

COSTAR GROUP INC
Form 424B2
September 25, 2017
TABLE OF CONTENTS

This preliminary prospectus supplement and the accompanying prospectus relate to an effective registration statement under the Securities Act of 1933, as amended, but this preliminary prospectus supplement is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell these securities and are not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

**Filed Pursuant to Rule 424(b)(2)
Registration No. 333-220607**

Subject to completion, dated September 25, 2017

**Preliminary prospectus supplement
To prospectus dated September 25, 2017**

\$750,000,000

CoStar Group, Inc.

Common Stock

We are offering _____ shares of our common stock, \$0.01 par value per share, with an aggregate offering price of \$750,000,000. At an assumed offering price of \$280.82, the last reported sale price of our common stock on September 22, 2017, we would expect to issue and sell 2,670,750 shares of our common stock.

Our common stock is listed on the Nasdaq Global Select Market under the symbol CSGP. The last reported sale price of our common stock on the Nasdaq Global Select Market on September 22, 2017 was \$280.82 per share. You are urged to obtain current market data and should not use the market price as of September 22, 2017 as a prediction of the future market price of our common stock.

	Per share	Total
Public offering price	\$	\$
Underwriting discounts and commissions	\$	\$
Proceeds, before expenses, to us	\$	\$

We have granted the underwriters an option for a period of 30 days from the date of this prospectus supplement to purchase up to _____ additional shares of common stock from us representing an aggregate amount of approximately \$112,500,000. If the underwriters exercise this option in full, the total underwriting discounts and commissions will be \$ _____ and total proceeds to us, before discounts, commissions and expenses, will be \$ _____.

Investing in our common stock involves risks. See Risk factors beginning on page S-5 of this prospectus supplement. You should also consider the risk factors described in the documents incorporated by reference into this prospectus supplement and the accompanying prospectus.

Neither the Securities and Exchange Commission (SEC) nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the shares of our common stock to purchasers on October , 2017.

Joint Bookrunners

J.P. Morgan Goldman Sachs & Co. LLC Citigroup

BofA Merrill Lynch SunTrust Robinson Humphrey Wells Fargo Securities

Co-Managers

Needham & Company Stephens Inc. William Blair

JMP Securities

B. Riley & Co.

The date of this prospectus supplement is September , 2017.

TABLE OF CONTENTS

Table of Contents

	Page
<u>About this prospectus supplement</u>	<u>S-ii</u>
<u>Cautionary statements regarding forward-looking statements</u>	<u>S-iii</u>
<u>Summary</u>	<u>S-1</u>
<u>Risk factors</u>	<u>S-5</u>
<u>Use of proceeds</u>	<u>S-8</u>
<u>Capitalization</u>	<u>S-9</u>
<u>Price range of our common stock and dividends</u>	<u>S-10</u>
<u>Underwriting</u>	<u>S-11</u>
<u>Material United States federal income tax considerations</u>	<u>S-18</u>
<u>Validity of the common stock</u>	<u>S-23</u>
<u>Experts</u>	<u>S-23</u>
<u>Where you can find additional information</u>	<u>S-23</u>
<u>Incorporation by reference</u>	<u>S-23</u>

Prospectus

	Page
<u>ABOUT THIS PROSPECTUS</u>	<u>1</u>
<u>CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS</u>	<u>1</u>
<u>WHERE YOU CAN FIND ADDITIONAL INFORMATION</u>	<u>3</u>
<u>INCORPORATION BY REFERENCE</u>	<u>3</u>
<u>OUR COMPANY</u>	<u>4</u>
<u>USE OF PROCEEDS</u>	<u>4</u>
<u>RATIO OF EARNINGS TO FIXED CHARGES</u>	<u>5</u>
<u>DESCRIPTION OF DEBT SECURITIES</u>	<u>5</u>
<u>DESCRIPTION OF COMMON STOCK</u>	<u>12</u>
<u>DESCRIPTION OF PREFERRED STOCK</u>	<u>15</u>
<u>DESCRIPTION OF OTHER SECURITIES</u>	<u>15</u>
<u>PLAN OF DISTRIBUTION</u>	<u>15</u>
<u>SELLING SECURITYHOLDERS</u>	<u>15</u>
<u>EXPERTS</u>	<u>16</u>
<u>VALIDITY OF THE SECURITIES</u>	<u>16</u>

You should rely only on the information contained in or incorporated by reference in this prospectus supplement and the accompanying prospectus or that is contained in any free writing prospectus issued by us. We have not, and the underwriters have not, authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not, and the underwriters are not, making an offer to sell the common stock in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus supplement and the accompanying prospectus and in the documents

incorporated by reference herein and therein or that is contained in any free writing prospectus issued by us is accurate only as of their respective dates. Our business, financial condition, results of operation and prospects may have changed since those dates.

S-i

TABLE OF CONTENTS

About this prospectus supplement

We provide information to you about the common stock in two separate documents: (1) this prospectus supplement, which describes the specific terms of the common stock and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference in that prospectus and (2) the accompanying prospectus, which provides general information about securities we may offer from time to time, including securities other than the common stock being offered by this prospectus supplement. If information in this prospectus supplement is inconsistent with the accompanying prospectus, you should rely on this prospectus supplement.

It is important for you to read and consider all of the information contained in this prospectus supplement, the documents incorporated by reference herein and the accompanying prospectus in making your investment decision. You also should read and consider the information in the documents we have referred you to in [Where you can find additional information](#) and [Incorporation by reference](#) on [page S-23](#) of this prospectus supplement and page 3 of the accompanying prospectus.

We include cross-references in this prospectus supplement and the accompanying prospectus to captions in these materials where you can find additional related discussions. The table of contents in this prospectus supplement provides the pages on which these captions are located.

Unless otherwise indicated or the context otherwise requires, references in this prospectus supplement to [Registrant](#), [Company](#), [we](#), [us](#), or [our](#) are to CoStar Group, Inc. and its consolidated subsidiaries, and [CoStar](#) refers to CoStar Group, Inc., a Delaware corporation.

S-ii

TABLE OF CONTENTS**Cautionary statements regarding forward-looking statements**

Certain parts of this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and in the accompanying prospectus, contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the Securities Act) and Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act). Forward-looking statements include information that is not purely historic fact and include, without limitation, statements concerning our financial outlook for 2017 and beyond, our possible or assumed future results of operations generally, and other statements and information regarding assumptions about our revenues, revenue growth rates, gross margin percentage, net income, net income per share, fully diluted net income per share, EBITDA, adjusted EBITDA, non-generally accepted accounting principles (GAAP) net income, non-GAAP net income per share, weighted-average outstanding shares, taxable income, cash flow from operating activities, available cash, operating costs, amortization expense, intangible asset recovery, capital and other expenditures, legal proceedings and claims, legal costs, effective tax rate, equity compensation charges, future taxable income, pending acquisitions, the anticipated benefits of completed or proposed acquisitions, the anticipated benefits of cross-selling efforts, product development and release, sales and marketing campaigns, product integrations, elimination and de-emphasizing of services, contract renewal rate, the timing of future payments of principal under our \$400.0 million term loan facility available to us under a credit agreement dated April 1, 2014 (as amended, the Credit Agreement), expectations regarding our compliance with financial and restrictive covenants in our 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 prospectus supplement, including Market, ranking and other data, Summary, The offering, Risk factors, Use of proceeds and Capitalization and the documents incorporated by reference herein, including Business, Risk Factors, Properties, Legal Proceedings, Management's Discussion and Analysis of Financial Condition and Results of Operations, Quantitative and Qualitative Disclosures about Market Risk, Controls and Procedures and the Financial Statements and related notes contain forward-looking statements.

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 comparative terminology. You should understand that these forward-looking statements are estimates reflecting our judgment, beliefs and expectations, not guarantees of future performance. They are subject to a number of assumptions, risks and uncertainties that could cause actual results to differ materially from those expressed or implied in the forward-looking statements. The following important factors, in addition to those discussed or referred to under the heading Risk Factors, and other unforeseen events or circumstances, could affect our future results and could cause those results or other outcomes to differ materially from those expressed or implied in our forward-looking statements:

- commercial real estate market conditions;
- general economic conditions, both domestic and international;
- our ability to identify, acquire and integrate acquisition candidates;
- our ability to realize the expected benefits, cost savings or other synergies from acquisitions, on a timely basis or at all;
- our ability to combine acquired businesses successfully or in a timely and cost-efficient manner;
- business disruption relating to integration of acquired businesses or other business initiatives;
- theft of any personally identifiable information we maintain or process;
- any actual or perceived failure to comply with privacy or data protection laws, regulations or standards;
- the amount of investment for sales and marketing and our ability to realize a return on investments in sales and marketing;

our ability to effectively and strategically combine, eliminate or de-emphasize service offerings;
reductions in revenues as a result of service changes;

S-iii

TABLE OF CONTENTS

the time and resources required to develop upgraded or new services and to expand service offerings;
changes or consolidations within the commercial real estate industry;
customer retention;
our ability to attract new clients;
our ability to sell additional services to existing clients;
our ability to integrate our North America and International product offerings;
our ability to integrate the backend systems of CoStar and LoopNet and subsequently create operating efficiencies and provide improved data to our customers;
our ability to successfully transition LoopNet to a pure marketing site, where all listings are paid and searches are free, in a timely manner and minimize the impact of that transition on revenue;
our ability to successfully introduce and cross-sell new products or upgraded services in U.S. and foreign markets;
our ability to attract consumers to our online marketplaces;
our ability to increase traffic on our network of sites;
the success of our marketing campaigns in generating brand awareness and site traffic;
competition;
foreign currency fluctuations;
global credit market conditions affecting investments;
our ability to continue to expand successfully, timely and in a cost-efficient manner, including internationally;
our ability to effectively penetrate and gain acceptance in new sectors and geographies;
our ability to control costs;
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 the applicable document. 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 prospectus supplement or to reflect the occurrence of unanticipated events.

