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

FORM 10-Q

[X] QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended March 31, 2019

OR

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

For the transition period from _____ to _____

Commission file number 0-24531



CoStar Group, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**52-2091509**
(State or other jurisdiction of incorporation or organization)	*(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)

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 x No o

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

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

Large accelerated filer x	Accelerated filer o
Non-accelerated filer o	Smaller reporting company o
	Emerging growth company o

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. o

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

As of April 19, 2019, there were 36,541,576 shares of the registrant's common stock outstanding.

COSTAR GROUP, INC.
FORM 10-Q
TABLE OF CONTENTS

PART I	**FINANCIAL INFORMATION**	
Item 1.	Financial Statements	4
	Condensed Consolidated Statements of Operations	4
	Condensed Consolidated Statements of Comprehensive Income	5
	Condensed Consolidated Balance Sheets	6
	Condensed Consolidated Statements of Changes in Stockholders' Equity	7
	Condensed Consolidated Statements of Cash Flows	8
	Notes to Condensed Consolidated Financial Statements	9
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	27
Item 3.	Quantitative and Qualitative Disclosures About Market Risk	38
Item 4.	Controls and Procedures	39
PART II	**OTHER INFORMATION**	
Item 1.	Legal Proceedings	40
Item 1A.	Risk Factors	40
Item 2.	Unregistered Sales of Equity Securities and Use of Proceeds	41
Item 3.	Defaults Upon Senior Securities	41
Item 4.	Mine Safety Disclosures	41
Item 5.	Other Information	41
Item 6.	Exhibits	42
Signatures		43

PART I — FINANCIAL INFORMATION

Item 1. Financial Statements

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

	Three Months Ended March 31,	
	2019	**2018**
Revenues	$ 328,425	$ 273,718
Cost of revenues	71,153	62,477
Gross profit	257,272	211,241
Operating expenses:		
Selling and marketing (excluding customer base amortization)	88,094	88,490
Software development	27,928	22,913
General and administrative	40,076	40,590
Customer base amortization	7,682	5,803
	163,780	157,796
Income from operations	93,492	53,445
Interest and other income	4,945	2,987
Interest and other expense	(732)	(690)
Income before income taxes	97,705	55,742
Income tax expense	12,536	3,511
Net income	$ 85,169	$ 52,231
Net income per share - basic	$ 2.35	$ 1.46
Net income per share - diluted	$ 2.33	$ 1.44
Weighted average outstanding shares - basic	36,237	35,893
Weighted average outstanding shares - diluted	36,567	36,350

See accompanying notes.

COSTAR GROUP, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(in thousands)
(unaudited)

	Three Months Ended March 31,	
	2019	**2018**
Net income	$ 85,169	$ 52,231
Other comprehensive income, net of tax		
Foreign currency translation adjustment	380	951
Total other comprehensive income	380	951
Total comprehensive income	$ 85,549	$ 53,182

See accompanying notes.

COSTAR GROUP, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands)
(unaudited)

	March 31, 2019	December 31, 2018
ASSETS		
Current assets:		
Cash and cash equivalents	$ 1,232,817	$ 1,100,416
Accounts receivable, less allowance of $4,790 and $5,709 as of March 31, 2019 and December 31, 2018, respectively	92,841	89,192
Prepaid expenses and other current assets	20,713	23,690
Total current assets	1,346,371	1,213,298
Long-term investments	10,070	10,070
Deferred income taxes, net	6,451	7,469
Property and equipment, net	85,978	83,303
Lease right-of-use assets	112,042	—
Goodwill	1,612,065	1,611,535
Intangible assets, net	275,750	288,911
Deferred commission costs, net	77,375	76,031
Deposits and other assets	7,274	7,432
Income tax receivable	14,908	14,908
Total assets	$ 3,548,284	$ 3,312,957
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 7,919	$ 6,327
Accrued wages and commissions	49,264	45,588
Accrued expenses	36,291	29,821
Deferred gain on the sale of building	—	2,523
Income taxes payable	22,536	14,288
Deferred rent	—	4,153
Lease liabilities	26,062	—
Deferred revenue	56,155	51,459
Total current liabilities	198,227	154,159
Deferred gain on the sale of building	—	13,669
Deferred rent	—	31,944
Deferred income taxes, net	76,682	69,857
Income taxes payable	17,443	17,386
Lease and other long-term liabilities	127,318	4,000
Total liabilities	419,670	291,015
Total stockholders' equity	3,128,614	3,021,942
Total liabilities and stockholders' equity	$ 3,548,284	$ 3,312,957

See accompanying notes.

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

	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Retained Earnings	Total Stockholders' Equity
	Shares	Amount				
Balance at December 31, 2018	36,446	$ 364	$ 2,419,812	$ (11,688)	$ 613,454	$ 3,021,942
Cumulative effect of adoption of new accounting standard, net of tax	—	—	—	—	12,057	12,057
Balance at January 1, 2019	36,446	$ 364	$ 2,419,812	$ (11,688)	$ 625,511	$ 3,033,999
Net income	—	—	—	—	85,169	85,169
Other comprehensive income	—	—	—	380	—	380
Exercise of stock options	79	1	10,637	—	—	10,638
Restricted stock grants	132	1	(1)	—	—	—
Restricted stock grants surrendered	(43)	—	(18,679)	—	—	(18,679)
Stock-based compensation expense	—	—	12,034	—	—	12,034
Management stock purchase plan	—	—	3,491	—	—	3,491
Employee stock purchase plan	4	—	1,582	—	—	1,582
Balance at March 31, 2019	36,618	$ 366	$ 2,428,876	$ (11,308)	$ 710,680	$ 3,128,614

See accompanying notes.

	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Retained Earnings	Total Stockholders' Equity
	Shares	Amount				
Balance at December 31, 2017	36,107	$ 361	$ 2,339,253	$ (9,020)	$ 320,656	$ 2,651,250
Cumulative effect of adoption of new accounting standard, net of tax	—	—	—	—	54,464	54,464
Balance at January 1, 2018	36,107	$ 361	$ 2,339,253	$ (9,020)	$ 375,120	$ 2,705,714
Net income	—	—	—	—	52,231	52,231
Other comprehensive income	—	—	—	951	—	951
Exercise of stock options	111	1	9,327	—	—	9,328
Restricted stock grants	114	1	(1)	—	—	—
Restricted stock grants surrendered	(47)	—	(15,392)	—	—	(15,392)
Stock-based compensation expense	—	—	10,335	—	—	10,335
Employee stock purchase plan	4	—	1,431	—	—	1,431
Stock issued for acquisitions	103	1	36,365	—	—	36,366
Balance at March 31, 2018	36,392	$ 364	$ 2,381,318	$ (8,069)	$ 427,351	$ 2,800,964

See accompanying notes.

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

	Three Months Ended March 31,	
	2019	**2018**
Operating activities:		
Net income	$ 85,169	$ 52,231
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	19,659	16,983
Amortization of deferred commissions costs	12,407	12,006
Amortization of debt issuance costs	219	219
Stock-based compensation expense	12,029	10,412
Deferred income taxes, net	3,702	1,851
Bad debt expense	2,185	1,431
Changes in operating assets and liabilities, net of acquisitions:		
Accounts receivable	(5,835)	(2,511)
Prepaid expenses and other current assets	206	(9,522)
Deferred commissions	(13,729)	(16,263)
Lease right-of-use and other assets	5,138	(3,412)
Accounts payable and other liabilities	18,636	4,288
Deferred revenue	8,708	5,272
Net cash provided by operating activities	148,494	72,985
Investing activities:		
Purchases of property and equipment and other assets	(9,429)	(8,617)
Cash paid for acquisitions, net of cash acquired	—	(340,074)
Net cash used in investing activities	(9,429)	(348,691)
Financing activities:		
Repurchase of restricted stock to satisfy tax withholding obligations	(18,679)	(15,392)
Proceeds from exercise of stock options and employee stock purchase plan	12,061	10,616
Net cash used in financing activities	(6,618)	(4,776)
Effect of foreign currency exchange rates on cash and cash equivalents	(46)	448
Net increase (decrease) in cash and cash equivalents	132,401	(280,034)
Cash and cash equivalents at the beginning of period	1,100,416	1,211,463
Cash and cash equivalents at the end of period	$ 1,232,817	$ 931,429
Supplemental cash flow disclosures:		
Interest paid	$ 519	$ 381
Income taxes paid	521	533
Supplemental non-cash investing and financing activities:		
Stock issued in connection with acquisition - ForRent	$ —	$ 36,366

See accompanying notes.

