage our international operations successfully, we may incur higher expenses and our profitability may be reduced. Finally, the investment required for additional international expansion could exceed the profit generated from such expansion, which would reduce our profitability and adversely affect our financial position.

*Fluctuating foreign currencies may negatively impact our business, results of operations and financial position.* Due to our acquisitions of CoStar U.K. Limited (formerly FOCUS Information Limited), Property and Portfolio Research Ltd., Grecam S.A.S., the assets of Belbex Corporate, S.L., Thomas Daily, as well as our expansion into Canada, a portion of our business is denominated in the British Pound, Euro and Canadian dollar. As a result, fluctuations in foreign currencies may have an impact on our business, results of operations and financial position. Foreign currency exchange rates have fluctuated and may continue to fluctuate. Significant foreign currency exchange rate fluctuations may negatively impact our international revenue, which in turn affects our consolidated revenue. Currencies may be affected by internal factors, general economic conditions and external developments in other countries, all of which can have an adverse impact on a country's currency. Currently, we are not party to any hedging transactions intended to reduce our exposure to exchange rate fluctuations. We may seek to enter into hedging transactions in the future, but we may be unable to enter into these transactions successfully, on acceptable terms or at all. We cannot predict whether we will incur foreign exchange losses in the future. Further, significant foreign exchange fluctuations resulting in a decline in the respective local currency may decrease the value of our foreign assets, as well as decrease our revenues and earnings from our foreign subsidiaries, which would reduce our profitability and adversely affect our financial position.

*The economic effects of "Brexit" may affect relationships with existing and future customers and could have an adverse impact on our business and operating results.* On June 23, 2016, the U.K held a referendum in which British citizens approved an exit from the European Union ("E.U."), commonly referred to as "Brexit." On March 29, 2017, the United Kingdom provided its official notice to the European Council that it intends to leave the European Union, commencing a period of up to two years for the U.K. and the other E.U. member states to negotiate the terms of the withdrawal. Uncertainty over the terms of the U.K.'s withdrawal from the E.U. could cause political and economic uncertainty in the U.K. and the rest of Europe, which could harm our business and financial results. In particular, Brexit could result in significant volatility in global equity markets, currency exchange rates and other asset prices, including those related to real property. The impact to us from Brexit will depend, in part, on the outcome of tariff, trade, regulatory and other negotiations. This impact may affect not only our U.K. operations but operations in other parts of the E.U. Any transitional or permanent agreements resulting from such negotiations could potentially disrupt the markets we serve and the tax jurisdictions in which we operate.

A potential devaluation of the local currencies of our international customers relative to the U.S. dollar may impair the purchasing power of our international customers and could cause international customers to decrease or cancel orders, or terminate or fail to renew subscriptions for our services.

We translate sales and other results denominated in foreign currency into U.S. dollars for our financial statements. During periods of a strengthening U.S. dollar, our reported international sales and earnings could be reduced because foreign currencies may translate into fewer U.S. dollars. Resulting asset price volatility that could follow the withdrawal of the U.K. from the E.U. may create global economic uncertainty, which may cause our customers to closely monitor their costs and reduce their spending budgets on our products and services. In addition, Brexit could lead to legal uncertainty and potentially divergent national laws and regulations as the U.K determines which E.U. laws to replace or replicate, and those laws and regulations may be cumbersome, difficult or costly in terms of compliance. Further, Brexit may lead other E.U. member countries to consider referendums regarding their E.U. membership. Any of these effects of Brexit, among others, could adversely affect our business, financial condition, operating results and cash flows.

*Changes in laws, regulations or fiscal and tax policies or the manner of their interpretation or enforcement could adversely impact our financial performance.* New laws or regulations, or changes in existing laws or regulations, or the manner of their

interpretation or enforcement, could increase our cost of doing business. In particular, there may be significant changes in U.S. laws and regulations by the current U.S. presidential administration that could affect a wide variety of industries and businesses, including our business. The current U.S. presidential administration has called for substantial change to fiscal and tax policies, and recently adopted tax reform legislation. Refer to Management's Discussion and Analysis of Financial Condition and Results of Operations of this Form 10-K for additional discussion of the impact of tax reform on the business. We cannot predict the impact, if any, of potential future additional changes to our business. If the current U.S. presidential administration materially modifies U.S. laws and regulations or fiscal and other tax policies, our business, financial condition, and results of operations could be adversely affected.

In December 2017, the United States enacted The Tax Cuts and Jobs Act (the "Tax Act"), and various provisions of the new law may adversely affect us. Certain aspects of Tax Reform are unclear and may not be clarified for some time. As required by Securities and Exchange Commission Staff Accounting Bulletin 118, Income Tax Accounting Implications of the Tax Cuts and Jobs Act, we have provided a provisional estimate on the effect of the Tax Act in our consolidated financial statements. However, we may be required to change our provisional estimates as a result of new accounting guidance, regulatory guidance, judicial interpretations or our continued analysis of the application of the law, which could materially affect our tax obligations and effective tax rate. In addition, if federal, state or foreign tax authorities change applicable tax laws or issue new guidance, our overall taxes could increase, and our business, financial condition or results of operations may be adversely impacted.

*Our indebtedness could adversely affect us, including by decreasing our business flexibility and increasing our costs.* On October 19, 2017, we entered into an amended and restated credit agreement (the "2017 Credit Agreement"), which amended and restated in its entirety the existing credit agreement dated April 1, 2014 (the "2014 Credit Agreement"), by and among CoStar, as borrower, CoStar Realty Information, Inc., as co-borrower, the lenders from time to time party thereto and JPMorgan Chase Bank, N.A., as administrative agent. The 2017 Credit Agreement provides for a \$750 million revolving credit facility with a term of five years from a syndicate of financial institutions as lenders and issuing banks. The 2017 Credit Agreement contains customary restrictive covenants imposing operating and financial restrictions on us, including restrictions that may limit our ability to engage in acts that we believe may be in our long-term best interests. These covenants restrict our ability and the ability of our subsidiaries to, among other things, (i) incur additional indebtedness, (ii) create, incur, assume or permit to exist any liens, (iii) enter into mergers, consolidations or similar transactions, (iv) make investments and acquisitions, (v) make certain dispositions of assets, (vi) make dividends, distributions and prepayments of certain indebtedness, and (vii) enter into certain transactions with affiliates.

The operating restrictions and financial covenants in the 2017 Credit Agreement and any future financing agreements may limit our ability to finance future operations or capital needs, to engage in other business activities or to respond to changes in market conditions. Our ability to comply with any financial covenants could be affected materially by events beyond our control, and we may be unable to satisfy any such requirements. If we fail to comply with these covenants, we may need to seek waivers or amendments of such covenants, seek alternative or additional sources of financing or reduce our expenditures. We may be unable to obtain such waivers, amendments or alternative or additional financing on a timely basis or at all, or on favorable terms.

We are required to make periodic principal and interest payments pursuant to the terms of the 2017 Credit Agreement. If an event of default occurs, the interest rate on overdue amounts will increase and the lenders under the 2017 Credit Agreement may declare all outstanding borrowings, together with accrued interest and other fees, to be immediately due and payable and may exercise remedies in respect of the collateral. We may not be able to repay all amounts due under the 2017 Credit Agreement in the event these amounts are declared due upon an event of default.

*Negative conditions in the global credit markets may affect the liquidity of a portion of our long-term investments.* Currently, our long-term investments include mostly AAA-rated auction rate securities ("ARS"), which are primarily student loan securities supported by guarantees from the Federal Family Education Loan Program ("FFELP") of the U.S. Department of Education. Continuing negative conditions in the global credit markets have prevented some investors from liquidating their holdings of auction rate securities because the amount of securities submitted for sale has exceeded the amount of purchase orders for such securities. As of December 31, 2017, we held \$11 million par value of ARS, all of which failed to settle at auctions. When an auction fails for ARS in which we have invested, we may be unable to liquidate some or all of these securities at par. In the event we need or desire to immediately access these funds, we will not be able to do so until a future auction on these investments is successful, a buyer is found outside the auction process or an alternative action is determined. If a buyer is found but is unwilling to purchase the investments at par, we may incur a loss, which would reduce our profitability and adversely affect our financial position.

Our ARS investments are not currently actively trading and therefore do not currently have a readily determinable market value. The estimated fair value of the ARS no longer approximates par value. We have used a discounted cash flow model to determine the estimated fair value of our investment in ARS as of December 31, 2017. The assumptions used in preparing the discounted cash flow model include estimates for interest rates, credit spreads, timing and amount of cash flows, liquidity risk

premiums, expected holding periods and default risk of the ARS. We update the discounted cash flow model on a quarterly basis to reflect any changes in the assumptions used in the model and settlements of ARS investments that occurred during the period. Based on this assessment of fair value, as of December 31, 2017, we determined there was a decline in the fair value of our ARS investments of approximately \$730,000. The decline was deemed to be a temporary impairment and was recorded as an unrealized loss in accumulated other comprehensive loss in stockholders' equity. If the issuers of these ARS are unable to successfully close future auctions and/or their credit ratings deteriorate, we may be required to record additional unrealized losses in accumulated other comprehensive loss or an other-than-temporary impairment charge to earnings on these investments, which would reduce our profitability and adversely affect our financial position.

We have not made any material changes in the accounting methodology used to determine the fair value of the ARS. We do not expect any material changes in the near term to the underlying assumptions used to determine the unobservable inputs used to calculate the fair value of the ARS as of December 31, 2017. However, if changes in these assumptions occur, and, should those changes be significant, we may be required to record additional unrealized losses in accumulated other comprehensive loss or an other-than-temporary impairment charge to earnings on these investments.

*Technical problems or disruptions that affect either our customers' ability to access our services, or the software, internal applications, database and network systems underlying our services, could damage our reputation and brands and lead to reduced demand for our information, analytics and online marketplace services, lower revenues and increased costs.* Our business, brands and reputation depend upon the satisfactory performance, reliability and availability of our websites, the Internet and our service providers. Interruptions in these systems, whether due to system failures, computer viruses, software errors, physical or electronic break-ins, or malicious hacks or attacks on our systems (such as denial of service attacks), could affect the security and availability of our services on our mobile applications and our websites and prevent or inhibit the ability of users to access our services. Our operations also depend on our ability to protect our databases, computers and software, telecommunications equipment and facilities against damage from potential dangers such as fire, flood, power loss, security breaches, computer viruses, telecommunications failures, terrorist attacks, acts of war, electronic and physical break-ins, computer viruses, earthquakes and similar events. Our users rely on our services when conducting their own businesses. Disruptions in, or reductions in ability to access, our services for whatever reason could damage our users' businesses, harm our reputation, result in additional costs or result in reduced demand for our information, analytics and online marketplace services, any of which could harm our business, results of operations and financial condition.

In addition, the software, internal applications and systems underlying our services are complex and may not be error-free. Our careful development and testing may not be sufficient to ensure that we will not encounter technical problems when we attempt to enhance our software, internal applications and systems. Any inefficiencies, errors or technical problems with our software, internal applications and systems could reduce the quality of our services or interfere with our customers' access to our information, analytics and online marketplaces, which could reduce the demand for our services, lower our revenues and increase our costs.

The majority of the communications, network and computer hardware used to operate our mobile applications and websites are located at facilities in Virginia and California. We do not own or control the operation of certain of these facilities. Our systems and operations are vulnerable to damage or interruption from fire, flood, power loss, security breaches, computer viruses, telecommunications failure, terrorist attacks, acts of war, electronic and physical break-ins, earthquakes and similar events. These risks may be increased with respect to operations housed at facilities we do not own or control. The occurrence of any of the foregoing events could result in damage to our systems and hardware or could cause them to fail completely, and our insurance may not cover such events or may be insufficient to compensate us for losses that may occur.

A failure of our systems at any site could result in reduced functionality for our users, and a total failure of our systems could cause our mobile applications or websites to be inaccessible. Problems faced or caused by our information technology service providers, including content distribution service providers, private network providers, Internet providers and third-party web-hosting providers, or with the systems by which they allocate capacity among their customers (as applicable), could adversely affect the experience of our users. Any financial difficulties, such as bankruptcy reorganization, faced by these third-party service providers or any of the service providers with whom they contract may have negative effects on our business, the nature and extent of which are difficult to predict. If our third-party service providers are unable to keep up with our growing needs for capacity, our business could be harmed. In addition, if distribution channels for our mobile applications experience disruptions, such disruptions could adversely affect the ability of users and potential users to access or update our mobile applications, which could harm our business.

Our business interruption insurance may not cover certain events or may be insufficient to compensate us for the potentially significant losses, including the potential harm to the future growth of our business, which may result from interruptions in our service as a result of system failures or malicious attacks. Any errors, defects, disruptions or other performance problems with our services could harm our reputation, business, results of operations and financial condition.

*Our operating results and revenues are subject to fluctuations and our quarterly financial results may be subject to seasonality and market cyclicality, each of which could cause our stock price to be negatively affected.* The commercial real estate market may be influenced by general economic conditions, economic cycles, annual seasonality factors and many other factors, which in turn may impact our financial results. The market is large and fragmented. The different sectors of the industry, such as office, industrial, retail, multifamily, and others, are influenced differently by different factors, and have historically moved through economic cycles with different timing. As such, it is difficult to estimate the potential impact of economic cycles and conditions or seasonality from year-to-year on our overall operating results. In addition, our results may be impacted by seasonality. The timing of widely observed holidays and vacation periods, particularly slowdowns during the end-of-year holiday period, and availability of real estate agents and related service providers during these periods, could significantly affect our quarterly operating results during that period. If we are unable to adequately respond to economic, seasonal or cyclical conditions, our revenues, expenses and operating results may fluctuate from quarter to quarter. Our operating results, revenues and expenses may fluctuate for many reasons, including those described below and elsewhere in this Annual Report on Form 10-K:

- Rates of subscriber adoption and retention;
- Timing of our sales conference or significant marketing events;
- A slow-down during the end-of-year holiday period;
- Changes in our pricing strategy and timing of changes;
- The timing and success of new service introductions and enhancements;
- The shift of focus from, or phase out of services that overlap or are redundant with other services we offer;
- The amount and timing of our operating expenses and capital expenditures;
- Our ability to control expenses;
- The amount and timing of non-cash stock-based charges;
- Costs related to acquisitions of businesses or technologies or impairment charges associated with such investments and acquisitions;
- Competition;
- Changes or consolidation in the real estate industry;
- Our investments in geographic expansion and to increase coverage in existing markets;
- Interest rate fluctuations;
- Successful execution of our expansion and integration plans;
- The development of our sales force;
- Foreign currency and exchange rate fluctuations;
- Inflation; and
- Changes in client budgets.

These fluctuations or seasonality effects could negatively affect our results of operations during the period in question and/or future periods or cause our stock price to decline. In addition, changes in accounting policies or practices may affect our level of net income. Fluctuations in our financial results, revenues and expenses may cause the market price of our common stock to decline.

*The consent order approved by the Federal Trade Commission in connection with the LoopNet merger imposes conditions that could have an adverse effect on us and our business, and failure to comply with the terms of the consent order may result in adverse consequences for the combined company.* On April 26, 2012, the FTC accepted the consent order in connection with the LoopNet merger that was previously agreed to among the FTC staff, CoStar, and LoopNet on April 17, 2012. The consent order was subject to a 30-day public comment period, and on August 29, 2012, the FTC issued its final acceptance of the consent order.

The consent order, which is publicly available on the FTC's website at <http://www.ftc.gov/>, requires CoStar to maintain certain business practices that the FTC believes are pro-competitive. For example, the consent order requires CoStar to license its products to customers who have bought its competitors' products on a non-discriminatory basis. In addition, CoStar is required to provide the FTC with advance written notification of certain acquisitions for which notification would not otherwise be required under the Hart-Scott-Rodino Premerger Notification Act. This provision of the consent order requiring CoStar to provide the FTC with advance written notification of certain acquisitions could prevent us from closing certain acquisitions or add significant time and cost to these potential acquisitions, ultimately making an acquisition prohibitive or preventing CoStar from realizing anticipated benefits of an acquisition. In the event that CoStar fails or is unable to comply with the terms of the consent order, CoStar could be subject to an enforcement proceeding that could result in substantial fines and/or injunctive relief.

*We have incurred and will continue to incur acquisition-related costs.* We have incurred severance costs and expect to incur additional costs to integrate prior acquisitions, such as IT integration expenses and costs related to the renegotiation of redundant vendor agreements. Costs in connection with acquisitions and integrations may be higher than expected, and we may also incur

unanticipated acquisition-related costs. These costs could adversely affect our financial condition, results of operation or prospects of the combined business.

*Changes in accounting and reporting policies or practices may affect our financial results or presentation of results, which may affect our stock price.* Changes in accounting and reporting policies or practices could reduce our net income, which reductions may be independent of changes in our operations. These reductions in reported net income could cause our stock price to decline.

**Item 1B. Unresolved Staff Comments**

None.

**Item 2. Properties**

Our headquarters is located at 1331 L Street, NW, in downtown Washington, DC, where we occupy approximately 157,480 square feet, of which 7,980 square feet is a sublease expiring January 31, 2019, and the remaining 149,500 square feet is a lease that expires May 31, 2025 (with two 5-year renewal options). Our headquarters is used primarily by our North America operating segment. Our principal facility in the U.K. is located in London, where we occupy approximately 15,900 square feet of office space. Our lease for this facility has a term ending August 31, 2025. This facility is used by our International operating segment.

In addition to our downtown Washington, DC leased facility and our London facility, we established our research operations headquarters in Richmond, Virginia in 2016, in which we occupy 132,987 square feet of office space. In addition to the Richmond research facility, we also operate our research functions out of leased spaces in San Diego, California; Columbia, Maryland; Atlanta, Georgia; and Glasgow, Scotland. Additionally, we lease office space in a variety of other metropolitan areas. These locations include, among others, the following: Austin, Texas; Boston, Massachusetts; Chicago, Illinois; Irvine, California; Los Angeles, California; and San Francisco, California.

We believe these facilities are suitable and appropriately support our business needs.

**Item 3. Legal Proceedings**

Currently, and from time to time, we are involved in litigation incidental to the conduct of our business. We are not a party to any lawsuit or proceeding that, in the opinion of our management based on consultations with legal counsel, is likely to have a material adverse effect on our financial position or results of operations.

**Item 4. Mine Safety Disclosures**

Not Applicable.



## PART II

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

*Price Range of Common Stock.* Our common stock is traded on the Nasdaq Global Select Market under the symbol "CSGP." The following table sets forth, for the periods indicated, the high and low daily closing prices per share of our common stock, as reported by the Nasdaq Global Select Market.

	<u>High</u>	<u>Low</u>
<b>Year Ended December 31, 2016</b>		
First Quarter	\$ 199.73	\$ 148.90
Second Quarter	\$ 218.66	\$ 176.85
Third Quarter	\$ 224.10	\$ 204.82
Fourth Quarter	\$ 215.75	\$ 180.29
<b>Year Ended December 31, 2017</b>		
First Quarter	\$ 211.37	\$ 186.15
Second Quarter	\$ 266.93	\$ 204.52
Third Quarter	\$ 287.02	\$ 263.60
Fourth Quarter	\$ 310.19	\$ 271.63

As of February 1, 2018, there were 1,342 holders of record of our common stock.

*Dividend Policy.* We have never declared or paid any dividends on our common stock. The 2017 Credit Agreement includes covenants that, subject to certain exceptions, restrict our ability and the ability of our subsidiaries to pay dividends or distributions. Any future determination to pay dividends will be at the discretion of our Board of Directors, subject to applicable limitations under Delaware law, and will be dependent upon our results of operations, financial position and other factors deemed relevant by our Board of Directors. We do not anticipate paying any dividends on our common stock during the foreseeable future, but intend to retain any earnings for future growth of our business.

*Recent Issues of Unregistered Securities.* We did not issue any unregistered securities during the years ended December 31, 2016 and 2017.

*Issuer Purchases of Equity Securities.* The following table is a summary of our repurchases of common stock during each of the three months in the quarter ended December 31, 2017:

#### ISSUER PURCHASES OF EQUITY SECURITIES

Month, 2017	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs
October 1 through 31	388	\$269.67	—	—
November 1 through 30	—	—	—	—
December 1 through 31	1,645	297.27	—	—
Total	2,033	\$292.00	—	—

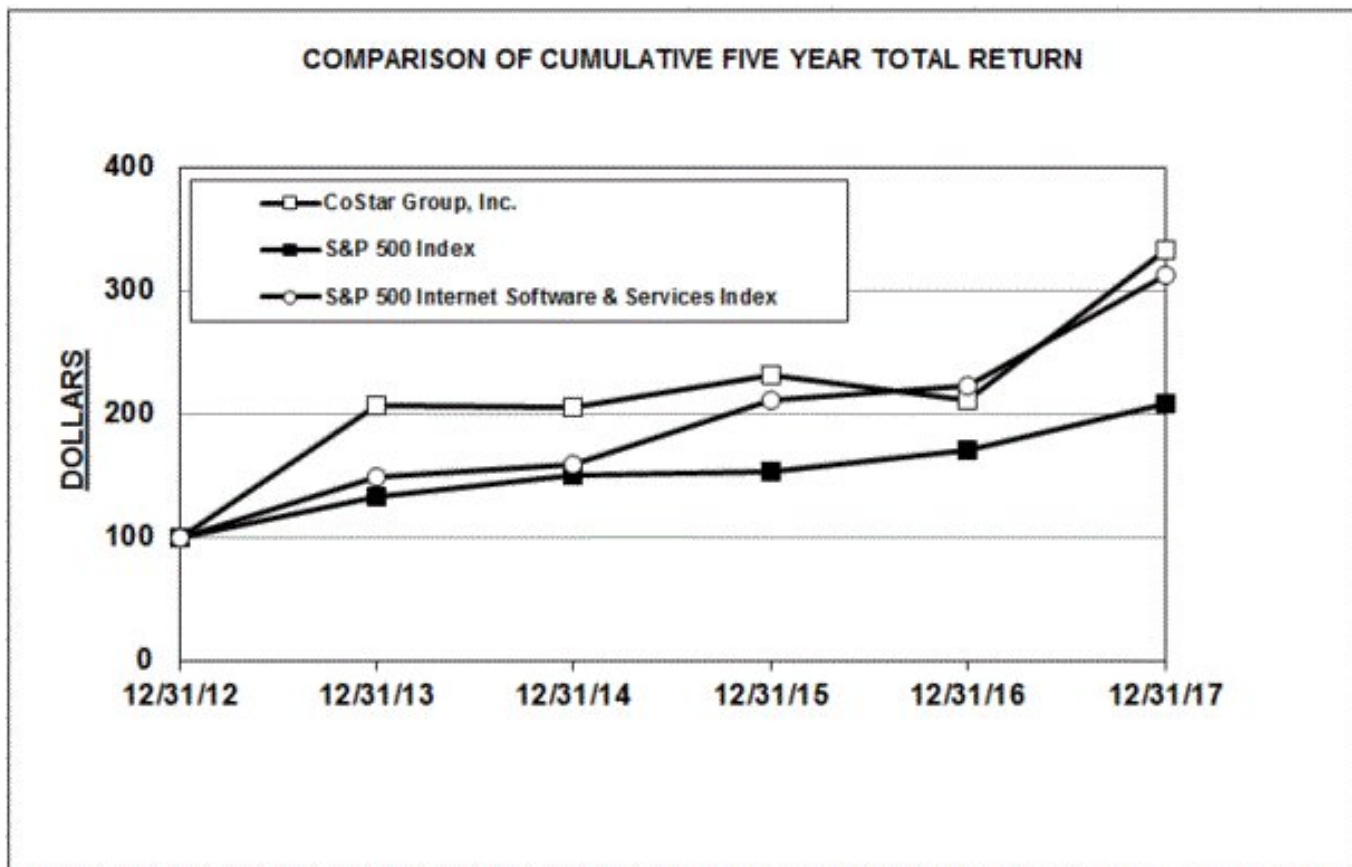
<sup>(1)</sup> The number of shares purchased consists of shares of common stock tendered by employees to the Company to satisfy the employees' minimum tax withholding obligations arising as a result of vesting of restricted stock grants under the Company's 2016 Stock Incentive Plan, as amended, which shares were purchased by the Company based on their fair market value on the trading day immediately preceding the vesting date. None of these share purchases were part of a publicly announced program to purchase common stock of the Company.

## Stock Price Performance Graph

The stock performance graph below shows how an initial investment of \$100 in our common stock would have compared to:

- An equal investment in the Standards & Poor's Stock 500 ("S&P 500") Index; and
- An equal investment in the S&P 500 Internet Software & Services Index.

The comparison covers the period beginning December 31, 2012, and ending on December 31, 2017, and assumes the reinvestment of any dividends. Note that this performance is historical and is not necessarily indicative of future price performance.



Company / Index	12/31/12	12/31/13	12/31/14	12/31/15	12/31/16	12/31/17
CoStar Group, Inc.	\$ 100.00	\$ 206.53	\$ 205.47	\$ 231.27	\$ 210.91	\$ 332.27
S&P 500 Index	100.00	132.39	150.51	152.59	170.84	208.14
S&P 500 Internet Software & Services Index	100.00	148.79	158.60	211.44	222.39	313.02

**Item 6. Selected Consolidated Financial and Operating Data**

**Selected Consolidated Financial and Operating Data  
(in thousands, except per share data)**

The following table provides selected consolidated financial and other operating data for the five years ended December 31, 2017. The consolidated statements of operations data shown below for each of the three years ended December 31, 2017, 2016 and 2015 and the consolidated balance sheet data as of December 31, 2017 and 2016 are derived from audited consolidated financial statements that are included in this report. The consolidated statements of operations data for each of the years ended 2014 and 2013 and the consolidated balance sheet data as of December 31, 2015, 2014 and 2013 shown below are derived from audited consolidated financial statements for those years that are not included in this report. Information about prior period acquisitions that may affect the comparability of the selected financial information presented below is included in "Item 1. Business." The total assets and total long-term liabilities reported in the consolidated balance sheet data have been reclassified to conform to our current presentation as a result of the retrospective application of the authoritative guidance to simplify the presentation of debt issuance costs.

<b>Consolidated Statements of Operations Data:</b>	<b>Year Ended December 31,</b>				
	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Revenues	\$ 440,943	\$ 575,936	\$ 711,764	\$ 837,630	\$ 965,230
Cost of revenues	129,185	156,979	188,885	173,814	220,403
Gross profit	311,758	418,957	522,879	663,816	744,827
Operating expenses	257,604	338,079	511,424	518,911	571,011
Income from operations	54,154	80,878	11,455	144,905	173,816
Interest and other income	326	516	537	1,773	4,044
Interest and other expense	(6,943)	(10,481)	(9,411)	(10,016)	(9,014)
Loss on debt extinguishment	—	—	—	—	(3,788)
Income before income taxes	47,537	70,913	2,581	136,662	165,058
Income tax expense	17,803	26,044	6,046	51,591	42,363
Net income (loss)	\$ 29,734	\$ 44,869	\$ (3,465)	\$ 85,071	\$ 122,695
Net income (loss) per share — basic	\$ 1.07	\$ 1.48	\$ (0.11)	\$ 2.64	\$ 3.70
Net income (loss) per share — diluted	\$ 1.05	\$ 1.46	\$ (0.11)	\$ 2.62	\$ 3.66
Weighted average shares outstanding — basic	27,670	30,215	31,950	32,167	33,200
Weighted average shares outstanding — diluted	28,212	30,641	31,950	32,436	33,559

<b>Consolidated Balance Sheet Data:</b>	<b>As of December 31,</b>				
	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Cash, cash equivalents and long-term investments	\$ 277,943	\$ 544,163	\$ 437,325	\$ 577,175	\$ 1,221,533
Working capital	196,913	480,521	337,452	472,545	1,141,269
Total assets	1,250,440	2,070,483	2,079,571	2,185,063	2,873,441
Total long-term liabilities	213,674	440,982	400,510	375,904	75,525
Stockholders' equity	927,862	1,513,546	1,543,780	1,654,213	2,651,250

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

The following Management's Discussion and Analysis of Financial Condition and Results of Operations contains "forward-looking statements," including statements about our beliefs and expectations. There are many risks and uncertainties that could cause actual results to differ materially from those discussed in the forward-looking statements. Potential factors that could cause actual results to differ materially from those discussed in any forward-looking statements include, but are not limited to, those stated above in Item 1A. under the headings "Risk Factors - Cautionary Statement Concerning Forward-Looking Statements" and "Risk Factors," as well as those described from time to time in our filings with the Securities and Exchange Commission.

All forward-looking statements are based on information available to us on the date of this filing and we assume no obligation to update such statements, whether as a result of new information, future events or otherwise. The following discussion should be read in conjunction with our Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and other filings with the Securities and Exchange Commission and the consolidated financial statements and related notes included in this Annual Report on Form 10-K.