TABLE OF CONTENTS

Summary

The following summary should be read together with the information contained in other parts of this prospectus supplement and the accompanying prospectus or incorporated by reference herein or therein. This summary highlights selected information about the Company, including important information from this prospectus supplement and the accompanying prospectus regarding the offering of the shares of common stock. You should read this prospectus supplement and the accompanying prospectus, including the documents we incorporate by reference, carefully to understand fully the terms of the offering as well as other considerations that are important to you in making a decision to invest in the shares. You should pay special attention to the Risk factors section beginning on page S-5 of this prospectus supplement, and the Risk Factors sections in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016 and in our Quarterly Reports on Form 10-Q for the quarterly periods ended March 31, 2017 and June 30, 2017 to determine whether an investment in the shares is appropriate for you. This prospectus supplement and the accompanying prospectus include and incorporate forward-looking statements that involve risks and uncertainties.

Our company

We are the number one provider of information, analytics and online marketplaces to the commercial real estate industry in the United States (U.S.) and the United Kingdom (U.K.) based on the fact that we offer the most comprehensive commercial real estate database available; have the largest research department in the industry; own and operate leading online marketplaces for commercial real estate and apartment listings in the U.S. based on the numbers of unique visitors and site visits per month; provide more information, analytics and marketing services than any of our competitors and believe that we generate more revenues than any of our commercial real estate information competitors. We created and compiled our standardized platform of information, analytics and online marketplace services where industry professionals and consumers of commercial real estate, including apartments, and the related business communities can continuously interact and facilitate transactions by efficiently accessing and exchanging accurate and standardized real estate-related information. We service a community which includes hundreds of thousands of commercial real estate professionals. Our websites attract approximately 37 million unique visitors a month, according to data from the second quarter of 2017.

Since our founding in 1987, our strategy has been to provide commercial real estate professionals with critical knowledge and tools. We provide value to our clients by supplying proprietary data that, combined with our analytic methods, creates essential decision-making support tools for professionals in the commercial real estate industry. Our service offerings span all commercial property types, including office, retail, industrial, multifamily, commercial land, mixed-use properties and hospitality.

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

Recent developments

Acquisitions

We have continually expanded the geographical coverage of our existing information services and developed new information, analytics and online marketplace services. In addition to internal growth, we have grown our business through strategic acquisitions.

On January 31, 2017, we acquired Koa Lei, Inc. (doing business as Westside Rentals and now known as Westside Rentals, LLC), an online marketplace specializing in Southern California real estate rentals, and its affiliated entity Westside Credit Services, LLC, a provider of credit checks and tenant screening for landlords in the Southern California real estate rental market.

On May 10, 2017, we acquired certain assets and assumed certain liabilities from Datasphere Technologies, Inc., in each case, related to the LandWatch.com® business.

S-1

TABLE OF CONTENTS

On July 18, 2017, we acquired The Screening Pros™, an online apartment leasing platform that includes tenant screening, rental applications and payments and lease renewals.

On September 12, 2017, we announced plans to acquire ForRent, a division of Dominion Enterprises (the ForRent acquisition), a digital advertising provider headquartered in Norfolk, Virginia, featuring approximately 17,000 properties on its network of four multifamily websites for an aggregate purchase price of \$385 million, payable \$350 million in cash (without interest) and \$35 million in shares of our common stock, subject to customary adjustments. This acquisition will help us provide prospective renters with a more robust and accurate inventory of apartment availabilities. The ForRent acquisition is subject to certain closing conditions, including the expiration or termination of the applicable waiting period under the Hart-Scott-Rodino Act.

Revolving Credit Facility

We expect to enter into a senior secured revolving credit facility (the 2017 Revolving Credit Facility) in an aggregate principal amount of \$750 million from a syndicate of financial institutions as lenders and issuing banks. We expect to close the 2017 Revolving Credit Facility after the consummation of this offering. Although the terms of the 2017 Revolving Credit Facility have not been finalized and are subject to change, we expect the 2017 Revolving Credit Facility to mature five years after the effectiveness thereof. There can be no assurance that we will enter into the 2017 Revolving Credit Facility on the terms contemplated or at all. The consummation of this offering is not conditioned upon the closing of the 2017 Revolving Credit Facility.

TABLE OF CONTENTS

The offering

The following summary contains basic information about this offering. This summary is not intended to be complete. You should read the full text and more specific details contained elsewhere in this prospectus supplement and the accompanying prospectus. For a more complete description of the shares of common stock, see Description of Common Stock beginning on page 12 of the accompanying prospectus.

Issuer

CoStar Group, Inc., a Delaware corporation.

Common stock offered

shares. We have also granted the underwriters a 30-day option to purchase up to additional shares.

Common stock to be outstanding immediately following this offering

shares (or shares if the underwriters exercise their option to purchase additional shares in full) (based on shares outstanding on September 22, 2017).

Use of proceeds

We estimate that the net proceeds from this offering will be approximately \$ (or approximately \$ if the underwriters exercise their option to purchase additional shares in full) after deducting underwriting discounts, commissions and expenses. We expect to use the net proceeds from the sale of the shares to fund all or a portion of the costs of any strategic acquisitions we determine to pursue in the future, to finance the growth of our business and for working capital and other general corporate purposes. See Use of proceeds.

Trading symbol for our common stock

Our common stock is listed on the Nasdaq Global Select Market under the symbol CSGP.

United States federal income tax considerations

For a discussion of material United States federal income tax consequences of holding and disposing of shares of our common stock, see Material United States federal income tax considerations.

Risk factors

You should carefully consider the information set forth in the section of this prospectus supplement entitled Risk factors as well as the other information included in or incorporated by reference into this prospectus supplement and the accompanying prospectus before deciding whether to invest in the shares.

Except as otherwise indicated, all information in this prospectus supplement:

• assumes that the underwriters will not exercise their option to purchase up to additional shares from the Company;

• excludes 453,843 shares issuable upon the exercise of options outstanding as of August 31, 2017 with a weighted average exercise price of \$156.24 per share;

• excludes an estimated 84,062 shares available for purchase under our Employee Stock Purchase Plan as of August 31, 2017;

• excludes an estimated 1,979,039 shares reserved for issuance pursuant to future grants of awards under our 2016 Stock Incentive Plan as of August 31, 2017;

• excludes an estimated 1,170 shares issuable upon vesting of unvested restricted stock units as of August 31, 2017; and
• excludes an estimated 124,635 shares, with a value of \$35 million, to be issued to the sellers in a private placement in connection with the closing of the ForRent acquisition. The estimated number of shares is based on the last reported sale price of our common stock on September 22, 2017.

S-3

TABLE OF CONTENTS**Summary financial data**

The following tables present summary financial data of the Company as of the dates and for the periods provided. The summary financial data for each of the years ended December 31, 2014, 2015 and 2016 and as of December 31, 2015 and 2016 are derived from our audited consolidated financial statements and related notes contained in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016, which is incorporated by reference into this prospectus supplement. The summary financial data as of December 31, 2014 have been derived from our audited consolidated financial statements for such year, which have not been incorporated by reference into this prospectus supplement. The summary financial data as of June 30, 2017 and for the periods ended June 30, 2016 and 2017 are derived from our unaudited condensed consolidated financial statements and related notes contained in our Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2017, which is incorporated by reference into this prospectus supplement, which financial statements include, in the opinion of our management team, all normal and recurring adjustments that are considered necessary for the fair presentation of the results for the period and dates presented. The historical operating results of the company for the period ended June 30, 2017 are not necessarily indicative of the results that may be expected for the full year.

The information in the following table is only a summary and is not necessarily indicative of the results of future operations of CoStar. You should read the following information together with our audited and unaudited consolidated financial statements, including the notes thereto and Management's Discussion and Analysis of Financial Condition and Results of Operations contained in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016, and our Quarterly Reports on Form 10-Q for the quarterly periods ended March 31, 2017 and June 30, 2017, which are incorporated by reference into this prospectus supplement. See Where you can find additional information beginning on page S-23 of this prospectus supplement.