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 condensed 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.

Interim Financial Statements

The accompanying unaudited condensed consolidated financial statements of the Company have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP") for interim financial information. In the opinion of the Company's management, the financial statements reflect all adjustments, consisting only of a normal recurring nature, necessary to present fairly the Company's financial position at March 31, 2019 and December 31, 2018, the results of its operations for the three months ended March 31, 2019 and 2018, its comprehensive income for the three months ended March 31, 2019 and 2018, its changes in stockholders' equity for the three months ended March 31, 2019 and 2018, and its cash flows for the three months ended March 31, 2019 and 2018.

Certain notes and other information have been condensed or omitted from the interim financial statements presented in this Quarterly Report on Form 10-Q. Therefore, these financial statements should be read in conjunction with the Company's Annual Report on Form 10-K for the year ended December 31, 2018.

Use of Estimates

The preparation of financial statements in conformity with 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, accounting for business combinations, stock-based compensation, estimating the Company's incremental borrowing rate for its leases, 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 primarily by (i) providing access to its proprietary database of commercial real estate information and (ii) providing online marketplaces for professional property management companies, property owners, brokers, and landlords, in each case 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. The Company's subscription-based license agreements renew automatically, and a majority have a term of one year.

The Company analyzes contracts to determine the appropriate revenue recognition using the following steps: (i) identification of contracts with customers, (ii) identification of distinct performance obligations in the contract, (iii) determination of contract transaction price, (iv) allocation of contract transaction price to the performance obligations and (v) determination of revenue recognition based on timing of satisfaction of the performance obligation(s).

The Company recognizes revenues upon the satisfaction of its performance obligation(s) (upon transfer of control of promised services to its customers) in an amount that reflects the consideration to which it expects to be entitled to in exchange for those services. Revenues from subscription-based services are recognized on a straight-line basis over the term of the agreement.

The Company's contracts with customers often include promises to transfer multiple services. For these contracts, the Company accounts for individual performance obligations separately if they are distinct. Determining whether services are considered distinct performance obligations may require significant judgment. Judgment is required to determine the standalone selling price ("SSP") for each distinct performance obligation. In instances where SSP is not directly observable, such as when the Company does not sell the services separately, the Company determines the SSP using available information, including market conditions and other observable inputs.

Deferred revenue results from amounts billed in advance to customers or cash received from customers in advance of the sale of subscription licenses and is recognized over the term of the license agreement.

Contract assets represent a conditional right to consideration for satisfied performance obligations that become a receivable when the conditions are satisfied. Contract assets are generated when contractual billing schedules differ from revenue recognition timing.

Certain sales commissions are considered incremental and recoverable costs of obtaining a contract with a customer. Sales commissions incurred for obtaining new contracts are deferred and then amortized as selling and marketing expenses on a straight-line basis over a period of benefit that the Company has determined to be 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 renewal rates, and industry competition. Certain commission costs are not capitalized as they do not represent incremental costs of obtaining a contract.

See Note 3 for further discussion of the Company's revenue recognition.

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, technology and other intangible assets.

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 $33 million and $23 million for the three months ended March 31, 2019 and 2018, respectively.

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 condensed consolidated statements of operations. There were no material gains or losses from foreign currency exchange transactions for the three months ended March 31, 2019 and 2018.

Accumulated Other Comprehensive Loss

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

	March 31, 2019	December 31, 2018
Foreign currency translation adjustment	$ (10,578)	$ (10,958)
Net unrealized loss on investments, net of tax	(730)	(730)
Total accumulated other comprehensive loss	$ (11,308)	$ (11,688)

There were no amounts reclassified out of accumulated other comprehensive loss to the condensed consolidated statements of operations for the three months ended March 31, 2019 and 2018. The foreign currency translation adjustment includes intra-entity foreign currency transactions that are of a long-term investment nature.

See Note 5 for additional information regarding unrealized gains and losses recognized on investments.

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 condensed 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 determines it is more likely than not that some portion or all of an asset may not be realized. Interest and penalties related to income tax matters are recognized in income tax expense.

See Note 11 for additional information regarding income taxes.

Net Income Per Share

Net income per share is computed by dividing net income by the weighted-average number of common shares outstanding during the period on a basic and diluted basis.

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

	Three Months Ended March 31,	
	2019	2018
Numerator:		
Net income	$ 85,169	$ 52,231
Denominator:		
Denominator for basic net income per share — weighted-average outstanding shares	36,237	35,893
Effect of dilutive securities:		
Stock options and restricted stock awards	330	457
Denominator for diluted net income per share — weighted-average outstanding shares	36,567	36,350
Net income per share — basic	$ 2.35	$ 1.46
Net income per share — diluted	$ 2.33	$ 1.44

The Company’s potentially dilutive securities include outstanding stock options, unvested performance-based restricted stock awards and restricted stock units and awards. 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.

The following table summarizes the shares underlying the performance-based restricted stock awards excluded from the basic and diluted earnings per share calculations (in thousands):

	Three Months Ended March 31,	
	2019	2018
Performance-based restricted stock awards	89	84

Diluted net income per share considers the impact of potentially dilutive securities except when the inclusion of the potentially dilutive securities would have an anti-dilutive effect. Stock options to purchase approximately 52,000 and 83,000 shares that were outstanding for the three months ended March 31, 2019 and 2018, respectively, were not included in the computation of diluted net income per share because the inclusion of the potentially dilutive securities 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 where the fair value of such equity instruments is recognized as expense in the condensed consolidated statements of operations as they are earned.

For stock-based awards that vest over set time periods, compensation expense is measured based on the fair value of the awards at the grant date, and is recognized on a straight-line basis over the vesting periods of the awards, net of an estimated forfeiture rate. 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 Company's initial estimates of the achievement of the performance conditions change, the related stock-based compensation expense and timing 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.

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

	Three Months Ended March 31,	
	2019	2018
Cost of revenues	$ 2,058	$ 1,431
Selling and marketing (excluding customer base amortization)	1,638	1,835
Software development	2,056	1,729
General and administrative	6,277	5,417
Total stock-based compensation expense	$ 12,029	$ 10,412

Leases

On January 1, 2019, the Company adopted Accounting Standards Update (“ASU”) 2016-02, *Leases*, later codified as Accounting Standards Codification ("ASC") 842 (*"ASC 842"*), using the modified retrospective method. For periods presented prior to the adoption date, the Company continues to follow its previous policy under *ASC 840, Leases*. Refer to the Company’s Annual Report on Form 10-K for the year ended December 31, 2018, filed with the Securities and Exchange Commission on February 28, 2019, for further details of the Company’s policy prior to adoption of *ASC 842*.

The determination of whether an arrangement contains a lease and the classification of a lease, if applicable, is made at lease commencement, at which time the Company also measures and recognizes a right-of-use ("ROU") asset, representing the Company’s right to use the underlying asset, and a lease liability, representing the Company’s obligation to make lease payments under the terms of the arrangement. For the purposes of recognizing ROU assets and lease liabilities associated with the Company’s leases, the Company has elected the practical expedient to not recognize a ROU asset or lease liability for short-term leases, which are leases with a term of twelve months or less. The lease term is defined as the noncancelable portion of the lease term plus any periods covered by an option to extend the lease if it is reasonably certain that that the option will be exercised.

In determining the amount of lease payments used in measuring ROU assets and lease liabilities, the Company has elected the practical expedient not to separate non-lease components from lease components for all classes of underlying assets. Consideration considered part of the lease payments used to measure ROU assets and lease liabilities generally includes fixed payments and variable payments based on either an index or a rate. The ROU asset also includes any lease prepayments, offset by lease incentives. ROU assets and liabilities are recognized at the lease commencement date based on the present value of lease payments over the lease term. The rates implicit within the Company's leases are generally not determinable, therefore, the Company's incremental borrowing rate is used to determine the present value of lease payments. The determination of the Company’s incremental borrowing rate requires judgment. Because the Company currently has no outstanding debt, the incremental borrowing rate for each lease is primarily based on publicly-available information for companies within the same industry and with similar credit profiles. The rate is then adjusted for the impact of collateralization, the lease term and other specific terms included in the Company’s lease arrangements. The incremental borrowing rate is determined at lease commencement, or as of January 1, 2019 for operating leases in existence upon adoption of *ASC 842*. The incremental borrowing rate is subsequently reassessed upon a modification to the lease arrangement. ROU assets are subsequently assessed for impairment in accordance with the Company’s accounting policy for long-lived assets.