### Overview

CoStar Group, Inc. (the "Company" or "CoStar") is the number one provider of information, analytics and online marketplaces to the commercial real estate industry in the United States ("U.S.") and the United Kingdom ("U.K.") based on the fact that we offer the most comprehensive commercial real estate database available; have the largest research department in the industry; own and operate leading online marketplaces for commercial real estate and apartment listings in the U.S. based on the numbers of unique visitors and site visits per month; provide more information, analytics and marketing services than any of our competitors and believe that we generate more revenues than any of our commercial real estate information and online marketplace competitors. We created and compiled our standardized platform of information, analytics and online marketplace services where industry professionals and consumers of commercial real estate, including apartments, and the related business communities, can continuously interact and facilitate transactions by efficiently accessing and exchanging accurate and standardized real estate-related information.

We have five flagship brands - CoStar®, LoopNet®, Apartments.com™, BizBuySell® and LandsofAmerica™. Our subscription-based services consist primarily of information, analytics and online marketplace services offered over the Internet to commercial real estate industry and related professionals. Our subscription-based information services consist primarily of CoStar Suite® services. CoStar Suite is sold as a platform of service offerings consisting of CoStar Property Professional®, CoStar COMPS Professional® and CoStar Tenant® and through our mobile application, CoStar Go®. Our integrated suite of online service offerings includes information about space available for lease, comparable sales information, information about properties for sale, tenant information, Internet marketing services, analytical capabilities, information for clients' websites, information about industry professionals and their business relationships, data integration and industry news. We provide market research, consulting and analysis for commercial real estate investors and lenders via our CoStar Portfolio Strategy and CoStar Suite service offerings; portfolio and debt analysis, management and reporting capabilities through our CoStar Investment Analysis and CoStar Risk Analytics service offerings; and, real estate and lease management solutions, including lease administration and abstraction services, through our CoStar Real Estate Manager service offerings.

Our LoopNet subscription-based online marketplace services enable commercial property owners, landlords and real estate agents working on their behalf to list properties for sale or for lease and to submit detailed information about property listings. Commercial real estate agents, buyers and tenants also use LoopNet's online marketplace services to search for available property listings that meet their criteria.

Apartments.com is part of our network of apartment marketing sites, which also includes ApartmentFinder.com™, ForRent.com®, ApartmentHomeLiving.com™, WestsideRentals.com®, AFTER55.com®, CorporateHousing.com™, ForRentUniversity.com® and Apartamentos.com™, our apartment-listing site offered exclusively in Spanish. Our apartment marketing network of subscription-based services offers renters a searchable database of over one million listings and provides professional property management companies and landlords with an advertising destination. Our apartment marketing network draws on and leverages CoStar's multifamily database, which contains detailed information on apartment properties. We designed the Apartments.com, ApartmentFinder.com and Apartamentos.com websites to meet renter preferences and demands, creating qualified renter prospects for our advertisers. We acquired the ForRent.com, AFTER55.com, CorporateHousing.com and ForRentUniversity.com sites when we completed the acquisition of ForRent, a division of Dominion Enterprises, on February 21, 2018. Our network of apartment marketing sites provide a comprehensive selection of rentals, information on actual availabilities and rents, and in-depth data on neighborhoods, including restaurants, nightlife, history, schools and other facts important to renters. To help renters find the information that meets their needs, the sites also offer innovative search tools such as the Polygon™ Search tool, which allows renters to specifically define the area in which they want to find an apartment. The Screening Pros™ is an

online apartment leasing platform that includes tenant screening services, rental applications and payments processing and lease renewals. On February 21 2018, we completed the acquisition of ForRent, a division of Dominion Enterprises, for a purchase price of approximately \$385 million, payable approximately \$350 million in cash and approximately \$35 million in shares of CoStar Group common stock, subject to a customary working capital adjustment and other post-closing adjustments. Approximately \$11 million of the cash consideration was placed in escrow to be used for potential employee stay bonuses.

Similar to our other past acquisitions, we have been, and plan to continue, integrating, further developing and cross-selling the services offered by Apartments.com, ApartmentFinder.com and Westside Rentals and the other services we offer, including but not limited to CoStar Suite. Now that we have completed the ForRent acquisition, we plan to develop and cross-sell the services offered by ForRent. We have incurred and plan to continue to incur product development costs to improve the online Apartments.com and ApartmentFinder.com platforms and Apartamentos.com. We have incurred and plan to continue to incur sales and marketing expenses in order to support the Apartments.com network and to increase brand awareness. To generate brand awareness and site traffic for the Apartments.com network, we utilize a multi-channel marketing campaign featuring television and radio advertising, online/digital advertising, social media and out-of-home ads and reinforced that advertising with Search Engine Marketing. We plan to continue to utilize these marketing methods and will continue to work to determine the optimal level of marketing investment for our services for future periods.

Our BizBuySell services, which include BizQuest®, provide an online marketplace for businesses for sale. Our Land.com network of sites, which provide online marketplaces for rural lands for sale, includes LandsofAmerica, LandAndFarm and LandWatch®.

Our service offerings span all commercial property types, including office, retail, industrial, multifamily, commercial land, mixed-use and hospitality.

#### Subscription-Based Services

Our subscription-based services consist primarily of information, analytics and online marketplace services offered over the Internet to commercial real estate industry and related professionals. Our services are typically distributed to our clients under subscription-based license agreements that renew automatically, a majority of which have a term of one year. Upon renewal, many of the subscription contract rates may change in accordance with contract provisions or as a result of contract renegotiations. To encourage clients to use our services regularly, we generally charge a fixed monthly amount for our subscription-based services rather than charging fees based on actual system usage or number of paid clicks. Depending on the type of service, contract rates are generally based on the number of sites, number of users, organization size, the client's business focus, geography, the number and types of services to which a client subscribes, the number of properties a client advertises and the prominence and placement of a client's advertised properties in the search results. Our subscription clients generally pay contract fees in advance on a monthly basis, but in some cases may pay us in advance on a quarterly or annual basis.

As of December 31, 2017 and 2016, our annualized net bookings of subscription-based services on all contracts were approximately \$43 million and \$29 million, respectively, calculated based on the annualized amount of change in our sales resulting from all new subscription-based contracts or upsales on all existing subscription-based contracts, less write downs and cancellations, for the period reported. Our net bookings is a quantitative measurement that is typically closely correlated with our subscription revenue results. Net bookings is considered a key indicator of future subscription revenue growth and is also used as a metric of salesforce productivity by management and investors. We recognize subscription revenues on a straight-line basis over the life of the contract.

For each of the twelve months ended December 31, 2017 and 2016, our contract renewal rate for existing CoStar subscription-based services on annual contracts was approximately 91% and 90%, respectively, and therefore our cancellation rate for those services was approximately 9% and 10%, respectively, for the same time periods. Our contract renewal rate is a quantitative measurement that is typically closely correlated with our revenue results. As a result, management also believes that the rate may be a reliable indicator of short-term and long-term performance. Our trailing twelve-month contract renewal rate may decline if, among other reasons, negative economic conditions lead to greater business failures and/or consolidations among our clients, reductions in customer spending, or decreases in our customer base.

#### Development, Investments and Expansion

We are committed to supporting and improving our information, news, analytic and online marketplace solutions. We expect to continue our software development efforts to improve existing services, introduce new services, integrate and cross-sell services, and expand and develop supporting technologies for our research, sales and marketing organizations. To generate brand awareness and site traffic for our listing sites, we utilize a variety of marketing campaigns, including television and radio advertising, online/

digital advertising, social media and out-of-home ads, and Search Engine Marketing. We expect to continue to invest in sales and marketing in 2018. As we continue to assess the success and effectiveness of our marketing campaign, we will continue to work to determine the optimal level of marketing investment for our services for future periods.

Our key priorities for 2018 and recent developments include:

- We are migrating all of our commercial real estate information capabilities to our flagship CoStar Suite product and winding down the legacy LoopNet Information products. This process began in the fall of 2017 with the integration of the CoStar and Loopnet databases. In addition, we are transitioning the LoopNet marketplace to a pure pay-to-list marketing site for commercial real estate. We completed integrating the backend systems of the LoopNet and CoStar databases during the second half of 2017; the two services now share a unified database of information, creating operating efficiencies and improving the data available to our customers. We also introduced new enhancements on the CoStar homepage, including a Listing Manager feature that we believe will increase the quantity and quality of the listing information available by enabling brokers and other industry participants to load information directly into the integrated system. This in turn is expected to reduce the time and costs associated with researching and maintaining our comprehensive database of commercial real estate information.
- On February 21, 2018, we completed the acquisition of ForRent, a division of Dominion Enterprises, ForRent's primary service is digital advertising through a network of four multifamily websites - which includes ForRent.com, AFTER55.com, CorporateHousing.com and ForRentUniversity.com. We plan to integrate, develop and cross-sell the services offered by ForRent. ForRent.com is expected to remain a distinct, complementary brand to Apartments.com, giving property managers and owners more exposure for their listings.
- We plan to continue developing new, and improve existing, product and service offerings to the apartments industry. In particular, we expect to implement the ability for renters to apply for leases online, for landlords to run tenant credit and background checks and, eventually, for landlords and tenants to generate leases and process payments online.
- We continue to invest in our research operations to support continued growth of our information and analytics offerings. We established our research operations headquarters in Richmond, Virginia, in December 2016, which is developing into a technology innovation hub, powering the software development necessary to support the content within our information, analytics and marketing services. In connection with the opening of the Richmond research headquarters, we have expanded our research team to continue to meet the growing content needs of our clients. In addition, we expect to continue to invest in our International research operations in Madrid, Spain and the U.K.

In support of our continued expansion and development, in October 2017, we completed a public equity offering of 3,317,308 shares of common stock for \$260.00 per share. Net proceeds from the public equity offering were approximately \$834 million, after deducting approximately \$29 million of underwriting discounts and fees. We expect to use the net proceeds from the public equity offering to fund all or a portion of the costs of any strategic acquisitions we determine to pursue in the future, to finance the growth of our business and for working capital and other general corporate purposes. General corporate purposes may include additions to working capital, capital expenditures, repayment of debt, investments in the Company's subsidiaries, possible acquisitions and the repurchase, redemption or retirement of securities, including the Company's common stock.

On October 19, 2017, the Company entered into an amended and restated credit agreement (the "2017 Credit Agreement"), which amended and restated in its entirety the existing 2014 Credit Agreement. The 2017 Credit Agreement provides for a \$750 million revolving credit facility with a term of five years from a syndicate of financial institutions as lenders and issuing banks. The Company also paid off the remaining balance of \$310 million and interest on its existing \$400 million term loan under the 2014 Credit Agreement on October 19, 2017 from existing cash balances. The 2017 revolving credit facility may be used for working capital and other general corporate purposes of the Company and its subsidiaries. The Company had no outstanding long-term debt at December 31, 2017 as it had not drawn any amounts under its 2017 Credit Agreement. The restructured credit facility, along with the proceeds from the October equity offering and cash generated by the Company's business are expected to support the Company's continued growth and give the Company flexibility to act on strategic acquisition opportunities that may arise.

We intend to continue to assess the need for additional investments in our business, in addition to the investments discussed above, in order to develop and distribute new services within our current platform or expand the reach of our current service offerings. Any future product development or expansion of services, combination and coordination of services or elimination of services or corporate expansion, development or restructuring efforts could reduce our profitability and increase our capital expenditures. Any new investments, changes to our service offerings or other unforeseen events could cause us to experience reduced revenues or generate losses and negative cash flow from operations in the future. Any development efforts must comply

with our credit facility, which contains restrictive covenants that restrict our operations and use of our cash flow and may prevent us from taking certain actions that we believe could increase our profitability or otherwise enhance our business.

### Property Developments

As we have done in the past, we expect to continue to identify new facilities and consolidate existing facilities to better accommodate the changing demands of our business operations and employees. As a result, we may incur additional lease restructuring charges for the abandonment of certain lease space and the impairment of leasehold improvements.

### **Non-GAAP Financial Measures**

We prepare and publicly release quarterly unaudited financial statements prepared in accordance with generally accepted accounting principles ("GAAP"). We also disclose and discuss certain non-GAAP financial measures in our public releases, investor conference calls and filings with the Securities and Exchange Commission. The non-GAAP financial measures that we may disclose include net income before interest and other income (expense), income taxes, depreciation and amortization ("EBITDA"), adjusted EBITDA, non-GAAP net income and non-GAAP net income per diluted share (also referred to as "non-GAAP EPS"). EBITDA is our net income before interest, loss on debt extinguishment, income taxes, depreciation and amortization. We typically disclose EBITDA on a consolidated and an operating segment basis in our earnings releases, investor conference calls and filings with the Securities and Exchange Commission. Adjusted EBITDA is different from EBITDA because we further adjust EBITDA for stock-based compensation expense, acquisition and integration related costs, restructuring costs and settlements and impairments incurred outside our ordinary course of business. Non-GAAP net income and non-GAAP net income per diluted share are similarly adjusted for stock-based compensation expense, acquisition and integration related costs, restructuring costs, settlement and impairment costs and loss on debt extinguishment incurred outside our ordinary course of business as well as amortization of acquired intangible assets and other related costs. We may disclose adjusted EBITDA, non-GAAP net income and non-GAAP net income per diluted share on a consolidated basis in our earnings releases, investor conference calls and filings with the Securities and Exchange Commission. The non-GAAP financial measures that we use may not be comparable to similarly titled measures reported by other companies. Also, in the future, we may disclose different non-GAAP financial measures in order to help our investors meaningfully evaluate and compare our results of operations to our previously reported results of operations or to those of other companies in our industry.

We view EBITDA, adjusted EBITDA, non-GAAP net income and non-GAAP net income per diluted share as operating performance measures and as such we believe that the most directly comparable GAAP financial measure is net income. In calculating EBITDA, adjusted EBITDA, non-GAAP net income and non-GAAP net income per diluted share, we exclude from net income (loss) the financial items that we believe should be separately identified to provide additional analysis of the financial components of the day-to-day operation of our business. We have outlined below the type and scope of these exclusions and the material limitations on the use of these non-GAAP financial measures as a result of these exclusions. EBITDA, adjusted EBITDA, non-GAAP net income and non-GAAP net income per diluted share are not measurements of financial performance under GAAP and should not be considered as a measure of liquidity, as an alternative to net income (loss) or as an indicator of any other measure of performance derived in accordance with GAAP. Investors and potential investors in our securities should not rely on EBITDA, adjusted EBITDA, non-GAAP net income and non-GAAP net income per diluted share as a substitute for any GAAP financial measure, including net income. In addition, we urge investors and potential investors in our securities to carefully review the GAAP financial information included as part of our Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q that are filed with the Securities and Exchange Commission, as well as our quarterly earnings releases, and compare the GAAP financial information with our EBITDA, adjusted EBITDA, non-GAAP net income and non-GAAP net income per diluted share.

EBITDA, adjusted EBITDA, non-GAAP net income and non-GAAP net income per diluted share may be used by management to internally measure our operating and management performance and may be used by investors as supplemental financial measures to evaluate the performance of our business. We believe that these non-GAAP measures, when viewed with our GAAP results and the accompanying reconciliation, provide additional information that is useful to understand the factors and trends affecting our business. We have spent more than 30 years building our database of commercial real estate information and expanding our markets and services partially through acquisitions of complementary businesses. Due to the expansion of our information, analytics and online marketplace services, which has included acquisitions, our net income has included significant charges for amortization of acquired intangible assets, depreciation and other amortization, acquisition and integration related costs, restructuring costs, and loss on debt extinguishment. Adjusted EBITDA, non-GAAP net income and non-GAAP net income per diluted share exclude these charges and provide meaningful information about the operating performance of our business, apart from charges for amortization of acquired intangible assets, depreciation and other amortization, acquisition and integration related costs, restructuring costs; settlement and impairment costs incurred outside our ordinary course of business. We believe the disclosure of non-GAAP measures can help investors meaningfully evaluate and compare our performance from quarter to quarter and from year to year. We also believe the non-GAAP measures we disclose are measures of our ongoing operating performance because the isolation of non-cash charges, such as amortization and depreciation, and other items, such as interest, income taxes, stock-based compensation expenses, acquisition and integration related costs, restructuring costs; loss on debt extinguishment and settlement and impairment costs incurred outside our ordinary course of business, provides additional information about our cost structure, and, over time, helps track our operating progress. In addition, investors, securities analysts and others have regularly relied on EBITDA and may rely on adjusted EBITDA, non-GAAP net income or non-GAAP net income per diluted share to provide a financial measure by which to compare our operating performance against that of other companies in our industry.

Set forth below are descriptions of financial items that have been excluded from net income to calculate EBITDA and the material limitations associated with using this non-GAAP financial measure as compared to net income :

- Amortization of acquired intangible assets in cost of revenues may be useful for investors to consider because it represents the diminishing value of any acquired trade names and other intangible assets and the use of our acquired database technology, which is one of the sources of information for our database of commercial real estate information. We do not believe these charges necessarily reflect the current and ongoing cash charges related to our operating cost structure.
- Amortization of acquired intangible assets in operating expenses may be useful for investors to consider because it represents the estimated attrition of our acquired customer base. We do not believe these charges necessarily reflect the current and ongoing cash charges related to our operating cost structure.
- Depreciation and other amortization may be useful for investors to consider because they generally represent the wear and tear on our property and equipment used in our operations. We do not believe these charges necessarily reflect the current and ongoing cash charges related to our operating cost structure.
- The amount of interest and other income we generate may be useful for investors to consider and may result in current cash inflows. However, we do not consider the amount of interest and other income to be a representative component of the day-to-day operating performance of our business.
- The amount of interest and other expense we incur may be useful for investors to consider and may result in current cash outflows. However, we do not consider the amount of interest and other expense to be a representative component of the day-to-day operating performance of our business.
- The amount of loss on our debt extinguishment may be useful for investors to consider and may result in current cash outflows. However, we do not consider the amount of the loss on debt extinguishment to be a representative component of the day-to-day operating performance of our business.
- Income tax expense may be useful for investors to consider because it generally represents the taxes which may be payable for the period and the change in deferred income taxes during the period and may reduce the amount of funds otherwise available for use in our business. However, we do not consider the amount of income tax expense to be a representative component of the day-to-day operating performance of our business.

Set forth below are descriptions of additional financial items that have been excluded from EBITDA to calculate adjusted EBITDA and the material limitations associated with using this non-GAAP financial measure as compared to net income:

- Stock-based compensation expense may be useful for investors to consider because it represents a portion of the compensation of our employees and executives. Determining the fair value of the stock-based instruments involves a



high degree of judgment and estimation and the expenses recorded may bear little resemblance to the actual value realized upon the future exercise or termination of the related stock-based awards. Therefore, we believe it is useful to exclude stock-based compensation in order to better understand the long-term performance of our core business.

- The amount of acquisition and integration related costs incurred may be useful for investors to consider because they generally represent professional service fees and direct expenses related to acquisitions. Because we do not acquire businesses on a predictable cycle we do not consider the amount of acquisition and integration related costs to be a representative component of the day-to-day operating performance of our business.
- The amount of restructuring costs incurred may be useful for investors to consider because they generally represent costs incurred in connection with a change in a contract or a change in the makeup of our properties or personnel. We do not consider the amount of restructuring related costs to be a representative component of the day-to-day operating performance of our business.
- The amount of settlement and impairment costs incurred outside of our ordinary course of business may be useful for investors to consider because they generally represent gains or losses from the settlement of litigation matters or impairments on acquired intangible assets. We do not believe these charges necessarily reflect the current and ongoing cash charges related to our operating cost structure.
- The amount of loss on our debt extinguishment may be useful for investors to consider because they generally represent gains or losses from the early extinguishment of debt. However, we do not consider the amount of the loss on debt extinguishment to be a representative component of the day-to-day operating performance of our business.

The financial items that have been excluded from our net income to calculate non-GAAP net income and non-GAAP net income per diluted share are amortization of acquired intangible assets and other related costs, stock-based compensation, acquisition and integration related costs, restructuring and related costs, settlement and impairment costs, and loss on debt extinguishment incurred outside our ordinary course of business. These items are discussed above with respect to the calculation of adjusted EBITDA together with the material limitations associated with using this non-GAAP financial measure as compared to net income (loss). We subtract an assumed provision for income taxes to calculate non-GAAP net income. In 2017, 2016, and 2015, we assumed a 38% tax rate, which approximates our historical long-term statutory corporate tax rate, excluding the impact of discrete items.

Non-GAAP net income per diluted share is a non-GAAP financial measure that represents non-GAAP net income divided by the number of diluted shares outstanding for the period used in the calculation of GAAP net income per diluted share.

Management compensates for the above-described limitations of using non-GAAP measures by using a non-GAAP measure only to supplement our GAAP results and to provide additional information that is useful to understand the factors and trends affecting our business.

The following table shows our net income reconciled to our EBITDA and our net cash flows from operating, investing and financing activities for the indicated periods (in thousands):

	<b>Year Ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
Net income (loss)	\$ 122,695	\$ 85,071	\$ (3,465)
Amortization of acquired intangible assets in cost of revenues	19,707	22,819	30,077
Amortization of acquired intangible assets in operating expenses	17,684	22,731	27,931
Depreciation and other amortization	26,252	24,615	20,524
Interest and other income	(4,044)	(1,773)	(537)
Interest and other expense	9,014	10,016	9,411
Loss on debt extinguishment	3,788	—	—
Income tax expense	42,363	51,591	6,046
<b>EBITDA</b>	<b>\$ 237,459</b>	<b>\$ 215,070</b>	<b>\$ 89,987</b>
<b>Net cash flows provided by (used in)</b>			
Operating activities	\$ 234,703	\$ 200,642	\$ 139,773
Investing activities	\$ (72,267)	\$ (23,259)	\$ (215,502)
Financing activities	\$ 480,430	\$ (30,563)	\$ (29,032)

## Consolidated Results of Operations

The following table provides our selected consolidated results of operations for the indicated periods (in thousands of dollars and as a percentage of total revenue):

	Year Ended December 31,					
	2017		2016		2015	
Revenues	\$ 965,230	100%	\$ 837,630	100%	\$ 711,764	10 %
Cost of revenues	220,403	23	173,814	21	188,885	27
Gross profit	744,827	77	663,816	79	522,879	73
Operating expenses:						
Selling and marketing (excluding customer base amortization)	318,362	33	296,483	35	302,226	42
Software development	88,850	9	76,400	9	65,760	9
General and administrative	146,128	15	123,297	15	115,507	16
Customer base amortization	17,671	2	22,731	3	27,931	4
Total operating expenses	571,011	59	518,911	62	511,424	72
Income from operations	173,816	18	144,905	17	11,455	1
Interest and other income	4,044	—	1,773	—	537	—
Interest and other expense	(9,014)	(1)	(10,016)	(1)	(9,411)	(1)
Loss on debt extinguishment	(3,788)	(2)	—	—	—	—
Income before income taxes	165,058	16	136,662	16	2,581	—
Income tax expense	42,363	4	51,591	6	6,046	1
Net income (loss)	\$ 122,695	12%	\$ 85,071	10%	\$ (3,465)	(1)%

The following table provides our revenues by type of service (in thousands of dollars and as a percentage of total revenue):

	Year Ended December 31,					
	2017		2016		2015	
Information and analytics						
CoStar Suite <sup>(1)</sup>	\$ 463,185	48%	\$ 408,456	49%	\$ 360,440	50%
Information services <sup>(2)</sup>	72,618	8	77,178	9	75,790	11
Online marketplaces						
Multifamily <sup>(3)</sup>	279,855	29	224,835	27	160,630	23
Commercial property and land <sup>(4)</sup>	149,572	15	127,161	15	114,904	16
Total revenues	\$ 965,230	100%	\$ 837,630	100%	\$ 711,764	100%

<sup>(1)</sup> CoStar Suite is comprised of CoStar Property Professional, CoStar COMPS Professional, CoStar Tenant; and CoStar Portfolio Strategy.

<sup>(2)</sup> Information services is comprised of LoopNet Premium Searcher; CoStar Real Estate Manager; CoStar Risk Analytics COMPASS; CoStar Investment Analysis Portfolio Maximizer; CoStar Investment Analysis Request; CoStar Brokerage Applications; PROPEX; Grecam; Belbex and Thomas Daily.

<sup>(3)</sup> Multifamily is comprised of Apartments.com, ApartmentFinder.com, ApartmentHomeLiving.com, WestsideRentals.com; Apartamentos.com; and The Screening Pros.

<sup>(4)</sup> Commercial property and land is comprised of LoopNet Premium Lister; LoopLink; CoStar Advertising; BizBuySell and BizQuest; LandsofAmerica, LandAndFarm and LandWatch; and CoStar Private Sale Network.

## Comparison of Year Ended December 31, 2017 and Year Ended December 31, 2016

The following table provides a comparison of our selected consolidated results of operations for the year ended December 31, 2017 and 2016 (in thousands of dollars):

	2017	2016	Increase (Decrease) (\$)	Increase (Decrease) (%)
Revenues				
CoStar Suite	\$ 463,185	\$ 408,456	\$ 54,729	13%
Information services	72,618	77,178	(4,560)	(6)
Multifamily	279,855	224,835	55,020	24
Commercial property and land	149,572	127,161	22,411	18
Total revenues	965,230	837,630	127,600	15
Cost of revenues	220,403	173,814	46,589	27
Gross profit	744,827	663,816	81,011	12
Operating expenses:				
Selling and marketing (excluding customer base amortization)	318,362	296,483	21,879	7
Software development	88,850	76,400	12,450	16
General and administrative	146,128	123,297	22,831	19
Customer base amortization	17,671	22,731	(5,060)	(22)
Total operating expenses	571,011	518,911	52,100	10
Income from operations	173,816	144,905	28,911	20
Interest and other income	4,044	1,773	2,271	128
Interest and other expense	(9,014)	(10,016)	(1,002)	(10)
Loss on extinguishment	(3,788)	—	3,788	NM
Income before income taxes	165,058	136,662	28,396	21
Income tax expense	42,363	51,591	(9,228)	(18)
Net income	\$ 122,695	\$ 85,071	\$ 37,624	44%

NM - Not meaningful

*Revenues.* Revenues increased to \$965 million in 2017, from \$838 million in 2016. The \$127 million increase was primarily attributable to increased revenues of approximately \$55 million or 13% from continued organic growth in CoStar Suite as well as a movement of our Loopnet customers onto our CoStar platform as a result of the Loopnet integration. Information Services decreased \$5M or 6% primarily due to continued wind down of Loopnet Information products including Premium Searcher partially offset by increases in our Real Estate Manager offering. Multifamily year over year increases of \$55 million or 24% was primarily attributable to organic growth as well as some smaller increases for several acquisitions. Commercial Property and Land revenue increased \$22 million or 18% over 2016 primarily due to organic growth as well as an increase due to the Landwatch acquisition. Overall, revenue growth rates are expected to be in line or slightly higher than 2017.

*Gross Profit.* Gross profit increased to \$745 million in 2017, from \$664 million in 2016. The gross margin percentage decreased to 77% in 2017, from 79% in 2016. Revenue growth led to an increase in costs of revenues of \$38 million for additional research personnel costs, \$5 million in occupancy related costs from our new research office in Richmond offset by a decrease in the amortization of intangible assets of \$4 million. Gross margins are impacted by the amortization of certain intangible assets acquired through acquisitions.

*Selling and Marketing Expenses.* Selling and marketing expenses increased to \$318 million in 2017, from \$296 million in 2016, and decreased as a percentage of revenues to 33% from 35%. The increase in the amount of selling and marketing expenses was primarily due to a \$25 million increase in sales personnel costs related to increased commission expense from higher sales in 2017 partially offset by a \$2 million decrease in digital marketing costs.

*Software Development Expenses.* Software development expenses increased to \$89 million in 2017, from \$76 million in 2016, and remained relatively consistent as a percentage of revenues at 9% for both 2017 and 2016. The increase in the amount of software development expense was primarily due to a \$14 million increase in personnel costs to support enhancements and upgrades to our services and integration of the backend systems of the LoopNet and CoStar databases.

*General and Administrative Expenses.* General and administrative expenses increased 19% to \$146 million in 2017, from \$123 million in 2016, and remained relatively consistent as a percentage of revenues at 15% in 2017 and 2016. The increase in the amount of general and administrative expenses was primarily due to legal costs related to litigation of approximately \$13 million, an increase in administrative personnel costs of \$5 million to support the ongoing growth of the business, and a \$3 million increase in charitable donations.

*Customer Base Amortization Expense.* Customer base amortization expense decreased to approximately \$18 million in 2017, from \$23 million in 2016, and decreased as a percentage of revenues to 2% in 2017, compared to 3% in 2016. The decrease in the amount and percentage of customer base amortization expense was primarily due to the accelerated amortization of acquired customer bases in 2016 as compared to 2017.