	Year Ended December 31,			Six Months Ended	
	2014	2015	2016	2016	2017
	(in thousands)				
Consolidated Statement of Operations Data:					
Revenues	\$ 575,936	\$ 711,764	\$ 837,630	\$ 406,608	\$ 463,706
Income from operations	80,878	11,455	144,905	58,420	65,545
Net income (loss)	\$ 44,869	\$ (3,465)	\$ 85,071	\$ 32,297	\$ 44,314
	As of December 31,			As of June	
	2014	2015	2016	2017	2017
	(in thousands)				
Consolidated Balance Sheet Data:					
Cash, cash equivalents and long-term investments	\$ 544,163	\$ 437,325	\$ 577,175	\$ 574,590	
Working capital ⁽¹⁾	480,521	337,452	472,545	485,086	
Total assets	2,070,483	2,079,571	2,185,063	2,220,019	
Total long-term liabilities	440,982	400,510	375,904	352,383	
Stockholders' equity	1,513,546	1,513,780	1,654,213	1,716,735	

(1) Calculated as current assets less current liabilities.

TABLE OF CONTENTS

Risk factors

Investing in our common stock involves risks, including the risks described below that are specific to shares of our common stock and those that could affect us and our business. You should not purchase shares of our common stock unless you understand these investment risks. You should carefully consider the following risk factors, as well as the risks described under the heading **Risk Factors** in our Annual Report on Form 10-K for the year ended December 31, 2016, incorporated by reference into this prospectus supplement and the accompanying prospectus. Please be aware that other risks may prove to be important in the future. New risks may emerge at any time and we cannot predict such risks or estimate the extent to which they may affect our financial performance. Before purchasing any shares of our common stock, you should consider carefully the risks and other information in this prospectus supplement and the accompanying prospectus and the documents incorporated by reference herein and therein.

Risks relating to the offering

The price of our common stock has and may continue to fluctuate significantly, and this may make it difficult for you to resell shares of common stock owned by you at times or at prices you find attractive.

The trading price of our common stock has and may continue to fluctuate widely as a result of a number of factors, many of which are outside our control. In addition, the stock market is subject to fluctuations in the share prices and trading volumes that affect the market prices of the shares of many companies. These broad market fluctuations have adversely affected and may continue to adversely affect the market price of our common stock. Among the factors that could affect our stock price are:

- actual or anticipated quarterly fluctuations in our operating results and financial condition;
- changes in revenue or earnings estimates or publication of research reports and recommendations by financial analysts;
- failure to meet analysts' revenue or earnings estimates;
- speculation in the press or investment community generally or relating to our reputation or the commercial real estate industry;
- strategic actions by us or our competitors, such as acquisitions or restructurings;
- actions by institutional shareholders;
- fluctuations in the stock price and operating results of our competitors;
- future sales of our equity or equity-related securities;
- changes in the frequency or amount of share repurchases;
- proposed or adopted regulatory changes or developments;
- anticipated or pending investigations, proceedings or litigation that involve or affect us;
- domestic and international economic factors unrelated to our performance; or
- general market conditions and, in particular, developments related to market conditions for the commercial real estate industry.

A significant decline in our stock price could result in substantial losses for individual shareholders and could lead to costly and disruptive securities litigation.

Our stock price may be negatively affected by fluctuations in our financial results.

Our operating results, revenues and expenses may fluctuate as a result of changes in general economic conditions and also for many other reasons, many of which are outside of our control, such as: cancellations or non-renewals of our services; competition; our ability to control expenses; loss of clients or revenues; technical problems with our services; changes or consolidation in the real estate industry; our investments in geographic expansion and to increase coverage in existing markets; interest rate fluctuations; the timing and success of new service introductions and

enhancements; successful execution of our expansion plans; data quality; the development of our sales force; managerial execution; employee retention; foreign currency and exchange rate

S-5

TABLE OF CONTENTS

fluctuations; inflation; successful adoption of and training on our services; litigation; acquisitions of other companies or assets; sales, brand enhancement and marketing promotional activities; client support activities; changes in client budgets; or our investments in other corporate resources. In addition, changes in accounting policies or practices may affect our level of net income. Fluctuations in our financial results, revenues and expenses may cause the market price of our common stock to decline.

Market volatility may have an adverse effect on our stock price.

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

There may be future sales or other dilution of our equity, which may adversely affect the market price of our common stock.

Except as described under "Underwriting," we are not restricted from issuing additional shares of common stock, including any securities that are convertible into or exchangeable for, or that represent the right to receive, common stock. The issuance of any additional shares of common or of preferred stock or convertible securities could be substantially dilutive to holders of our common stock. Moreover, to the extent that we issue restricted stock units, stock appreciation rights, options or warrants to purchase shares of our common stock in the future and those stock appreciation rights, options, or warrants are exercised or as the restricted stock units vest, our shareholders may experience further dilution. Holders of our common stock have no preemptive rights that entitle holders to purchase their pro rata share of any offering of shares of any class or series and, therefore, such sales or offerings could result in increased dilution to our shareholders. The market price of our common stock could decline as a result of sales of shares of our common stock made after this offering or the perception that such sales could occur.

The common stock is equity and is subordinate to our existing and future indebtedness and preferred stock.

Shares of the common stock are equity interests in CoStar and do not constitute indebtedness. As such, shares of the common stock will rank junior to all indebtedness and other non-equity claims on CoStar with respect to assets available to satisfy claims on CoStar, including in a liquidation of CoStar. Additionally, our board of directors is authorized to issue series of preferred stock without any action on the part of holders of our common stock. Holders of our common stock are subject to the prior dividend and liquidation rights of any holders of our preferred stock or depositary shares representing such preferred stock then outstanding.

We do not currently intend to pay dividends on our common stock and, consequently, your ability to achieve a return on your investment will depend on appreciation in the price of our common stock.

We have never declared or paid any cash dividends on our common stock and do not intend to do so for the foreseeable future. We currently intend to invest our future earnings, if any, to finance our growth or share repurchases. In addition, provisions of the Credit Agreement governing our credit facilities limit, and we expect that the 2017 Revolving Credit Facility will limit, our ability to pay cash dividends. Therefore, you are not likely to

receive any dividends on your common stock for the foreseeable future and the success of an investment in shares of our common stock will depend upon any future appreciation in their value. There is no guarantee that shares of our common stock will appreciate in value or even maintain the price at which our stockholders have purchased their shares.

S-6

TABLE OF CONTENTS

Our Certificate of Incorporation and By-Laws could prevent a third party from acquiring us or limit the price that investors might be willing to pay for shares of our common stock.

Provisions of the Delaware General Corporation Law, our Certificate of Incorporation and our By-Laws could have the effect of making it more difficult for a third party to acquire, or of discouraging a third party from attempting to acquire, control of us. These provisions could delay or prevent a change in control of and could limit the price that investors might be willing to pay in the future for shares of our common stock.

Our Certificate of Incorporation authorizes our Board of Directors to issue new series of preferred stock without stockholder approval. Depending on the rights and terms of any new series created, and the reaction of the market to the series, your rights or the value of your common stock could be negatively affected. For example, subject to applicable law, our Board of Directors could create a series of preferred stock with superior voting rights to our existing common stock. The ability of our Board of Directors to issue this new series of preferred stock could also prevent or delay a third party from acquiring us, even if doing so would be beneficial to our stockholders.

We are also subject to the anti-takeover provisions of Section 203 of the Delaware General Corporation Law, which prohibits Delaware corporations from engaging in business combinations specified in the statute with an interested stockholder, as defined in the statute, for a period of three years after the date of the transaction in which the person first becomes an interested stockholder, unless the business combination is approved in advance by a majority of the independent directors or by the holders of at least two-thirds of the outstanding disinterested shares. The application of Section 203 of the Delaware General Corporation Law could also have the effect of delaying or preventing a change of control.

S-7

TABLE OF CONTENTS

Use of proceeds

We estimate that the net proceeds of this offering will be approximately \$. If the underwriters exercise their option to purchase additional shares in full, we estimate that the net proceeds of this offering will be approximately \$. Net proceeds is what we expect to receive after paying the underwriting discount and commissions and other estimated expenses of the offering. We expect to use the net proceeds from the sale of the shares to fund all or a portion of the costs of any strategic acquisitions we determine to pursue in the future, to finance the growth of our business and for working capital and other general corporate purposes. General corporate purposes may include additions to working capital, capital expenditures, repayment of debt, investments in our subsidiaries, possible acquisitions and the repurchase, redemption or retirement of securities, including our common stock.

S-8

TABLE OF CONTENTS**Capitalization**

The following table presents our capitalization on:

• on an actual basis as of June 30, 2017; and

• on an adjusted basis as of June 30, 2017 to give effect to this offering.