Lease costs related to the Company's operating leases are generally recognized as a single ratable lease cost over the lease term.

See Note 7 for further discussion of the Company’s accounting for leases.

Long-Lived Assets, Intangible Assets and Goodwill

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 undiscounted 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.

Goodwill is tested annually for impairment by each reporting unit on October 1 of each year or more frequently if an event or other circumstance indicates that we may not recover the carrying value of the asset. 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 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.

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. To the extent that debt is outstanding, these amounts are reflected in the consolidated balance sheets as direct deductions from a combination of the current and long-term portions of debt, otherwise, they are reflected as current and long-term assets. 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.

See Note 10 for additional information regarding the Company's revolving credit facility.

Business Combinations

The Company allocates the purchase consideration related to business combinations to the identifiable tangible and intangible assets acquired, and liabilities assumed based on their estimated fair values. The purchase consideration is determined based on the fair value of the assets transferred, liabilities incurred and equity interests issued, after considering any transactions that are separate from the business combination. 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 and contingent liabilities. Significant estimates in valuing certain intangible assets include, but are not limited to, future expected cash flows from acquired customer bases, acquired technology and acquired trade names, useful lives, royalty rates and discount rates. 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.

For a given acquisition, the Company may identify certain pre-acquisition contingencies as of the acquisition date and may extend its review and evaluation of these pre-acquisition contingencies throughout the measurement period in order to obtain sufficient information to assess whether the Company includes these contingencies as a part of the fair value estimates of assets acquired and liabilities assumed and, if so, to determine their estimated amounts.

If the Company cannot reasonably determine the fair value of a pre-acquisition contingency (non-income tax related) by the end of the measurement period, which is generally the case given the nature of such matters, the Company will recognize an asset or a liability for such pre-acquisition contingency if: (i) it is probable that an asset existed or a liability had been assumed at the acquisition date and (ii) the amount of the asset or liability can be reasonably estimated. Subsequent to the measurement period, changes in the Company's estimates of such contingencies will affect earnings and could have a material effect on its results of operations and financial position.

In addition, uncertain tax positions and tax related valuation allowances assumed in connection with a business combination are initially estimated as of the acquisition date. The Company reevaluates these items based upon facts and circumstances that existed as of the acquisition date with any adjustments to its preliminary estimates being recorded to goodwill provided that the Company is within the measurement period. Subsequent to the measurement period, changes to these uncertain tax positions and tax related valuation allowances will affect the Company's provision for income taxes in its condensed consolidated statements of operations and comprehensive income and could have a material impact on its results of operations and financial position.

Recent Accounting Pronouncements

Recently Adopted Accounting Pronouncements

On January 1, 2019, the Company adopted ASU 2016-02, *Leases*, using the modified retrospective method which allows for the application of the transition provisions at the beginning of the period of adoption, rather than at the beginning of the earliest comparative period presented in these condensed consolidated financial statements. As permitted by the guidance, the Company elected to retain the original lease classification and historical accounting for initial direct costs for leases existing prior to the adoption date and did not reassess contracts entered into prior to the adoption date for the existence of a lease. The Company also did not recognize ROU assets and lease liabilities for short-term leases, which are leases in existence as of the adoption date with an original term of twelve months or less.

As a result of the adoption of the standard, the Company recognized ROU assets of $116 million, including prepaid rent and deferred rent that was reclassified and recognized as of the adoption date as a component of the ROU asset, as well as lease liabilities of $150 million, on its condensed consolidated balance sheet. The assets and liabilities recognized upon application of the transition provisions were primarily associated with existing office leases. The Company also recognized a cumulative-effect adjustment to beginning retained earnings of $12 million, net of tax, as of January 1, 2019 to recognize the remaining deferred gain on the sale-leaseback of the Company's corporate headquarters building, pursuant to the guidance in *ASC 842*.

Recent Accounting Pronouncements Not Yet Adopted

In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurements (subsequent to adoption of ASU 2018-13, Fair Value Measurement)*. The ASU was issued to eliminate certain disclosure requirements for fair value measurements, and add and modify other disclosure requirements, as part of its disclosure framework project, including additional requirements for public companies to disclose certain information about the significant unobservable inputs for Level 3 fair value measurements. This guidance is effective for fiscal years beginning after December 15, 2019 and for interim periods within those fiscal years. The Company is currently evaluating the impact this guidance will have on its financial statements and related disclosures.

In August 2018, the FASB issued ASU 2018-15, *Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract.* ASU 2018-15 requires a customer in a cloud computing arrangement that is a service contract to follow the internal-use software guidance in Accounting Standards Codification 350-40 to determine which implementation costs to defer and recognize as an asset. For public business entities, the guidance is effective for annual and interim periods beginning after December 15, 2019. The Company is currently evaluating the impact this guidance will have on its financial statements and related disclosures.

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.

3. REVENUE FROM CONTRACTS WITH CUSTOMERS

Disaggregated Revenue

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

	Three Months Ended March 31,					
	2019			2018		
	North America	International	Total	North America	International	Total
Information and analytics						
CoStar Suite	$ 140,973	$ 6,728	$ 147,701	$ 123,886	$ 6,475	$ 130,361
Information services	16,591	2,259	18,850	12,612	2,448	15,060
Online marketplaces						
Multifamily	114,268	—	114,268	87,683	—	87,683
Commercial property and land	47,405	201	47,606	40,614	—	40,614
Total revenues	$ 319,237	$ 9,188	$ 328,425	$ 264,795	$ 8,923	$ 273,718

Deferred Revenue

Changes in deferred revenue for the period were as follows (in thousands):

Balance at December 31, 2018	$ 51,459
Revenue recognized in the current period from the amounts in the beginning balance	(30,015)
New deferrals, net of amounts recognized in the current period	38,723
Effects of foreign currency	134
Balance at March 31, 2019[(1)]	$ 60,301

[(1)] Deferred revenue is comprised of $56 million of current liabilities and $4 million of noncurrent liabilities classified within lease and other long-term liabilities on the Company's condensed consolidated balance sheet as of March 31, 2019.

Contract Assets

The Company had contract assets of $2 million as of March 31, 2019 and December 31, 2018, which are generated when contractual billing schedules differ from revenue recognition timing. Contract assets represent a conditional right to consideration for satisfied performance obligations that becomes a receivable when the conditions are satisfied.

Commissions

The Company recognized $12 million of amortization of deferred commissions included in selling and marketing expense in the Company's condensed consolidated statements of operations for both the three months ended March 31, 2019 and 2018. The Company determined that no deferred commissions were impaired as of March 31, 2019.

Commissions expense activity for the three months ended March 31, 2019 and 2018 was as follows (in thousands):

	Three Months Ended March 31,	
	2019	2018
Commissions incurred	$ 18,551	$ 23,595
Commissions capitalized in the current period	(13,729)	(16,263)
Amortization of deferred commissions costs	12,407	12,006
Total commissions expense	$ 17,229	$ 19,338

Unsatisfied Performance Obligations

Remaining contract consideration for which revenue has not been recognized due to unsatisfied performance obligations was approximately $206 million at March 31, 2019, which the Company expects to recognize over the next five years. This amount does not include contract consideration for contracts with a duration of one year or less.

4. ACQUISITIONS

On February 21, 2018 (the "Acquisition Date"), the Company acquired all of the issued and outstanding capital stock of DE Holdings, Inc., including its ForRent division ("ForRent"), a wholly owned subsidiary of Dominion Enterprises ("Seller"), for a purchase price of approximately $376 million. The purchase price was comprised of approximately $340 million in cash and 103,280 shares of Company common stock, valued at approximately $36 million. ForRent's primary service is digital advertising provided through a network of four multifamily websites. The acquisition is expected to yield increased revenue, significant cost synergies and an improved competitive position in the industry. The Company applied the acquisition method to account for the ForRent transaction, which requires that assets acquired and liabilities assumed be recorded at their fair values as of the acquisition date.