*Interest and Other Income.* Interest and other income increased to approximately \$4 million in 2017 compared to approximately \$2 million in 2016. The increase was primarily due to increased short term investments on a larger cash balance in 2017 than in 2016 mainly due to net proceeds of \$834 million from the equity offering in October 2017.

*Interest and Other Expense.* Interest and other expense remained relatively consistent at \$9 million in 2017 compared to \$10 million in 2016. The decrease was primarily due to the repayment of outstanding debt in October 2017 in conjunction with the 2017 Credit Agreement offset by higher interest rates on outstanding debt in 2017 compared to 2016.

*Loss on Extinguishment.* The loss on extinguishment was due to the restatement and amendment of the 2014 Credit Agreement as the 2017 Credit Agreement, which resulted in a loss on debt extinguishment of approximately \$4 million.

*Income Tax Expense.* Income tax expense decreased to \$42 million in 2017 compared to \$52 million in 2016. Without the effect of discrete items, income tax expense would have increased by approximately \$12 million. Discrete items resulted in a reduction in tax expense of approximately \$22 million including the revaluation of the deferred tax liability at the lower federal statutory tax rate resulting in a \$7 million benefit. We also recognized approximately \$8 million benefit in net research and development tax benefits related to the periods 2013-2017. Finally, we recognized \$7 million benefit from the impact of the accounting rule change in ASU 2016-09 that provided for recognizing excess tax benefits in income tax expense as compared to additional paid in capital, which was the treatment prior to 2017.

## **Comparison of Business Segment Results for Year Ended December 31, 2017 and Year Ended December 31, 2016**

We manage our business geographically in two operating segments, with our primary areas of measurement and decision-making being North America, which includes the U.S. and Canada, and International, which includes the U.K., Spain, Germany and France. Management relies on an internal management reporting process that provides revenues and operating segment EBITDA, which is our net income (loss) before interest, income taxes, depreciation and amortization. Management believes that operating segment EBITDA is an appropriate measure for evaluating the operational performance of our operating segments. EBITDA is used by management to internally measure our operating and management performance and to evaluate the performance of our business. However, this measure should be considered in addition to, not as a substitute for or superior to, income from operations or other measures of financial performance prepared in accordance with GAAP.

*Segment Revenues.* North America revenues increased to \$934 million for the year ended December 31, 2017, compared to \$809 million for the year ended December 31, 2016. This increase in North America revenues was primarily due to increased revenues of approximately \$55 million from our Multifamily products, and an increase of \$55 million in CoStar Suite from the continued growth of our subscription-based services due to successful cross-selling of our services to our customers in existing markets, combined with continued high renewal rates. International revenues increased to \$31 million for the year ended December 31, 2017, compared to \$28 million for the year ended December 31, 2016. This increase was primarily due to continued growth of our subscription-based information services resulting from sales of CoStar Suite.

*Segment EBITDA.* North America EBITDA increased to \$237 million for the year ended December 31, 2017, compared to \$211 million for the year ended December 31, 2016. The increase in North America EBITDA was due primarily to an increase in revenues of \$125 million primarily offset by increased personnel costs from additional investments in our research operations and the opening of our Richmond research headquarters as well as increased legal costs. International EBITDA decreased to \$1 million

for the year ended December 31, 2017, compared to \$4 million for the year ended December 31, 2016. This decrease in International EBITDA was primarily due to an increase in personnel costs from the relocation of our European research headquarters from Glasgow, Scotland to London, England and as a result of increased headcount from investments in our International research operations in Madrid, Spain and the U.K.

## Comparison of Year Ended December 31, 2016 and Year Ended December 31, 2015

The following table provides a comparison of our selected consolidated results of operations for the year ended December 31, 2016 and 2015 (in thousands of dollars):

	<u>2016</u>	<u>2015</u>	<u>Increase (Decrease) (\$)</u>	<u>Increase (Decrease) (%)</u>
Revenues				
CoStar Suite	\$ 408,456	\$ 360,440	\$ 48,016	13%
Information services	77,178	75,790	1,388	2
Multifamily	224,835	160,630	64,205	40
Commercial property and land	127,161	114,904	12,257	11
Total revenues	<u>837,630</u>	<u>711,764</u>	<u>125,866</u>	<u>18</u>
Cost of revenues	<u>173,814</u>	<u>188,885</u>	<u>(15,071)</u>	<u>(8)</u>
Gross profit	<u>663,816</u>	<u>522,879</u>	<u>140,937</u>	<u>27</u>
Operating expenses:				
Selling and marketing (excluding customer base amortization)	296,483	302,226	(5,743)	(2)
Software development	76,400	65,760	10,640	16
General and administrative	123,297	115,507	7,790	7
Customer base amortization	22,731	27,931	(5,200)	(19)
Total operating expenses	<u>518,911</u>	<u>511,424</u>	<u>7,487</u>	<u>1</u>
Income from operations	<u>144,905</u>	<u>11,455</u>	<u>133,450</u>	<u>NM</u>
Interest and other income	1,773	537	1,236	NM
Interest and other expense	(10,016)	(9,411)	605	6
Income before income taxes	<u>136,662</u>	<u>2,581</u>	<u>134,081</u>	<u>NM</u>
Income tax expense	51,591	6,046	45,545	NM
Net income (loss)	<u>\$ 85,071</u>	<u>\$ (3,465)</u>	<u>\$ 88,536</u>	<u>NM</u>

*Revenues.* Revenues increased to \$838 million in 2016, from \$712 million in 2015. The \$126 million increase was primarily attributable to increased revenues of approximately \$64 million from our Apartments Network primarily related to the acquisition of Apartment Finder on June 1, 2015 as well as continued organic growth in CoStar Suite and Multifamily revenues.

*Gross Profit.* Gross profit increased to \$664 million in 2016, from \$523 million in 2015. The gross margin percentage increased to 79% in 2016, from 73% in 2015. The increase in the gross profit amount and percentage was principally due to an increase in revenues as well as a decrease in cost of revenues of \$15 million. The decrease in costs of revenues is primarily due to a \$7 million decrease in the amortization of intangible assets and a \$6 million decrease in research personnel costs.

*Selling and Marketing Expenses.* Selling and marketing expenses decreased to \$296 million in 2016, from \$302 million in 2015, and decreased as a percentage of revenues to 35% in 2016, from 42% in 2015. The decrease in the amount and percentage of selling and marketing expenses was primarily due to a \$19 million decrease in marketing expense for the wide-scale marketing campaign to generate brand awareness and site traffic for Apartments.com, partially offset by a \$14 million increase in sales personnel costs.

*Software Development Expenses.* Software development expenses increased to \$76 million in 2016, from \$66 million in 2015, and remained relatively consistent as a percentage of revenues at 9% in 2016 and 2015. The increase in the amount of software development expense was primarily due to an increase in personnel costs to support enhancements and upgrades to our services and continued work to integrate the backend systems of the LoopNet and CoStar databases.

*General and Administrative Expenses.* General and administrative expenses increased to \$123 million in 2016, from \$116 million in 2015, and decreased as a percentage of revenues to 15% in 2016 from 16% in 2015. The increase in the amount of general and administrative expenses was primarily due to legal costs related to litigation of approximately \$6 million incurred during 2016 that did not occur during 2015, as well as an increase in lease restructuring charges of \$2 million for the abandonment of certain lease space and the impairment of leasehold improvements in 2016 compared to 2015.

*Customer Base Amortization Expense.* Customer base amortization expense decreased to approximately \$23 million in 2016, from \$28 million in 2015, and decreased as a percentage of revenues to 3% in 2016, compared to 4% in 2015. The decrease in the amount and percentage of customer base amortization expense was primarily due to the accelerated amortization of acquired customer bases in 2015 as compared to 2016.

*Interest and Other Income.* Interest and other income increased to approximately \$2 million in 2016 compared to approximately \$537,000 in 2015. The increase was primarily due to a realized gain of approximately \$808,000 on investments in auction rate securities (“ARS”) in 2016 that did not occur in 2015.

*Interest and Other Expense.* Interest and other expense remained relatively consistent at \$10 million in 2016 compared to \$9 million in 2015.

*Income Tax Expense.* Income tax expense increased to \$52 million in 2016 compared to \$6 million in 2015. This increase was primarily due to higher income before income taxes in 2016 as compared to 2015 as a result of our increased revenues.

## **Comparison of Business Segment Results for Year Ended December 31, 2016 and Year Ended December 31, 2015**

We manage our business geographically in two operating segments, with our primary areas of measurement and decision-making being North America, which includes the U.S. and Canada, and International, which includes the U.K., Spain, Germany and France. Management relies on an internal management reporting process that provides revenues and operating segment EBITDA, which is our net income (loss) before interest, income taxes, depreciation and amortization. Management believes that operating segment EBITDA is an appropriate measure for evaluating the operational performance of our operating segments. EBITDA is used by management to internally measure our operating and management performance and to evaluate the performance of our business. However, this measure should be considered in addition to, not as a substitute for or superior to, income from operations or other measures of financial performance prepared in accordance with GAAP.

*Segment Revenues.* North America revenues increased to \$809 million for the year ended December 31, 2016, compared to \$687 million for the year ended December 31, 2015. This increase in North America revenues was primarily due to increased revenues of approximately \$64 million from our Apartments Network, as well as the further penetration of our subscription-based services and successful cross-selling of our services to our customers in existing markets, combined with continued high renewal rates. International revenues increased to \$28 million for the year ended December 31, 2016, compared to \$25 million for the year ended December 31, 2015. This increase was primarily due to further penetration of our subscription-based information services resulting from sales of CoStar Suite.

*Segment EBITDA.* North America EBITDA increased to \$211 million for the year ended December 31, 2016, compared to \$87 million for the year ended December 31, 2015. The increase in North America EBITDA was due primarily to an increase in revenues. International EBITDA increased to \$4 million for the year ended December 31, 2016, compared to \$3 million for the year ended December 31, 2015. This increase in International EBITDA was primarily due to an increase in revenues.



## Consolidated Quarterly Results of Operations

The following tables present our unaudited consolidated results of operations on a quarterly basis for the indicated periods (in thousands, except per share amounts, and as a percentage of total revenues). These tables should be read in conjunction with the consolidated financial statements and related notes included in this Annual Report on Form 10-K. The quarterly results of historical periods are not necessarily indicative of quarterly results for any future period.

	2017				2016			
	Mar. 31	Jun. 30	Sep. 30	Dec. 31	Mar. 31	Jun. 30	Sep. 30	Dec. 31
Revenues	\$226,553	\$237,153	\$247,533	\$253,991	\$199,739	\$206,869	\$212,711	\$218,311
Cost of revenues	51,346	55,273	55,483	58,301	42,900	42,679	42,222	46,013
Gross profit	175,207	181,880	192,050	195,690	156,839	164,190	170,489	172,298
Operating expenses	137,545	153,997	134,537	144,932	126,538	136,071	130,893	125,409
Income from operations	37,662	27,883	57,513	50,758	30,301	28,119	39,596	46,889
Interest and other income	429	605	555	2,455	84	159	344	1,186
Interest and other expense	(2,686)	(2,693)	(2,901)	(734)	(2,509)	(2,455)	(2,498)	(2,554)
Loss on debt extinguishment	—	—	—	(3,788)	—	—	—	—
Income (loss) before income taxes	35,405	25,795	55,167	48,691	27,876	25,823	37,442	45,521
Income tax expense	13,275	3,611	20,990	4,487	11,155	10,247	14,241	15,948
Net income	\$ 22,130	\$ 22,184	\$ 34,177	\$ 44,204	\$ 16,721	\$ 15,576	\$ 23,201	\$ 29,573
Net income per share — basic	\$ 0.69	\$ 0.68	\$ 1.05	\$ 1.24	\$ 0.52	\$ 0.48	\$ 0.72	\$ 0.92
Net income per share — diluted	\$ 0.68	\$ 0.68	\$ 1.04	\$ 1.22	\$ 0.52	\$ 0.48	\$ 0.72	\$ 0.91

	2017				2016			
	Mar. 31	Jun. 30	Sep. 30	Dec. 31	Mar. 31	Jun. 30	Sep. 30	Dec. 31
Revenues	100%	100%	100%	100%	100%	100%	100%	100%
Cost of revenues	23	23	22	23	21	21	20	21
Gross profit	77	77	78	77	79	79	80	79
Operating expenses	60	65	55	58	64	65	61	58
Income from operations	17	12	23	19	15	14	19	21
Interest and other income	—	—	—	1	—	—	—	1
Interest and other expense	(1)	(1)	(1)	—	(1)	(1)	(1)	(1)
Loss on debt extinguishment	—	—	—	(1)	—	—	—	—
Income before income taxes	16	11	22	19	14	13	18	21
Income tax expense	6	2	8	2	6	5	7	7
Net income	10%	9%	14%	17%	8%	8%	11%	14%

## Liquidity and Capital Resources

Our principal sources of liquidity are cash and cash equivalents, and cash from operations. Total cash and cash equivalents increased to \$1 billion at December 31, 2017 compared to cash and cash equivalents of \$567 million at December 31, 2016. The increase in cash and cash equivalents for the year ended December 31, 2017 was primarily due to \$834 million in net proceeds from our public equity offering in October 2017 of 3,317,308 shares of common stock for \$260.00 per share after deducting underwriting discounts and fees of \$29 million. In addition, the Company generated net cash provided by operating activities of approximately \$235 million, partially offset by debt payments of \$345 million, purchase of property, equipment and other assets of approximately \$24 million, and payments made for acquisitions including LandWatch, Westside Rentals and The Screening Pros totaling approximately \$48 million.

Changes in cash and cash equivalents are dependent upon changes in, among other things, working capital items such as accounts receivable, accounts payable, accrued expenses and deferred revenues, as well as proceeds from the exercise of stock options offset by issuance of shares to cover taxes.

Net cash provided by operating activities for the year ended December 31, 2017 was \$235 million compared to \$201 million for the year ended December 31, 2016 and \$140 million for the year ended December 31, 2015. The \$34 million and \$61 million increase from December 31, 2016 to December 31, 2017 and from December 31, 2015 to December 31, 2016, respectively, is primarily due to higher income from operations in both periods. Income from operations was partially offset fluctuations in working capital.

Net cash used in investing activities for the year ended December 31, 2017 was \$72 million compared to \$23 million for the year ended December 31, 2016 and \$216 million for the year ended December 31, 2015. The \$49 million increase in investing activities in 2017 compared to 2016 was primarily due to the increase in cash used for acquisitions from 2016 to 2017. 2017 included cash payments for the acquisitions of Westside Rentals for \$14 million, a \$31 million payment for LandWatch and a \$3 million payment for the acquisition of The Screening Pros. During 2017, we incurred capital expenditures of approximately \$24 million primarily related to computer equipment and leasehold improvements for build out of sales office space. We expect capital expenditures to increase in 2018 related to the build out of leased office space, including the Richmond research headquarters, as well as investments in technology.

The \$192 million decrease in investing activities in 2016 compared to 2015 was primarily due to the decrease in cash used for acquisitions from 2015 to 2016. The \$182 million of net cash used for acquisitions in 2015 included \$179 million for the acquisition of Apartment Finder and certain assets related to the business operations of Apartment Finder's independent distributors as well as \$3 million for the acquisition of the assets of Belbex Corporate, S.L. In 2016, we spent \$10 million for the acquisitions of Thomas Daily and certain assets related to the business operations of Apartment Finder's independent distributors. During 2016, we incurred capital expenditures of approximately \$19 million primarily related to computer equipment and leasehold improvements for build out of sales office space.

Net cash provided by financing activities for the year ended December 31, 2017 was \$480 million compared to net cash used in financing activities of \$31 million for the year ended December 31, 2016 and \$29 million in December 31, 2015. This \$511 million increase from 2016 to 2017 was primarily due to \$834 million in net proceeds from our equity offering offset by an increase in debt repayments in 2017 of \$325 million.

Our future capital requirements will depend on many factors, including, among others, our operating results, expansion and integration efforts, and our level of acquisition activity or other strategic transactions. To date, we have grown in part by acquiring other companies, and we expect to continue to make acquisitions. On January 31, 2017, we acquired Westside Rentals; on May 10, 2017, we acquired LandWatch; and on July 18, 2017, we acquired The Screening Pros. On February 21, 2018, we completed the acquisition of ForRent, a division of Dominion Enterprises, for approximately \$350 million in cash and approximately \$35 million in CoStar Group stock, subject to customary working capital and other post-closing adjustments. Our future acquisitions may vary in size and could be material to our current operations. We may use cash, stock, debt or other means of funding to make these acquisitions.

On October 19, 2017, the Company entered into the "2017 Credit Agreement", which amended and restated in its entirety the existing 2014 Credit Agreement. The 2017 Credit Agreement provides for a \$750 million revolving credit facility with a term of five years from a syndicate of financial institutions as lenders and issuing banks. The Company had not drawn on the 2017 Credit Agreement as of December 31, 2017.

Based on current plans, we believe that our available cash combined with positive cash flow provided by operating activities should be sufficient to fund our operations for at least the next 12 months.

*Contractual Obligations.* The following table summarizes our principal contractual obligations at December 31, 2017 and the effect such obligations are expected to have on our liquidity and cash flows in future periods (in thousands):

	Total	2018	2019-2020	2021-2022	Thereafter
Operating leases	\$ 178,402	\$ 30,853	\$ 54,061	\$ 47,427	\$ 46,061
Purchase obligations <sup>(1)</sup>	11,953	4,408	4,615	2,284	646
Total contractual principal cash obligations	\$ 190,355	\$ 35,261	\$ 58,676	\$ 49,711	\$ 46,707

<sup>(1)</sup>Amounts do not include (i) contracts with terms of twelve months or less, (ii) multi-year contracts that may be terminated by a third-party or us, or (iii) employment agreements. Amounts do not include unrecognized tax benefits of \$13.4 million due to uncertainty regarding the timing of future cash payments.

## Critical Accounting Policies

The preparation of financial statements and related disclosures in conformity with U.S. generally accepted accounting principles (“GAAP”) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and revenues and expenses during the period reported. The following accounting policies involve a “critical accounting estimate” because they are particularly dependent on estimates and assumptions made by management about matters that are highly uncertain at the time the accounting estimates are made. In addition, while we have used our best estimates based on facts and circumstances available to us at the time, different acceptable assumptions would yield different results. Changes in the accounting estimates are reasonably likely to occur from period to period, which may have a material impact on the presentation of our financial condition and results of operations. We review these estimates and assumptions periodically and reflect the effects of revisions in the period that they are determined to be necessary.

### Valuation of Long-Lived and Intangible Assets and Goodwill

We assess the impairment of long-lived assets, identifiable intangibles and goodwill whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Judgments made by management relate to the expected useful lives of long-lived assets and our ability to recover the carrying value of such assets. The accuracy of these judgments may be adversely affected by several factors, including the factors listed below:

- Significant underperformance relative to historical or projected future operating results;
- Significant changes in the manner of our use of the acquired assets or the strategy for our overall business;
- Significant negative industry or economic trends; or
- Significant decline in our market capitalization relative to net book value for a sustained period.

When we determine that the carrying value of long-lived and identifiable intangible assets may not be recovered based upon the existence of one or more of the above indicators, we test for impairment.

Goodwill and identifiable intangible assets that are not subject to amortization are tested annually for impairment by each reporting unit on October 1 of each year and are also tested for impairment more frequently based upon the existence of one or more of the above indicators.

Goodwill represents the excess of costs over the fair value of assets of acquired businesses. Goodwill is not amortized, but instead tested for impairment at least annually by each reporting unit. The Company may first assess qualitative factors to evaluate whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount or elect to bypass such assessment. If it is determined that it is more likely than not that the fair value of a reporting unit is less than its carrying value, or the Company elects to bypass such assessment, the Company then determines the fair value of each reporting unit. We estimate the fair value of each reporting unit based on a projected discounted cash flow model that includes significant assumptions and estimates including our discount rate, growth rate and future financial performance. Assumptions about the discount rate are based on a weighted average cost of capital for comparable companies. Assumptions about the growth rate and future financial performance of a reporting unit are based on our forecasts, business plans, economic projections and anticipated future cash flows. These assumptions are subject to change from period to period and could be adversely impacted by the uncertainty surrounding global market conditions, commercial real estate conditions and the competitive environment in which we operate. Changes in these or other factors could negatively affect our reporting units' fair value and potentially result in impairment charges. Such impairment charges could have an adverse effect on our results of operations.

The fair value of each reporting unit is compared to the carrying amount of the reporting unit. If the carrying value of the reporting unit exceeds the fair value, then an impairment loss is recognized for the difference. We estimate the fair value of our reporting units based on a projected discounted cash flow method using a discount rate determined by our management to be commensurate with the risk in our current business model. As of October 1, 2017, the date of our most recent impairment analysis, the estimated fair value of each of our reporting units substantially exceeded the carrying value of our reporting units. There have been no events or changes in circumstances since the date of our impairment analysis on October 1, 2017, that would indicate that the carrying value of each reporting unit may not be recoverable.

## Revenue Recognition

We recognize revenues when (1) there is persuasive evidence of an arrangement, (2) the fee is fixed or determinable, (3) services have been rendered and payment has been contractually earned and (4) collectability is reasonably assured. Revenues from subscription-based services are recognized on a straight-line basis over the term of the agreement. We evaluate our allowance for doubtful accounts and estimate collectability of accounts receivable based on our analysis of historical collection experience, changes in customer payment profiles and the aging of receivable balances, as well as current economic conditions, all of which may affect a customer's ability to pay. A credit reserve has also been established based on historical experience of credits issued to customers to ensure that revenue is recognized appropriately in the current period. Deferred revenue results from advance cash receipts from customers or amounts billed in advance to customers from the sale of subscription services and is recognized over the term of the service agreement.

We derive revenues by providing access to our proprietary database of commercial real estate information. We generally charge a fixed monthly amount for our subscription-based services. Our subscription-based services consist primarily of information, analytics and online marketplace services offered over the internet to commercial real estate industry and related professionals. Subscription contract rates are based on the number of sites, number of users, organization size, the client's business focus, geography, the number and types of services to which a client subscribes, the number of properties a client advertises and the prominence and placement of a client's advertised properties in the search results, as applicable. A majority of the subscription-based service agreements have a term of one year and renew automatically.

We analyze contracts with multiple elements under the accounting guidance for multiple-element arrangements. Our multiple-element arrangements include information, analytics and/or online marketplace services that are generally provided to the customer over the same term. When identifying multiple-element arrangements, we consider multiple purchases made by the same customer within a short time frame and assess whether the purchases were negotiated together as one overall arrangement. If a multiple-element arrangement is identified, then the arrangement consideration is allocated among the separate units of accounting based on their relative selling prices, which is estimated considering factors such as historical pricing, pricing strategy, market conditions and other factors. We account for each deliverable in the transaction separately. If the deliverables cannot be separated into multiple units of accounting, then the arrangement consideration is combined and recognition of revenues is determined for the combined unit of accounting. Multiple-element transactions require judgment to determine the selling price or fair value of the different elements. The judgments impact the amount of revenues recognized over the term of the contract, as well as the period in which they are recognized.

## Accounting for Income Taxes

As part of the process of preparing our consolidated financial statements, we are required to estimate our income taxes in each of the jurisdictions in which we operate. This process requires us to estimate our current tax exposure and assess the temporary differences resulting from differing treatment of items, such as deductibility of certain intangible assets, for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included within our consolidated balance sheets. We must then also assess the likelihood that our deferred tax assets will be recovered from future taxable income, and, to the extent we believe that it is more-likely-than-not that some portion or all of our deferred tax assets will not be realized, we must establish a valuation allowance. To the extent we establish a valuation allowance or change the allowance in a period, we must reflect the corresponding increase or decrease within the tax provision in the consolidated statements of operations.

We generally recognize the effect of the tax law changes in the period of enactment. Changes in existing tax laws and rates, their related interpretations, and the uncertainty generated by the current economic environment may affect the amounts of our deferred tax liabilities or the valuations of our deferred tax assets over time. Our accounting for deferred tax consequences represents management's best estimate of future events that can be appropriately reflected in the accounting estimates. In accordance with SEC Staff Accounting Bulletin 118, Income Tax Accounting Implications of the Tax Cuts and Jobs Act, we report provisional amounts if we are able to determine a reasonable estimate but do not have the necessary information available, prepared, and analyzed in reasonable detail to complete the accounting for Tax Reform. We may revise our estimates as we finalize our accounting during a measurement period of up to one year from the enactment of Tax Reform.

## Stock-Based Compensation

We account for equity instruments issued in exchange for employee services using a fair-value based method and we recognize the fair value of such equity instruments as an expense in the consolidated statements of operations. We estimate the fair value of each option granted on the date of grant using the Black-Scholes option-pricing model, which requires us to estimate the dividend yield, expected volatility, risk-free interest rate and expected life of the stock option. For equity instruments that vest based on a market condition, we estimate the fair value of each equity instrument granted on the date of grant using a Monte-Carlo simulation model, which also requires us to estimate the dividend yield, expected volatility, risk-free interest rate and expected life of the equity instruments. These assumptions and the estimation of expected forfeitures are based on multiple factors, including historical employee behavior patterns of exercising options and post-employment termination behavior, expected future employee option exercise patterns, and the historical volatility of our stock price. For equity instruments that vest based on performance, we assess the probability of the achievement of the performance conditions at the end of each reporting period, or more frequently based upon the occurrence of events that may change the probability of whether the performance conditions would be met. If our initial estimates of the achievement of the performance conditions change, the related stock-based compensation expense and timing of recognition may fluctuate from period to period based on those estimates. If the performance conditions are not met, no stock-based compensation expense will be recognized, and any previously recognized stock-based compensation expense will be reversed.

We do not expect any material changes in the near term to the underlying assumptions used to calculate stock-based compensation expense for the year ended December 31, 2017. However, if changes in these assumptions occur, and, should those changes be significant, they could have a material impact on our stock-based compensation expense.

## Business Combinations

We allocate the purchase consideration to the tangible assets acquired, liabilities assumed and intangible assets acquired based on their estimated fair values. The excess of the fair value of purchase consideration over the fair values of these identifiable assets and liabilities is recorded as goodwill. Such valuations require management to make significant estimates and assumptions, especially with respect to intangible assets. Significant estimates in valuing certain intangible assets include, but are not limited to, future expected cash flows from acquired customer bases, acquired database technology, and acquired trade names from a market participant's perspective, useful lives and discount rates. During the measurement period, we may record adjustments to the assets acquired and liabilities assumed. Any adjustments to provisional amounts that are identified during the measurement period are recorded in the reporting period in which the adjustment amounts are determined. Upon the conclusion of the measurement period, any subsequent adjustments are recorded to earnings.

## Fair Value of Auction Rate Securities

Fair value is defined as the price that would be received in the sale of an asset or paid to transfer a liability in an orderly transaction between market participants. There is a three-tier fair value hierarchy, which categorizes assets and liabilities by the inputs used in measuring fair value. These tiers include: Level 1, defined as observable inputs such as quoted prices in active markets; Level 2, defined as inputs other than quoted prices in active markets that are either directly or indirectly observable; and Level 3, defined as unobservable inputs for which little or no market data exists, therefore requiring an entity to develop its own assumptions. Our Level 3 assets consist of auction rate securities ("ARS"), whose underlying assets are primarily student loan securities supported by guarantees from the Federal Family Education Loan Program ("FFELP") of the U.S. Department of Education.

Our ARS investments are not currently actively trading and therefore do not currently have a readily determinable market value. The estimated fair value of the ARS no longer approximates par value. We have used a discounted cash flow model to determine the estimated fair value of our investment in ARS as of December 31, 2017. The assumptions used in preparing the discounted cash flow model include estimates for interest rates, credit spreads, timing and amount of contractual cash flows, liquidity risk premiums, expected holding periods and default risk of the ARS. We update the discounted cash flow model on a quarterly basis to reflect any changes in the assumptions used in the model and settlements of ARS investments that occurred during the period.

The only significant unobservable input in the discounted cash flow model is the discount rate. The discount rate used represents our estimate of the yield expected by a market participant from the ARS investments. The weighted average discount rate used in the discounted cash flow model as of December 31, 2017 and 2016 was approximately 6% and 5%, respectively. Selecting another discount rate within the range used in the discounted cash flow model would not result in a significant change to the fair value of the ARS.

Based on this assessment of fair value, as of December 31, 2017, we determined there was a net decline in the fair value of our ARS investments of approximately \$730,000. The decline was deemed to be a temporary impairment and recorded as an unrealized loss in accumulated other comprehensive loss in stockholders' equity. If the issuers of these ARS are unable to successfully close future auctions and/or their credit ratings deteriorate, we may be required to record additional unrealized losses in accumulated other comprehensive loss or an other-than-temporary impairment charge to earnings on these investments, which would reduce our profitability and adversely affect our financial position.