There have been no other significant adjustments to our capitalization since June 30, 2017. You should read the information below in conjunction with the section of this prospectus supplement entitled "Use of proceeds," the consolidated financial statements and related notes included herein and the other financial information incorporated by reference into this prospectus supplement or the accompanying prospectus.

	June 30, 2017	
	Actual	As Adjusted for this Offering
	(\$ in thousands)	
Cash and cash equivalents	\$ 564,638	\$ 1,288,389
Long-Term Debt:	304,826	304,826
Stockholders' equity:		
Preferred stock, \$0.01 par value; 2,000 shares authorized; none outstanding as of June 30, 2017	—	—
Common stock — \$0.01 par value; 60,000 shares authorized; 32,821 issued and outstanding as of June 30, 2017	328	355
Additional paid-in capital	1,484,929	2,208,653
Accumulated and other comprehensive loss	(10,797)	(10,797)
Retained earnings	\$ 242,275	\$ 242,275
Total stockholders' equity	\$ 1,716,735	\$ 2,400,486
Total Capitalization (long-term debt plus stockholders' equity)	\$ 2,021,561	\$ 2,745,312

TABLE OF CONTENTS**Price range of our common stock and dividends**

Our common stock is listed and traded on the Nasdaq Global Select Market under the symbol CSGP. The following table sets forth, for the calendar quarters indicated, the high and low daily closing price per share of our common stock as reported on the Nasdaq Global Select Market. On September 22, 2017, the last practicable trading day prior to the date of this prospectus supplement, there were 32,820,135 shares of our common stock outstanding.

	High	Low
2015		
First Quarter	\$ 200.62	\$ 169.95
Second Quarter	214.20	193.36
Third Quarter	218.43	164.53
Fourth Quarter	210.42	170.07
2016		
First Quarter	199.73	148.90
Second Quarter	218.66	176.85
Third Quarter	224.10	204.82
Fourth Quarter	215.75	180.29
2017		
First Quarter	211.37	186.15
Second Quarter	266.93	204.52
Third Quarter (through September 22, 2017)	287.02	263.60

The closing sale price per share of our common stock as of September 22, 2017 was \$280.82.

We have never declared or paid any cash dividends on our common stock and do not intend to do so for the foreseeable future.

TABLE OF CONTENTS**Underwriting**

We are offering the shares of common stock described in this prospectus supplement through the underwriters named below. J.P. Morgan Securities LLC is acting as representative of the underwriters. Under the terms and subject to the conditions contained in an underwriting agreement dated September , 2017, we have agreed to sell to the underwriters, and each underwriter has severally agreed to purchase, at the public offering price less the underwriting discounts and commissions set forth on the cover page of this prospectus supplement, the number of shares of common stock listed next to its name in the following table:

	Number of Shares
J. P. Morgan Securities LLC	
Goldman Sachs & Co. LLC	
Citigroup Global Markets Inc.	
Merrill Lynch, Pierce, Fenner & Smith Incorporated	
SunTrust Robinson Humphrey, Inc.	
Wells Fargo Securities, LLC	
Needham & Company, LLC	
Stephens Inc.	
William Blair & Company, L.L.C.	
JMP Securities LLC	
B. Riley & Co., LLC	
Total	

The underwriters are committed to purchase all the shares of common stock offered by us if they purchase any shares. The underwriting agreement also provides that if an underwriter defaults, the purchase commitments of non-defaulting underwriters may be increased or the offering may be terminated.

The underwriters propose to offer the shares of common stock directly to the public at the public offering price set forth on the cover page of this prospectus supplement, and to certain dealers at that price less a concession not in excess of \$ per share. Any such dealers may resell shares to certain other brokers or dealers at a discount of up to \$ per share from the public offering price. After the public offering of the shares, the underwriters may change the offering price and other selling terms. Sales of shares made outside of the United States may be made by affiliates of the underwriters.

The underwriters have an option to buy up to additional shares of common stock from us to cover sales of shares by the underwriters which exceed the number of shares specified in the table above. The underwriters have 30 days from the date of this prospectus supplement to exercise this option. If any shares are purchased with this option, the underwriters will purchase shares in approximately the same proportion as shown in the table above. If any additional shares of common stock are purchased, the underwriters will offer the additional shares on the same terms as those on which the shares are being offered. The offering of the shares by the underwriters is subject to receipt and acceptance and subject to the underwriters' right to reject any order in whole or in part.

The underwriting discount is equal to the public offering price per share of common stock less the amount paid by the underwriters per share of our common stock. The following table shows the per share and total underwriting discounts and commissions we will pay, assuming both no exercise and full exercise of the underwriters' option to purchase

additional shares.

	Without exercise of options to purchase additional shares	With exercise of options to purchase additional shares
Per Share	\$	\$
Total	\$	\$

We estimate that the total expenses of this offering, including registration, filing and listing fees, printing fees and legal and accounting expenses, but excluding the underwriting discounts and commissions, will be approximately \$0.6 million. The underwriters have agreed to reimburse us for certain expenses relating to this offering, the 2017 Revolving Credit Facility and the ForRent acquisition.

S-11

TABLE OF CONTENTS

A prospectus in electronic format may be made available on the websites maintained by one or more underwriters, or selling group members, if any, participating in the offering. The underwriters may agree to allocate a number of shares to underwriters and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the representative to underwriters and selling group members that may make Internet distributions on the same basis as other allocations.

We have agreed with the underwriters that we will not (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase or otherwise transfer or dispose of, directly or indirectly, or file with the SEC a registration statement under the Securities Act relating to, any shares of our common stock or any securities convertible into or exercisable or exchangeable for any shares of our common stock, or publicly disclose the intention to make any offer, sale, pledge, disposition or filing, or (ii) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of any shares of our common stock or any such other securities (regardless of whether any of these transactions are to be settled by the delivery of shares of our common stock or such other securities, in cash or otherwise), in each case without the prior written consent of J.P. Morgan Securities LLC on behalf of the underwriters, for a period of 90 days after the date of this prospectus supplement, other than (i) the shares of our common stock to be sold hereunder, (ii) shares of our common stock issued upon the exercise of options granted under our existing stock-based incentive plans, (iii) new compensatory grants made under our existing stock-based incentive plans and (iv) the offer, sale and issuance of shares of our common stock, not to exceed 10%, in the aggregate, of the shares of our common stock outstanding immediately after this offering, in connection with one or more acquisitions during the 90-day restricted period. Notwithstanding the foregoing, we may contract to sell and publicly disclose the intention to issue shares of our common stock in connection with any acquisition; provided that no shares in excess of the 10% limitation specified in clause (iv) above are issued prior to the expiration of the 90-day restricted period.

Our directors and executive officers have agreed with the underwriters not to, for a period of 90 days after the date of this prospectus supplement, subject to certain exceptions, without the prior written consent of J.P. Morgan Securities LLC on behalf of the underwriters, (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any securities convertible into or exercisable or exchangeable for our common stock (including, without limitation, common stock or such other securities which may be deemed to be beneficially owned by such directors and executive officers in accordance with the rules and regulations of the SEC and securities which may be issued upon exercise of a stock option or warrant), or publicly disclose the intention to make any offer, sale, pledge or disposition, (ii) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of our common stock or such other securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of our common stock or such other securities, in cash or otherwise or (iii) make any demand for or exercise any right with respect to the registration of any shares of our common stock or any security convertible into or exercisable or exchangeable for our common stock, in each case other than (A) transfers of shares of our common stock as a bona fide gift or gifts or as a result of testate or intestate succession; (B) in the case of a stock option expiring during the period when the restrictions described in this paragraph continue, sales, exchanges, swaps or other transfers or dispositions of shares of our common stock issuable upon the exercise thereof to us in an amount limited to the amount necessary to cover the exercise price thereof or to satisfy the tax withholding in connection with the exercise thereof; and (C) in the case of restricted stock vesting during the period when the restrictions described in this paragraph continue, sales, exchanges, swaps or other transfers or dispositions of shares of our common stock so vested to the Company in an amount limited to the amount necessary to satisfy the tax withholding in connection with the vesting thereof; provided that in the case of clause (A), each transferee executes and delivers to the representative a lock-up letter in the form of this paragraph and no filing by any party (donor, donee, transferor or transferee) under the Exchange Act or other public announcement is required or is made voluntarily in connection with such transfer (other than a filing on a Form 5 made after the expiration of the 90-day restricted period referred to above).

We have agreed to indemnify the several underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the underwriters may be required to make in respect of those liabilities.

Our common stock is listed on the Nasdaq Global Select Market under the symbol CSGP.