The following table summarizes the amounts recorded for acquired assets and assumed liabilities recorded at their fair values as of the Acquisition Date (in thousands):

	Final: February 21, 2018
Cash and cash equivalents	$ 59
Accounts receivable	8,769
Indemnification asset	5,443
Goodwill	266,595
Intangible assets	141,300
Deferred tax liabilities	(34,032)
Contingent sales tax liability	(6,260)
State uncertain income tax position liability	(2,047)
Other assets and liabilities	(3,535)
Fair value of identifiable net assets acquired	$ 376,292

The net assets of ForRent were recorded at their estimated fair values. In valuing acquired assets and assumed liabilities, fair value estimates were based primarily on future expected cash flows, market rate assumptions for contractual obligations, and appropriate discount rates. Measurement period adjustments related to the determination of working capital as of the Acquisition Date and recognized in 2018, were not material.

The acquired customer base for the acquisition is composed of acquired customer contracts and the related customer relationships, and has a weighted average estimated useful life of ten years. The acquired technology has an estimated useful life of three years. The acquired trade name has a weighted average estimated useful life of ten years. The acquired building photography

has an estimated useful life of one year. Amortization of the acquired customer base is recognized on an accelerated basis related to the expected economic benefit of the intangible asset, while amortization of the acquired technology, acquired building photography and acquired trade names and other intangible assets is recognized on a straight-line basis over their respective estimated useful lives. Goodwill recorded in connection with this acquisition is not amortized, but is subject to an annual impairment test. The $267 million of goodwill recorded as part of the acquisition is associated with the Company's North America operating segment. $8 million of the goodwill recognized is expected to be deductible for income tax purposes in future periods.

Goodwill is calculated as the excess of the consideration transferred over the net assets recognized and represents the future economic benefits arising from other assets acquired that could not be individually identified and separately recognized. Specifically, the goodwill recorded as part of the ForRent acquisition includes but is not limited to: (i) the expected synergies and other benefits that the Company believes will result from combining its operations with ForRent's operations; and (ii) any intangible assets that do not qualify for separate recognition, such as the assembled workforce.

Upon acquisition, the Company assessed the (i) probability of a contingent sales tax liability and (ii) a state uncertain income tax position liability due to apportionment factors, and recorded accruals of $6 million and $2 million, respectively. The Company could not determine the fair value for the pre-acquisition state sales tax liability and therefore estimated a liability in accordance with *ASC 450 Contingencies*, using a state-by-state assessment. The uncertain income tax position was determined in accordance with the provisions of *ASC 740 Income Tax,* and was recorded as part of the purchase price allocation. The Seller has provided an indemnity for tax liabilities related to periods prior to the acquisition. The Seller's indemnification for sales taxes in the state of Texas is limited to approximately $2 million. The total indemnification asset established as of the acquisition date was $5 million. $1 million of the uncertain income tax position liability and related indemnification asset recognized as of the acquisition date was reversed during 2018, upon expiration of the statute of limitations applicable to the uncertain income tax position.

As part of the ForRent acquisition, the Company incurred $3 million of transaction costs during the three months ended March 31, 2018. Additionally, the Company paid $12 million cash into a cash escrow account for retention compensation for certain ForRent employees, payable if they remained employed by the Company for a defined six-month period following the acquisition or were earlier terminated without cause or resigned for good reason. In the event funds remained in the escrow account after the employees were compensated and the defined six-month period ended, those funds were remitted to the Seller. The Company expensed all of the retention compensation as the services were performed in the post-combination period in 2018.

Other Acquisitions

On October 12, 2018, the Company acquired Realla Ltd. ("Realla"), the operator of a commercial property listings and data management platform in the U.K., for £12 million ($15 million). The purchase agreement required an initial payment of £10 million ($13 million), net of cash acquired, at the time of closing, and the remainder of the purchase price is due one year following the acquisition date. In connection with the acquisition, the Company recorded goodwill and intangible assets of £8 million ($10 million) and £4 million ($5 million), respectively. The net assets of Realla were recorded at their estimated fair value. The estimated fair values are preliminary, subject to the final determination of net working capital as of the acquisition date and completion of the Company's assessment of certain tax matters.

On November 8, 2018, the Company acquired Cozy Services, Ltd. ("Cozy"), a leading provider of online rental solutions that provides a broad spectrum of services to both landlords and tenants, for $65 million, net of cash acquired. As part of the acquisition, the Company recorded goodwill and intangible assets of $53 million and $11 million, respectively. The net assets of Cozy were recorded at their estimated fair value. The estimated fair values are preliminary, subject to the final determination of net working capital and completion of the Company's assessment of certain tax matters.

Pro Forma Financial Information

The unaudited pro forma financial information presented below summarizes the combined results of operations for the Company and ForRent as though the companies were combined as of January 1, 2017. The unaudited pro forma financial information for all periods presented includes amortization charges from acquired intangible assets, retention compensation, as referenced above, and the related tax effects, along with certain other accounting effects, but excludes the impacts of any expected operational synergies. The unaudited pro forma financial information as presented below is for informational purposes only and is not necessarily indicative of the results of operations that would have been achieved if the acquisition had taken place on January 1, 2017.

The unaudited pro forma financial information for the three months ended March 31, 2018 combine the historical results of the Company for the three months ended March 31, 2018 and the historical results of ForRent for the period prior to the Acquisition Date and the effects of the pro forma adjustments listed above.

The unaudited pro forma financial information was as follows (in thousands, except per share data):

	Three Months Ended March 31, 2018
Revenue	$ 287,470
Net income	$ 52,839
Net income per share - basic	1.47
Net income per share - diluted	1.45

Revenue and net loss attributable to ForRent from February 21, 2018 through March 31, 2018 were $8 million and $8 million, respectively. The net loss was primarily due to personnel costs, including retention compensation, and the amortization of intangible assets upon acquisition.

5. INVESTMENTS

The Company's investments consist of long-term variable rate debt instruments with an auction reset feature, referred to as auction rate securities ("ARS"), classified as available-for-sale and carried at fair value.

Scheduled maturities of investments classified as available-for-sale as of March 31, 2019 are as follows (in thousands):

Maturity	Fair Value
Due:	
April 1, 2019 — March 31, 2020	$ —
April 1, 2020 — March 31, 2024	—
April 1, 2024 — March 31, 2029	—
After March 31, 2029	10,070
Available-for-sale investments	$ 10,070

The Company had no realized gains or losses on its investments for each of the three months ended March 31, 2019 and 2018, respectively. Realized gains and losses from the sale of available-for-sale securities are determined on a specific-identification basis.

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.

As of March 31, 2019, the amortized cost basis and fair value of investments classified as available-for-sale were as follows (in thousands):

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

As of December 31, 2018, the amortized cost basis and fair value of investments classified as available-for-sale were as follows (in thousands):

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

The unrealized losses on the Company's investments as of March 31, 2019 and December 31, 2018 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 March 31, 2019 and December 31, 2018. See Note 6 for further discussion of the fair value of the Company's financial assets.

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

	March 31, 2019		December 31, 2018	
	Aggregate Fair Value	Gross Unrealized Losses	Aggregate Fair Value	Gross Unrealized Losses
Auction rate securities	$ 10,070	$ (730)	$ 10,070	$ (730)
Investments in an unrealized loss position	$ 10,070	$ (730)	$ 10,070	$ (730)

The Company did not have any investments in an unrealized loss position for less than twelve months as of March 31, 2019 and December 31, 2018, respectively.

6. 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 March 31, 2019 (in thousands):

	Level 1	Level 2	Level 3	Total
Assets:				
Money market funds	$ 594,036	$ —	$ —	$ 594,036
Auction rate securities	—	—	10,070	10,070
Total assets measured at fair value	$ 594,036	$ —	$ 10,070	$ 604,106

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, 2018 (in thousands):

	Level 1	Level 2	Level 3	Total
Assets:				
Money market funds	$ 590,567	$ —	$ —	$ 590,567
Auction rate securities	—	—	10,070	10,070
Total assets measured at fair value	$ 590,567	$ —	$ 10,070	$ 600,637

The carrying value of accounts receivable, accounts payable and accrued expenses approximates fair value.