We have not made any material changes in the accounting methodology used to determine the fair value of the ARS. We do not expect any material changes in the near term to the underlying assumptions used to determine the unobservable inputs used to calculate the fair value of the ARS as of December 31, 2017. However, if changes in these assumptions occur, and, should those changes be significant, we may be exposed to additional unrealized losses in accumulated other comprehensive loss or an other-than-temporary impairment charge to earnings on these investments.

### **Recent Accounting Pronouncements**

In March 2016, the FASB issued authoritative guidance to simplify several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification of share-based payment transactions on the statement of cash flows. Effective the first quarter of 2017, the Company adopted the standard, which impacted our 2017 net income because excess tax benefits, which were previously reflected in additional paid in capital, are now reflected in income tax expense. The significance of the impact will depend on the intrinsic value at the time of vesting or exercise of equity instruments.

In January 2017, the FASB issued ASU 2017-04, Intangibles - Goodwill and Other (Topic 350: Simplifying the Test for Goodwill Impairment), which is designed to simplify the subsequent measurement of goodwill by eliminating Step 2 from the goodwill impairment test. The guidance indicates that an entity should recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value; however, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. This guidance is effective on a prospective basis for annual reporting periods beginning after December 15, 2019, including interim periods within that reporting period. Early application is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The Company early adopted this guidance during the first quarter of 2017 and the early adoption did not have a material impact on the Company's consolidated financial statements and related disclosures.

See Note 2 of the Notes to Consolidated Financial Statements included in this Annual Report on Form 10-K for additional information on recent accounting pronouncements, including the expected dates of adoption.

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

We provide information, analytics and online marketplace services to the commercial real estate and related business community in the U.S., the U.K., and parts of Canada, Spain, Germany and France. Our functional currency for our operations in the U.K., Canada, Spain, Germany and France is the local currency. As such, fluctuations in the British Pound, Canadian dollar and Euro may have an impact on our business, results of operations and financial position. For the year ended December 31, 2017, revenues denominated in foreign currencies was approximately 3% of total revenue. For the year ended December 31, 2017, our revenues would have decreased by approximately \$3 million if the U.S. dollar exchange rate used strengthened by 10%. For the year ended December 31, 2017, our revenues would have increased by approximately \$3 million if the U.S. dollar exchange rate used weakened by 10%. In addition, we have assets and liabilities denominated in foreign currencies. We currently do not use financial instruments to hedge our exposure to exchange rate fluctuations with respect to our foreign subsidiaries. We may seek to enter into hedging transactions in the future to reduce our exposure to exchange rate fluctuations, but we may be unable to enter into hedging transactions successfully, on acceptable terms or at all. As of December 31, 2017, accumulated other comprehensive loss included a loss from foreign currency translation adjustments of approximately \$8 million.

We do not have material exposure to market risks associated with changes in interest rates related to cash equivalent securities held as of December 31, 2017. As of December 31, 2017, we had \$1 billion of cash and cash equivalents and short-term investments. If there is an increase or decrease in interest rates, there will be a corresponding increase or decrease in the amount of interest earned on our cash and cash equivalents.

Included within our short-term and long-term investments are investments in mostly AAA-rated student loan ARS. These securities are primarily securities supported by guarantees from the FFELP of the U.S. Department of Education. As of December 31, 2017, \$11 million of our investments in ARS failed to settle at auction. As a result, we may not be able to sell these investments at par value until a future auction on these investments is successful. In the event we need to immediately liquidate these investments, we may have to locate a buyer outside the auction process, who may be unwilling to purchase the investments at par, resulting in a loss. Based on an assessment of fair value of these investments in ARS as of December 31, 2017, we determined that there was a decline in the fair value of our ARS investments of approximately \$730,000, which was deemed to be a temporary impairment and recorded as an unrealized loss in accumulated other comprehensive loss in stockholders' equity. If the issuers are unable to successfully close future auctions and/or their credit ratings deteriorate, we may be required to adjust the carrying value of these investments as a temporary impairment and recognize a greater unrealized loss in accumulated other comprehensive loss or as an other-than-temporary impairment charge to earnings. Based on our ability to access our cash and cash equivalents, and our expected operating cash flows, we do not anticipate having to sell these securities below par value in order to operate our business in the foreseeable future. See Notes 3 and 4 to the Notes to Consolidated Financial Statements included in this Annual Report on Form 10-K for further discussion.

We had approximately \$1.5 billion in intangible assets as of December 31, 2017. As of December 31, 2017, we believe our intangible assets will be recoverable, however, changes in the economy, the business in which we operate and our own relative performance could change the assumptions used to evaluate intangible asset recoverability. In the event that we determine that an asset has been impaired, we would recognize an impairment charge equal to the amount by which the carrying amount of the assets exceeds the fair value of the asset. We continue to monitor these assumptions and their effect on the estimated recoverability of our intangible assets.



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

Financial Statements meeting the requirements of Regulation S-X are set forth beginning at page F-1. Supplementary data is set forth in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” under the caption “Consolidated Results of Operations” and “Consolidated Quarterly Results of Operations.”

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

None.

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

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission’s rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow for timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

As of December 31, 2017, we carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures. Based on the foregoing, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective and were operating at a reasonable assurance level.

During the fourth quarter of 2017, we commenced the implementation of a new financial system that is designed to improve the efficiency and effectiveness of the Company’s operational and financial accounting processes. This implementation is expected to continue through 2019. Consistent with any process change that we implement, the design of the internal controls has and will continue to be evaluated for effectiveness as part of our overall assessment of the effectiveness of our disclosure controls and procedures. We expect that the implementation of this system will improve our internal controls over financial reporting.

## **Management’s Report on Internal Control over Financial Reporting**

Management of CoStar is responsible for establishing and maintaining adequate internal control over financial reporting and for the assessment of the effectiveness of internal control over financial reporting. As defined by the Securities and Exchange Commission, internal control over financial reporting is a process designed by, or supervised by, the Company’s principal executive and principal financial officers, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with GAAP.

The Company’s internal control over financial reporting is supported by written policies and procedures, that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the Company’s assets; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that receipts and expenditures of the Company are being made only in accordance with authorizations of the Company’s management and directors; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company’s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. 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.

In connection with the preparation of the Company’s annual financial statements, management of the Company has undertaken an assessment of the effectiveness of the Company’s internal control over financial reporting as of December 31, 2017 based on criteria established in Internal Control – Integrated Framework (2013 framework) issued by the Committee of Sponsoring Organizations of the Treadway Commission (“the COSO Framework”). Management’s assessment included an evaluation of the design of the Company’s internal control over financial reporting and testing of the operational effectiveness of the Company’s internal control over financial reporting.

Based on this assessment, management has concluded that the Company's internal control over financial reporting was effective as of December 31, 2017.

Ernst & Young LLP, the independent registered public accounting firm that audited the Company's financial statements included in this report, has issued an attestation report on the effectiveness of internal control over financial reporting, a copy of which is included in this Annual Report on Form 10-K.

On January 31, 2017, we completed the acquisition of Westside Rentals. On May 10, 2017, we completed the acquisition of LandWatch. On July 18, 2017, we completed the acquisition of The Screening Pros. As permitted by the Securities and Exchange Commission, we have elected to exclude the accounts receivable and revenue of Westside Rentals, LandWatch, and The Screening Pros from our assessment of the effectiveness of internal control over financial reporting as of December 31, 2017. The excluded aggregate financial position of Westside Rentals, LandWatch, and The Screening Pros represented less than 1% of our total assets as of December 31, 2017, and less than 2% of our revenues for the year then ended. We will include the internal controls of Westside Rentals, LandWatch, and The Screening Pros accounts receivable and revenue in our assessment of the effectiveness of our internal control over financial reporting as of December 31, 2018.

During the fourth quarter of 2017, we commenced the implementation of a new financial system that is designed to improve the efficiency and effectiveness of the Company's operational and financial accounting processes. This implementation is expected to continue through 2019. Consistent with any process change that we implement, the design of the internal controls has and will continue to be evaluated for effectiveness as part of our overall assessment of the effectiveness of our disclosure controls and procedures.

Other than the implementation of a new financial system noted previously, there have been no changes in our internal control over financial reporting during our most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

**Item 9B. Other Information.**

None.

**PART III**

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

CoStar has adopted a Code of Conduct for its directors. In addition, CoStar has adopted a separate Code of Conduct for its officers and employees, including its principal executive, financial and accounting officers, or persons performing similar functions. Copies of each of these codes may be found in the "Investors" section of the Company's website at <http://www.costargroup.com/investors/governance>. We intend to disclose future amendments to certain provisions of our Codes, or waivers of such provisions granted to executive officers and directors, as required by SEC rules on the website within four business days following the date of such amendment or waiver.

The remaining information required by this Item is incorporated by reference to our Proxy Statement for our 2018 annual meeting of stockholders.

**Item 11. Executive Compensation**

The information required by this Item is incorporated by reference to our Proxy Statement for our 2018 annual meeting of stockholders.

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

The information required by this Item is incorporated by reference to our Proxy Statement for our 2018 annual meeting of stockholders.

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

The information required by this Item is incorporated by reference to our Proxy Statement for our 2018 annual meeting of stockholders.

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

The information required by this Item is incorporated by reference to our Proxy Statement for our 2018 annual meeting of stockholders.

## PART IV

### Item 15. Exhibits and Financial Statement Schedules

(a)(1) The following financial statements are filed as a part of this report: CoStar Group, Inc. Consolidated Financial Statements.

(a)(2) Financial statement schedules:

#### Schedule II – Valuation and Qualifying Accounts

Years Ended December 31, 2017, 2016, and 2015 (in thousands):

Allowance for Doubtful Accounts and Billing Adjustments <sup>(1)</sup>	Balance at Beginning of Year	Charged to Expense	Charged to Other Accounts <sup>(2)</sup>	Write-offs, Net of Recoveries	Balance at End of Year
Year ended December 31, 2015	\$ 4,815	\$ 7,002	\$ 1,470	\$ 5,809	\$ 7,478
Year ended December 31, 2016	\$ 7,478	\$ 7,358	\$ —	\$ 8,492	\$ 6,344
Year ended December 31, 2017	\$ 6,344	\$ 5,690	\$ —	\$ 5,565	\$ 6,469

<sup>(1)</sup> Additions to the allowance for doubtful accounts are charged to bad debt expense.

<sup>(2)</sup> Amounts represent opening balances from acquired businesses.

Additional financial statement schedules are omitted because they are not applicable or not required or because the required information is incorporated herein by reference or included in the financial statements or related notes included elsewhere in this report.

(a)(3) The documents required to be filed as exhibits to this Report under Item 601 of Regulation S-K are listed as follows:

#### Exhibits

Exhibit No.	Description
<a href="#">3.1</a>	Third Amended and Restated Certificate of Incorporation (Incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed with the Commission on June 6, 2013).
<a href="#">3.2</a>	Third Amended and Restated By-Laws (Incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed with the Commission on September 24, 2013).
<a href="#">4.1</a>	Specimen Common Stock Certificate (Incorporated by reference to Exhibit 4.1 to the Registration Statement on Form S-4 of the Registrant (Reg. No. 333-174214) filed with the Commission on June 3, 2011).
* <a href="#">10.1</a>	CoStar Group, Inc. 2016 Stock Incentive Plan (Incorporated by reference to Exhibit 4.4 to the Registration Statement on Form S-8 of the Registrant (Reg. No. 333-212278) filed with the Commission on June 28, 2016).
* <a href="#">10.2</a>	CoStar Group, Inc. 2007 Stock Incentive Plan, as amended (Incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed June 8, 2012).
* <a href="#">10.3</a>	CoStar Group, Inc. 2007 Stock Incentive Plan French Sub-Plan (Incorporated by reference to Exhibit 10.3 to the Registrant's Report on Form 10-K filed February 29, 2008).
* <a href="#">10.4</a>	Form of CoStar Group, Inc. 2016 Plan Restricted Stock Grant Agreement between the Registrant and certain of its officers, directors and employees (Incorporated by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q filed July 28, 2016).
* <a href="#">10.5</a>	Form of CoStar Group, Inc. 2016 Plan Restricted Stock Grant Agreement for Service Awards between the Registrant and certain of its officers and employees (Incorporated by reference to Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q filed July 28, 2016).
* <a href="#">10.6</a>	Form of CoStar Group, Inc. 2016 Plan Restricted Stock Unit Grant Agreement between the Registrant and certain of its officers and employees (Incorporated by reference to Exhibit 10.5 to the Registrant's Quarterly Report on Form 10-Q filed July 28, 2016).

Exhibit No.	Description
<a href="#">*10.7</a>	Form of CoStar Group, Inc. 2016 Plan Incentive Stock Option Grant Agreement between the Registrant and certain of its officers and employees (Incorporated by reference to Exhibit 10.6 to the Registrant's Quarterly Report on Form 10-Q filed July 28, 2016).
<a href="#">*10.8</a>	Form of CoStar Group, Inc. 2016 Plan Incentive Stock Option Grant Agreement between the Registrant and Andrew C. Florance (Incorporated by reference to Exhibit 10.7 to the Registrant's Quarterly Report on Form 10-Q filed July 28, 2016).
<a href="#">*10.9</a>	Form of CoStar Group, Inc. 2016 Plan Nonqualified Stock Option Grant Agreement between the Registrant and certain of its officers, directors and employees (Incorporated by reference to Exhibit 10.8 to the Registrant's Quarterly Report on Form 10-Q filed July 28, 2016).
<a href="#">*10.10</a>	Form of CoStar Group, Inc. 2016 Plan Nonqualified Stock Option Grant Agreement between the Registrant and Andrew C. Florance (Incorporated by reference to Exhibit 10.9 to the Registrant's Quarterly Report on Form 10-Q filed July 28, 2016).
<a href="#">*10.11</a>	Form of 2007 Plan Restricted Stock Grant Agreement between the Registrant and certain of its officers, directors and employees (Incorporated by reference to Exhibit 99.1 to the Registrant's Report on Form 8-K filed June 22, 2007).
<a href="#">*10.12</a>	Form of 2007 Plan Restricted Stock Unit Agreement between the Registrant and certain of its officers and employees (Incorporated by reference to Exhibit 10.8 to the Registrant's Report on Form 10-K filed February 20, 2014).
<a href="#">*10.13</a>	Form of 2007 Plan Incentive Stock Option Grant Agreement between the Registrant and certain of its officers and employees (Incorporated by reference to Exhibit 10.8 to the Registrant's Report on Form 10-K filed February 24, 2009).
<a href="#">*10.14</a>	Form of 2007 Plan Incentive Stock Option Grant Agreement between the Registrant and Andrew C. Florance (Incorporated by reference to Exhibit 10.9 to the Registrant's Report on Form 10-K filed February 24, 2009).
<a href="#">*10.15</a>	Form of 2007 Plan Nonqualified Stock Option Grant Agreement between the Registrant and certain of its officers and employees (Incorporated by reference to Exhibit 10.10 to the Registrant's Report on Form 10-K filed February 24, 2009).
<a href="#">*10.16</a>	Form of 2007 Plan Nonqualified Stock Option Grant Agreement between the Registrant and certain of its directors (Incorporated by reference to Exhibit 10.11 to the Registrant's Report on Form 10-K filed February 24, 2009).
<a href="#">*10.17</a>	Form of 2007 Plan Nonqualified Stock Option Grant Agreement between the Registrant and Andrew C. Florance (Incorporated by reference to Exhibit 10.12 to the Registrant's Report on Form 10-K filed February 24, 2009).
<a href="#">*10.18</a>	Form of 2007 Plan French Sub-Plan Restricted Stock Agreement between the Registrant and certain of its employees (Incorporated by reference to Exhibit 10.10 to the Registrant's Report on Form 10-K filed February 29, 2008).
<a href="#">*10.19</a>	CoStar Group, Inc. 2016 Cash Incentive Plan (Incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed July 28, 2016).
<a href="#">*10.20</a>	CoStar Group, Inc. Amended and Restated Employee Stock Purchase Plan (Incorporated by reference to Exhibit 4.4 to the Registrant's Registration Statement on Form S-8 filed with the Commission on September 14, 2015).
<a href="#">*10.21</a>	CoStar Group, Inc. Management Stock Purchase Plan (filed herewith).
<a href="#">*10.22</a>	Summary of Non-Employee Director Compensation (Incorporated by reference to Exhibit 10.1 to the Registrant's Report on Form 10-Q filed on October 24, 2013).
<a href="#">*10.23</a>	Employment Agreement for Andrew C. Florance (Incorporated by reference to Exhibit 10.2 to Amendment No. 1 to the Registration Statement on Form S-1 of the Registrant (Reg. No. 333-47953) filed with the Commission on April 27, 1998).
<a href="#">*10.24</a>	First Amendment to Andrew C. Florance Employment Agreement, effective January 1, 2009 (Incorporated by reference to Exhibit 10.16 to the Registrant's Report on Form 10-K filed February 24, 2009).
<a href="#">10.25</a>	Form of Indemnification Agreement between the Registrant and each of its officers and directors (Incorporated by reference to Exhibit 10.1 to the Registrant's Report on Form 10-Q filed on May 7, 2004).
<a href="#">10.26</a>	Deed of Office Lease by and between GLL L-Street 1331, LLC and CoStar Realty Information, Inc., dated February 18, 2011, and made effective as of June 1, 2010 (Incorporated by reference to Exhibit 10.1 to the Registrant's Report on form 10-Q filed on April 29, 2011).
<a href="#">10.27</a>	Securities Purchase Agreement, dated as of September 11, 2017, among CoStar Realty Information, Inc., CoStar Group, Inc., LTM Company Dominion, LLC, Dominion Enterprises, and Landmark Media Enterprises, LLC (Incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the Commission on September 13, 2017).

Exhibit No.	Description
<a href="#">10.28</a>	Amendment and Restatement Agreement, dated as of October 19, 2017, by and among CoStar Group, Inc., CoStar Realty Information, Inc., the Lenders party thereto and JPMorgan Chase Bank, N.A., as Administrative Agent (Incorporated by referenced to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the Commission on October 25, 2017).
<a href="#">21.1</a>	Subsidiaries of the Registrant (filed herewith).
<a href="#">23.1</a>	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm (filed herewith).
<a href="#">31.1</a>	Certification of Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith).
<a href="#">31.2</a>	Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith).
<a href="#">32.1</a>	Certification of Principal Executive Officer pursuant to 18 U.S.C. Sec. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (filed herewith).
<a href="#">32.2</a>	Certification of Principal Financial Officer pursuant to 18 U.S.C. Sec. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (filed herewith).
101	The following materials from CoStar Group, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2017, formatted in XBRL (eXtensible Business Reporting Language): (i) Consolidated Statements of Operations for the years ended December 31, 2017, 2016 and 2015, respectively; (ii) Consolidated Statements of Comprehensive Income (Loss) for the years ended December 31, 2017, 2016 and 2015, respectively; (iii) Consolidated Balance Sheets at December 31, 2017 and December 31, 2016, respectively; (iv) Statements of Changes in Stockholders' Equity for the years ended December 31, 2017, 2016 and 2015, respectively; (v) Consolidated Statements of Cash Flows for the years ended December 31, 2017, 2016 and 2015, respectively; (vi) Notes to the Consolidated Financial Statements that have been detail tagged; and (vii) Schedule II – Valuation and Qualifying Accounts (submitted electronically with this report).

\* Management Contract or Compensatory Plan or Arrangement.

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

Not applicable.

## SIGNATURES

Pursuant to the requirements of Section 13 of the Securities Act of 1934, as amended, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Washington, District of Columbia, on the 22<sup>nd</sup> day of February 2018.

COSTAR GROUP, INC.

By: /s/ Andrew C. Florance  
Andrew C. Florance  
President and Chief Executive Officer

KNOW ALL PERSONS BY THESE PRESENTS, that each individual whose signature appears below constitutes and appoints Andrew C. Florance and Scott T. Wheeler, and each of them individually, as their true and lawful attorneys-in-fact and agents, with full power of substitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments to this report, and to file the same, with all exhibits thereto and to all documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, herein by ratifying and confirming all that said attorneys-in-fact and agents or any of them, or his or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.



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

<b>Signature</b>	<b>Capacity</b>	<b>Date</b>
<u>/s/ Michael R. Klein</u> Michael R. Klein	Chairman of the Board	February 22, 2018
<u>/s/ Andrew C. Florance</u> Andrew C. Florance	Chief Executive Officer and President and a Director (Principal Executive Officer)	February 22, 2018
<u>/s/ Scott T. Wheeler</u> Scott T. Wheeler	Chief Financial Officer (Principal Financial and Accounting Officer)	February 22, 2018
<u>/s/ Michael J. Glosserman</u> Michael J. Glosserman	Director	February 22, 2018
<u>/s/ Warren H. Haber</u> Warren H. Haber	Director	February 22, 2018
<u>/s/ John W. Hill</u> John W. Hill	Director	February 19, 2018
<u>/s/ Laura Cox Kaplan</u> Laura Cox Kaplan	Director	February 22, 2018
<u>/s/ Christopher J. Nassetta</u> Christopher J. Nassetta	Director	February 20, 2018
<u>/s/ David J. Steinberg</u> David J. Steinberg	Director	February 21, 2018

**COSTAR GROUP, INC.**

**INDEX TO CONSOLIDATED FINANCIAL STATEMENTS**

Reports of Independent Registered Public Accounting Firm	<a href="#">F-2</a>
Consolidated Statements of Operations	<a href="#">F-5</a>
Consolidated Statements of Comprehensive Income (Loss)	<a href="#">F-6</a>
Consolidated Balance Sheets	<a href="#">F-7</a>
Statement of Changes in Stockholders' Equity	<a href="#">F-8</a>
Consolidated Statements of Cash Flows	<a href="#">F-8</a>
Notes to Consolidated Financial Statements	<a href="#">F-9</a>

## **Report of Independent Registered Public Accounting Firm**

The Board of Directors and Stockholders of CoStar Group, Inc.

### **Opinion on the Financial Statements**

We have audited the accompanying consolidated balance sheets of CoStar Group, Inc. (the Company) as of December 31, 2017 and 2016, and the related consolidated statements of operations, comprehensive income (loss), stockholders' equity and cash flows for each of the three years in the period ended December 31, 2017, and the related notes and the financial statement schedule listed in the Index at Item 15(a)(2) (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the consolidated financial position of the Company at December 31, 2017 and 2016, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated February 22, 2018 expressed an unqualified opinion thereon.

### **Basis for Opinion**

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

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

/s/ Ernst & Young LLP

We have served as the Company's auditor since 1994.

Tysons, Virginia

February 22, 2018

## **Report of Independent Registered Public Accounting Firm**

The Board of Directors and Stockholders of CoStar Group, Inc.

### **Opinion on Internal Control over Financial Reporting**

We have audited CoStar Group, Inc.'s internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, CoStar Group, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on the COSO criteria.

As indicated in the accompanying Management's Report on Internal Control over Financial Reporting, management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of Westside Rentals, LandWatch and The Screening Pros related to accounts receivable and revenues, which are included in the 2017 consolidated financial statements of CoStar Group, Inc. and constituted less than 1% of total assets as of December 31, 2017 and less than 2% of revenues for the year then ended. Our audit of internal control over financial reporting of CoStar Group, Inc. did not include an evaluation of the internal control over financial reporting of Westside Rentals, LandWatch and The Screening Pros.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of CoStar Group, Inc. as of December 31, 2017 and 2016, and the related consolidated statements of operations, comprehensive income (loss), stockholders' equity and cash flows for each of the three years in the period ended December 31, 2017 and the related notes and the financial statement schedule listed in the Index at Item 15(a)(2) (Collectively referred to as the "financial statements") of CoStar Group, Inc. and our report dated February 22, 2018 expressed an unqualified opinion thereon.

### **Basis for Opinion**

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

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

## **Definition and Limitations of Internal Control Over Financial Reporting**

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

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

/s/ Ernst & Young LLP

Tysons, Virginia  
February 22, 2018

**COSTAR GROUP, INC.**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
(in thousands, except per share data)

	<b>Year Ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
Revenues	\$ 965,230	\$ 837,630	\$ 711,764
Cost of revenues	220,403	173,814	188,885
Gross profit	744,827	663,816	522,879
<b>Operating expenses:</b>			
Selling and marketing (excluding customer base amortization)	318,362	296,483	302,226
Software development	88,850	76,400	65,760
General and administrative	146,128	123,297	115,507
Customer base amortization	17,671	22,731	27,931
	571,011	518,911	511,424
Income from operations	173,816	144,905	11,455
Interest and other income	4,044	1,773	537
Interest and other expense	(9,014)	(10,016)	(9,411)
Loss on debt extinguishment	(3,788)	—	—
Income before income taxes	165,058	136,662	2,581
Income tax expense	42,363	51,591	6,046
Net income (loss)	\$ 122,695	\$ 85,071	\$ (3,465)
Net income (loss) per share — basic	\$ 3.70	\$ 2.64	\$ (0.11)
Net income (loss) per share — diluted	\$ 3.66	\$ 2.62	\$ (0.11)
Weighted average outstanding shares — basic	33,200	32,167	31,950
Weighted average outstanding shares — diluted	33,559	32,436	31,950

*See accompanying notes.*

**COSTAR GROUP, INC.**  
**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)**  
(in thousands)

	<b>Year Ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
Net income (loss)	\$ 122,695	\$ 85,071	\$ (3,465)
Other comprehensive loss, net of tax			
Foreign currency translation adjustment	3,901	(5,032)	(1,466)
Net decrease in unrealized loss on investments	118	395	256
Reclassification adjustment for realized gains on investments included in net income	—	(808)	—
Total other comprehensive income (loss)	4,019	(5,445)	(1,210)
Total comprehensive income (loss)	<u>\$ 126,714</u>	<u>\$ 79,626</u>	<u>\$ (4,675)</u>

*See accompanying notes.*

**COSTAR GROUP, INC.**  
**CONSOLIDATED BALANCE SHEETS**  
(in thousands, except per share data)

	December 31,	
	2017	2016
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 1,211,463	\$ 567,223
Accounts receivable, net of allowance for doubtful accounts of approximately \$6,469 and \$6,344 as of December 31, 2017 and 2016, respectively	60,900	48,537
Income tax receivable	—	129
Prepaid expenses and other current assets	15,572	11,602
<b>Total current assets</b>	<b>1,287,935</b>	<b>627,491</b>
Long-term investments	10,070	9,952
Deferred income taxes, net	5,431	7,273
Property and equipment, net	84,496	87,568
Goodwill	1,283,457	1,254,866
Intangible assets, net	182,892	195,965
Deposits and other assets	6,179	1,948
Income tax receivable	12,981	—
<b>Total assets</b>	<b>\$ 2,873,441</b>	<b>\$ 2,185,063</b>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Current portion of long-term debt	\$ —	\$ 31,866
Accounts payable	9,262	11,478
Accrued wages and commissions	54,104	33,803
Accrued expenses	22,193	31,092
Deferred gain on the sale of building	2,523	2,523
Income taxes payable	8,166	3,814
Deferred rent	4,732	1,206
Deferred revenue	45,686	39,164
<b>Total current liabilities</b>	<b>146,666</b>	<b>154,946</b>
Long-term debt, less current portion	—	306,473
Deferred gain on the sale of building	16,192	18,715
Deferred rent	33,909	31,589
Deferred income taxes, net	12,070	18,386
Income taxes payable	13,354	741
<b>Total liabilities</b>	<b>222,191</b>	<b>530,850</b>
Commitments and contingencies (Note 10)		
Stockholders' equity:		
Preferred stock, \$0.01 par value; 2,000 shares authorized; none outstanding	—	—
Common stock, \$0.01 par value; 60,000 shares authorized; 36,107 and 32,606 issued and outstanding as of December 31, 2017 and 2016, respectively	361	326
Additional paid-in capital	2,339,253	1,471,127
Accumulated other comprehensive loss	(9,020)	(13,039)
Retained earnings	320,656	195,799
<b>Total stockholders' equity</b>	<b>2,651,250</b>	<b>1,654,213</b>
<b>Total liabilities and stockholders' equity</b>	<b>\$ 2,873,441</b>	<b>\$ 2,185,063</b>