S-12

TABLE OF CONTENTS

In connection with this offering, the underwriters may engage in stabilizing transactions, which involves making bids for, purchasing and selling shares of our common stock in the open market for the purpose of preventing or retarding a decline in the market price of the shares of our common stock while this offering is in progress. These stabilizing transactions may include making short sales of the shares of our common stock, which involves the sale by the underwriters of a greater number of shares of our common stock than they are required to purchase in this offering, and purchasing shares of our common stock on the open market to cover positions created by short sales. Short sales may be covered shorts, which are short positions in an amount not greater than the underwriters' option to purchase additional shares referred to above, or may be naked shorts, which are short positions in excess of that amount. The underwriters may close out any covered short position either by exercising their option to purchase additional shares, in whole or in part, or by purchasing shares of our common stock in the open market. In making this determination, the underwriters will consider, among other things, the price of shares of our common stock available for purchase in the open market compared to the price at which the underwriters may purchase shares of our common stock through the option to purchase additional shares. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of our common stock in the open market that could adversely affect investors who purchase in this offering. To the extent that the underwriters create a naked short position, they will purchase shares of our common stock in the open market to cover the position.

The underwriters have advised us that, pursuant to Regulation M of the Securities Act, they may also engage in other activities that stabilize, maintain or otherwise affect the price of our common stock, including the imposition of penalty bids. This means that if the representative of the underwriters purchases common stock in the open market in stabilizing transactions or to cover short sales, the representative can require the underwriters that sold those shares as part of this offering to repay the underwriting discount received by them. These activities may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock, and, as a result, the price of our common stock may be higher than the price that otherwise might exist in the open market. If the underwriters commence these activities, they may discontinue them at any time. The underwriters may carry out these transactions on the Nasdaq Global Select Market, in the over the counter market or otherwise.

In addition, in connection with this offering certain of the underwriters (and selling group members) may engage in passive market making transactions in our common stock on The Nasdaq Stock Market prior to the pricing and completion of this offering. Passive market making consists of displaying bids on The Nasdaq Stock Market no higher than the bid prices of independent market makers and making purchases at prices no higher than these independent bids and effected in response to order flow. Net purchases by a passive market maker on each day are generally limited to a specified percentage of the passive market maker's average daily trading volume in the common stock during a specified period and must be discontinued when such limit is reached. Passive market making may cause the price of our common stock to be higher than the price that otherwise would exist in the open market in the absence of these transactions. If passive market making is commenced, it may be discontinued at any time.

The underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include sales and trading, commercial and investment banking, advisory, investment management, investment research, principal investment, hedging, market making, brokerage and other financial and non-financial activities and services. Certain of the underwriters and their affiliates have provided in the past to us and our affiliates and may provide from time to time in the future certain commercial banking, financial advisory, investment banking and other services in the ordinary course of their business, for which they have received and may continue to receive customary fees and commissions. In addition, from time to time, certain of the underwriters and their affiliates may effect transactions for their own account or the accounts of their customers, and hold on behalf of themselves or their customers, long or short positions in our debt or equity securities or loans, and may do so in the future. The underwriters and their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such assets, securities or

instruments and may at any time hold, or recommend to clients that they should acquire, long and/or short positions in such assets, securities and instruments.

Certain of the underwriters and their affiliates, including J.P. Morgan Securities LLC, as joint lead arranger and joint bookrunner, JPMorgan Chase Bank, N.A., an affiliate of J.P. Morgan Securities LLC, as administrative

S-13

TABLE OF CONTENTS

agent and lender, Goldman Sachs Bank USA, an affiliate of Goldman Sachs & Co., as lender, Citibank, N.A., an affiliate of Citigroup Global Markets Inc., as lender, Bank of America, N.A., an affiliate of Merrill Lynch, Pierce, Fenner & Smith Incorporated, as lender, Merrill Lynch, Pierce, Fenner & Smith Incorporated, as joint lead arranger, joint bookrunner and co-syndication agent, SunTrust Bank, an affiliate of SunTrust Robinson Humphrey, Inc., as co-syndication agent and lender, SunTrust Robinson Humphrey, Inc., as joint lead arranger and joint bookrunner, Wells Fargo Bank, N.A., an affiliate of Wells Fargo Securities, LLC, as co-syndication agent and lender, and Wells Fargo Securities, LLC, as joint lead arranger and joint bookrunner, are party to the Credit Agreement dated as of April 1, 2014 among the Company, the borrowing subsidiary thereto, the lenders party thereto and JPMorgan Chase Bank, N.A., as administrative agent. In addition, from time to time, certain of the underwriters and their affiliates may effect transactions for their own account or the account of customers, and hold on behalf of themselves or their customers, long or short positions in our debt or equity securities or loans, and may do so in the future.

Other than in the United States, no action has been taken by us or the underwriters that would permit a public offering of the securities offered by this prospectus supplement in any jurisdiction where action for that purpose is required. The securities offered by this prospectus supplement may not be offered or sold, directly or indirectly, nor may this prospectus supplement, the accompanying prospectus or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus supplement comes are advised to inform themselves about and to observe any restrictions relating to the offering and the distribution of this prospectus supplement. This prospectus supplement does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus supplement in any jurisdiction in which such an offer or a solicitation is unlawful.

Notice to Prospective Investors in the United Kingdom

This document is only being distributed to and is only directed at (i) persons who are outside the United Kingdom or (ii) investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the Order) or (iii) high net worth entities, and other persons to whom it may lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as relevant persons). The securities are only available to, and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such securities will be engaged in only with, relevant persons. Any person who is not a relevant person should not act or rely on this document or any of its contents.

Notice to Prospective Investors in the European Economic Area

In relation to each Member State of the European Economic Area that has implemented the Prospectus Directive (each, a Relevant Member State), from and including the date on which the European Union Prospectus Directive (the EU Prospectus Directive) was implemented in that Relevant Member State (the Relevant Implementation Date) an offer of securities described in this prospectus supplement and the accompanying prospectus may not be made to the public in that Relevant Member State prior to the publication of a prospectus in relation to the shares of common stock which has been approved by the competent authority in that Relevant Member State or, where appropriate, approved in another Relevant Member State and notified to the competent authority in that Relevant Member State, all in accordance with the EU Prospectus Directive, except that, with effect from and including the Relevant Implementation Date, an offer of securities described in this prospectus supplement and the accompanying prospectus may be made to the public in that Relevant Member State at any time:

- to any legal entity which is a qualified investor as defined under the EU Prospectus Directive;
- to fewer than 150 natural or legal persons (other than qualified investors as defined in the EU Prospectus Directive), subject to obtaining the prior consent of the underwriters for any such offer; or

in any other circumstances falling within Article 3(2) of the EU Prospectus Directive, provided that no such offer of securities described in this prospectus shall result in a requirement for the publication by us of a prospectus pursuant to Article 3 of the EU Prospectus Directive.

For the purposes of this provision, the expression an offer of securities to the public in relation to any securities in any Relevant Member State means the communication in any form and by any means of sufficient

S-14

TABLE OF CONTENTS

information on the terms of the offer and the securities to be offered so as to enable an investor to decide to purchase or subscribe for the securities, as the same may be varied in that Member State by any measure implementing the EU Prospectus Directive in that Member State. The expression "EU Prospectus Directive" means Directive 2003/71/EC (and any amendments thereto, including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member State) and includes any relevant implementing measure in each Relevant Member State, and the expression "2010 PD Amending Directive" means Directive 2010/73/EU.

Notice to Prospective Investors in Canada

The shares may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the shares must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

Notice to Prospective Investors in Switzerland

The shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange ("SIX") or on any other stock exchange or regulated trading facility in Switzerland. This document has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the shares or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, the Company, the shares have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of shares will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA (FINMA), and the offer of shares has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes ("CISA"). The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of shares.

Notice to Prospective Investors in the Dubai International Financial Centre

This prospectus supplement relates to an Exempt Offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority ("DFSA"). This prospectus supplement is intended for distribution only to persons of a type specified in the Offered Securities Rules of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers.

The DFSA has not approved this prospectus supplement nor taken steps to verify the information set forth herein and has no responsibility for the prospectus supplement. The shares to which this prospectus supplement relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the shares offered should conduct their own due diligence on the shares. If you do not understand the contents of this prospectus supplement you should consult an authorized financial advisor.

Notice to Prospective Investors in Australia

No placement document, prospectus, product disclosure statement or other disclosure document has been lodged with the Australian Securities and Investments Commission (ASIC), in relation to the offering. This

S-15

TABLE OF CONTENTS

prospectus supplement does not constitute a prospectus, product disclosure statement or other disclosure document under the Corporations Act 2001 (the Corporations Act), and does not purport to include the information required for a prospectus, product disclosure statement or other disclosure document under the Corporations Act.

Any offer in Australia of the shares may only be made to persons (the Exempt Investors) who are sophisticated investors (within the meaning of section 708(8) of the Corporations Act), professional investors (within the meaning of section 708(11) of the Corporations Act) or otherwise pursuant to one or more exemptions contained in section 708 of the Corporations Act so that it is lawful to offer the shares without disclosure to investors under Chapter 6D of the Corporations Act.