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.

The following table summarizes changes in fair value of the Company’s Level 3 assets from December 31, 2017 to March 31, 2019 (in thousands):

	Auction Rate Securities
Balance at December 31, 2017	$ 10,070
Decrease in unrealized loss included in accumulated other comprehensive loss	—
Balance at December 31, 2018	10,070
Decrease in unrealized loss included in accumulated other comprehensive loss	—
Balance at March 31, 2019	$ 10,070

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 March 31, 2019, 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 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 on the Company’s condensed consolidated balance sheet as of March 31, 2019. See Note 5 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 March 31, 2019. 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 models as of March 31, 2019 and December 31, 2018 was approximately 6%. 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 March 31, 2019, the Company determined there was no decline in the fair value of its ARS investments. If the issuers are unable to successfully close future auctions and/or their credit ratings deteriorate, the

Company may be required to record unrealized losses in accumulated other comprehensive loss or an other-than-temporary impairment charge to earnings on these investments.

7. LEASES

The Company has operating leases for its office facilities, data centers and certain vehicles, as well as finance leases for office equipment. The Company's leases have remaining terms of less than one year to ten years. The leases contain various renewal and termination options. The period which is subject to an option to extend the lease is included in the lease term if it is reasonably certain that the option will be exercised. The period which is subject to an option to terminate the lease is included if it is reasonably certain that the option will not be exercised.

Lease costs related to the Company's operating leases included in the condensed consolidated statement of operations were as follows (in thousands):

	Three Months Ended March 31, 2019
Operating lease costs:	
Cost of revenues	$ 3,238
Software development	952
Selling and marketing (excluding customer base amortization)	2,191
General and administrative	292
Total operating lease costs	$ 6,673

The impact of lease costs related to finance leases and short-term leases was not material for the three months ended March 31, 2019. Rent expense related to operating leases for office facilities was $7 million for the three months ended March 31, 2018.

Supplemental balance sheet information related to operating leases was as follows (in thousands):

Balance	Balance Sheet Location	March 31, 2019
Long-term lease liabilities	Lease and other long-term liabilities	$ 119,172
Weighted average remaining lease term in years		5.7
Weighted average discount rate		4.2%

Balance sheet information related to finance leases was not material as of March 31, 2019.

Supplemental cash flow information related to leases was as follows (in thousands):

	Three Months Ended March 31, 2019
Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash flows used in operating leases	$ 7,716
ROU assets obtained in exchange for lease obligations:	
Operating leases	$ 170

Maturities of operating lease liabilities at March 31, 2019 were as follows (in thousands):

April 1, 2019 - March 31, 2020	$	31,652
April 1, 2020 - March 31, 2021		30,116
April 1, 2021 - March 31, 2022		27,193
April 1, 2022 - March 31, 2023		26,377
April 1, 2023 - March 31, 2024		24,421
Thereafter		23,941
Total lease payments		163,700
Less imputed interest		(18,466)
Present value of lease liabilities	$	145,234

Future minimum lease payments as of December 31, 2018 were as follows (in thousands):

2019	$	30,485
2020		29,255
2021		27,421
2022		25,634
2023		24,515
Thereafter		31,768
Total future minimum lease payments	$	169,078

8. GOODWILL

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

	North America	International	Total
Goodwill, December 31, 2017	$ 1,253,494	$ 29,963	$ 1,283,457
Acquisitions	319,594	10,344	329,938
Effect of foreign currency translation	—	(1,860)	(1,860)
Goodwill, December 31, 2018	1,573,088	38,447	1,611,535
Effect of foreign currency translation	—	530	530
Goodwill, March 31, 2019	$ 1,573,088	$ 38,977	$ 1,612,065

The Company recorded goodwill of approximately $267 million in connection with the February 21, 2018 acquisition of ForRent, a digital advertising service provided through a network of four multifamily websites. The Company recorded goodwill of approximately $10 million in connection with the October 12, 2018 acquisition of Realla, the operator of a commercial property listings and data management platform in the U.K., including a free-to-list search engine for commercial property listings. The Company recorded goodwill of approximately $53 million in connection with the November 8, 2018 acquisition of Cozy, a leading provider of online rental solutions that provides a broad spectrum of services to both landlords and tenants, including property listings, rent estimates, rental applications, tenant screening, online rent payments and expense tracking.

9. INTANGIBLE ASSETS

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

	March 31, 2019	December 31, 2018	Weighted-Average Amortization Period (in years)
Capitalized product development cost	$ 2,173	$ 2,173	4
Accumulated amortization	(2,173)	(2,173)	
Capitalized product development cost, net	—	—	
Building photography	9,087	9,035	2
Accumulated amortization	(8,949)	(8,809)	
Building photography, net	138	226	
Acquired technology	101,887	103,128	5
Accumulated amortization	(85,963)	(85,344)	
Acquired technology, net	15,924	17,784	
Acquired customer base	339,685	339,574	10
Accumulated amortization	(207,199)	(199,405)	
Acquired customer base, net	132,486	140,169	
Acquired trade names and other intangible assets	190,614	190,717	12
Accumulated amortization	(63,412)	(59,985)	
Acquired trade names and other intangible assets, net	127,202	130,732	
Intangible assets, net	$ 275,750	$ 288,911	

10. LONG-TERM DEBT

On October 19, 2017, the Company entered into an amended and restated 2017 Credit Agreement (the "2017 Credit Agreement"), which amended and restated in its entirety, the existing 2014 Credit Agreement dated April 1, 2014 (the "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.

Up to $20 million of the revolving credit facility is available for the issuance of letters of credit. The Company had an irrevocable standby letter of credit outstanding totaling $0.2 million as of March 31, 2019 and December 31, 2018, which was required to secure its San Francisco office lease. The letter of credit was established in 2014 and automatically renews through January 31, 2025.

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 half 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 of the 2017 Credit Agreement.

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 ones 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 March 31, 2019.

The Company had no outstanding long-term debt at March 31, 2019 and December 31, 2018. For the three months ended March 31, 2019 and 2018, the Company recognized interest expense of $0.7 million, including amortization of debt issuance costs of $0.2 million and commitment fees of $0.5 million, on its revolving credit facility. The Company had $3 million of deferred debt issuance costs included in deposits and other assets on the Company's condensed consolidated balance sheets as of March 31, 2019 and December 31, 2018.

11. INCOME TAXES

The income tax provision for the three months ended March 31, 2019 and 2018 reflects an effective tax rate of approximately 13% and 6%, respectively. The increase in the effective tax rate was primarily due to higher income before income taxes for the three months ended March 31, 2019, partially offset by an increase in excess tax benefits. The amounts for other discrete items for the three months ended March 31, 2019 and 2018 were consistent.

12. COMMITMENTS AND CONTINGENCIES

The Company leases office facilities under various non-cancelable operating leases. The leases contain various renewal options. See Note 7 for further discussion of the Company's operating lease commitments. In addition, the Company has other commitments related to purchase obligations for goods and services.

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. 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, at this time management has concluded that the resolutions of these matters are not expected to have a material adverse effect on the Company's consolidated financial position, future results of operations or liquidity. Legal defense costs are expensed as incurred.

13. 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. Management relies on an internal management reporting process that provides revenue and operating segment net income before interest and other income (expense), loss on debt extinguishment, 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):

	Three Months Ended March 31,	
	2019	2018
EBITDA		
North America	$ 115,268	$ 71,055
International	(2,117)	(627)
Total EBITDA	$ 113,151	$ 70,428

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

	Three Months Ended March 31,	
	2019	2018
Net income	$ 85,169	$ 52,231
Amortization of acquired intangible assets in cost of revenues	5,513	4,608
Amortization of acquired intangible assets in operating expenses	7,682	5,803
Depreciation and other amortization	6,464	6,572
Interest and other income	(4,945)	(2,987)
Interest and other expense	732	690
Income tax expense	12,536	3,511
EBITDA	$ 113,151	$ 70,428

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

	March 31, 2019	December 31, 2018
Property and equipment, net		
North America	$ 81,867	$ 79,493
International	4,111	3,810
Total property and equipment, net	$ 85,978	$ 83,303
Goodwill		
North America	$ 1,573,088	$ 1,573,088
International	38,977	38,447
Total goodwill	$ 1,612,065	$ 1,611,535
Assets		
North America	$ 3,475,272	$ 3,253,035
International	73,012	59,922
Total assets	$ 3,548,284	$ 3,312,957
Liabilities		
North America	$ 386,122	$ 272,776
International	33,548	18,239
Total liabilities	$ 419,670	$ 291,015

Item 2. **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 discussed in "Cautionary Statement Concerning Forward-Looking Statements" at the end of this Item 2 and "Risk Factors" in Item 1A of Part II of this Quarterly Report on Form 10-Q, 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, except as required by law. The following discussion should be read in conjunction with our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and other filings with the Securities and Exchange Commission and the condensed consolidated financial statements and related notes included in this Quarterly Report on Form 10-Q.