*See accompanying notes.*



**COSTAR GROUP, INC.**  
**CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY**  
(in thousands)

	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Retained Earnings	Total Stockholders' Equity
	Shares	Amount				
Balance at December 31, 2014	32,318	\$ 323	\$ 1,405,414	\$ (6,384)	\$ 114,193	\$ 1,513,546
Net loss	—	—	—	—	(3,465)	(3,465)
Other comprehensive loss	—	—	—	(1,210)	—	(1,210)
Exercise of stock options	60	1	5,068	—	—	5,069
Restricted stock grants	239	2	(2)	—	—	—
Restricted stock grants surrendered	(121)	(1)	(16,435)	—	—	(16,436)
Stock compensation expense, net of forfeitures	—	—	35,153	—	—	35,153
Employee stock purchase plan	13	—	2,595	—	—	2,595
Excess tax benefit from stock-based compensation	—	—	8,528	—	—	8,528
Balance at December 31, 2015	32,509	325	1,440,321	(7,594)	110,728	1,543,780
Net income	—	—	—	—	85,071	85,071
Other comprehensive loss	—	—	—	(5,445)	—	(5,445)
Exercise of stock options	29	—	3,303	—	—	3,303
Restricted stock grants	195	2	(2)	—	—	—
Restricted stock grants surrendered	(142)	(1)	(16,423)	—	—	(16,424)
Stock compensation expense, net of forfeitures	—	—	36,388	—	—	36,388
Employee stock purchase plan	15	—	2,842	—	—	2,842
Excess tax benefit from stock-based compensation	—	—	4,698	—	—	4,698
Balance at December 31, 2016	32,606	326	1,471,127	(13,039)	195,799	1,654,213
Cumulative effect of adoption of new accounting standard	—	—	—	—	2,162	2,162
Net income	—	—	—	—	122,695	122,695
Other comprehensive income	—	—	—	4,019	—	4,019
Exercise of stock options	82	1	6,796	—	—	6,797
Restricted stock grants	187	2	(2)	—	—	—
Restricted stock grants surrendered	(99)	(1)	(14,901)	—	—	(14,902)
Stock compensation expense, net of forfeitures	—	—	38,921	—	—	38,921
Stock issued for equity offering	3,317	33	833,878	—	—	833,911
Employee stock purchase plan	14	—	3,434	—	—	3,434
Balance at December 31, 2017	36,107	\$ 361	\$ 2,339,253	\$ (9,020)	\$ 320,656	\$ 2,651,250

*See accompanying notes.*

**COSTAR GROUP, INC.**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(in thousands)

	<b>Year Ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
Operating activities:			
Net income (loss)	\$ 122,695	\$ 85,071	\$ (3,465)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation and amortization	63,643	70,165	78,532
Amortization of debt issuance costs	2,303	3,227	3,311
Loss on extinguishment of debt	3,788	—	—
Impairment loss	—	23	2,778
Loss on disposal of property and equipment	129	839	681
Realized gain on investments	—	(808)	—
Stock-based compensation expense	39,030	36,349	34,537
Deferred income tax (benefit) expense, net	(2,903)	15,635	(5,792)
Bad debt expense	5,690	7,358	7,002
Changes in operating assets and liabilities, net of acquisitions:			
Accounts receivable	(17,524)	(16,044)	(3,999)
Prepaid expenses and other current assets	(3,672)	(1,157)	367
Income tax receivable	(12,981)	—	—
Accounts payable and other liabilities	11,525	(1,520)	9,938
Income taxes payable	16,937	2,816	11,380
Deferred revenue	6,004	(2,070)	3,817
Deposits and other assets	39	758	686
Net cash provided by operating activities	234,703	200,642	139,773
Investing activities:			
Proceeds from sale and settlement of investments	—	5,950	1,900
Purchases of property and equipment and other assets	(24,499)	(18,766)	(35,061)
Acquisitions, net of cash acquired	(47,768)	(10,443)	(182,341)
Net cash used in investing activities	(72,267)	(23,259)	(215,502)
Financing activities:			
Payments of long-term debt	(345,000)	(20,000)	(20,000)
Payments of debt issuance costs	(3,467)	—	—
Repurchase of restricted stock to satisfy tax withholding obligations	(14,902)	(16,424)	(16,436)
Proceeds from equity offering, net of transaction costs	833,911	—	—
Proceeds from exercise of stock options and employee stock purchase plan	9,888	5,861	7,404
Net cash provided by (used in) financing activities	480,430	(30,563)	(29,032)
Effect of foreign currency exchange rates on cash and cash equivalents	1,374	(1,415)	(433)
Net increase (decrease) in cash and cash equivalents	644,240	145,405	(105,194)
Cash and cash equivalents at beginning of year	567,223	421,818	527,012
Cash and cash equivalents at end of year	<u>\$ 1,211,463</u>	<u>\$ 567,223</u>	<u>\$ 421,818</u>

*See accompanying notes.*

**COSTAR GROUP, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**December 31, 2017**

**1. ORGANIZATION**

CoStar Group, Inc. (the “Company” or “CoStar”) provides information, analytics and online marketplace services to the commercial real estate and related business community through its comprehensive, proprietary database of commercial real estate information covering the United States (“U.S.”), the United Kingdom (“U.K.”), and parts of Canada, Spain, Germany and France. The Company provides online marketplaces for commercial real estate, apartment rentals, lands for sale and businesses for sale. The Company operates within two operating segments, North America and International, and its services are typically distributed to its clients under subscription-based license agreements that renew automatically, a majority of which have a term of one year.

**2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

**Basis of Presentation**

The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation. Accounting policies are consistent for each operating segment.

**Use of Estimates**

The preparation of financial statements in conformity with U.S. generally accepted accounting principles (“GAAP”) requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. On an ongoing basis, the Company evaluates its estimates and assumptions, including those related to revenue recognition, allowance for doubtful accounts, useful lives of property and equipment and intangible assets, recoverability of long-lived assets and intangible assets with definite lives, goodwill, income taxes, fair value of equity instruments, fair value of auction rate securities (“ARS”), accounting for business combinations and contingencies, among others. The Company bases these estimates on historical and anticipated results, trends, and various other assumptions that it believes are reasonable, including assumptions as to future events. These estimates form the basis for making judgments about the carrying values of assets and liabilities and recorded revenues and expenses. Actual results could differ from these estimates.

**Revenue Recognition**

The Company derives revenues by providing access to its proprietary database of commercial real estate information, typically through a fixed monthly fee for its subscription-based services. The Company's subscription-based services consist primarily of information, analytics and online marketplace services offered over the Internet to commercial real estate industry and related professionals. Subscription contract rates are based on the number of sites, number of users, organization size, the client's business focus, geography, the number and types of services to which a client subscribes, the number of properties a client advertises and the prominence and placement of a client's advertised properties in the search results. A majority of the subscription-based license agreements have a term of one year and renew automatically.

Revenues are recognized when (1) there is persuasive evidence of an arrangement, (2) the fee is fixed or determinable, (3) services have been rendered and payment has been contractually earned and (4) collectability is reasonably assured.

Revenues from subscription-based services are recognized on a straight-line basis over the term of the agreement. Deferred revenue results from advance cash receipts from customers or amounts billed in advance to customers from the sale of subscription licenses and is recognized over the term of the license agreement.

**2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES — (CONTINUED)**

**Revenue Recognition — (Continued)**

The Company analyzes contracts with multiple elements under the accounting guidance for multiple-element arrangements. The Company's multiple-element arrangements include information, analytics and/or online marketplace services that are generally provided to the customer over the same term. When identifying multiple-element arrangements, the Company considers multiple purchases made by the same customer within a short time frame and assesses whether the purchases were negotiated together as one overall arrangement. If a multiple-element arrangement is identified, then the arrangement consideration is allocated among the separate units of accounting based on their relative selling prices, which are estimated considering factors such as historical pricing, pricing strategy, market conditions and other factors. The Company accounts for each deliverable in the transaction separately. If the deliverables cannot be separated into multiple units of accounting, then the arrangement consideration is combined and recognition of revenue is determined for the combined unit of accounting. Multiple-element transactions require judgment to determine the selling price or fair value of the different elements. These judgments impact the amount of revenue recognized over the term of the contract, as well as the period in which they are recognized.

**Cost of Revenues**

Cost of revenues principally consists of salaries, benefits, bonuses, and stock-based compensation expenses for the Company's researchers who collect and analyze the commercial real estate data that is the basis for the Company's information, analytics and online marketplaces. Additionally, cost of revenues includes the cost of data from third-party data sources, credit card and other transaction fees relating to processing customer transactions, which are expensed as incurred, and the amortization of acquired trade names and other intangible assets and database technology.

**Foreign Currency Translation**

The Company's functional currency in its foreign locations is the local currency. Assets and liabilities are translated into U.S. dollars using the exchange rates as of the balance sheet dates. Revenues, expenses, gains and losses are translated at the average exchange rates in effect during each period. Gains and losses resulting from translation are included in accumulated other comprehensive loss. Currency gains and losses on the translation of intercompany loans made to foreign subsidiaries that are of a long-term investment nature are also included in accumulated other comprehensive loss. Net gains or losses resulting from foreign currency exchange transactions are included in the consolidated statements of operations. There were no material gains or losses from foreign currency exchange transactions for the years ended December 31, 2017, 2016, and 2015.

**Accumulated Other Comprehensive Loss**

The components of accumulated other comprehensive loss were as follows (in thousands):

	<b>As of December 31,</b>	
	<b>2017</b>	<b>2016</b>
Foreign currency translation adjustment	\$ (8,290)	\$ (12,191)
Net unrealized loss on investments, net of tax	(730)	(848)
<b>Total accumulated other comprehensive loss</b>	<b>\$ (9,020)</b>	<b>\$ (13,039)</b>

There were no amounts reclassified out of accumulated other comprehensive loss to the consolidated statement of operations for the year ended December 31, 2017. The amount of realized gain from the redemption of available-for-sale securities reclassified out of accumulated other comprehensive loss to the consolidated statement of operations for the year ended December 31, 2016 was approximately \$808,000. There were no amounts reclassified out of accumulated other comprehensive loss to the consolidated statements of operations for the year ended December 31, 2015.

**Advertising Costs**

The Company expenses advertising costs as incurred. Advertising costs include e-commerce, television, radio, print and other media advertising. Advertising costs were approximately \$104 million, \$109 million and \$132 million for the years ended December 31, 2017, 2016, and 2015, respectively.

**2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES — (CONTINUED)**

**Income Taxes**

Deferred income taxes result from temporary differences between the tax basis of assets and liabilities and the basis reported in the Company's consolidated financial statements. Deferred tax liabilities and assets are determined based on the difference between the financial statement and the tax basis of assets and liabilities using enacted rates in effect during the year in which the Company expects differences to reverse. Valuation allowances are provided against assets, including net operating losses, if the Company anticipates that some or all of an asset may not be realized through future taxable earnings or implementation of tax planning strategies. Interest and penalties related to income tax matters are recognized in income tax expense. See Note 9 for additional information regarding income taxes.

**Net Income (Loss) Per Share**

Net income (loss) per share is computed by dividing net income (loss) by the weighted average number of common shares outstanding during the period on a basic and diluted basis. The Company's potentially dilutive securities include stock options and restricted stock. Diluted net income (loss) per share considers the impact of potentially dilutive securities except in periods in which there is a net loss, as the inclusion of the potentially dilutive common shares would have an anti-dilutive effect.

**Stock-Based Compensation**

Equity instruments issued in exchange for services performed by officers, employees, and directors of the Company are accounted for using a fair-value based method and the fair value of such equity instruments is recognized as expense in the consolidated statements of operations.

Stock-based compensation expense is measured at the grant date of the stock-based awards that vest over set time periods based on their fair values, and is recognized on a straight-line basis as expense over the vesting periods of the awards, net of an estimated forfeiture rate. For equity instruments that vest based on performance, the Company assesses the probability of the achievement of the performance conditions at the end of each reporting period, or more frequently based upon the occurrence of events that may change the probability of whether the performance conditions would be met. If the Company's initial estimates of the achievement of the performance conditions change, the related stock-based compensation expense and timing of recognition may fluctuate from period to period based on those estimates. For equity instruments that vest based on a performance condition and a market condition, the Company estimates the fair value of each equity instrument granted on the date of grant using a Monte-Carlo simulation model. This pricing model uses multiple simulations to evaluate the probability of achieving the market condition to calculate the fair value of the awards. Stock-based compensation expense is updated based on the expected achievement of the related performance conditions at the end of each reporting period. If the performance conditions are not met, no stock-based compensation expense will be recognized, and any previously recognized stock-based compensation expense will be reversed.

In March 2017, March 2016 and March 2015, the Compensation Committee of the Board of Directors of the Company approved grants of restricted common stock to the executive officers that vest based on the Company's achievement of a three-year cumulative revenue goal established at the grant date, and are subject to forfeiture in the event the foregoing performance condition is not met by the end of each respective three-year period. These grants of restricted common stock are also subject to continuing employment requirements and a market condition based on total shareholder return ("TSR"). The actual number of shares that vest at the end of each respective three-year period is determined based on the Company's achievement of the three-year performance goals described above, as well as its TSR relative to the Russell 1000 Index over the same three-year performance period. Each reporting period, the Company reassesses the probability of achieving the performance and market conditions and determines whether it is probable that the performance and market conditions for the awards would be met. The Company recorded a total of approximately \$5 million, \$3 million and \$3 million of stock-based compensation expense related to the performance-based restricted common stock awards with a market condition for the years ended December 31, 2017, 2016, and 2015, respectively. The Company expects to record estimated stock-based compensation expense related to the performance-based restricted common stock awards of approximately \$6 million in aggregate over the periods 2018, 2019 and 2020.

**COSTAR GROUP, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)**

**2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES — (CONTINUED)**

**Stock-Based Compensation — (Continued)**

Stock-based compensation expense for stock options and restricted stock issued under equity incentive plans and stock purchases under the ESPP included in the Company's results of operations were as follows (in thousands):

	<b>Year Ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
Cost of revenues	\$ 4,971	\$ 5,495	\$ 5,815
Selling and marketing (excluding customer base amortization)	7,086	6,634	5,114
Software development	7,071	6,546	5,712
General and administrative	19,902	17,674	17,896
Total stock-based compensation	<u>\$ 39,030</u>	<u>\$ 36,349</u>	<u>\$ 34,537</u>

**Cash and Cash Equivalents**

The Company considers all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents. Cash equivalents consist of money markets and commercial paper.

**Investments**

The Company determines the appropriate classification of debt and equity investments at the time of purchase and re-evaluates such designation as of each balance sheet date. The Company considers all of its investments to be available-for-sale. The Company's investments consist of long-term variable rate debt instruments with an auction reset feature, referred to as auction rate securities. Investments are carried at fair value. Changes in unrealized holding gains and losses, net of the related tax effect, on available-for-sale securities are excluded from earnings and are reported as a separate component of accumulated other comprehensive loss in stockholders' equity until realized. A decline in market value of any available-for-sale security below cost that is deemed to be other-than-temporary results in a reduction in carrying amount to fair value. The impairment is charged to earnings and a new cost basis for the security is established. Dividend and interest income are recognized when earned.

**Concentration of Credit Risk and Financial Instruments**

The Company performs ongoing assessments of its customers' financial conditions and generally does not require that its customers' obligations to the Company be secured. The Company maintains reserves for estimated inherent credit losses, and such losses have been within management's expectations. The large size and widespread nature of the Company's customer base and the Company's lack of dependence on any individual customer mitigates the risk of nonpayment of the Company's accounts receivable. No single customer accounted for more than 5% of the Company's revenues for each of the years ended December 31, 2017, 2016, and 2015. The carrying amount of the accounts receivable approximates the net realizable value.

The Company holds cash at major financial institutions that often exceed Federal Deposit Insurance Corporation insured limits. The Company manages its credit risk associated with cash concentrations by concentrating its cash deposits in high quality financial institutions and by periodically evaluating the credit quality of the primary financial institutions holding such deposits. The carrying value of cash approximates fair value. Historically, the Company has not experienced any losses due to such cash concentrations.

**2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES — (CONTINUED)**

**Accounts Receivable, Net of Allowance for Doubtful Accounts**

Accounts receivable are recorded at the invoiced amount net of credits due. Accounts receivable payment terms vary and amounts due from customers are stated in the financial statements net of an allowance for doubtful accounts. When evaluating the adequacy of the allowance for doubtful accounts, the Company analyzes historical collection experience, changes in customer payment profiles and the aging of receivable balances, as well as current economic conditions, all of which may affect a customer's ability to pay.

**Property and Equipment, Net**

Property and equipment are stated at cost, net of accumulated depreciation and amortization. All repairs and maintenance costs are expensed as incurred. Depreciation and amortization are calculated on a straight-line basis over the following estimated useful lives of the assets:

Leasehold improvements	Shorter of lease term or useful life
Furniture and office equipment	Five to ten years
Vehicles	Five to ten years
Computer hardware and software	Two to five years

Qualifying internal-use software costs incurred during the application development stage, which consist primarily of internal product development costs, outside services and purchased software license costs are capitalized and amortized over the estimated useful life of the asset. All other costs are expensed as incurred.

**Goodwill and Intangible Assets**

Goodwill represents the excess of costs over the fair value of assets of acquired businesses. Goodwill is not amortized, but instead tested for impairment at least annually by each reporting unit. The Company may first assess qualitative factors to evaluate whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount or elect to bypass such assessment. If it is determined that it is more likely than not that the fair value of a reporting unit is less than its carrying value, or the Company elects to bypass such assessment, the Company then determines the fair value of each reporting unit. The estimate of the fair value of each reporting unit is based on a projected discounted cash flow model that includes significant assumptions and estimates including the Company's discount rate, growth rate and future financial performance. Assumptions about the discount rate are based on a weighted average cost of capital for comparable companies. Assumptions about the growth rate and future financial performance of a reporting unit are based on the Company's forecasts, business plans, economic projections and anticipated future cash flows. The fair value of each reporting unit is compared to the carrying amount of the reporting unit. If the carrying value of the reporting unit exceeds the fair value, then an impairment loss is recognized for the difference.

Acquired database technology, customer base and trade names and other intangible assets are related to the Company's acquisitions (see Notes 6 and 7). Acquired database technology is amortized on a straight-line basis over periods ranging from three years to eight years. Acquired trade names and other intangible assets are amortized on a straight-line basis over periods ranging from three years to fifteen years. See Note 7 for further details on the reclassification of the acquired trade names recorded in connection with the LoopNet acquisition from an indefinite-lived intangible asset to a definite-lived intangible asset. Acquired intangible assets characterized as customer base consists of acquired customer contracts and the related customer relationships and are amortized over periods ranging from ten years to thirteen years. Acquired customer bases are typically amortized on an accelerated basis related to the expected economic benefit of the intangible asset. The cost of capitalized building photography is amortized on a straight-line basis over periods ranging from three years to five years. Intangible assets are reviewed for impairment at least annually, and more frequently whenever events or changes in circumstances indicate that the carrying value may not be recoverable.

**2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES — (CONTINUED)**

**Long-Lived Assets**

Long-lived assets, such as property and equipment, and purchased intangibles subject to amortization, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset or asset group. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized in the amount by which the carrying amount of the asset exceeds the fair value of the asset.

Assets to be disposed of would be separately presented in the balance sheet and reported at the lower of the carrying amount or fair value less costs to sell, and would no longer be depreciated. The assets and liabilities of a disposal group classified as held for sale would be presented separately in the appropriate asset and liability sections of the balance sheet.

**Debt Issuance Costs**

Costs incurred in connection with the issuance of long-term debt are deferred and amortized as interest expense over the term of the related debt using the effective interest method for term debt and on a straight-line basis for revolving debt. These amounts are reflected in the consolidated balance sheets as direct deductions from a combination of the current and long-term portions of debt for term debt and as current and long-term assets for costs related to revolving debt. Upon a refinancing or amendment, previously capitalized debt issuance costs are expensed and included in loss on extinguishment of debt if the Company determines that there has been a substantial modification of the related debt. If the Company determines that there has not been a substantial modification of the related debt, any previously capitalized debt issuance costs are amortized as interest expense over the term of the new debt instrument. The Company had capitalized debt issuance costs, net of amortization, of approximately \$4 million and \$7 million as of December 31, 2017 and 2016, respectively. The debt issuance costs are associated with our various previous credit agreements, and the current amended and restated 2017 Credit Agreement (the "2017 Credit Agreement"). See Note 8 for additional information regarding the term loan and revolving credit facility. The Company recognized debt issuance costs of approximately \$2 million, \$3 million, and \$3 million and included in interest expense for each of the years ended December 31, 2017, 2016, and 2015.

**Business Combinations**

The Company allocates the purchase consideration to the tangible assets acquired, liabilities assumed and intangible assets acquired based on their estimated fair values. The excess of the fair value of purchase consideration over the fair values of these identifiable assets and liabilities is recorded as goodwill. Such valuations require management to make significant estimates and assumptions, especially with respect to intangible assets. Significant estimates in valuing certain intangible assets include, but are not limited to, future expected cash flows from acquired customer bases, acquired database technology, and acquired trade names from a market participant's perspective, useful lives and discount rates. During the measurement period, the Company may record adjustments to the assets acquired and liabilities assumed. Any adjustments to provisional amounts that are identified during the measurement period are recorded in the reporting period in which the adjustment amounts are determined. Upon the conclusion of the measurement period, any subsequent adjustments are recorded to earnings.



## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES — (CONTINUED)

### Recent Accounting Pronouncements

#### *Recently Adopted Accounting Pronouncements*

In March 2016, the FASB issued ASU 2016-09, *Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*, which simplifies several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification of share-based payment transactions on the statement of cash flows. The guidance requires a company to (i) recognize all excess tax benefits and tax deficiencies as income tax expense or benefit in the statement of operations using a prospective transition method, (ii) recognize excess tax benefits in the current period regardless of whether the benefit reduces taxes payable using a modified retrospective transition method, and (iii) classify all excess tax benefits as operating activities within the statement of cash flows using either a prospective transition method or a retrospective transition method. The guidance also allows a company to (i) elect whether to estimate the number of share-based awards expected to vest or account for forfeitures when they occur, and (ii) withhold up to the maximum statutory tax rate in the applicable jurisdiction for awards, both of which should be applied using a modified retrospective transition method. Finally, the guidance requires a company to classify the cash paid by an employer when directly withholding shares for tax withholding purposes as a financing activity within the statement of cash flows using a retrospective transition method. This guidance is effective for annual reporting periods beginning after December 15, 2016, including interim periods within that reporting period.

The Company adopted the new guidance on January 1, 2017. The adoption of the new standard resulted in a \$2 million cumulative-effect adjustment as of January 1, 2017 to record a deferred tax asset with the offset to retained earnings on the balance sheet, representing the amount of the Company's net operating loss carryforwards attributable to excess tax benefits that it was not able to record under the prior guidance. The Company elected to continue to estimate the number of awards expected to be forfeited and adjust the estimate when it is no longer probable that the service or performance conditions will be met.

Additionally, the Company elected to apply the presentation requirements for statement of cash flows related to excess tax benefits retrospectively to all periods presented, which resulted in an increase to both net cash provided by operating activities and net cash used in financing activities of approximately \$5 million and \$9 million for the twelve months ended December 31, 2016 and 2015, respectively. The presentation requirements related to employee taxes paid by withholding shares had no impact on any of the periods presented in the Company's consolidated cash flows statements since such cash flows have historically been presented as a financing activity.

In January 2017, the FASB issued ASU 2017-04, *Intangibles - Goodwill and Other (Topic 350: Simplifying the Test for Goodwill Impairment)*, which is designed to simplify the subsequent measurement of goodwill by eliminating Step 2 from the goodwill impairment test. The guidance indicates that an entity should recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value; however, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. This guidance is effective on a prospective basis for annual reporting periods beginning after December 15, 2019, including interim periods within that reporting period. Early application is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The Company early adopted this guidance during the first quarter of 2017 and the early adoption did not have a material impact on the Company's consolidated financial statements and related disclosures.

#### *Recent Accounting Pronouncements Not Yet Adopted*

In May 2014, the Financial Accounting Standards Board ("FASB") and International Accounting Standards Board ("IASB") jointly issued a new revenue recognition standard, Accounting Standards Update ("ASU") 2014-09, *Revenue from Contracts with Customers (Topic 606)* that is designed to improve financial reporting by creating common recognition guidance for GAAP and International Financial Reporting Standards ("IFRS"). This guidance provides a robust framework for addressing revenue issues, improves the comparability of revenue recognition practices across industries, provides useful information to users of financial statements through improved disclosure requirements and simplifies the presentation of financial statements. The core principle of the guidance is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Subsequently, amendments to the new revenue recognition standard were issued to clarify numerous accounting topics, including, but not limited to (i) the implementation guidance on principal versus agent considerations, (ii) the identification of performance obligations, (iii) the licensing implementation guidance, (iv) the objective of the collectability criterion, (v) the application of the variable consideration guidance and modified retrospective transition method, (vi) the way in which impairment testing is performed and

**COSTAR GROUP, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)**

(vii) the disclosure requirements for revenue recognized from performance obligations. This guidance permits the use of either a full retrospective method or a modified retrospective approach. The modified retrospective approach would be applied only to the most current period presented along with a cumulative-effect adjustment at the date of adoption. This guidance will be effective for annual reporting periods beginning after December 15, 2017, although companies may adopt the standard as early as annual reporting periods beginning after December 15, 2016, including interim periods within that reporting period.

The Company currently intends to adopt the new guidance using the modified retrospective approach. Under this adoption method, the Company will recognize a cumulative effect adjustment to retained earnings as of January 1, 2018 and will account for its contracts with customers under the new guidance prospectively beginning on January 1, 2018. The Company used several available practical expedients provided in the new guidance, including assessing contracts with similar terms and conditions on a “portfolio” basis. Based on the Company’s preliminary analysis, the Company believes that the potential impact of adopting this guidance on reported revenue in any period will not be material. The primary impact of adopting the new guidance relates to the deferral of incremental costs of obtaining customer contracts which is primarily commission costs on new sales. Under existing guidance, the Company expensed all commission costs in the periods they were earned, whereas under the new guidance the Company will defer commission costs on new sales and amortize them on a straight-line basis over three years. The three-year amortization period was determined based on several factors, including the nature of the technology and proprietary data underlying the services being purchased; customer contract renewals rates; and industry competition. The Company currently estimates that the cumulative effect of adoption will result in the recognition of deferred commission cost asset between \$48 million to \$58 million, net of appropriate taxes, as of January 1, 2018.

Beginning in 2018, the Company expects significant changes to its disclosed revenue recognition policies and practices, as well as to other related financial statement disclosures. These revised disclosures will be made in the Company’s first quarterly report in 2018.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*, to increase transparency and comparability among organizations’ accounting for leases. The guidance requires a company to recognize lease assets and lease liabilities on the balance sheet, as well as disclose key information about leasing arrangements. This guidance is effective on a modified retrospective basis for annual reporting periods beginning after December 15, 2018, including interim periods within that reporting period. Early application is permitted. The Company is currently evaluating the impact this guidance will have on its financial statements and related disclosures, but expects that the adoption of this standard may result in a material increase in assets and liabilities on its consolidated balance sheets.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, which is designed to provide financial statement users with more information about the expected credit losses on financial instruments and other commitments to extend credit held by a reporting entity at each reporting date. When determining such expected credit losses, the guidance requires companies to apply a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. This guidance is effective on a modified retrospective basis for annual reporting periods beginning after December 15, 2019, including interim periods within that reporting period. Companies may adopt the standard as early as annual reporting periods beginning after December 15, 2018. The Company is currently evaluating the impact this guidance will have on its financial statements and related disclosures.

In August 2016, the FASB issued ASU 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments*, which is designed to reduce the existing diversity in how certain cash receipts and cash payments are presented and classified in the consolidated statements of cash flows. This guidance is effective on a retrospective basis for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period. The Company will adopt this guidance in the first quarter of 2018. This guidance is not expected to have a material impact on the Company’s consolidated statements of cash flows and related disclosures.

In January 2017, the FASB issued ASU 2017-01, *Business Combinations (Topic 805): Clarifying the Definition of a Business*, which is designed to clarify the definition of a business to assist entities with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The guidance indicates that when substantially all of the fair value of the gross assets acquired (or disposed of) is concentrated in a single identifiable asset or a group of similar identifiable assets, the set of assets is not a business. This guidance is effective on a prospective basis for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period. The Company will adopt this guidance in the first quarter of 2018 and this guidance is not expected to have a material impact on the Company’s consolidated financial statements and related disclosures.

**2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES — (CONTINUED)**

In May 2017, the FASB issued ASU 2017-09, *Compensation- Stock Compensation (Topic 718): Scope of Modification Accounting*, which is designed to reduce the existing diversity and complexity in the accounting for changes to terms or conditions of a share-based payment award. This guidance clarifies that an entity will not apply modification accounting to a share-based payment award if all of the following are the same immediately before and after the change: (i) the fair value of the award, (ii) the vesting conditions of the award, and (iii) the classification of the award as an equity instrument or liability instrument. This guidance is effective on a prospective basis for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period. The Company will adopt this guidance in the first quarter of 2018. This guidance is not expected to have a material impact on the Company's consolidated financial statements and related disclosures.

**3. INVESTMENTS**

The Company determines the appropriate classification of debt and equity investments at the time of purchase and re-evaluates such designation as of each balance sheet date. The Company considers all of its investments to be available-for-sale. The Company's investments consist of long-term variable rate debt instruments with an auction reset feature, referred to as ARS. Investments are carried at fair value.