The shares applied for by Exempt Investors in Australia must not be offered for sale in Australia in the period of 12 months after the date of allotment under the offering, except in circumstances where disclosure to investors under Chapter 6D of the Corporations Act would not be required pursuant to an exemption under section 708 of the Corporations Act or otherwise or where the offer is pursuant to a disclosure document which complies with Chapter 6D of the Corporations Act. Any person acquiring shares must observe such Australian on-sale restrictions.

This prospectus supplement contains general information only and does not take account of the investment objectives, financial situation or particular needs of any particular person. It does not contain any securities recommendations or financial product advice. Before making an investment decision, investors need to consider whether the information in this prospectus supplement is appropriate to their needs, objectives and circumstances, and, if necessary, seek expert advice on those matters.

Notice to Prospective Investors in Hong Kong

The shares may not be offered or sold by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap.32, Laws of Hong Kong), or (ii) to professional investors within the meaning of the Securities and Futures Ordinance (Cap.571, Laws of Hong Kong) and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a prospectus within the meaning of the Companies Ordinance (Cap.32, Laws of Hong Kong), and no advertisement, invitation or document relating to the shares may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to professional investors within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder.

Notice to Prospective Investors in Japan

The securities have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (the Financial Instruments and Exchange Law) and each underwriter has agreed that it will not offer or sell any securities, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Law and any other applicable laws, regulations and ministerial guidelines of Japan.

Notice to Prospective Investors in Singapore

This prospectus supplement has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus supplement and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the SFA), (ii) to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

S-16

TABLE OF CONTENTS

Where the shares are subscribed or purchased under Section 275 by a relevant person which is: (a) a corporation (which is not an accredited investor) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary is an accredited investor, shares, debentures and units of shares and debentures of that corporation or the beneficiaries' rights and interest in that trust shall not be transferable for 6 months after that corporation or that trust has acquired the shares under Section 275 except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA; (2) where no consideration is given for the transfer; or (3) by operation of law.

S-17

TABLE OF CONTENTS

Material United States federal income tax considerations

The following is a summary of material U.S. federal income tax consequences relating to the ownership and disposition of shares of our common stock, as of the date hereof. This summary deals only with shares of our common stock that are held as capital assets within the meaning of Section 1221 of the Internal Revenue Code of 1986, as amended, or the Code (generally, property held for investment). This summary does not discuss any U.S. federal tax consequences other than those relating to income taxes (such as estate or gift tax consequences) and does not discuss any state, local or non-U.S. tax consequences. In addition, this summary does not discuss all aspects of U.S. federal income taxation that may be relevant to the ownership or disposition of our common stock by prospective investors in light of their particular circumstances. In particular, except to the extent discussed below, this summary does not address all of the tax consequences that may be relevant to certain types of investors subject to special treatment under U.S. federal income tax laws, such as:

- dealers in securities or currencies, brokers, financial institutions, controlled foreign corporations, passive foreign investment companies, regulated investment companies, real estate investment trusts, retirement plans, certain former citizens or long-term residents of the United States, tax-exempt entities, traders in securities that elect to use a mark-to-market method of accounting for their securities holdings or insurance companies;
- U.S. Holders (as defined below) of shares of our common stock whose functional currency is not the U.S. dollar;
- persons holding shares of our common stock as part of a hedging, integrated, constructive sale, or conversion transaction or a straddle;
- entities or arrangements that are treated as partnerships for U.S. federal income tax purposes; or
- persons liable for alternative minimum tax.

The discussion below is based upon the provisions of the Code, applicable U.S. Treasury regulations promulgated thereunder, and administrative rulings and judicial decisions as of the date hereof. Those authorities may be subject to different interpretations and may be changed, perhaps retroactively, so as to result in U.S. federal income tax consequences different from those discussed below.

If an entity or arrangement treated as a partnership for U.S. federal income tax purposes) holds shares of our common stock, the tax treatment of a partner in the partnership will generally depend upon the status of the partner and the activities of the partnership. If you are an equity holder in a partnership that holds shares of our common stock, you should consult your tax advisor as to the particular U.S. federal income tax consequences applicable to you.

If you are considering the purchase of shares of our common stock, you should consult your own tax advisors concerning the U.S. federal tax consequences, including estate tax consequences, to you and any consequences arising under the laws of any state, local, non-U.S. or other taxing jurisdiction. Each prospective investor should seek advice based on its particular circumstances from an independent tax advisor.

For purposes of this summary, a U.S. Holder means a beneficial owner of a share of our common stock that is:

- an individual who is a citizen or resident of the United States;
- a corporation (or any other entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States or any state thereof or the District of Columbia;
- an estate the income of which is subject to U.S. federal income taxation regardless of its source; or
- a trust if (i) it is subject to the primary supervision of a court within the United States and one or more U.S. persons have the authority to control all substantial decisions of the trust or (ii) it has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person.

TABLE OF CONTENTS**Consequences to U.S. Holders**

The following is a summary of material U.S. federal income tax consequences that will apply to a U.S. Holder of shares of our common stock.

Distributions

If we make a distribution in respect of our common stock, the distribution will be treated as a dividend to the extent it is paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. If the distribution exceeds current and accumulated earnings and profits, the excess will be treated as a nontaxable return of capital that reduces the holder's adjusted tax basis in the common stock to the extent of the holder's adjusted tax basis in that stock. A holder's adjusted tax basis in our common stock will generally be the amount the holder paid for it, subject to certain adjustments. Any remaining excess will be treated as capital gain.

If a U.S. Holder is an individual, dividends received by such holder may be subject to a reduced maximum tax rate provided certain holding period and other requirements are met. If a U.S. Holder is a U.S. corporation, it may be able to claim the deduction allowed to U.S. corporations in respect of dividends received from other U.S. corporations equal to a portion of any dividends received, subject to generally applicable limitations on that deduction. U.S. Holders should consult their tax advisors regarding the holding period requirements that must be satisfied in order to qualify for the dividends-received deduction and the reduced maximum tax rate on dividends.

Sale, exchange or other taxable disposition of common stock

A U.S. Holder will generally recognize capital gain or loss on a sale, exchange or other taxable disposition of our common stock. The U.S. Holder's gain or loss will equal the difference between the amount realized by the U.S. Holder and the U.S. Holder's adjusted tax basis in the stock. The amount realized by the U.S. Holder will include the amount of any cash and the fair market value of any other property received for the stock. Gain or loss recognized by a U.S. Holder on a sale or exchange of stock will be long-term capital gain or loss if the U.S. Holder's holding period in the stock is more than one year at the time of the sale, exchange or other taxable disposition. Long-term capital gains of non-corporate taxpayers currently are eligible for reduced rates of taxation. The deductibility of capital losses is subject to certain limitations.

In certain circumstances, amounts received by a U.S. Holder upon the redemption of our common stock may be treated as a dividend with respect to our common stock, rather than as a payment in exchange for our common stock that results in the recognition of capital gain or loss. In these circumstances, the redemption payment would be included in a U.S. Holder's gross income as a dividend to the extent such payment is made out of our earnings and profits (as described above). The determination of whether redemption of common stock will be treated as a dividend, rather than as a payment in exchange for our common stock, will depend, in part, on whether and to what extent the redemption reduces the U.S. Holder's ownership in us (including as a result of certain constructive ownership attribution rules). The rules applicable to redemptions are complex, and each U.S. Holder should consult its own tax advisor to determine the consequences of any redemption.

Additional tax on net investment income

Non-corporate U.S. persons are generally subject to a 3.8% tax on the lesser of (1) the U.S. person's net investment income for the relevant taxable year and (2) the excess of the U.S. person's modified adjusted gross income for the taxable year over a certain threshold (which in the case of individuals will be between \$125,000 and \$250,000, depending on the individual's tax return filing status). A U.S. Holder's net investment income will generally include any income or gain recognized by such holder with respect to our common stock, unless such income or gain is

derived in the ordinary course of the conduct of such U.S. Holder's trade or business (other than a trade or business that consists of certain passive or trading activities). Non-corporate U.S. persons should consult their tax advisors on the applicability of this additional tax to its income and gains in respect of their investment in our common stock.

Information reporting and backup withholding

We or our paying agent must report annually to U.S. Holders and the Internal Revenue Service, or the IRS, amounts paid to such holders on or with respect to our common stock during each calendar year, the amount of proceeds from the sale of our common stock and the amount of tax, if any, withheld from such

S-19

TABLE OF CONTENTS

payments. A U.S. Holder will be subject to backup withholding on dividends paid on our common stock and proceeds from the sale of our common stock at the applicable rate if the U.S. Holder is not otherwise exempt and (i) the holder fails to provide us or our paying agent with a correct taxpayer identification number, (ii) we or our paying agent are notified by the IRS that the holder provided an incorrect taxpayer identification number, (iii) we or our paying agent are notified by the IRS that the holder failed to properly report payments of interest or dividends or (iv) the holder fails to certify under penalty of perjury that it has provided a correct taxpayer identification number and has not been notified by the IRS that it is subject to backup withholding. A U.S. Holder generally may establish that it is exempt from or otherwise not subject to backup withholding by providing a properly completed IRS Form W-9 to us or our paying agent. Any amounts withheld under the backup withholding rules will generally be allowed as a refund or a credit against a U.S. Holder's U.S. federal income tax liability, provided the required information is properly furnished to the IRS on a timely basis.