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; and provide more information, analytics and marketing services than any of our 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 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, 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. Our service offerings span all commercial property types, including office, retail, industrial, multifamily, commercial land, mixed-use and hospitality. 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, as applicable. 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.

We also provide market research, portfolio and debt analysis, management and reporting capabilities, and real estate and lease management solutions, including lease administration and abstraction services, to commercial customers, real estate investors and lenders via our other service offerings.

Our principal information, analytics and online marketplace services are described in the following paragraphs by type of service:

Information and Analytics

CoStar Suite®. 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 applications, CoStar Mobile App and 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 and industry news.

Information services. We provide real estate and lease management solutions, including lease administration and abstraction services, through our CoStar Real Estate Manager service offerings, as well as, portfolio and debt analysis, management and reporting capabilities through our CoStar Investment Analysis and CoStar Risk Analytics service offerings. We also provide information services internationally, through our Grecam, Belbex and Thomas Daily businesses in France, Spain and Germany, respectively.

Online Marketplaces

Multifamily. 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 apartment listings and provides professional property management companies and landlords with an advertising destination. On February 21, 2018, we completed the acquisition of ForRent, a division of Dominion Enterprises, including the ForRent.com, AFTER55.com, CorporateHousing.com and ForRentUniversity.com apartment marketing sites. We continue to integrate, develop and cross-sell the services offered by ForRent. During the remaining quarters in 2019, we expect a lower multifamily year-over-year revenue growth rate compared to our results for the current period due to the lapsing of the acquisition anniversary date, continued integration of our service offerings and the discontinuation of certain ForRent products which were included in our 2018 results. On November 8, 2018, we acquired Cozy Services, Ltd. ("Cozy"), a leading provider of online rental solutions that provides a broad spectrum of services to both landlords and tenants, including property listings, rent estimates, rental applications, tenant screening, online rent payments and expense tracking. See Note 4 to the accompanying Notes to the Condensed Consolidated Financial Statements included in Part I of this Quarterly Report on Form 10-Q for further discussion of the acquisition of Cozy.

Commercial property and land. 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 use LoopNet's online marketplace services to search for available property listings that meet their criteria. On October 12, 2018, we acquired all of the issued share capital of Realla Ltd. ("Realla"), the operator of a commercial property listings and data management platform in the U.K., including a free-to-list search engine for commercial property listings. See Note 4 to the accompanying Notes to the Condensed Consolidated Financial Statements included in Part I of this Quarterly Report on Form 10-Q for further discussion of the acquisition of Realla. Our BizBuySell services, which include BizQuest®, provide an online marketplace for businesses for sale. Our Land.com network of sites, which provides online marketplaces for rural lands for sale, includes LandsofAmerica, LandAndFarm and LandWatch®.

As of March 31, 2019 and 2018, our annualized net bookings of subscription-based services on all contracts was approximately $48 million and $35 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. We recognize subscription revenues on a straight-line basis over the life of the contract. 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.

For the three months ended March 31, 2019 our contract renewal rate for existing CoStar subscription-based services on annual contracts was approximately 90%, as compared with 91% for the three months ended March 31, 2018, and therefore our cancellation rates for those services for those same periods were approximately 10% and 9%, respectively. 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, improving and enhancing our information, news, analytics and online marketplace solutions, including expanding and improving our offerings for property managers and renters. 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. We have been, and plan to continue, integrating, further developing and cross-selling our services. To generate brand awareness and site traffic for our listing sites, we utilize a multi-channel marketing campaign, 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, consistent with recent historical

levels, to promote our listing sites in 2019. As we continue to assess the success and effectiveness of our marketing campaign, we will continue to determine the optimal level of marketing investment for our services for future periods.

Our key priorities for 2019 include:

- Continuing to develop new, and improve existing, online rental property service offerings for the apartments industry. We plan to utilize acquired platforms, including Cozy, along with our previously developed and newly developed technologies, to create a complete digital rental experience that enables renters to apply for leases, landlords to run tenant credit and background checks and landlords and tenants to generate and enter into leases and to make and process payments, all online through a single platform.

- Continuing to develop and enhance CoStar Suite by making additional investments in analytical capabilities and developing products offerings with new capabilities focused on owners and lenders of commercial real estate. We also plan to invest in integrating the technology and infrastructure from other existing products into the CoStar Suite platform, including CoStar Real Estate Manager, in order to leverage data across our platforms and provide customers with additional functionality. We plan to invest further in our daily newsletter for U.S. subscribers, including providing curated content to our largest markets and more personalized information.

- Continuing to invest in the LoopNet marketplace by enhancing the content on the site, including high-quality imagery, seeking targeted advertisements and adding more content for premium listings, to better meet the needs of a broader cross section of the commercial real estate industry. Continuing to invest in our research operations to support continued growth of our information and analytics offerings. In furtherance of both of these priorities, we plan to continue to generate awareness and promote usage of Listing Manager, an online tool that allows customers with CoStar or LoopNet listings to update and manage their listings directly online. LoopNet users can also monitor listing performance, access lead and prospect reports, and upgrade exposure of their listings. We expect the use of this tool to result in more updates made directly by brokers and owners entering data directly into the self-service tool, which we believe will result in significant long-term cost savings and better quality data.

- Continuing to invest in the growth of our international business. We plan to integrate Realla with our CoStar U.K. operations, including development of a single point of data entry to allow our clients to simultaneously arrange to display their commercial real estate listings through the CoStar Suite service offering and to also make them visible to prospective tenants and investors through Realla's marketing portal.

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 and functionality 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.

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), loss on debt extinguishment, income taxes, depreciation and amortization ("EBITDA"), adjusted EBITDA, adjusted EBITDA margin, non-GAAP net income and non-GAAP net income per diluted share. EBITDA is our net income before interest and other income (expense), 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 is determined by adjusting our net income for stock-based compensation expense, acquisition- and integration-related costs, restructuring costs, settlement and impairment costs incurred outside our ordinary course of business and loss on debt extinguishment, as well as amortization of acquired intangible assets and other related costs, and then subtracting an assumed provision for income taxes. We may disclose adjusted EBITDA, adjusted EBITDA margin, 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 to EBITDA, adjusted EBITDA and non-GAAP net income is net income. We believe the most directly comparable GAAP financial measure to non-GAAP net income per diluted share and adjusted EBITDA margin are net income per diluted share and net income divided by revenue, respectively. In calculating EBITDA, adjusted EBITDA, adjusted EBITDA margin, non-GAAP net income and non-GAAP net income per diluted share, we exclude from net income 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, adjusted EBITDA margin, 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 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, adjusted EBITDA margin, non-GAAP net income and non-GAAP net income per diluted share as a substitute for any GAAP financial measure, including net income and net income per diluted share. 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, adjusted EBITDA margin, non-GAAP net income and non-GAAP net income per diluted share.

EBITDA, adjusted EBITDA, adjusted EBITDA margin, 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 accompanying reconciliations, 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, adjusted EBITDA margin, 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, adjusted EBITDA margin, 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 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 and expense we generate and incur may be useful for investors to consider and may result in current cash inflows and outflows. However, we do not consider the amount of interest and other income and expense 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.

- The amount of loss on our debt extinguishment may be useful for investors to consider because it generally represents 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.