**COSTAR GROUP, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)**

**3. INVESTMENTS — (CONTINUED)**

Scheduled maturities of investments classified as available-for-sale as of December 31, 2017 are as follows (in thousands):

<b>Maturity</b>	<b>Fair Value</b>
Due in:	
2018	\$ —
2019 — 2022	—
2023 — 2027	—
2028 and thereafter	10,070
<b>Available-for-sale investments</b>	<b>\$ 10,070</b>

The Company had no realized gains on its investments during the year ended December 31, 2017. The Company realized gains of \$0.8 million related to an ARS that was redeemed at a par value of \$1 million for the year ended December 31, 2016. The Company had no realized gains on its investments for the year ended December 31, 2015. The Company had no realized losses on its investments for the years ended December 31, 2017, 2016, and 2015. Realized gains and losses from the sale of available-for-sale securities are determined on a specific-identification basis.

As of December 31, 2017, the amortized cost basis and fair value of investments classified as available-for-sale were as follows (in thousands):

	<b>Amortized Cost</b>	<b>Gross Unrealized Gains</b>	<b>Gross Unrealized Losses</b>	<b>Fair Value</b>
Auction rate securities	\$ 10,800	\$ —	\$ (730)	\$ 10,070
Available-for-sale investments	\$ 10,800	\$ —	\$ (730)	\$ 10,070

As of December 31, 2016, the amortized cost basis and fair value of investments classified as available-for-sale were as follows (in thousands):

	<b>Amortized Cost</b>	<b>Gross Unrealized Gains</b>	<b>Gross Unrealized Losses</b>	<b>Fair Value</b>
Auction rate securities	\$ 10,800	\$ —	\$ (848)	\$ 9,952
Available-for-sale investments	\$ 10,800	\$ —	\$ (848)	\$ 9,952

The unrealized losses on the Company's investments as of December 31, 2017 and 2016 were generated primarily from changes in interest rates and ARS that failed to settle at auction, due to adverse conditions in the global credit markets. The losses are considered temporary, as the contractual terms of these investments do not permit the issuer to settle the security at a price less than the amortized cost of the investment. Because the Company does not intend to sell these instruments and it is not more likely than not that the Company will be required to sell these instruments prior to anticipated recovery, which may be at maturity, the Company does not consider these investments to be other-than-temporarily impaired as of December 31, 2017 and 2016. See Note 4 for further discussion of the fair value of the Company's financial assets.

**COSTAR GROUP, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)**

**3. INVESTMENTS — (CONTINUED)**

The components of the Company's investments in an unrealized loss position for twelve months or longer were as follows (in thousands):

	<b>December 31,</b>			
	<b>2017</b>		<b>2016</b>	
	<b>Aggregate Fair Value</b>	<b>Gross Unrealized Losses</b>	<b>Aggregate Fair Value</b>	<b>Gross Unrealized Losses</b>
Auction rate securities	\$ 10,070	\$ (730)	\$ 9,952	\$ (848)
Investments in an unrealized loss position	\$ 10,070	\$ (730)	\$ 9,952	\$ (848)

The Company did not have any investments in an unrealized loss position for less than twelve months as of December 31, 2017 and 2016, respectively.

**4. FAIR VALUE**

Fair value is defined as the price that would be received in the sale of an asset or paid to transfer a liability in an orderly transaction between market participants. There is a three-tier fair value hierarchy, which categorizes the inputs used in measuring fair value. These tiers include: Level 1, defined as observable inputs such as quoted prices in active markets for identical assets or liabilities; Level 2, defined as inputs other than quoted prices in active markets that are either directly or indirectly observable; and Level 3, defined as unobservable inputs for which little or no market data exists, therefore requiring an entity to develop its own assumptions.

The following table represents the Company's fair value hierarchy for its financial assets (cash equivalents and investments) measured at fair value on a recurring basis as of December 31, 2017 (in thousands):

	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
Assets:				
Money markets	\$ 586,084	\$ —	\$ —	\$ 586,084
Commercial paper	351,098	—	—	351,098
Auction rate securities	—	—	10,070	10,070
Total assets measured at fair value	<u>\$ 937,182</u>	<u>\$ —</u>	<u>\$ 10,070</u>	<u>\$ 947,252</u>

The carrying value of accounts receivable, accounts payable, accrued expenses and long-term debt approximates fair value.

The following table represents the Company's fair value hierarchy for its financial assets (cash equivalents and investments) measured at fair value on a recurring basis as of December 31, 2016 (in thousands):

	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
Assets:				
Money markets	\$ 175,344	\$ —	\$ —	\$ 175,344
Commercial paper	6,383	—	—	6,383
Auction rate securities	—	—	9,952	9,952
Total assets measured at fair value	<u>\$ 181,727</u>	<u>\$ —</u>	<u>\$ 9,952</u>	<u>\$ 191,679</u>

The Company's Level 3 assets consist of ARS, whose underlying assets are primarily student loan securities supported by guarantees from the Federal Family Education Loan Program ("FFELP") of the U.S. Department of Education.

**COSTAR GROUP, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)**

**4. FAIR VALUE — (CONTINUED)**

The following table summarizes changes in fair value of the Company's Level 3 assets from December 31, 2015 to December 31, 2017 (in thousands):

	<b>Auction Rate Securities</b>
Balance at December 31, 2015	\$ 15,507
Decrease in unrealized loss included in accumulated other comprehensive loss	395
Settlements	<u>(5,950)</u>
Balance at December 31, 2016	9,952
Decrease in unrealized loss included in accumulated other comprehensive loss	118
Balance at December 31, 2017	<u>\$ 10,070</u>

ARS are variable rate debt instruments whose interest rates are reset approximately every 28 days. The underlying securities have contractual maturities greater than twenty years. The ARS are recorded at fair value.

As of December 31, 2017, the Company held ARS with \$11 million par value, all of which failed to settle at auction. The majority of these investments are of high credit quality with AA to AAA credit ratings and are primarily student loan securities supported by guarantees from the FFELP of the U.S. Department of Education. The Company may not be able to liquidate and fully recover the carrying value of the ARS in the near term. As a result, these securities are classified as long-term investments in the Company's consolidated balance sheet as of December 31, 2017. See Note 3 for further discussion of the scheduled maturities of investments classified as available-for-sale.

While the Company continues to earn interest on its ARS investments at the contractual rate, these investments are not currently actively trading and therefore do not currently have a readily determinable market value. The estimated fair value of the ARS no longer approximates par value. The Company used a discounted cash flow model to determine the estimated fair value of its investment in ARS as of December 31, 2017. The assumptions used in preparing the discounted cash flow model include estimates for interest rates, credit spreads, timing and amount of contractual cash flows, liquidity risk premiums, expected holding periods and default risk. The Company updates the discounted cash flow model on a quarterly basis to reflect any changes in the assumptions used in the model and settlements of ARS investments that occurred during the period.

The only significant unobservable input in the discounted cash flow model is the discount rate. The discount rate used represents the Company's estimate of the yield expected by a market participant from the ARS investments. The weighted average discount rate used in the discounted cash flow model as of December 31, 2017 and 2016 was approximately 6% and 5%, respectively. Selecting another discount rate within the range used in the discounted cash flow model would not result in a significant change to the fair value of the ARS.

Based on this assessment of fair value, as of December 31, 2017, the Company determined there was a decline in the fair value of its ARS investments of approximately \$730,000. The decline was deemed to be a temporary impairment and recorded as an unrealized loss in accumulated other comprehensive loss in stockholders' equity. In addition, while a majority of the ARS are currently rated AAA, if the issuers are unable to successfully close future auctions and/or their credit ratings deteriorate, the Company may be required to record additional unrealized losses in accumulated other comprehensive loss or an other-than-temporary impairment charge to earnings on these investments.

**COSTAR GROUP, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)**

**5. PROPERTY AND EQUIPMENT**

Property and equipment consists of the following (in thousands):

	<b>December 31,</b>	
	<b>2017</b>	<b>2016</b>
Leasehold improvements	\$ 59,447	\$ 53,073
Furniture, office equipment and vehicles	52,163	45,035
Computer hardware and software	71,281	64,577
Property and equipment, gross	182,891	162,685
Accumulated depreciation and amortization	(98,395)	(75,117)
Property and equipment, net	<u>\$ 84,496</u>	<u>\$ 87,568</u>

Depreciation expense for property and equipment was approximately \$26 million, \$24 million and \$20 million, for the years ended December 31, 2017, 2016, and 2015, respectively.

**6. GOODWILL**

The changes in the carrying amount of goodwill by operating segment consist of the following (in thousands):

	<b>North America</b>	<b>International</b>	<b>Total</b>
Goodwill, December 31, 2015	\$ 1,227,310	\$ 25,635	\$ 1,252,945
Acquisition	467	5,933	6,400
Effect of foreign currency translation	—	(4,479)	(4,479)
Goodwill, December 31, 2016	1,227,777	27,089	1,254,866
Acquisitions	25,717	—	25,717
Effect of foreign currency translation	—	2,874	2,874
Goodwill, December 31, 2017	<u>\$ 1,253,494</u>	<u>\$ 29,963</u>	<u>\$ 1,283,457</u>

The Company recorded goodwill of approximately \$6 million in connection with the May 3, 2016 acquisition of Thomas Daily GmbH (“Thomas Daily”), a commercial real estate news and information provider operating in Freiburg, Germany. Additionally, the Company recorded goodwill of approximately \$0.5 million during the year ended December 31, 2016 in connection with the acquisition of certain assets related to the business operations of Apartment Finder's independent distributors within various markets.

The Company recorded goodwill of approximately \$8 million in connection with the January 31, 2017 acquisition of Koa Lei, Inc. (doing business as Westside Rentals® and now known as Westside Rentals, LLC), an online marketplace specializing in Southern California real estate rentals, and its affiliated entity Westside Credit Services, LLC, a provider of credit checks and tenant screening for landlords in the Southern California real estate rental market. The Company recorded goodwill of approximately \$15 million in connection with the May 10, 2017 acquisition of certain assets and assumption of certain liabilities from Datasphere Technologies, Inc., in each case, related to the LandWatch.com® business (collectively referred to as “LandWatch”), a leading listing site dedicated to land and rural properties. The Company recorded goodwill of approximately \$2 million in connection with the July 18, 2017 acquisition of The Screening Pros, LLC, an online apartment leasing platform that includes tenant screening services, rental applications and payments processing and lease renewals. The purchase accounting for the acquisitions of Westside Rentals®, LandWatch®, and The Screening Pros™ is preliminary, subject to the completion of the accounting for certain tax related items and working capital adjustments.

The total amount of goodwill that is expected to be deductible for tax purposes is approximately \$24 million as of December 31, 2017. No goodwill was deductible as of December 31, 2016.

During the fourth quarters of 2017, 2016 and 2015, the Company completed the annual impairment test of goodwill and concluded that goodwill was not impaired.

**COSTAR GROUP, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)**

**7. INTANGIBLE ASSETS**

Intangible assets consist of the following (in thousands, except amortization period data):

	December 31,		Weighted-Average Amortization Period (in years)
	2017	2016	
Capitalized product development cost	\$ 2,275	\$ 2,275	4
Accumulated amortization	(2,262)	(2,217)	
Capitalized product development cost, net	<u>13</u>	<u>58</u>	
Building photography	18,739	17,271	4
Accumulated amortization	(18,212)	(16,351)	
Building photography, net	<u>527</u>	<u>920</u>	
Acquired database technology	83,469	78,151	5
Accumulated amortization	(79,188)	(72,691)	
Acquired database technology, net	<u>4,281</u>	<u>5,460</u>	
Acquired customer base	225,879	220,749	10
Accumulated amortization	(169,157)	(150,445)	
Acquired customer base, net	<u>56,722</u>	<u>70,304</u>	
Acquired trade names and other intangible assets	167,718	153,607	13
Accumulated amortization	(46,369)	(34,384)	
Acquired trade names and other intangible assets, net	<u>121,349</u>	<u>119,223</u>	
Intangible assets, net	<u>\$ 182,892</u>	<u>\$ 195,965</u>	

Amortization expense for intangible assets was approximately \$37 million, \$46 million and \$59 million for the years ended December 31, 2017, 2016, and 2015, respectively.

In the aggregate, the Company expects amortization for intangible assets existing as of December 31, 2017 for future periods to be approximately \$29 million, \$24 million, \$21 million, \$20 million and \$17 million for the years ending December 31, 2018, 2019, 2020, 2021 and 2022, respectively.

Intangible assets are reviewed for impairment at least annually and more frequently whenever events or changes in circumstances indicate that the carrying value of such assets may not be recoverable. During the first quarter of 2016, the Company determined that the acquired trade names recorded in connection with the LoopNet acquisition on April 30, 2012 should be reclassified from an indefinite-lived intangible asset to a definite-lived intangible asset due to work being performed to integrate the backend systems of LoopNet and CoStar, which may result in a future re-branding effort if aspects of the LoopNet and CoStar services are ultimately combined. The Company estimated the fair value of the LoopNet trade names using the relief from royalty method and concluded that no impairment existed as of March 31, 2016. The Company estimated a useful life of fifteen years for the LoopNet trade names, which are being amortized on a straight-line basis.



## **8. LONG-TERM DEBT**

On April 1, 2014 (the “Closing Date”), the Company entered into the 2014 Credit Agreement by and among the Company, as Borrower, CoStar Realty Information, Inc., as Co-Borrower, the Lenders from time to time party thereto and JPMorgan Chase Bank, N.A., as Administrative Agent. The 2014 Credit Agreement provided for a \$400 million term loan and a \$225 million revolving credit facility, each with a term of five years. The Company repaid the remaining balance of \$310 million and accrued interest on its existing term loan under the 2014 Credit Agreement on October 19, 2017 from existing cash balances.

The revolving credit facility includes a subfacility for swingline loans of up to \$10 million, and up to \$10 million of the revolving credit facility is available for the issuance of letters of credit. The Company has an irrevocable standby letter of credit outstanding totaling \$0.2 million as of December 31, 2017 and December 31, 2016, which was required to secure its San Francisco office lease. The letter of credit was established in 2014 related to the San Francisco office lease, and automatically renews through January 31, 2025.

The term loan was amortized in quarterly installments in amounts resulting in an annual amortization of 5% during each of the first, second and third years, 10% during the fourth year and 15% during the fifth year after the Closing Date, with the remainder payable at final maturity. The loans under the 2014 Credit Agreement bore interest, at the Company's option, either (i) during any interest period selected by the Company, at the London interbank offered rate for deposits in U.S. dollars with a maturity comparable to such interest period, adjusted for statutory reserves (“LIBOR”), plus an initial spread of 2% per annum, subject to adjustment based on the First Lien Secured Leverage Ratio (as defined in the 2014 Credit Agreement) of the Company, or (ii) at the greatest of (x) the prime rate from time to time announced by JPMorgan Chase Bank, N.A., (y) the federal funds effective rate plus 0.5% and (z) LIBOR for a one-month interest period plus 1%, plus an initial spread of 1% per annum, subject to adjustment based on the First Lien Secured Leverage Ratio of the Company. If an event of default occurred under the 2014 Credit Agreement, the interest rate on overdue amounts increased by 2% per annum. The obligations under the 2014 Credit Agreement were guaranteed by all material subsidiaries of the Company and were secured by a lien on substantially all of the assets of the Company and those of its material subsidiaries, in each case subject to certain exceptions, pursuant to security and guarantee documents entered into on the Closing Date.

On October 19, 2017, the Company entered into an amended and restated credit agreement (the “2017 Credit Agreement”), which amended and restated in its entirety the existing 2014 Credit Agreement. The 2017 Credit Agreement provides for a \$750 million revolving credit facility with a term of five years from a syndicate of financial institutions as lenders and issuing banks. The 2017 facility may be used for working capital and other general corporate purposes of the Company and its subsidiaries. In connection with the transaction, the Company incurred \$4 million of issuance costs. Those costs along with the \$5 million of unamortized costs related to the prior agreement were allocated between the extinguishment of the 2014 Credit Agreement and the 2017 Credit Agreement. This allocation resulted in the Company recognizing a loss of \$4 million on the extinguishment with the remaining \$4 million being deferred and amortized on a straight-line basis as interest expense over the term of the 2017 Credit Agreement.

Up to \$20 million of the revolving credit facility is available for the issuance of letters of credit. The loans under the 2017 Credit Agreement bear interest during any interest period selected by the Company, at either (i) the London interbank offered rate for deposits in U.S. dollars with a maturity comparable to such interest period, adjusted for statutory reserves (“LIBOR”), plus an initial spread of 1.25% per annum, subject to adjustment based on the First Lien Secured Leverage Ratio (as defined in the 2017 Credit Agreement) of the Company, or (ii) at the greatest of (x) the prime rate from time to time announced by JPMorgan Chase Bank, N.A., (y) the federal funds effective rate plus ½ of 1% and (z) LIBOR for a one-month interest period plus 1.00%, plus an initial spread of 0.25% per annum, subject to adjustment based on the First Lien Secured Leverage Ratio of the Company. If an event of default occurs under the 2017 Credit Agreement, the interest rate on overdue amounts will increase by 2.00% per annum. The obligations under the 2017 Credit Agreement are guaranteed by all material subsidiaries of the Company and are secured by a lien on substantially all of the assets of the Company and its material subsidiaries, in each case subject to certain exceptions, pursuant to security and guarantee agreements entered into on the Closing Date.

The 2017 Credit Agreement requires the Company to maintain (i) a First Lien Secured Leverage Ratio not exceeding 3.50 to 1.00 and (ii) after the incurrence of additional indebtedness under certain specified exceptions in the 2017 Credit Agreement, a Total Leverage Ratio (as defined in the 2017 Credit Agreement) not exceeding 4.50 to 1.00. The 2017 Credit Agreement also includes other covenants, including covenants that, subject to certain exceptions, restrict the ability of the Company and its subsidiaries to (i) incur additional indebtedness, (ii) create, incur, assume or permit to exist any liens, (iii) enter into mergers, consolidations or similar transactions, (iv) make investments and acquisitions, (v) make certain dispositions of assets, (vi) make dividends, distributions and prepayments of certain indebtedness, and (vii) enter into certain transactions with affiliates. The Company was in compliance with the covenants in the 2017 Credit Agreement as of December 31, 2017.

**COSTAR GROUP, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)**

As of December 31, 2017 and 2016, no amounts were outstanding under the Company's credit facility. Total interest expense for the term loan and revolving credit facilities was approximately \$9 million, \$10 million and \$9 million for the years ended December 31, 2017, 2016, and 2015, respectively. Interest expense included amortized debt issuance costs of approximately \$2 million, \$3 million, and \$3 million for the years ended December 31, 2017, 2016, and 2015. Total interest paid for the term loan and revolving credit facilities was approximately \$6 million, \$7 million, and \$6 million for the years ended December 31, 2017, 2016, and 2015, respectively.

**COSTAR GROUP, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)**

**8. LONG-TERM DEBT — (CONTINUED)**

The Company had no outstanding long-term debt at December 31, 2017 as it had not drawn any amounts under its 2017 Credit Agreement. At December 31, 2017, the Company had \$4 million of deferred debt issuance costs included in deposits and other assets.

The following table represents the Company's long-term debt at December 31, 2016 (in thousands):

	<b>December 31,</b>
	<b>2016</b>
Term loan	\$ 345,000
Debt issuance costs, net	(6,661)
<b>Total debt</b>	<b>338,339</b>
Current maturities of long-term debt	(35,000)
Current debt issuance costs, net	3,134
Total long-term debt, less current portion	<u>\$ 306,473</u>

**9. INCOME TAXES**

The components of the provision for income taxes attributable to operations consist of the following (in thousands):

	<b>Year Ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
Current:			
Federal	\$ 41,453	\$ 32,198	\$ 10,295
State	3,518	3,682	1,503
Foreign	295	76	40
Total current	<u>45,266</u>	<u>35,956</u>	<u>11,838</u>
Deferred:			
Federal	(7,917)	12,586	(8,382)
State	4,695	3,014	2,590
Foreign	319	35	—
Total deferred	<u>(2,903)</u>	<u>15,635</u>	<u>(5,792)</u>
Total provision for income taxes	<u>\$ 42,363</u>	<u>\$ 51,591</u>	<u>\$ 6,046</u>

**COSTAR GROUP, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)**

**9. INCOME TAXES — (CONTINUED)**

The components of deferred tax assets and liabilities consist of the following (in thousands):

	<b>December 31,</b>	
	<b>2017</b>	<b>2016</b>
Deferred tax assets:		
Reserve for bad debts	\$ 1,636	\$ 2,437
Accrued compensation	6,706	5,562
Stock compensation	10,568	14,268
Net operating losses	25,899	30,319
Accrued reserve and other	1,393	2,097
Unrealized loss on securities	185	326
Deferred rent	6,533	7,814
Deferred gain on the sale of building	4,741	8,166
Total deferred tax assets, prior to valuation allowance	57,661	70,989
Valuation allowance	(13,032)	(8,557)
Total deferred tax assets, net of valuation allowance	44,629	62,432
Deferred tax liabilities:		
Prepays	(1,239)	(1,753)
Depreciation	(6,229)	(13,045)
Intangibles	(43,800)	(58,747)
Total deferred tax liabilities	(51,268)	(73,545)
Net deferred tax assets (liabilities)	\$ (6,639)	\$ (11,113)

As of December 31, 2017 and 2016, a valuation allowance has been established for certain deferred tax assets due to the uncertainty of realization. The valuation allowance as of December 31, 2017 and 2016 includes an allowance for unrealized losses on ARS investments, foreign deferred tax assets and state net operating losses and tax credits. The valuation allowance for the deferred tax asset for unrealized losses on ARS has been recorded as an adjustment to accumulated other comprehensive loss.

The Company established the valuation allowance because it is more likely than not that a portion of the deferred tax asset for certain items will not be realized based on the weight of available evidence. A valuation allowance was established for the unrealized losses on securities as the Company has not historically generated capital gains, and it is uncertain whether the Company will generate sufficient capital gains in the future to absorb the capital losses. A valuation allowance was established for the foreign deferred tax assets due to the cumulative loss in recent years in those jurisdictions. The Company has not had sufficient taxable income historically to utilize the foreign deferred tax assets, and it is uncertain whether the Company will generate sufficient taxable income in the future to utilize the deferred tax assets. Similarly, the Company has established a valuation allowance for net operating losses and tax credits in certain states where it is uncertain whether the Company will generate sufficient taxable income to utilize the net operating losses and tax credits before they expire.

The Company's change in valuation allowance was an increase of approximately \$4 million for the year ended December 31, 2017 and a decrease of approximately \$1 million for the year ended December 31, 2016. The increase for the year ended December 31, 2017 is due to an increase in the valuation allowance for foreign deferred tax assets related to foreign net operating losses of approximately \$4 million. The decrease for the year ended December 31, 2016 is due to a decrease in the valuation allowance for foreign deferred tax assets of approximately \$1 million.

The Company had U.S. income before income taxes of approximately \$167 million, \$135 million, and \$2 million for the years ended December 31, 2017, 2016 and 2015, respectively. The Company had a foreign loss before income taxes of approximately \$2 million for the year ended December 31, 2017. The Company had foreign income before income taxes of approximately \$2 million and \$1 million for the years ended December 31, 2016 and 2015, respectively.

**COSTAR GROUP, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)**

**9. INCOME TAXES — (CONTINUED)**

The Company's provision for income taxes resulted in effective tax rates that varied from the statutory federal income tax rate as follows (in thousands):

	<b>Year Ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
Expected federal income tax provision at statutory rate	\$ 57,770	\$ 47,832	\$ 903
State income taxes, net of federal benefit	4,776	3,638	(678)
Foreign income taxes, net effect	(3,540)	(31)	469
Increase (decrease) in valuation allowance	3,624	(103)	1,956
Nondeductible compensation	230	141	574
Nondeductible transaction costs	—	103	229
Meals and entertainment	958	712	1,032
Tax rate changes	(7,340)	283	1,203
Research credits	(20,547)	(920)	—
Excess tax benefit	(7,010)	—	—
Tax reserves	12,646	(150)	71
Other adjustments	796	86	287
Income tax expense	<u>\$ 42,363</u>	<u>\$ 51,591</u>	<u>\$ 6,046</u>

The Company's U.K. subsidiaries with foreign losses are disregarded entities for U.S. income tax purposes. Accordingly, the losses from these disregarded entities are included in the Company's consolidated federal income tax provision at the statutory rate. Federal income taxes attributable to income from these disregarded entities are reduced by foreign taxes paid by those disregarded entities.

The Company paid approximately \$41 million, \$34 million, and \$1 million in income taxes for the years ended December 31, 2017, 2016, and 2015, respectively.

The Company recognized an income tax benefit during the year ended December 31, 2017 for research credits of \$21 million for tax years December 31, 2013 through December 31, 2017. These research credits relate to eligible activities including the development of new products, product enhancements and new or improved processes.

The Company has net operating loss carryforwards for international income tax purposes of approximately \$49 million, which do not expire. The Company has federal net operating loss carryforwards of approximately \$38 million that begin to expire in 2020, state net operating loss carryforwards with a tax value of approximately \$6 million that begin to expire in 2020 and state income tax credit carryforwards with a tax value of approximately \$3 million that begin to expire in 2020. The Company realized a cash benefit relating to the use of its tax loss carryforwards of approximately \$7 million, \$5 million, and \$1 million in December 31, 2017, 2016, and 2015, respectively.

**COSTAR GROUP, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)**

The following table summarizes the activity related to the Company's unrecognized tax benefits (in thousands):

Unrecognized tax benefits as of December 31, 2014	\$ 5,749
Increase for current year tax positions	—
Increase for prior year tax positions	1,954
Expiration of the statute of limitation for assessment of taxes	(39)
Unrecognized tax benefits as of December 31, 2015	<u>7,664</u>
Increase for current year tax positions	368
Decrease for prior year tax positions	(6,115)
Expiration of the statute of limitation for assessment of taxes	(74)
Unrecognized tax benefits as of December 31, 2016	<u>1,843</u>
Increase for current year tax positions	12,620
Decrease for prior year tax positions	(34)
Expiration of the statute of limitation for assessment of taxes	(66)
Unrecognized tax benefits as of December 31, 2017	<u><u>\$ 14,363</u></u>

**9. INCOME TAXES — (CONTINUED)**

Approximately \$14 million and \$1 million of the unrecognized tax benefits as of December 31, 2017 and 2016, respectively, would favorably affect the annual effective tax rate, if recognized in future periods. The increase for current year tax positions of \$13 million for the year ended December 31, 2017 is primarily attributable to research credits. The Company recognized \$72,000 for interest and penalties in its consolidated statement of operations for the year ended December 31, 2017. The Company reversed interest and penalties of \$416,000 in its consolidated statement of operations for the year ended December 31, 2016. The Company recognized \$83,000 for interest and penalties in its consolidated statements of operations for the year ended December 31, 2015. The Company had liabilities of \$205,000, \$133,000, and \$549,000 for interest and penalties in its consolidated balance sheets as of December 31, 2017, 2016, 2015 respectively. The Company does not anticipate the amount of the unrecognized tax benefits will change significantly over the next twelve months.

The Company is subject to taxation in the U.S. and various states and foreign jurisdictions. The Company's federal income tax returns for tax years 2011 through 2016 remain open to examination. Most of the Company's state income tax returns for tax years 2014 through 2016 remain open to examination. For states that have a four-year statute of limitations, the state income tax returns for tax years 2013 through 2016 remain open to examination. The Company's U.K. income tax returns for tax years 2012 through 2016 remain open to examination.

On December 22, 2017, the U.S. enacted the Tax Cuts and Jobs Act (the "Tax Act"), which significantly changed U.S. tax law. The Tax Act lowered the Company's U.S. statutory federal income tax rate from 35% to 21% effective January 1, 2018, while also imposing a deemed repatriation tax on deferred foreign income. The Tax Act also created a new minimum tax on certain future foreign earnings. The Securities and Exchange Commission staff issued Staff Accounting Bulletin 118, Income Tax Accounting Implications of the Tax Cuts and Jobs Act, ("SAB 118"), which provides guidance on accounting for the tax effects of the Tax Act. SAB 118 provides a measurement period that should not extend beyond one year from the Tax Act enactment date for companies to complete the accounting under Accounting Standards Codification Topic 740, ("ASC 740"). In accordance with SAB 118, a company must reflect the income tax effects of those aspects of the Tax Act for which the accounting under ASC 740 is complete. To the extent that a company's accounting for certain income tax effects of the Tax Act is incomplete but it is able to determine a reasonable estimate, it must record a provisional estimate in the financial statements. If a company cannot determine a provisional estimate to be included in the financial statements, it should continue to apply ASC 740 on the basis of the provisions of the tax laws that were in effect immediately before the enactment of the Tax Act.