Consequences to Non-U.S. Holders

The following is a summary of the material U.S. federal income tax consequences that will apply to a Non-U.S. Holder of shares of our common stock. The term "Non-U.S. Holder" means a beneficial owner of shares of our common stock that is an individual, corporation, estate or trust for U.S. federal income tax purposes and is not a U.S. Holder.

Distributions

Distributions on our common stock will constitute dividends to the extent described above in "Consequences to U.S. Holders—Distributions." Any dividends paid to Non-U.S. Holders with respect to the shares of our common stock will generally be subject to U.S. withholding tax at a 30% rate or such lower rate as specified by an applicable income tax treaty. To receive the benefit of a reduced treaty rate, a Non-U.S. Holder must furnish to us or our paying agent a valid IRS Form W-8BEN, W-BEN-E, or other applicable or successor form, certifying such holder's qualification for the reduced rate. This certification must be provided to us or our paying agent prior to the payment of dividends and must be updated periodically. If a Non-U.S. Holder is eligible for a reduced rate of U.S. withholding tax pursuant to an income tax treaty but fails to timely provide the required certification, the holder may obtain a refund or credit of any excess amounts withheld by timely filing an appropriate claim for such refund or credit with the IRS.

Dividends that are effectively connected with a Non-U.S. Holder's conduct of a trade or business within the United States (and, where an applicable income tax treaty so requires, are attributable to such Non-U.S. Holder's permanent establishment in the United States) are generally not subject to U.S. withholding tax, provided the Non-U.S. Holder furnishes to us or our paying agent a properly executed IRS Form W-8ECI (or applicable successor form) prior to the payment of dividends. Instead, dividends that are effectively connected with a Non-U.S. Holder's conduct of a U.S. trade or business (and, where an applicable income tax treaty so requires, are attributable to such Non-U.S. Holder's permanent establishment in the United States), are subject to U.S. federal income tax on a net income basis at applicable graduated individual or corporate rates. Any such effectively connected dividends received by a foreign corporation may, under certain circumstances, be subject to an additional branch profits tax at a 30% rate or such lower rate as specified by an applicable income tax treaty. Non-U.S. Holders should consult their tax advisors regarding the potential application of tax treaties and their eligibility for income tax treaty benefits.

Sale, exchange or other taxable disposition of common stock

Subject to the discussions below under "Information reporting and backup withholding" and "Foreign Account Tax Compliance Act," any gain realized by a Non-U.S. Holder upon the sale, exchange or other taxable disposition of shares of our common stock generally will not be subject to U.S. federal income tax unless:

-

that gain is effectively connected with such Non-U.S. Holder's conduct of a trade or business in the United States (and, where an applicable income tax treaty so requires, is attributable to such Non-U.S. Holder's permanent establishment in the United States);

the Non-U.S. Holder is an individual who is present in the United States for 183 days or more in the taxable year of that disposition, and certain other conditions are met; or

we are or have been a United States real property holding corporation for U.S. federal income tax purposes at any time within the shorter of the five-year period ending on the date of disposition or the

S-20

TABLE OF CONTENTS

period that such Non-U.S. Holder held shares of our common stock and either our common stock was not regularly traded on an established securities market at any time during the calendar year in which the disposition occurs, or the Non-U.S. Holder owns or owned (actually or constructively) more than five percent of the total fair market value of shares of our common stock at any time during the five-year period ending on the date of disposition. We do not believe that we are, and do not anticipate that we will become, a U.S. real property holding corporation for U.S. federal income tax purposes.

A Non-U.S. Holder described in the first bullet point above will generally be subject to U.S. federal income tax on the net gain derived from the sale under regular graduated U.S. federal income tax rates or such lower rate as specified by an applicable income tax treaty. A Non-U.S. Holder that is a foreign corporation may, in addition, be subject to a branch profits tax at a 30% rate or a lower rate specified by an applicable income tax treaty. An individual Non-U.S. Holder described in the second bullet point above will generally be subject to a flat 30% U.S. federal income tax on the gain derived from the sale, which may be offset by U.S. source capital losses. If a Non-U.S. Holder is eligible for the benefits of an income tax treaty between the United States and its country of residence, any gain described in the second bullet point will be subject to U.S. federal income tax in the manner specified by the income tax treaty and generally will only be subject to such tax if such gain is attributable to a permanent establishment maintained by the Non-U.S. Holder in the United States. To claim the benefit of any applicable income tax treaty, a Non-U.S. Holder must properly submit an IRS Form W-8BEN, W-8BEN-E or other applicable or successor form). Non-U.S. Holders should consult their tax advisors regarding the potential application of income tax treaties and their eligibility for income tax treaty benefits.

As described above in —Consequences to U.S. Holders—Sale, exchange or other taxable disposition of stock, in certain circumstances amounts received upon the redemption of our common stock may be treated as a dividend and not as a payment in exchange for our common stock that results in the recognition of capital gain or loss. The rules applicable to redemptions are complex, and each non-U.S. Holder should consult its own tax advisor to determine the consequences of a redemption to it.

Information reporting and backup withholding

We must report annually to the IRS the amount of dividends or other distributions we pay to Non-U.S. Holders on shares of our common stock and the amount of tax we withhold on these distributions. These information reporting requirements apply even if no withholding was required. Copies of the information returns reporting such distributions and any withholding may also be made available to the tax authorities in the country in which the Non-U.S. Holder resides under the provisions of an applicable income tax treaty or other agreement. A Non-U.S. Holder generally will not be subject to backup withholding (but may be subject to other withholding as described above) on dividends the Non-U.S. Holder receives on shares of our common stock provided that we do not have actual knowledge or reason to know that the holder is a U.S. person, as defined under the Code, and we have received from the holder a properly completed IRS Form W-8BEN, W-8BEN-E or other applicable or successor form, or the holder otherwise establishes an exemption.

Information reporting and backup withholding generally are not required with respect to the amount of any proceeds from the sale of shares of our common stock outside the United States through a foreign office of a foreign broker that does not have certain specified connections to the United States. However, if a Non-U.S. Holder sells shares of our common stock through a U.S. broker or the U.S. office of a foreign broker, the broker will be required to report the amount of proceeds paid to the Non-U.S. Holder to the IRS and also backup withhold on that amount unless the Non-U.S. Holder provides to the broker a properly completed IRS Form W-8BEN, W-8BEN-E or other applicable or successor form or otherwise establishes an exemption, and the broker does not have actual knowledge or reasons to know that the holder is a U.S. person, as defined under the Code.

Any amounts withheld under the backup withholding rules will generally be allowed as a refund or a credit against a Non-U.S. Holder's U.S. federal income tax liability provided the required information is properly furnished to the IRS on a timely basis.

Foreign Account Tax Compliance Act

Sections 1471 through 1474 of the Code, Treasury regulations promulgated thereunder and applicable administrative guidance (collectively, "FATCA") impose a 30% withholding tax on payments of dividends on, and after December 31, 2018, gross proceeds from the sale or other disposition of, our common stock made to

S-21

TABLE OF CONTENTS

(i) a foreign financial institution, as defined under such rules, unless such institution enters into an agreement with the Department of Treasury to, among other things, collect and provide to it substantial information regarding such institution's United States financial account holders, including certain account holders that are foreign entities with United States owners or, in the case of a foreign financial institution in a jurisdiction that has entered into an intergovernmental agreement with the United States, such institution complies with the requirements of such agreement and (ii) a non-financial foreign entity, as defined under such rules, unless such entity provides the paying agent with a certification that it does not have any substantial United States owners or a certification identifying the direct and indirect substantial United States owners of the entity, unless in each case, an exemption applies.

Holders are encouraged to consult with their own tax advisors regarding the possible implications of these rules for their investment in our common stock.

The foregoing discussion of material U.S. federal income tax considerations is for general information purposes only and is not tax or legal advice. You should consult your own tax advisor as to the particular tax consequences to you of owning and disposing of our common stock, including the applicability and effect of any U.S. federal, state or local or non-U.S. tax laws, and of any changes or proposed changes in applicable law.

S-22

TABLE OF CONTENTS

Validity of the common stock

The validity of the common stock offered hereby will be passed upon for us by Gibson, Dunn & Crutcher LLP, New York, New York. The underwriters have been represented by Cravath, Swaine & Moore LLP, New York, New York.