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 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 restructuring costs incurred may be useful for investors to consider because such costs 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 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 and settlement and impairment costs 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. In addition to these exclusions, we subtract an assumed provision for income taxes to calculate non-GAAP net income. In 2019 and 2018, we assumed a 25% tax rate which approximated our historical long-term statutory corporate tax rate, excluding the impact of discrete items.

Adjusted EBITDA margin represents adjusted EBITDA divided by revenues for the period.

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):

	Three Months Ended March 31,	
	2019	**2018**
Net income	$ 85,169	$ 52,231
Amortization of acquired intangible assets in cost of revenues	5,513	4,608
Amortization of acquired intangible assets in operating expenses	7,682	5,803
Depreciation and other amortization	6,464	6,572
Interest and other income	(4,945)	(2,987)
Interest and other expense	732	690
Income tax expense	12,536	3,511
EBITDA	$ 113,151	$ 70,428
Net cash flows provided by (used in)		
Operating activities	$ 148,494	$ 72,985
Investing activities	(9,429)	(348,691)
Financing activities	(6,618)	(4,776)

Comparison of Three Months Ended March 31, 2019 and Three Months Ended March 31, 2018

The following table provides a comparison of our selected consolidated results of operations for the three months ended March 31, 2019 and 2018 (in thousands):

	Three Months Ended March 31,			
	2019	2018	Increase (Decrease) ($)	Increase (Decrease) (%)
Revenues:				
CoStar Suite	$ 147,701	$ 130,361	$ 17,340	13 %
Information services	18,850	15,060	3,790	25
Multifamily	114,268	87,683	26,585	30
Commercial property and land	47,606	40,614	6,992	17
Total revenues	328,425	273,718	54,707	20
Cost of revenues	71,153	62,477	8,676	14
Gross profit	257,272	211,241	46,031	22
Operating expenses:				
Selling and marketing (excluding customer base amortization)	88,094	88,490	(396)	—
Software development	27,928	22,913	5,015	22
General and administrative	40,076	40,590	(514)	(1)
Customer base amortization	7,682	5,803	1,879	32
Total operating expenses	163,780	157,796	5,984	4
Income from operations	93,492	53,445	40,047	75
Interest and other income	4,945	2,987	1,958	66
Interest and other expense	(732)	(690)	42	(6)
Income before income taxes	97,705	55,742	41,963	75
Income tax expense	12,536	3,511	9,025	NM
Net income	$ 85,169	$ 52,231	$ 32,938	63

NM - Not meaningful

Revenues. Revenues increased to $328 million for the three months ended March 31, 2019, from $274 million for the three months ended March 31, 2018. The $55 million increase was primarily attributable to a 30% year-over-year increase in multifamily revenues of approximately $27 million, driven by the inclusion of the operations of ForRent for the full three months ended March 31, 2019 and organic growth as a result of our prior year marketing campaign for the three months ended March 31, 2019 compared to the three months ended March 31, 2018. CoStar Suite revenue increased $17 million, or 13%, due to continued organic growth. Commercial property and land revenue increased $7 million, or 17%, primarily due to growth in our LoopNet online marketplace services of $5 million, as well as, growth in our land and business for sale products of $2 million. Information Services revenue increased $4 million, or 25%, primarily due to an increase of $6 million from our CoStar Real Estate Manager offering, partially offset by lower sales on other information services offerings.

Gross Profit. Gross profit increased to $257 million for the three months ended March 31, 2019, from $211 million for the three months ended March 31, 2018. The gross profit percentage was 78% compared to 77% for the three months ended March 31, 2019 and 2018, respectively. Investment in research to further support our products and services led to an increase in costs of revenues of $9 million for the three months ended March 31, 2019 compared to the three months ended March 31, 2018. The increase was primarily due to additional research personnel costs of $4 million and data and content costs of $2 million. There was also an increase of $1 million in additional occupancy costs and $1 million due to amortization of acquired intangible assets from the acquisition of ForRent.

Selling and Marketing Expenses. Selling and marketing expenses remained consistent for the three months ended March 31, 2019 compared to the three months ended March 31, 2018 as a result of an increase of $7 million in marketing costs for the three months ended March 31, 2019, of which $2 million was related to increased search engine marketing, offset by a $5 million decrease in personnel costs and a $2 million decrease in costs related to conferences.

Software Development Expenses. Software development expenses increased to $28 million for the three months ended March 31, 2019, from $23 million for the three months ended March 31, 2018, and increased as a percentage of revenues to 9% for the three months ended March 31, 2019 from 8% for the three months ended March 31, 2018. The increase in the amount of software development expense was primarily due to a $5 million increase in personnel costs and $1 million increase in occupancy costs.

General and Administrative Expenses. General and administrative expenses decreased to $40 million for the three months ended March 31, 2019, from $41 million for the three months ended March 31, 2018, and decreased as a percentage of revenues to 12% from 15% for the three months ended March 31, 2019 and 2018, respectively. The decrease was primarily due to a decrease in professional services costs of $5 million for legal fees and implementation costs for our financial systems, partially offset by a $2 million increase in personnel costs.

Customer Base Amortization Expense. Customer base amortization expense increased to $8 million for the three months ended March 31, 2019, from $6 million for the three months ended March 31, 2018, and remained consistent as a percentage of revenues at 2% for the three months ended March 31, 2019 and 2018. The increase in the amount of amortization expense was primarily due to the amortization of the ForRent customer base intangible assets acquired on February 21, 2018.

Interest and Other Income. Interest and other income increased to $5 million for the three months ended March 31, 2019, from $3 million for the three months ended March 31, 2018. The increase was primarily due to higher average cash and cash equivalent balances during the three months ended March 31, 2019 compared to the three months ended March 31, 2018.

Interest and Other Expense. Interest and other expense remained consistent for the three months ended March 31, 2019 as compared to the three months ended March 31, 2018, and primarily consists of commitment fees and amortization of debt issuance costs.

Income Tax Expense. Income tax expense increased to $13 million for the three months ended March 31, 2019, from $4 million for the three months ended March 31, 2018. The increase was primarily due to higher income before income taxes for the three months ended March 31, 2019, partially offset by an increase in excess tax benefits. The amounts for other discrete items for the three months ended March 31, 2019 and 2018 were consistent.

Comparison of Business Segment Results for Three Months Ended March 31, 2019 and Three Months Ended March 31, 2018

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 before interest and other income (expense), loss on debt extinguishment, 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 $319 million for the three months ended March 31, 2019, from $265 million for the three months ended March 31, 2018. This increase in North America revenues was primarily due to increased multifamily revenues resulting from the acquisition of ForRent and organic growth from our prior year marketing campaign, as well as, organic growth for CoStar Suite. International revenues remained consistent at $9 million for the three months ended March 31, 2019 and 2018, respectively.

Segment EBITDA. North America EBITDA increased to $115 million for the three months ended March 31, 2019 from $71 million for the three months ended March 31, 2018. The increase in North America EBITDA was primarily due to an increase in revenues. International EBITDA decreased to a loss of $2 million for the three months ended March 31, 2019 compared to a loss of $1 million for the three months ended March 31, 2018. The decrease in International EBITDA was primarily due to higher personnel and marketing costs.

Liquidity and Capital Resources

Our principal sources of liquidity are cash and cash equivalents, cash from operations and the availability of funds from our revolving credit facility. Total cash and cash equivalents increased to $1.2 billion as of March 31, 2019, compared to cash and cash equivalents of $1.1 billion as of December 31, 2018. The increase in cash and cash equivalents for the three months ended March 31, 2019 was primarily due to net cash generated from operations of $148 million and proceeds from the exercise of employee stock options of approximately $12 million, partially offset by cash paid for purchases of property and equipment of $9 million and repurchases of restricted stock to satisfy employee tax withholding obligations upon vesting of restricted stock awards valued at approximately $19 million.

Net cash provided by operating activities for the three months ended March 31, 2019 was approximately $148 million compared to approximately $73 million for the three months ended March 31, 2018. The $75 million increase was mainly due to an increase in net income of $33 million, the timing of payments related to accrued expenses, and an increase in income taxes payable.

Net cash used in investing activities for the three months ended March 31, 2019 was approximately $9 million compared to approximately $349 million for the three months ended March 31, 2018. This $340 million decrease in cash used in investing activities was primarily due to approximately $340 million cash paid to acquire ForRent during the three months ended March 31, 2018. During the three months ended March 31, 2019, we incurred capital expenditures of approximately $9 million compared to approximately $9 million in the three months ended March 31, 2018.