In connection with the Company's initial analysis of the impact of the Tax Act, the Company recorded a provisional discrete net tax benefit of \$7 million in the period ending December 31, 2017. This net benefit primarily consists of a net benefit for the corporate tax rate reduction of \$7.4 million and a net expense for the repatriation tax of \$400,000. For various reasons, the Company has not completed its accounting for the income tax effects of certain elements of the Tax Act. The Company was able to make reasonable estimates of the effects of elements for which the Company's analysis is not yet complete and recorded provisional adjustments. As the Company completes its analysis of the Tax Act, collects and prepares necessary data, and interprets any additional guidance issued by the U.S. Treasury Department, the IRS, and other standard-setting bodies, the Company may make adjustments to the provisional amounts. Those adjustments may materially impact the provision for income taxes in the period in which the adjustments are made.

Global intangible low taxed income (GILTI): Due to the complexity of the new GILTI tax rules, the Company is continuing to evaluate this provision of the Tax Act and the application of ASC 740. Under U.S. GAAP, the Company is allowed to make an accounting policy choice of either (1) treating taxes due on future U.S. inclusions in taxable income related to GILTI as a current-period expense when incurred (the "period cost method") or (2) factoring such amounts into the measurement of deferred taxes (the "deferred method"). The Company's selection of an accounting policy with respect to the new GILTI tax rules will depend, in part, on analyzing its global income to determine whether it expects to have future U.S. inclusions in taxable income related to GILTI and, if so, what the impact is expected to be. Because whether the Company expects to have future U.S. inclusions in taxable income related to GILTI depends on not only its current structure and estimated future results of global operations but also its intent and ability to modify its structure and/or its business, the Company is not yet able to reasonably estimate the effect of this provision of the Tax Act. Therefore, the Company has not made any adjustments related to potential GILTI tax in its financial statements and has not made a policy decision regarding whether to record deferred taxes on GILTI.

**COSTAR GROUP, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)**

**10. COMMITMENTS AND CONTINGENCIES**

The Company leases office facilities and office equipment under various non-cancelable operating leases. The leases contain various renewal options. Rent expense for the years ended December 31, 2017, 2016 and 2015, was approximately \$26 million, \$22 million and \$21 million, respectively.

Future minimum lease payments as of December 31, 2017 are as follows (in thousands):

2018	\$ 30,853
2019	27,925
2020	26,136
2021	24,544
2022	22,883
Thereafter	46,061
Total future minimum lease payments	<u>\$ 178,402</u>

Currently, and from time to time, the Company is involved in litigation incidental to the conduct of its business. In accordance with GAAP, the Company records a provision for a liability when it is both probable that a liability has been incurred and the amount can be reasonably estimated. At the present time, while it is reasonably possible that an unfavorable outcome may occur as a result of one or more of the Company's current litigation matters, management has concluded that it is not probable that a loss has been incurred in connection with the Company's current litigation. In addition, the Company is unable to estimate the possible loss or range of loss that could result from an unfavorable outcome in the Company's current litigation and accordingly, the Company has not recognized any liability in the consolidated financial statements for unfavorable results, if any. Legal defense costs are expensed as incurred.



**11. SEGMENT REPORTING**

**Segment Information**

The Company manages its business geographically in two operating segments, with the primary areas of measurement and decision-making being North America, which includes the U.S. and Canada, and International, which includes the U.K., Spain, Germany and France. The Company and its subsidiaries' subscription-based services consist primarily of information, analytics and online marketplace services offered over the Internet to commercial real estate industry and related professionals. The Company's subscription-based information services consist primarily of CoStar Suite® services. CoStar Suite is sold as a platform of service offerings consisting of CoStar Property Professional®, CoStar COMPS Professional® and CoStar Tenant® and through the Company's mobile application, CoStar Go®. CoStar Suite is the Company's primary service offering in the North America and International operating segments. Management relies on an internal management reporting process that provides revenue and operating segment net income (loss) before interest and other income (expense), income taxes, depreciation and amortization ("EBITDA"). Management believes that operating segment EBITDA is an appropriate measure for evaluating the operational performance of the Company's operating segments. EBITDA is used by management to internally measure operating and management performance and to evaluate the performance of the business. However, this measure should be considered in addition to, not as a substitute for or superior to, income from operations or other measures of financial performance prepared in accordance with GAAP.

Summarized information by operating segment consists of the following (in thousands):

	<b>Year Ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
Revenues			
North America	\$ 934,464	\$ 809,492	\$ 686,573
International			
External customers	30,766	28,138	25,191
Intersegment revenue	42	40	41
Total International revenue	30,808	28,178	25,232
Intersegment eliminations	(42)	(40)	(41)
Total revenues	<u>\$ 965,230</u>	<u>\$ 837,630</u>	<u>\$ 711,764</u>
EBITDA			
North America	\$ 236,906	\$ 210,901	\$ 87,092
International	553	4,169	2,895
Total EBITDA	<u>\$ 237,459</u>	<u>\$ 215,070</u>	<u>\$ 89,987</u>

The reconciliation of net income (loss) to EBITDA consists of the following (in thousands):

	<b>Year Ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
Net income (loss)	\$ 122,695	\$ 85,071	\$ (3,465)
Amortization of acquired intangible assets in cost of revenues	19,707	22,819	30,077
Amortization of acquired intangible assets in operating expenses	17,684	22,731	27,931
Depreciation and other amortization	26,252	24,615	20,524
Interest and other income	(4,044)	(1,773)	(537)
Interest and other expense	9,014	10,016	9,411
Loss on debt extinguishment	3,788	—	—
Income tax expense	42,363	51,591	6,046
EBITDA	<u>\$ 237,459</u>	<u>\$ 215,070</u>	<u>\$ 89,987</u>

**COSTAR GROUP, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)**

**11. SEGMENT REPORTING — (CONTINUED)**

**Segment Information — (Continued)**

Intersegment revenues were attributable to services performed for the Company's wholly owned subsidiary, CoStar Portfolio Strategy by Grecom S.A.S. ("Grecom"), a wholly owned subsidiary of CoStar Limited, the Company's wholly owned U.K. holding company. Intersegment revenues are recorded at an amount the Company believes approximates fair value. North America EBITDA includes a corresponding cost for the services performed by Grecom.

Summarized information by operating segment consists of the following (in thousands):

	<b>December 31,</b>	
	<b>2017</b>	<b>2016</b>
Property and equipment, net		
North America	\$ 79,736	\$ 84,727
International	4,760	2,841
Total property and equipment, net	<u>\$ 84,496</u>	<u>\$ 87,568</u>
Goodwill		
North America	\$ 1,253,494	\$ 1,227,777
International	29,963	27,089
Total goodwill	<u>\$ 1,283,457</u>	<u>\$ 1,254,866</u>
Assets		
North America	\$ 2,816,156	\$ 2,139,896
International	57,285	45,167
Total assets	<u>\$ 2,873,441</u>	<u>\$ 2,185,063</u>
Liabilities		
North America	\$ 201,831	\$ 520,833
International	20,360	10,017
Total liabilities	<u>\$ 222,191</u>	<u>\$ 530,850</u>

**11. SEGMENT REPORTING — (CONTINUED)**

**Revenues by Services**

The Company provides information, analytics and online marketplaces to the commercial real estate industry. The revenues by type of service consists of the following (in thousands):

	<b>Year Ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
Information and analytics			
CoStar Suite <sup>(1)</sup>	\$ 463,185	\$ 408,456	\$ 360,440
Information services <sup>(2)</sup>	72,618	77,178	75,790
Online marketplaces			
Multifamily <sup>(3)</sup>	279,855	224,835	160,630
Commercial property and land <sup>(4)</sup>	149,572	127,161	114,904
Total revenues	<u>\$ 965,230</u>	<u>\$ 837,630</u>	<u>\$ 711,764</u>

<sup>(1)</sup> CoStar Suite is comprised of: CoStar Property Professional, CoStar COMPS Professional, CoStar Tenant; and CoStar Portfolio Strategy.

<sup>(2)</sup> Information services is comprised of: LoopNet Premium Searcher; CoStar Real Estate Manager; CoStar Risk Analytics COMPASS; CoStar Investment Analysis Portfolio Maximizer; CoStar Investment Analysis Request; CoStar Brokerage Applications; PROPEX; Grecom; Belbex; and Thomas Daily.

<sup>(3)</sup> Multifamily is comprised of Apartments.com, ApartmentFinder.com and ApartmentHomeLiving.com; WestsideRentals.com; Apartamentos.com; and The Screening Pros.

<sup>(4)</sup> Commercial property and land is comprised of: LoopNet Premium Lister; LoopLink; CoStar Advertising; BizBuySell and BizQuest; LandsofAmerica, LandAndFarm, and LandWatch; and CoStar Private Sale Network.

**12. STOCKHOLDERS' EQUITY**

**Preferred Stock**

The Company has 2,000,000 shares of preferred stock, \$0.01 par value, authorized for issuance as of December 31, 2017. The Board of Directors may issue the preferred stock from time to time as shares of one or more classes or series.

**Common Stock**

The Company has 60,000,000 shares of common stock, \$0.01 par value, authorized for issuance. Dividends may be declared and paid on the common stock, subject in all cases to the rights and preferences of the holders of preferred stock and authorization by the Board of Directors. In the event of liquidation or winding up of the Company and after the payment of all preferential amounts required to be paid to the holders of any series of preferred stock, any remaining funds shall be distributed among the holders of the issued and outstanding common stock.

**Equity Offering**

In October 2017, the Company completed a public equity offering of 3,317,308 shares of common stock for \$260.00 per share. Net proceeds from the public equity offering were approximately \$834 million, after deducting approximately \$29 million of underwriting discounts and other fees. The Company expects to use the net proceeds from the public equity offering to fund all or a portion of the costs of any strategic acquisitions we determine to pursue in the future, to finance the growth of its business and for working capital and other general corporate purposes. General corporate purposes may include additions to working capital, capital expenditures, repayment of debt, investments in the Company's subsidiaries, possible acquisitions and the repurchase, redemption or retirement of securities, including the Company's common stock.

**COSTAR GROUP, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)**

**13. NET INCOME (LOSS) PER SHARE**

The following table sets forth the calculation of basic and diluted net income (loss) per share (in thousands except per share data):

	<b>Year Ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
Numerator:			
Net income (loss)	\$ 122,695	\$ 85,071	\$ (3,465)
Denominator:			
Denominator for basic net income (loss) per share — weighted-average outstanding shares	33,200	32,167	31,950
Effect of dilutive securities:			
Stock options and restricted stock	359	269	—
Denominator for diluted net income (loss) per share — weighted-average outstanding shares	33,559	32,436	31,950
Net income (loss) per share — basic	\$ 3.70	\$ 2.64	\$ (0.11)
Net income (loss) per share — diluted	\$ 3.66	\$ 2.62	\$ (0.11)

Stock options to purchase approximately 87,000 and 194,000 shares that were outstanding for the years ended December 31, 2017 and December 31, 2016, respectively, were not included in the computation of diluted net income per share because the inclusion of the potentially dilutive common shares would have an anti-dilutive effect. The Company did not consider the impact of potentially dilutive securities for the year ended December 31, 2015 when calculating the diluted net loss per share because the inclusion of the potentially dilutive common shares would have an anti-dilutive effect. Shares underlying restricted common stock awards that vest based on Company performance and service conditions that have not been achieved as of the end of the period are not included in the computation of basic or diluted earnings per share. Shares underlying restricted stock units that vest based on Company service conditions, that have not been achieved as of the end of the period are not included in the computation of basic or diluted earnings per share. The following table summarizes the shares underlying the performance-based restricted stock awards and service-based restricted stock units excluded from the basic and diluted calculation (in thousands):

	<b>Year Ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
Performance-based restricted stock awards	58	59	55
Service-based restricted stock units	1	1	1
Total shares excluded from computation	59	60	56

## 14. EMPLOYEE BENEFIT PLANS

### Stock Incentive Plans

In April 2007, the Company's Board of Directors adopted the CoStar Group, Inc. 2007 Stock Incentive Plan (as amended, the "2007 Plan"), subject to stockholder approval, which was obtained on June 7, 2007. In April 2016, the Company's Board of Directors adopted the CoStar Group, Inc. 2016 Stock Incentive Plan (as amended, the "2016 Plan"), subject to stockholder approval, which was obtained on June 9, 2016. All shares of common stock that were authorized for issuance under the 2007 Plan that, as of June 9, 2016, remained available for issuance under the 2007 Plan (excluding shares subject to outstanding awards) were rolled into the 2016 Plan and, as of that date, no shares of common stock were available for new awards under the 2007 Plan. The 2007 Plan continues to govern unexercised and unexpired awards issued under the 2007 Plan prior to June 9, 2016. The 2007 Plan provided for the grant of stock options, restricted stock, restricted stock units and stock appreciation rights to officers, directors and employees of the Company and its subsidiaries. Stock options granted under the 2007 Plan could be incentive or non-qualified, and except in limited circumstances related to a merger or other acquisition, the exercise price for a stock option may not be less than the fair market value of the Company's common stock on the date of grant. The vesting period of the options, restricted stock and restricted stock unit grants under the 2007 Plan was determined by the Board of Directors or a committee thereof and was generally three to four years. In some cases, vesting of restricted stock awards under the 2007 Plan is subject to performance conditions. Upon the occurrence of a Change of Control, as defined in the 2007 Plan, all outstanding unexercisable options and restricted stock grants under the 2007 Plan immediately become exercisable.

The 2016 Plan provides for the grant of stock options, restricted stock, restricted stock units, and stock appreciation rights to officers, directors and employees of the Company and its subsidiaries. Stock options granted under the 2016 Plan may be non-qualified or may qualify as incentive stock options. Except in limited circumstances related to a merger or other acquisition, the exercise price for an option may not be less than the fair market value of the Company's common stock on the date of grant. The vesting period for each grant of options, restricted stock, restricted stock units and stock appreciation rights under the 2016 Plan is determined by the Board of Directors or a committee thereof and is generally three to four years, subject to minimum vesting periods for restricted stock and restricted stock units of at least one year. In some cases, vesting of awards under the 2016 Plan may be based on performance conditions. The Company has issued and/or reserved the following shares of common stock for issuance under the 2016 Plan: (a) 1,450,000 shares of common stock, plus (b) 815,464 shares of common stock that were authorized for issuance under the 2007 Plan that, as of June 9, 2016, remained available for issuance under the 2007 Plan (not including any Shares that were subject as of such date to outstanding awards under the 2007 Plan), and (c) any shares of common stock subject to outstanding awards under the 2007 Plan as of June 9, 2016, that on or after such date cease for any reason to be subject to such awards (other than by reason of exercise or settlement of the awards to the extent they are exercised for or settled in vested and nonforfeitable shares). Unless terminated sooner, the 2016 Plan will terminate in June 2026, but will continue to govern unexercised and unexpired awards issued under the 2016 Plan prior to that date. Approximately 2 million shares were available for future grant under the 2016 Plan as of December 31, 2017.

At December 31, 2017, there was approximately \$57 million of unrecognized compensation cost related to stock incentive plans, net of estimated forfeitures, which the Company expects to recognize over a weighted-average-period of 2.2 years.

**COSTAR GROUP, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)**

**14. EMPLOYEE BENEFIT PLANS — (CONTINUED)**

**Stock Options**

Option activity was as follows:

	Number of Shares	Range of Exercise Price	Weighted- Average Exercise Price	Weighted- Average Remaining Contract Life (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding at December 31, 2014	370,179	\$36.48 - \$201.04	\$ 99.12		
Granted	89,500	\$193.69 - \$193.69	\$ 193.69		
Exercised	(59,602)	\$36.48 - \$201.04	\$ 85.48		
Outstanding at December 31, 2015	400,077	\$36.48 - \$201.04	\$ 122.30		
Granted	82,400	\$182.75 - \$182.75	\$ 182.75		
Exercised	(29,285)	\$36.48 - \$201.04	\$ 112.78		
Canceled or expired	(13,034)	\$193.69 - \$201.04	\$ 195.78		
Outstanding at December 31, 2016	440,158	\$36.48 - \$201.04	\$ 132.08		
Granted	95,500	\$204.91	\$ 204.91		
Exercised	(81,815)	\$36.48 - \$201.04	\$ 83.07		
Outstanding at December 31, 2017	<u>453,843</u>	\$36.73 - \$204.91	\$ 156.24	6.67	\$ 63,861
Exercisable at December 31, 2015	<u>220,107</u>	\$36.48 - \$201.04	\$ 77.63		
Exercisable at December 31, 2016	<u>284,489</u>	\$36.48 - \$201.04	\$ 100.94		
Exercisable at December 31, 2017	<u>278,239</u>	\$36.73 - \$201.04	\$ 130.91	5.47	\$ 46,199

The aggregate intrinsic value is calculated as the difference between (i) the closing price of the common stock at the end of the period and (ii) the exercise prices of the underlying awards, multiplied by the shares underlying options as of the end of the period that had an exercise price less than the closing price on that date. Options to purchase 81,815, 29,285, and 59,602, shares were exercised during the years ended 2017, 2016, and 2015, respectively. The aggregate intrinsic value of options exercised, determined as of the date of option exercise, was approximately \$13 million, \$3 million, and \$7 million for the years ended December 31, 2017, 2016, and 2015, respectively.

The weighted-average grant date fair value of each option granted during the years ended December 31, 2017, 2016, and 2015 using the Black-Scholes option-pricing model was \$59.06, \$54.34 and \$56.53, respectively.

The Company estimated the fair value of each option granted on the date of grant using the Black-Scholes option-pricing model, using the assumptions in the following table:

	Year Ended December 31,		
	2017	2016	2015
Dividend yield	0%	0%	0%
Expected volatility	28%	31%	30%
Risk-free interest rate	2%	1%	2%
Expected life (in years)	5	5	5

**COSTAR GROUP, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)**

**14. EMPLOYEE BENEFIT PLANS — (CONTINUED)**

**Stock Options — (Continued)**

The expected dividend yield is determined based on the Company's past cash dividend history and anticipated future cash dividend payments. The Company has never declared or paid any dividends on its common stock and does not anticipate paying any dividends on its common stock during the foreseeable future, but intends to retain any earnings for future growth of its business. Expected volatility is calculated based on historical volatility of the daily closing price of the Company's common stock over a period consistent with the expected life of the options granted. The risk-free interest rate is based on the U.S. Treasury rate with terms similar to the expected life of the options granted. The expected life for the options is determined based on multiple factors, including historical employee behavior patterns of exercising options and post-employment termination behavior as well as expected future employee option exercise patterns.

The following table summarizes information regarding options outstanding at December 31, 2017:

Range of Exercise Price	Options Outstanding			Options Exercisable	
	Number of Shares	Weighted-Average Remaining Contractual Life (in years)	Weighted-Average Exercise Price	Number of Shares	Weighted-Average Exercise Price
\$36.73 - \$58.06	41,359	3.13	\$ 56.64	41,359	\$ 56.64
\$58.07 - \$59.59	40,004	4.14	\$ 58.95	40,004	\$ 58.95
\$59.60 - \$81.19	1,000	3.42	\$ 60.23	1,000	\$ 60.23
\$81.20 - \$142.45	70,944	5.19	\$ 102.16	70,944	\$ 102.16
\$142.46 - \$188.22	76,934	8.19	\$ 182.75	21,999	\$ 182.75
\$188.23 - \$197.37	65,802	7.17	\$ 193.69	40,633	\$ 193.69
\$197.38 - \$202.98	62,300	6.16	\$ 201.04	62,300	\$ 201.04
\$202.99 - \$204.91	95,500	9.16	\$ 204.91	—	\$ —
<b>\$36.73 - \$204.91</b>	<b>453,843</b>	<b>6.67</b>	<b>\$ 156.24</b>	<b>278,239</b>	<b>\$ 130.91</b>

**Restricted Stock Awards**

In March 2017, March 2016, and March 2015, the Compensation Committee of the Board of Directors of the Company approved grants of restricted common stock to the executive officers that vest based on the Company's achievement of a three-year cumulative revenue goal established at the grant date, and are subject to forfeiture in the event the foregoing performance condition is not met by the end of each respective three-year period. The number of shares that may be earned ranges between 0% (if the specified threshold performance level is not attained) and 200% (if performance meets or exceeds the maximum achievement level) of the target award. If actual performance exceeds the pre-established threshold, the number of shares earned is calculated based on the relative performance between specified levels of achievement. These awards support the Company's goals of aligning executive incentives with long-term stockholder value and ensuring that executive officers have a continuing stake in the long-term success of the Company.

These grants of restricted common stock are subject to continuing employment requirements and to a market condition. The actual number of shares that vest at the end of the respective three-year period is determined based on the Company's achievement of the three-year performance goals described above, as well as its TSR relative to the Russell 1000 Index over the same three-year performance period. At the end of the three-year performance period, if the performance condition is achieved at or above the pre-established threshold, the number of shares earned is further adjusted by a TSR payout percentage, which ranges between 80% and 120%, based on the Company's TSR performance relative to that of the Russell 1000 Index over the respective three-year period. The Company granted a total of 32,160, 25,680 and 32,400 shares of performance-based restricted common stock during the years ended December 31, 2017, 2016, and 2015, respectively.

**COSTAR GROUP, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)**

**14. EMPLOYEE BENEFIT PLANS — (CONTINUED)**

**Restricted Stock Awards — (Continued)**

The Company estimates the fair value of its performance-based restricted common stock awards with a market condition on the date of grant using a Monte-Carlo simulation valuation model. This pricing model uses multiple simulations to evaluate the probability of the Company achieving various stock price levels to determine the expected TSR performance ranking. Expense is only recorded for awards that are expected to vest, net of estimated forfeitures. The assumptions used to estimate the fair value of performance-based restricted common stock awards with a market condition granted were as follows:

	<b>Year Ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
Dividend yield	0%	0%	0%
Expected volatility	28%	28%	26%
Risk-free interest rate	2%	1%	1%
Expected life (in years)	3	3	3
Weighted-average grant date fair value	\$ 218.59	\$ 184.97	\$ 208.08

The expected dividend yield is determined based on the Company's past cash dividend history and anticipated future cash dividend payments. The Company has never declared or paid any dividends on its common stock and does not anticipate paying any dividends on its common stock during the foreseeable future, but intends to retain any earnings for future growth of its business. Expected volatility is calculated based on historical volatility of the daily closing price of the common stock of the companies within the Russell 1000 Index over a period consistent with the expected life of the performance-based restricted common stock awards with a market condition. The risk-free interest rate is based on the U.S. Treasury rate with terms similar to the expected life of the performance-based restricted common stock awards with a market condition. The expected life is consistent with the performance measurement period of the performance-based restricted common stock awards with a market condition.

As of December 31, 2017, the Company reassessed the probability of achieving the performance and market conditions and determined that it was probable that the performance and market conditions for the 2017, 2016 and 2015 performance-based restricted common stock awards would be met by their forfeiture dates. As a result, the Company recorded a total of approximately \$5 million, \$3 million, and \$3 million of stock-based compensation expense related to the performance-based restricted common stock awards with a market condition for the years ended December 31, 2017, 2016 and 2015, respectively. The Company expects to record an aggregate amount of stock-based compensation expense related to the performance-based restricted common stock awards of approximately \$6 million over the periods 2018, 2019 and 2020.

The following table presents unvested restricted stock awards activity for the year ended December 31, 2017:

	<b>Restricted Stock Awards — without Market Condition</b>		<b>Restricted Stock Awards — with Market Condition</b>	
	<b>Number of Shares</b>	<b>Weighted- Average Grant Date Fair Value per Share</b>	<b>Number of Shares</b>	<b>Weighted- Average Grant Date Fair Value per Share</b>
Unvested restricted stock awards at December 31, 2016	394,712	\$ 192.38	72,480	\$ 202.07
Granted	156,238	\$ 211.69	32,160	\$ 218.59
Vested	(156,240)	\$ 177.72	(13,477)	\$ 216.20
Canceled	(30,827)	\$ 196.87	(5,963)	\$ 216.20
Unvested restricted stock awards at December 31, 2017	<u>363,883</u>	<u>\$ 206.59</u>	<u>85,200</u>	<u>\$ 205.08</u>



**14. EMPLOYEE BENEFIT PLANS — (CONTINUED)**

**Restricted Stock Units**

The following table presents unvested restricted stock units activity for the year ended December 31, 2017:

	<b>Number of Shares</b>	<b>Weighted- Average Grant Date Fair Value per Share</b>
Unvested restricted stock units at December 31, 2016	1,199	\$ 182.64
Granted	69	\$ 291.82
Vested	(306)	\$ 183.28
Canceled	—	\$ —
Unvested restricted stock units at December 31, 2017	962	\$ 190.27

**Employee 401(k) Plan**

The Company maintains a 401(k) Plan (the “401(k)”) as a defined contribution retirement plan for all eligible employees. The 401(k) provides for tax-deferred contributions of employees’ salaries, limited to a maximum annual amount as established by the IRS. In addition to the traditional 401(k), effective January 1, 2015, eligible employees have the option of making an after-tax contribution to a Roth 401(k) plan or a combination of both. In 2017, 2016 and 2015, the Company matched 100% of employee contributions up to a maximum of 4% of total compensation. Amounts contributed to the 401(k) by the Company to match employee contributions for the years ended December 31, 2017, 2016, and 2015 were approximately \$10 million, \$9 million and \$8 million, respectively. The Company had no administrative expenses in connection with the 401(k) plan for the years ended December 31, 2017, 2016, and 2015, respectively.

**Employee Pension Plan**

The Company maintains a Group Personal Pension Plan (the “Plan”) for all eligible employees in the Company’s U.K. offices. The Plan is a defined contribution plan. Employees are eligible to contribute a portion of their salaries, subject to a maximum annual amount as established by Her Majesty’s Revenue and Customs. In 2017, 2016 and 2015, the Company’s matching contribution was based on the percentage contributed by the employee, up to a maximum of 6% of total compensation. Amounts contributed to the Plan by the Company to match employee contributions for the years ended December 31, 2017, 2016, and 2015, were approximately \$380,000, \$380,000 and \$420,000 respectively.

**Registered Retirement Savings Plan**

As of January 1, 2015, the Company introduced a registered retirement savings plan (“RRSP”) for all eligible employees in the Company’s Canadian offices. In 2017, 2016, and 2015, the Company matched 100% of employee contributions up to a maximum of 4% of total compensation. Amounts contributed to the RRSP by the Company to match employee contributions for the years ended December 31, 2017, 2016, and 2015 were approximately \$43,000, \$10,000, and \$40,000 respectively.

**Employee Stock Purchase Plan**

As of August 1, 2006, the Company introduced an Employee Stock Purchase Plan (“ESPP”), pursuant to which eligible employees participating in the plan authorize the Company to withhold specified amounts from the employees’ compensation and use the withheld amounts to purchase shares of the Company’s common stock at 90% of the market price. Participating employees are able to purchase common stock under this plan during each offering period. An offering period begins the second Saturday before each of the Company’s regular pay dates and ends on each of the Company’s regular pay dates. On June 3, 2015, the Company’s stockholders approved an amendment to the ESPP to increase the number of shares available for purchase under the ESPP by 100,000 shares. On September 14, 2015, the Company registered the issuance of these additional shares under the ESPP pursuant to the registration statement filed September 14, 2015. There were 80,022 and 93,812 shares available for purchase under the ESPP as of December 31, 2017 and 2016, respectively, and approximately 13,790 and 14,735 shares of the Company’s common stock were purchased under the ESPP during 2017 and 2016, respectively.

**COSTAR GROUP, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)**

**15. QUARTERLY RESULTS OF OPERATIONS**

The following is a summary of the unaudited quarterly results of operations for the years ended December 31, 2017 and 2016.