Net cash used in financing activities was approximately $7 million for the three months ended March 31, 2019, compared to approximately $5 million for the three months ended March 31, 2018. This $2 million increase in net cash used in financing activities was primarily due to higher repurchases of restricted stock to satisfy employee tax withholding obligations upon vesting of restricted stock awards of $3 million offset by an increase in proceeds from the exercise of employee stock options of $1 million, during the three months ended March 31, 2019.

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. 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 twelve months.

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. We consider policies relating to the following matters to be critical accounting policies:

- Long-lived assets, intangible assets and goodwill
- Revenue recognition
- Income taxes
- Business combinations

For an in depth discussion of each of our significant accounting policies, including our critical accounting policies and further information regarding estimates and assumptions involved in their application, see the Company's Annual Report on Form 10-K for the year ended December 31, 2018 and Note 2 to the accompanying Notes to the Condensed Consolidated Financial Statements included in Part I of this Quarterly Report on Form 10-Q.

Recent Accounting Pronouncements

See Note 2 to the accompanying Notes to the Condensed Consolidated Financial Statements included in Part I of this Quarterly Report on Form 10-Q for information on recent accounting pronouncements, including the expected dates of adoption.

Cautionary Statement Concerning Forward-Looking Statements

We have made forward-looking statements in this Report and make forward-looking statements in our press releases, conference calls, Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and other filings with the Securities and Exchange Commission 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 2019 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, adjusted EBITDA margin, non-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, the anticipated benefits of completed or proposed acquisitions, the anticipated benefits of cross-selling efforts, product development and release, planned service enhancements, sales and marketing campaigns, product integrations, elimination and de-emphasizing of services, contract renewal rates, 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 the Financial Statements and related Notes, “Management's Discussion and Analysis of Financial Condition and Results of Operations,” “Quantitative and Qualitative Disclosures About Market Risk,” “Controls and Procedures,” “Legal Proceedings” and “Risk Factors.”

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 and acquire acquisition candidates; our ability to realize the expected benefits, cost savings or other synergies from acquisitions, including ForRent, Realla and Cozy, on a timely basis or at all; our ability to combine acquired businesses, successfully or in a timely and cost-efficient manner including our ability to integrate Realla with our CoStar U.K. operations; business disruption relating to integration of acquired businesses or other business initiatives; business disruption relating to acquisitions 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, or the businesses that we acquire, maintain, store or process; any actual or perceived failure to comply with privacy or data protection laws, regulations or standards; any disruption of our systems, including due to any cyberattack or other similar event, 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 and to sell additional services to existing clients; our ability to integrate our North America and International product offerings; 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; our ability to protect and defend our intellectual property including unauthorized or unlicensed use of our services; 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 continue to develop and maintain 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.

Item 3. 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 three months ended March 31, 2019, revenues denominated in foreign currencies was approximately 4% of total revenue. For the three months ended March 31, 2019, our revenues would have decreased by approximately $1 million if the U.S. dollar exchange rate used strengthened by 10%. For the three months ended March 31, 2019, our revenues would have increased by approximately $1 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 March 31, 2019, accumulated other comprehensive loss included a loss from foreign currency translation adjustments of approximately $11 million.

We do not have material exposure to market risks associated with changes in interest rates related to cash equivalent securities held as of March 31, 2019. As of March 31, 2019, we had $1.2 billion of cash and cash equivalents. 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 auction rate securities ("ARS"). These securities are primarily securities supported by guarantees from the FFELP of the U.S. Department of Education. As of March 31, 2019, our investments in ARS, with a cost basis of $11 million, 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. 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 5 and 6 to the accompanying Notes to the Condensed Consolidated Financial Statements included in Part I of this Quarterly Report on Form 10-Q for further discussion.

We had approximately $1.9 billion of goodwill and intangible assets as of March 31, 2019. As of March 31, 2019, 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 4. 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 Securities Exchange Act of 1934 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 March 31, 2019, 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 2019, we continued to implement a new financial system that is designed to improve the efficiency and effectiveness of our operational and financial accounting processes. This implementation is expected to continue beyond 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.

Other than the implementation of the new financial system noted above, 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.

PART II — OTHER INFORMATION

Item 1. Legal Proceedings

Currently, and from time to time, we are involved in litigation incidental to the conduct of our business. We are not currently 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. See Note 12 of the Notes to the Condensed Consolidated Financial Statements included in Part I of this Quarterly Report on Form 10-Q for further discussion.

Item 1A. Risk Factors

In addition to the other information set forth in this Quarterly Report on Form 10-Q, you should carefully consider the factors discussed in Part I, "Item 1A Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2018 (the "2018 Form 10-K"), which could materially affect our business, financial condition or future results. The risks described in our 2018 Form 10-K are not the only risks facing our Company. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition and/or results of operations. There have been no material changes to the Risk Factors as previously disclosed in Part I, "Item 1A Risk Factors" in our 2018 Form 10-K.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

The following table is a summary of our repurchases of common stock during each of the three months in the quarter ended March 31, 2019:

ISSUER PURCHASES OF EQUITY SECURITIES

Month, 2019	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
January 1 through January 31	1,625		$ 363.76	—	—
February 1 through February 28	9,598		451.05	—	—
March 1 through March 31	29,728		462.77	—	—
Total	40,951	(1)	$ 456.09	—	—

(1) 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 2007 Stock Incentive Plan, as amended, and the Company's 2016 Stock Incentive Plan, as amended, for which shares were purchased by the Company based on their fair market value on the trading day preceding the vesting date. None of these share purchases were part of a publicly announced program to purchase common stock of the Company.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

Exhibit No.	Description
3.1	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).
3.2	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).
31.1	Certification of Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith).
31.2	Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith).
32.1	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).
32.2	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 Quarterly Report on Form 10-Q for the quarter ended March 31, 2019, formatted in XBRL (eXtensible Business Reporting Language): (i) Unaudited Condensed Consolidated Statements of Operations for the three months ended March 31, 2019 and 2018, respectively; (ii) Unaudited Condensed Consolidated Statements of Comprehensive Income for the three months ended March 31, 2019 and 2018, respectively; (iii) Unaudited Condensed Consolidated Balance Sheets at March 31, 2019 and December 31, 2018, respectively; (iv) Unaudited Condensed Consolidated Statements of Changes in Stockholders' Equity at March 31, 2019 and March 31, 2018; (v) Unaudited Condensed Consolidated Statements of Cash Flows for the three months ended March 31, 2019 and 2018, respectively; and (vi) Notes to the Unaudited Condensed Consolidated Financial Statements that have been detail tagged.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

COSTAR GROUP, INC.

Date: April 24, 2019

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

EXHIBIT 31.1

CERTIFICATION

I, Andrew C. Florance, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q 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: April 24, 2019

By: Andrew C. Florance

/s/ Andrew C. Florance

Andrew C. Florance
Chief Executive Officer
(Principal Executive Officer and Duly Authorized Officer)

EXHIBIT 31.2

CERTIFICATION

I, Scott T. Wheeler, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q 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: April 24, 2019

By: Scott T. Wheeler

/s/ Scott T. Wheeler

Scott T. Wheeler
Chief Financial Officer
(Principal Financial and Accounting Officer and Duly Authorized Officer)

EXHIBIT 32.1

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

April 24, 2019

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 Quarterly Report on Form 10-Q of CoStar Group, Inc., for the quarter ended March 31, 2019, 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 Quarterly Report on Form 10-Q of CoStar Group, Inc., for the quarter ended March 31, 2019, 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 Quarterly Report on Form 10-Q of CoStar Group, Inc., for the quarter ended March 31, 2019, 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 quarterly 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.

EXHIBIT 32.2

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

April 24, 2019

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 Quarterly Report on Form 10-Q of CoStar Group, Inc., for the quarter ended March 31, 2019, 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 Quarterly Report on Form 10-Q of CoStar Group, Inc., for the quarter ended March 31, 2019, 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 Quarterly Report on Form 10-Q of CoStar Group, Inc., for the quarter ended March 31, 2019, 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 quarterly 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.