	<b>2017</b>			
	<b>Mar. 31</b>	<b>Jun. 30</b>	<b>Sep. 30</b>	<b>Dec. 31</b>
Revenues	\$ 226,553	\$ 237,153	\$ 247,533	\$ 253,991
Cost of revenues	51,346	55,273	55,483	58,301
Gross profit	175,207	181,880	192,050	195,690
Operating expenses	137,545	153,997	134,537	144,932
Income from operations	37,662	27,883	57,513	50,758
Interest and other income	429	605	555	2,455
Interest and other expense	(2,686)	(2,693)	(2,901)	(734)
Loss on debt extinguishment	—	—	—	(3,788)
Income before income taxes	35,405	25,795	55,167	48,691
Income tax expense	13,275	3,611	20,990	4,487
Net income	<u>\$ 22,130</u>	<u>\$ 22,184</u>	<u>\$ 34,177</u>	<u>\$ 44,204</u>
Net income per share — basic	<u>\$ 0.69</u>	<u>\$ 0.68</u>	<u>\$ 1.05</u>	<u>\$ 1.24</u>
Net income per share — diluted	<u>\$ 0.68</u>	<u>\$ 0.68</u>	<u>\$ 1.04</u>	<u>\$ 1.22</u>

	<b>2016</b>			
	<b>Mar. 31</b>	<b>Jun. 30</b>	<b>Sep. 30</b>	<b>Dec. 31</b>
Revenues	\$ 199,739	\$ 206,869	\$ 212,711	\$ 218,311
Cost of revenues	42,900	42,679	42,222	46,013
Gross profit	156,839	164,190	170,489	172,298
Operating expenses	126,538	136,071	130,893	125,409
Income from operations	30,301	28,119	39,596	46,889
Interest and other income	84	159	344	1,186
Interest and other expense	(2,509)	(2,455)	(2,498)	(2,554)
Income before income taxes	27,876	25,823	37,442	45,521
Income tax expense	11,155	10,247	14,241	15,948
Net income	<u>\$ 16,721</u>	<u>\$ 15,576</u>	<u>\$ 23,201</u>	<u>\$ 29,573</u>
Net income per share — basic	<u>\$ 0.52</u>	<u>\$ 0.48</u>	<u>\$ 0.72</u>	<u>\$ 0.92</u>
Net income per share — diluted	<u>\$ 0.52</u>	<u>\$ 0.48</u>	<u>\$ 0.72</u>	<u>\$ 0.91</u>

**16. SUBSEQUENT EVENTS**

On February 21, 2018, the Company completed the acquisition of ForRent, a division of Dominion Enterprises, pursuant to which the Company acquired all of the issued and outstanding shares of common stock, no par value per share, of DE Holdings, Inc., for a purchase price of approximately \$385 million, payable approximately \$350 million in cash and approximately \$35 million in shares of Company common stock, subject to a customary working capital adjustment and other post-closing adjustments.

## COSTAR GROUP, INC. MANAGEMENT STOCK PURCHASE PLAN

**1. Establishment of Plan; Purpose.** This CoStar Group, Inc. Management Stock Purchase Plan (this “Plan”) was adopted by the Board of Directors (the “Board”) of CoStar Group, Inc. (the “Company”) on December 7, 2017. This Plan is intended to provide selected key employees of the Company and its subsidiaries the opportunity to defer a portion of their bonus and commission compensation and to align management and shareholder interests through awards of Deferred Stock Units (“DSUs”) under this Plan and awards of matching Restricted Stock Units (“Matching RSUs”) under Section 8 of the CoStar Group, Inc. 2016 Stock Incentive Plan or its successor plan(s) (the “2016 SIP”).

**2. Tax Compliance.** Notwithstanding anything in this Plan to the contrary, this Plan is intended, and shall be construed to, provide that all elections, awards issued hereunder, distributions, and other aspects of this Plan shall comply with Section 409A of the Internal Revenue Code of 1986, as amended (the “Code”) and any regulations and other guidance thereunder to the extent applicable.

**3. Eligibility, Participation and Administration.**

3.1 Eligibility. An employee of the Company or a Subsidiary shall be eligible to participate in this Plan if the employee (a) is (i) an “executive officer” as defined in Section 16 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), including without limitation the Chief Executive Officer of the Company, or (ii) is designated from time to time by the Chief Executive Officer of the Company, who is also a director of the Company, acting as a committee of one, to participate in the Plan, and (b) is a member of a select group of management or highly compensated employees within the meaning of the Employee Retirement Income Security Act of 1974, as amended (“ERISA”) (each such employee who elects to defer bonus and/or commission compensation pursuant to this Plan is referred to herein as a “Participant”).

3.2 Participation. An eligible employee may elect to participate in this Plan with respect to any Plan Year by submitting a participation agreement in the form determined by the Company (a “Participation Agreement”) to the Company, on or before the date established by the Company. The “Plan Year” shall be the calendar year. Such election shall be made no later than December 31 of the year immediately-preceding the year to which the applicable bonus or commission relates or, if permitted by the Compensation Committee of the Company’s board of directors (the “Committee”), any later date permitted by Section 409A of the Code.

3.3 Administration. This Plan shall be administered by the Committee. Subject to the express provisions of this Plan, the Committee shall be authorized and empowered to do all things that it determines to be necessary or appropriate in connection with the administration of this Plan, including, without limitation: (i) to prescribe, amend and rescind rules and regulations relating to this Plan and to define terms not otherwise defined herein; (ii) to determine which persons are Participants; (iii) to grant awards to Participants and determine the terms and conditions thereof; (iv) to prescribe and amend the terms of the Participation Agreements or other documents evidencing awards made under this Plan

(which need not be identical) and the terms of or form of any document or notice required to be delivered to the Company by Participants under this Plan; (v) to determine the extent to which adjustments are required pursuant to Section 4.1(b); (vi) to interpret and construe this Plan, any rules and regulations under this Plan and the terms and conditions of any award granted hereunder, and to make exceptions to any such provisions in good faith and for the benefit of the Company; and (vii) to make all other determinations deemed necessary or advisable for the administration of this Plan. In addition, the Compensation Committee may delegate any or all aspects of the day-to-day administration of the Plan to one or more officers or employees of the Company or any Subsidiary, and/or to one or more agents. All decisions, determinations and interpretations by the Committee regarding the Plan, any rules and regulations under the Plan and the terms and conditions of or operation of any award granted hereunder, shall be final and binding on all Participants, beneficiaries, heirs, assigns or other persons holding or claiming rights under the Plan. The Committee shall consider such factors as it deems relevant, in its sole and absolute discretion, to making such decisions, determinations and interpretations including, without limitation, the recommendations or advice of any officer or other employee of the Company and such attorneys, consultants and accountants as it may select.

#### **4. Deferred Stock Unit and Restricted Stock Unit Awards.**

##### **4.1 Shares Subject to this Plan.**

(a) Shares Available. The total number of shares of common stock of the Company (“Common Shares”) reserved and available for issuance pursuant to DSUs under this Plan shall be 150,000. For the avoidance of doubt, Common Shares issued pursuant to awards of Matching RSUs under this Plan shall not reduce the share pool set forth in the preceding sentence, but instead shall be issued from the share pool under the 2016 SIP. The Common Shares issued pursuant to this Plan may be Common Shares that are authorized and unissued or Shares that were acquired by the Company, including Common Shares purchased on the open market.

(b) Adjustments for Certain Corporate Transactions. The number and kind of Common Shares available for issuance under this Plan (including under any awards then outstanding) shall be equitably adjusted by the Committee to reflect any reorganization, reclassification, combination of shares, stock split, reverse stock split, spin-off, dividend or distribution of securities, property or cash (other than regular, quarterly cash dividends), or any other equity restructuring transaction, as that term is defined in Statement of Financial Accounting Standards No. 123 (revised). Such adjustment may be designed to treat the Common Shares available under the Plan and subject to DSUs as if they were all outstanding on the record date for such event or transaction or to increase the number of such Common Shares to reflect a deemed reinvestment in Common Shares of the amount distributed to the Company’s securityholders. In the event there shall be any other change in the number or kind of outstanding Common Shares, or any stock or other securities into which such Common Shares shall have been changed, or for which it shall have been

exchanged, by reason of a change of control, other merger, consolidation or otherwise in circumstances that do not involve an equity restructuring transaction, as that term is defined in Statement of Financial Accounting Standards No. 123 (revised), then the Committee shall determine the appropriate adjustment, if any, to be effected. No right to purchase fractional shares shall result from any adjustment in DSUs pursuant to this Section 4.1(b). In case of any such adjustment, the Common Shares subject to the DSUs shall be rounded down to the nearest whole share. The Company shall notify Participants holding awards subject to any adjustments pursuant to this Section 4.1(b) of such adjustment, but (whether or not notice is given) such adjustment shall be effective and binding for all purposes of the Plan.

4.2 Bonus Deferral Commitment. A Participant may elect to defer up to 100% (or such other percentage as determined by the Committee) of (i) his or her incentive award (in increments of 1% or as otherwise determined by the Committee), paid under the Company's 2016 Cash Incentive Plan or any other Company- or Company subsidiary-sponsored bonus or cash incentive plans (or any successor incentive plan), and/or (ii) to the extent permitted by the Committee, commission compensation (collectively, "Bonus Compensation"), in a Participation Agreement for a period of four (4) years, or such longer period as may be permitted by the Committee (the "Deferral Period") from the date that amounts subject to such election would otherwise become payable (the "Deferral Date") (any amount so elected to be deferred pursuant to this Plan is referred to herein as a "Bonus Deferral Commitment"). To the extent applicable, Bonus Deferral Commitments under this Plan are intended to conform to the requirements of Section 409A of the Code. The amount to be deferred shall be stated as a percentage of any Bonus Compensation payable during the Plan Year with respect to which the deferral applies, or in such other form as allowed by the Committee consistent with the applicable requirements of Section 409A of the Code. Each Bonus Deferral Commitment shall be obtained from a Participant in a time and manner that complies with Section 409A of the Code and any regulatory or other guidance issued thereunder to the extent applicable.

4.3 Awards of Deferred and Restricted Stock Units.

(a) Deferred Stock Unit Awards. A DSU shall be a bookkeeping unit equivalent to one Common Share. DSUs shall not constitute actual stock and shall have no voting rights. On the Deferral Date, the Company shall award to the Participant DSUs covering a number of Common Shares having an aggregate Fair Market Value on the Deferral Date equal to the amount of the Bonus Compensation elected to be deferred (rounded down to the nearest whole Common Share, with any remaining cash payable to the Participant with his cash Bonus Compensation) and withhold from the Bonus Compensation otherwise payable an amount equal to the Fair Market Value of such DSUs on the Deferral Date. For these purposes, the "Fair Market Value" means, as of any given date, the higher of (i) the closing sales price and (ii) the consolidated closing bid price on such date during normal trading hours (or, if there are no reported sales on such date, on the last date prior to such date on which there were sales) of the Common Shares on NASDAQ, or if not listed on

NASDAQ on the New York Stock Exchange Composite Tape or, if not listed on any such exchanges, on any other national securities exchange on which the Common Shares are listed, in any case, as reporting in such source as the Committee shall select. If there is no regular public trading market for such Common Shares, the Fair Market Value of the Common Shares shall be determined by the Committee in good faith. Any DSU granted to a Participant under this Plan shall be credited to a Deferred Stock Unit bookkeeping account maintained by the Company for such Participant.

(b) Matching Restricted Stock Unit Awards. In addition to the DSUs, on the Deferral Date the Company shall also award to the Participant pursuant to the terms of the 2016 SIP, Restricted Stock Units (“Matching RSUs”) covering a number of Common Shares equal to 100% (or such other percentage as determined by the Committee) of the number of Common Shares subject to the DSUs awarded to the Participant on the Deferral Date pursuant to Section 4.3(a) (rounded down to the nearest whole Common Share). Additional Matching RSUs may be granted as determined by the Committee, and such additional Matching RSUs may be subject to such performance goals as determined by the Committee and permitted under the 2016 SIP. Matching RSUs shall not constitute actual stock and shall have no voting rights. Any Matching RSU granted to a Participant under this Plan shall be credited to a Restricted Stock Unit bookkeeping account maintained by the Company for such Participant.

(c) Vesting. Unless otherwise provided for in the terms of a Participation Agreement, all DSUs shall be fully vested as of the applicable Deferral Date. Matching RSUs shall vest on the fourth (4<sup>th</sup>) anniversary of the Deferral Date, subject to the Participant’s continued employment with the Company through such anniversary. Notwithstanding the foregoing, any unvested Matching RSUs shall vest immediately upon the occurrence of a Change in Control. For purposes hereof, a “Change in Control” means the occurrence of any one or more of the following events: (i) a Person (as the term person is used for purposes of Section 13(d) or 14(d) of the Exchange Act (other than the Company, any Company subsidiary, any Company benefit plan, or any underwriter temporarily holding securities for an offering of such securities) acquires ownership of more than 80% of the undiluted total voting power of the Company’s then outstanding securities eligible to vote to elect members of the Board (the “Company Voting Securities”); (ii) consummation of a merger, consolidation or reorganization of the Company with or into any other entity, unless the holders of the Company Voting Securities outstanding immediately before such consummation, together with any trustee or other fiduciary holding securities under a Company benefit plan, hold securities that represent immediately after such merger or consolidation at least 20% of the combined voting power of the then outstanding voting securities of either the Company or the other surviving entity or its parent; or (iii) the stockholders of the Company approve (A) a plan of complete liquidation or dissolution of the Company or (B) an agreement for the Company’s sale or disposition of all or substantially all of the Company’s assets, and such liquidation, dissolution, sale or disposition is consummated. Even if other tests are

met, a Change in Control shall not have occurred under any circumstances in which the Company files for bankruptcy protection or is reorganized following a bankruptcy filing.

(d) Employment Required. Notwithstanding anything herein to the contrary, a Participant must be employed by the Company or a Subsidiary on the Deferral Date in order to receive an award of DSUs or Matching RSUs under this Plan.

4.4 Dividend Equivalent Rights. Unless otherwise provided by the Committee, any awards of DSUs or Matching RSUs under this Plan shall earn dividend equivalents. Unless otherwise provided by the Committee, such dividend equivalents shall be made (by regularly scheduled payroll or otherwise) at the same time the underlying DSUs or Matching RSUs are settled.

4.5 Modification of Bonus Deferral Commitment. A Bonus Deferral Commitment shall be irrevocable except that the Committee may, in its sole and absolute discretion, permit a Participant to reduce the amount to be deferred, or waive the remainder of the Bonus Deferral Commitment upon a finding that the Participant has suffered an Unforeseeable Emergency (as defined below). The dollar amount associated with such a reduction or waiver shall not exceed the amount required (including anticipated taxes on the distribution) to meet the emergency financial need and not reasonably available from other resources of the Participant (including reimbursement or compensation by insurance, cessation of deferrals under this Plan, and liquidation of the Participant's assets, to the extent liquidation itself would not cause severe financial hardship). If the Committee grants a reduction or waiver request pursuant to this Section 4.5, the Participant will forfeit any unvested Matching RSUs associated with the reduction or waiver and will not be allowed to enter into a new Bonus Deferral Commitment for the remainder of the Plan Year in which the reduction or waiver of the Bonus Deferral Commitment occurs and the following Plan Year. Any resumption of the Participant's deferrals under this Plan shall be made only at the election of the Participant in accordance with this Section 4.

For purposes hereof, an "Unforeseeable Emergency" is a severe financial hardship to the Participant resulting from: (a) medical expenses resulting from a sudden unexpected illness or accident incurred by the Participant, his spouse, his beneficiary, or his dependents (as defined in Code Section 152(a) without regard to section 152(b)(1), (b)(2), and (d)(1)(B) for employees of the Company); (b) uninsured casualty loss pertaining to property owned by the Participant; or (c) other similar extraordinary and unforeseeable circumstances involving an uninsured loss arising from an event beyond the control of the Participant.

Any DSUs subject to such waiver or reduction request shall be distributed to the Participant in the form of Common Shares as soon as practicable following the grant of such waiver or reduction request.



**5. Time and Form of Payment.**

5.1 Time and Form of Payment. DSUs shall be settled with the Participant (or his or her beneficiary) in the form of Common Shares as soon as practicable after the date on which the earliest of the following occurs: (a) the Deferral Period expires, (b) the Participant dies, (c) the Participant becomes disabled (pursuant to the terms of the Company's or the Company subsidiary's Long-Term Disability Plan, as the case may be), (d) the Participant experiences a separation from service (within the meaning of Section 409A of the Code and the regulations, notices and other guidance thereunder), or (e) there is a Change in Control that qualifies as a change in the ownership or effective control of the Company within the meaning of Section 409A of the Code. Vested Matching RSUs shall be settled with the Participant (or his or her beneficiary) in Common Shares as soon as practicable after the date on which the Matching RSUs vest in accordance with the terms of this Plan, and in all events no later than March 15th of the year following the year in which such Matching RSUs vest.

5.2 Specified Employees. Notwithstanding anything herein to the contrary, and subject to Code Section 409A, to the extent Code Section 409A(2)(B) is applicable, payment under this Section 5 shall not be made to any Participant who is a specified employee (within the meaning of Section 409A of the Code and the regulations, notices and other guidance thereunder) before the date that is not less than six months after the date of the Participant's separation from service (within the meaning of Section 409A of the Code and the regulations, notices and other guidance thereunder).

**6. Amendment and Termination.** The Board may amend, alter or discontinue this Plan and the Committee may amend, or alter any agreement or other document evidencing an award made under this Plan. No amendment or alteration to the Plan or an award or a Participation Agreement shall be made which would impair the rights of the Participant without such Participant's consent, provided that no such consent shall be required if the Committee determines in its sole discretion and prior to the date of any Change of Control that such amendment or alteration either is required or advisable in order for the Company, the Plan or the award to satisfy any law or regulation or to meet the requirements of or avoid adverse financial accounting consequences under any accounting standard or any violation of Section 409A of the Code.

**7. Miscellaneous.**

7.1 No Liability of Company. The Company and any Subsidiary or affiliate which is in existence or hereafter comes into existence shall not be liable to a Participant or any other person as to: (i) the non-issuance or sale of Common Shares as to which the Company has been unable to obtain from any regulatory body having jurisdiction the authority deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Common Shares hereunder; and (ii) any tax consequence expected, but not realized, by any Participant or other person due to the receipt or settlement of any award granted hereunder.

7.2 Unfunded Plan. The Plan is intended to be an unfunded plan. Participants are and shall at all times be general creditors of the Company with respect to their awards. If the Committee or the Company chooses to set aside funds in a trust or otherwise for the payment of awards under the Plan, such funds shall at all times be subject to the claims of the creditors of the Company in the event of its bankruptcy or insolvency.

7.3 Transferability. Except as provided in the applicable Participation Agreement or otherwise required by law, awards shall not be transferable or assignable other than by will or the laws of descent and distribution. In no event may any award be transferred in exchange for consideration.

7.4 No Right to Employment, Reelection or Continued Service. Nothing in this Plan or a Participation Agreement shall interfere with or limit in any way the right of the Company, its Subsidiaries and/or its affiliates to terminate any Participant's employment at any time or for any reason not prohibited by law, nor shall this Plan or an award itself confer upon any Participant any right to continue his or her employment or service for any specified period of time. Neither an award nor any benefits arising under this Plan shall constitute an employment contract with the Company, any Subsidiary and/or its affiliates.

7.5 Non-Exclusivity of Plan. Neither the adoption of this Plan by the Board nor the submission of this Plan to the stockholders of the Company for approval, if applicable, shall be construed as creating any limitations on the power of the Board or the Committee to adopt such other incentive arrangements as either may deem desirable.

7.6 Tax Withholding. To the extent required by applicable federal, state, local or foreign law, a Participant shall be required to satisfy, in a manner satisfactory to the Company, any withholding tax obligations that arise by reason of the grant, vesting or settlement of an award hereunder. The Company and its Subsidiaries shall not be required to issue Common Shares, make any payment or to recognize the transfer or disposition of Common Shares until such obligations are satisfied. The Committee may provide for or permit the statutory withholding obligations to be satisfied through the mandatory or elective sale of Common Shares and/or by having the Company withhold a portion of the Common Shares that otherwise would be issued to him or her upon the vesting or settlement of DSUs or Matching RSUs, or by tendering Common Shares previously acquired.

7.7 Governing Law. This Plan and any agreements or other documents hereunder shall be interpreted and construed in accordance with the laws of the Delaware and applicable federal law.

7.8 Compliance with Law. This Plan, the grant, issuance, vesting and settlement of awards hereunder, and the obligation of the Company to sell, issue or deliver Common Shares under such awards, shall be subject to all applicable foreign, federal, state and local laws, rules and regulations, stock exchange rules and regulations, and to such approvals by any governmental or regulatory agency as may be required. The Company shall not be required to register in a Participant's name or deliver any Common Shares prior to the completion of any registration or qualification of such shares under any foreign, federal,

state or local law or any ruling or regulation of any government body which the Committee shall determine to be necessary or advisable. To the extent the Company is unable to or the Committee deems it infeasible to obtain authority from any regulatory body having jurisdiction, which authority is deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Common Shares hereunder, the Company and its Subsidiaries shall be relieved of any liability with respect to the failure to issue or sell such Common Shares as to which such requisite authority shall not have been obtained. No Common Shares shall be issued and/or transferable under any other award unless a registration statement with respect to the Common Shares is effective and current or the Company has determined that such registration is unnecessary

7.9 Successors. All obligations of the Company under this Plan with respect to awards granted hereunder shall be binding on any successor to the Company, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation, or otherwise, of all or substantially all of the equity and/or assets of the Company.

## **8. Claims Procedures.**

8.1 Claim. The Committee shall establish rules and procedures to be followed by Participants and their beneficiaries in (a) filing claims for benefits, and (b) for furnishing and verifying proof necessary to establish the right to benefits in accordance with this Plan, consistent with the remainder of this Section 8. Such rules and procedures shall require that claims and proof be made in writing and directed to the Committee.

8.2 Review of Claim. The Committee or its designee shall review all claims for benefits. Upon receipt by the Committee of such a claim, it shall determine all facts which are necessary to establish the right of the claimant to benefits under the provisions of this Plan and the amount thereof as herein provided within ninety (90) days of receipt of such claim. If prior to the expiration of the initial ninety (90) day period, the Committee determines additional time is needed to come to a determination on the claim, the Committee shall provide written notice to the Participant, beneficiary or other claimant of the need for the extension, not to exceed a total of one hundred eighty (180) days from the date the application was received.

8.3 Notice of Denial of Claim. In the event that any Participant, beneficiary or other claimant claims to be entitled to a benefit under this Plan, and the Committee determines that such claim should be denied, in whole or in part, the Committee shall, in writing, notify such claimant that the claim has been denied, in whole or in part, setting forth the specific reasons for such denial. Such notification shall be written in a manner reasonably expected to be understood by such claimant, shall refer to the specific sections of the Plan relied on, shall describe any additional material or information necessary for the claimant to perfect the claim, shall provide an explanation of why such material or information is necessary, and, where appropriate, shall include an explanation of how the claimant can obtain reconsideration of such denial.

8.4 Reconsideration of Denied Claim.

(a) Within sixty (60) days after receipt of the notice of the denial of a claim, such claimant or duly authorized representative may request, by mailing or delivery of such written notice to the Committee, a reconsideration by the Committee of the decision denying the claim. If the claimant or duly authorized representative fails to request such a reconsideration within such sixty (60) day period, it shall be conclusively determined for all purposes of this Plan that the denial of such claim by the Committee is correct. If such claimant or duly authorized representative requests a reconsideration within such sixty (60) day period, the claimant or duly authorized representative shall have thirty (30) days after filing a request for reconsideration to submit additional written material in support of the claim, review pertinent documents, and submit issues and comments in writing.

(b) After such reconsideration request, the Committee shall determine within sixty (60) days of receipt of the claimant's request for reconsideration whether such denial of the claim was correct and shall notify such claimant in writing of its determination. The written notice of the Committee's decision shall be in writing and shall include specific reasons for the decision, shall be written in a manner reasonably calculated to be understood by the claimant, and shall identify specific references to the pertinent Plan provisions on which the decision is based. In the event of special circumstances determined by the Committee, the time for the Committee to make a decision may be extended by an additional sixty (60) days upon written notice to the claimant prior to the commencement of the extension.

**SUBSIDIARIES OF THE REGISTRANT**

- a) CoStar Realty Information, Inc., a Delaware corporation
- b) CoStar Limited, a U.K. company
- c) CoStar UK Limited, a U.K. company
- d) Grecam S.A.S., a France Societ e par Actions Simplifi e
- e) CoStar Portfolio Strategy, LLC, a Delaware limited liability company
- f) Property and Portfolio Research Ltd., a U.K. company
- g) CoStar Realty Information Canada Ltd., a British Columbia company
- h) CoStar International LLC., a Delaware limited liability company
- i) CoStar Field Research, LLC, a Delaware limited liability company
- j) Network Communications, LLC., a Georgia limited liability company
- k) CoStar Europe Ltd., a U.K. company
- l) CoStar Espa a, S.L., a Spanish company
- m) Thomas Daily GmbH, a German company
- n) Westside Rentals, LLC, a California limited liability company
- o) Westside Credit Services, LLC, a California limited liability company
- p) CS Land LLC, a Delaware limited liability company
- q) The Screening Pros, LLC, a California limited liability company

**Consent of Independent Registered Public Accounting Firm**

We consent to the incorporation by reference in the following Registration Statements:

- (1) Registration Statement Number 333-135709 on Form S-8 pertaining to the CoStar Group, Inc. Employee Stock Purchase Plan,
- (2) Registration Statement Number 333-206929 on Form S-8 pertaining to the CoStar Group, Inc. Amended and Restated Employee Stock Purchase Plan, and
- (3) Registration Statement Number 333-143968 on Form S-8 pertaining to the CoStar Group, Inc. 2007 Stock Incentive Plan, as amended,
- (4) Registration Statement Number 333-167424 on Form S-8 pertaining to the CoStar Group, Inc. 2007 Stock Incentive Plan, as amended,
- (5) Registration Statement Number 333-182377 on Form S-8 pertaining to the CoStar Group, Inc. 2007 Stock Incentive Plan, as amended,
- (6) Registration Statement Number 333-212278 on Form S-8 pertaining to the CoStar Group, Inc. 2016 Stock Incentive Plan, and
- (7) Registration Statement Number 333-220607 on Form S-3 of CoStar Group, Inc.

of our reports dated February 22, 2018, with respect to the consolidated financial statements and schedule of CoStar Group, Inc. and the effectiveness of internal control over financial reporting of CoStar Group, Inc., included in this Annual Report (Form 10-K) of CoStar Group, Inc. for the year ended December 31, 2017.

/s/ Ernst & Young LLP

Tysons, Virginia

February 22, 2018

## CERTIFICATION

I, Andrew C. Florance, certify that:

1. I have reviewed this annual report on Form 10-K of CoStar Group, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) 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(s) 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 22, 2018

By: /s/ Andrew C. Florance

Andrew C. Florance

Chief Executive Officer

(Principal Executive Officer and Duly Authorized Officer)

## CERTIFICATION

I, Scott T. Wheeler certify that:

1. I have reviewed this annual report on Form 10-K of CoStar Group, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) 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(s) 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 22, 2018

By: /s/ Scott T. Wheeler

Scott T. Wheeler

Chief Financial Officer

(Principal Financial and Accounting Officer and Duly Authorized Officer)



CoStar Group, Inc.  
1331 L Street, NW  
Washington, DC 20005

February 22, 2018

Securities and Exchange Commission  
100 F Street, NE  
Washington, DC 20549

**Re: Certification Of Principal Executive Officer Pursuant To 18 U.S.C. Sec. 1350**

Dear Ladies and Gentlemen:

In connection with the accompanying Annual Report on Form 10-K of CoStar Group, Inc., for the year ended December 31, 2017, I, Andrew C. Florance, Chief Executive Officer of CoStar Group, Inc., hereby certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- 1) such Annual Report on Form 10-K of CoStar Group, Inc., for the year ended December 31, 2017, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o (d)); and
- 2) the information contained in such Annual Report on Form 10-K of CoStar Group, Inc., for the year ended December 31, 2017, fairly presents, in all material respects, the financial condition and results of operations of CoStar Group, Inc.

By: /s/ Andrew C. Florance  
Andrew C. Florance  
Chief Executive Officer  
(Principal Executive Officer and Duly Authorized Officer)

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to CoStar Group, Inc. and will be retained by CoStar Group, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

In accordance with Item 601 of Regulation S-K, this certification is being “furnished” as Exhibit 32.1 to CoStar Group, Inc.’s annual report and shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934 (the “Exchange Act”) or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act, except as expressly set forth by specific reference in such a filing.

CoStar Group, Inc.  
1331 L Street, NW  
Washington, DC 20005

February 22, 2018

Securities and Exchange Commission  
100 F Street, NE  
Washington, DC 20549

**Re: Certification Of Principal Financial Officer Pursuant To 18 U.S.C. Sec. 1350**

Dear Ladies and Gentlemen:

In connection with the accompanying Annual Report on Form 10-K of CoStar Group, Inc., for the year ended December 31, 2017, I, Scott T. Wheeler, Chief Financial Officer of CoStar Group, Inc., hereby certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- 1) such Annual Report on Form 10-K of CoStar Group, Inc., for the year ended December 31, 2017, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o (d)); and
- 2) the information contained in such Annual Report on Form 10-K of CoStar Group, Inc., for the year ended December 31, 2017, fairly presents, in all material respects, the financial condition and results of operations of CoStar Group, Inc.

By: /s/ Scott T. Wheeler  
Scott T. Wheeler  
Chief Financial Officer  
(Principal Financial and Accounting Officer and Duly  
Authorized Officer)

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to CoStar Group, Inc. and will be retained by CoStar Group, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

In accordance with Item 601 of Regulation S-K, this certification is being “furnished” as Exhibit 32.2 to CoStar Group, Inc.’s annual report and shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934 (the “Exchange Act”) or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act, except as expressly set forth by specific reference in such a filing.