Experts

Ernst & Young LLP, independent registered public accounting firm, has audited CoStar Group, Inc.'s consolidated financial statements and schedule included in our Annual Report on Form 10-K for the year ended December 31, 2016 and the effectiveness of our internal control over financial reporting as of December 31, 2016, as set forth in their reports, which are incorporated by reference in this prospectus supplement. The CoStar Group, Inc. financial statements and schedule are incorporated by reference in reliance on Ernst & Young LLP's report, given their authority as experts in accounting and auditing.

Where you can find additional information

We are subject to the informational requirements of the Exchange Act and, in accordance with these requirements, we file annual, quarterly and current reports, proxy statements and other information relating to our business, financial condition and other matters with the SEC. We are required to disclose in such reports certain information, as of particular dates, concerning our operating results and financial condition, officers and directors, principal holders of securities, any material interests of such persons in transactions with us and other matters. You may read and copy any of this information filed with the SEC at the SEC's public reference room:

Public Reference Room
100 F Street NE
Washington, DC 20549

For information regarding the operation of the Public Reference Room, you may call the SEC at 1-800-SEC-0330. Our filings are also available to the public through the website maintained by the SEC at <http://www.sec.gov> or from commercial document retrieval services. Our filings are also available on our website at <http://www.costar.com/investors/sec-filings>. You are encouraged to read the materials that we file with the SEC, which disclose important information about us. This information includes any filing we have made with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act. The information on our website or any other website is not incorporated by reference in this prospectus supplement or the accompanying prospectus and should not be considered part of this prospectus supplement or the accompanying prospectus or any other filing we make with the SEC.

Incorporation by reference

The SEC allows us to incorporate by reference into this prospectus supplement and the accompanying prospectus, which means that we can disclose important information to you by referring you to another document that we filed separately with the SEC. The information incorporated by reference is deemed to be part of this prospectus supplement and the accompanying prospectus, except for any information superseded by information contained directly in this prospectus supplement and the accompanying prospectus. These documents contain important information about us and our financial condition, business and results.

We are incorporating by reference our filings listed below and any additional documents that we may file with the SEC pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act on or after the date we file this prospectus supplement and prior to the termination of any offering; except we are not incorporating by reference any information

Edgar Filing: COSTAR GROUP INC - Form 424B2

furnished (but not filed) under Item 2.02 or Item 7.01 of any Current Report on Form 8-K, unless specifically noted below:

- our Annual Report on Form 10-K for the year ended December 31, 2016 (including the portions of our proxy statement for our 2017 annual meeting of stockholders incorporated by reference therein);
- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2017 and June 30, 2017, filed on April 27, 2017 and July 27, 2017, respectively;
- our Current Reports on Form 8-K filed with the SEC on June 7, 2017 and September 13, 2017 (with respect to Item 1.01 only), respectively; and

S-23

TABLE OF CONTENTS

the description of our common stock, par value \$0.01 per share, contained in our Form 8-A filed on June 25, 1998 (SEC File Number 000-24531), and any amendment or report filed for the purpose of updating such description. We will provide, without charge, to each person to whom a copy of this prospectus supplement has been delivered, including any beneficial owner, a copy of any and all of the documents referred to herein that are summarized in this prospectus supplement, if such person makes a written or oral request directed to:

CoStar Group, Inc.
1331 L Street, Northwest
Washington, DC 20005
Attention: Investor Relations
(202) 346-6500

You can obtain copies of documents incorporated by reference in this prospectus supplement, without charge, by requesting them in writing or by telephone from us at CoStar Group, Inc., 1331 L Street, NW, Washington, DC 20005, Attention: Investor Relations, telephone number (202) 346-6500. You should rely only on the information incorporated by reference or provided in this prospectus supplement, the accompanying prospectus, and any applicable free writing prospectus. We have not authorized anyone else to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this prospectus supplement, the accompanying prospectus or any applicable free writing prospectus or any document incorporated by reference is accurate as of any date other than the date of the applicable document.

Our principal executive office is located at 1331 L Street, NW, Washington, DC 20005 (telephone number (202) 346-6500). We maintain a website at <http://www.costargroup.com>. The information on our website is not part of this prospectus supplement or the accompanying prospectus, nor is it incorporated by reference. Documents available on our website include our (i) Code of Conduct for Directors, (ii) Code of Conduct for Employees, (iii) Principles of Corporate Governance and (iv) charters for the Audit, Compensation, and Nominating and Corporate Governance Committees.

S-24

TABLE OF CONTENTS

PROSPECTUS

CoStar Group, Inc.

Debt Securities

Common Stock

Preferred Stock

Warrants

Depository Shares

Purchase Contracts

We or selling securityholders may, from time to time, offer to sell senior or convertible debt securities, common stock, preferred stock, warrants, depository shares or purchase contracts. Each time we or a selling securityholder sells securities pursuant to this prospectus, we will provide a supplement to this prospectus that contains specific information about the offering and the specific terms of the securities offered. You should read this prospectus and the applicable prospectus supplement carefully before you invest in our securities.

Our common stock is listed on the NASDAQ Global Select Market under the symbol CSGP.

Investing in our securities involves a high degree of risk. See the Risk Factors section of our filings with the Securities and Exchange Commission and the applicable prospectus supplement.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is September 25, 2017

TABLE OF CONTENTS

TABLE OF CONTENTS

	Page
<u>ABOUT THIS PROSPECTUS</u>	<u>1</u>
<u>CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS</u>	<u>1</u>
<u>WHERE YOU CAN FIND ADDITIONAL INFORMATION</u>	<u>3</u>
<u>INCORPORATION BY REFERENCE</u>	<u>3</u>
<u>OUR COMPANY</u>	<u>4</u>
<u>USE OF PROCEEDS</u>	<u>4</u>
<u>RATIO OF EARNINGS TO FIXED CHARGES</u>	<u>5</u>
<u>DESCRIPTION OF DEBT SECURITIES</u>	<u>5</u>
<u>DESCRIPTION OF COMMON STOCK</u>	<u>12</u>
<u>DESCRIPTION OF PREFERRED STOCK</u>	<u>15</u>
<u>DESCRIPTION OF OTHER SECURITIES</u>	<u>15</u>
<u>PLAN OF DISTRIBUTION</u>	<u>15</u>
<u>SELLING SECURITYHOLDERS</u>	<u>15</u>
<u>EXPERTS</u>	<u>16</u>
<u>VALIDITY OF THE SECURITIES</u>	<u>16</u>

You should rely only on the information contained or incorporated by reference in this prospectus and in any accompanying prospectus supplement or in any related free writing prospectus. We have not authorized any other person to provide you with different information with respect to this offering. This document may only be used where it is legal to sell these securities. You should only assume that the information in this prospectus or in any prospectus supplement is accurate as of the date on the front of those documents. Our business, financial condition, results of operations and prospects may have changed since that date. We are not making an offer of these securities in any state where the offer is not permitted.

TABLE OF CONTENTS

ABOUT THIS PROSPECTUS

This prospectus is part of an automatic shelf registration statement that we filed with the Securities and Exchange Commission, or SEC, as a well-known seasoned issuer as defined in Rule 405 under the Securities Act of 1933, as amended (the Securities Act). By using an automatic shelf registration statement, we may, at any time and from time to time, sell securities under this prospectus in one or more offerings in an unlimited amount. As allowed by the SEC rules, this prospectus does not contain all of the information included in the registration statement. For further information, we refer you to the registration statement, including its exhibits. Statements contained in this prospectus about the provisions or contents of any agreement or other document are not necessarily complete. If the SEC's rules and regulations require that an agreement or document be filed as an exhibit to the registration statement, please see that agreement or document for a complete description of these matters.

This prospectus provides you with a general description of the securities we may offer. Each time we use this prospectus to offer securities, we will provide you with a prospectus supplement that will describe the specific amounts, prices and terms of the securities being offered. The prospectus supplement may also add, update or change information contained in this prospectus. Therefore, if there is any inconsistency between the information in this prospectus and the prospectus supplement, you should rely on the information in the prospectus supplement.

To understand the terms of our securities, you should carefully read this document and the applicable prospectus supplement. Together they give the specific terms of the securities we are offering. You should also read the documents we have referred you to under **Where You Can Find Additional Information** below for information about us and our financial statements. You can read the registration statement and exhibits on the SEC's website or at the SEC as described under **Where You Can Find Additional Information**.

Unless otherwise indicated or the context otherwise requires, references in this prospectus to **Registrant**, **Company**, **we** or **our** are to CoStar Group, Inc. and its consolidated subsidiaries, and **CoStar** refers to CoStar Group, Inc., a Delaware corporation.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

Certain parts of this prospectus and any prospectus supplement, and the documents incorporated by reference herein, contain forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act). Forward-looking statements include information that is not purely historic fact and include, without limitation, statements concerning our financial outlook for 2017 and beyond, our possible or assumed future results of operations generally, and other statements and information regarding assumptions about our revenues, revenue growth rates, gross margin percentage, net income, net income per share, fully diluted net income per share, EBITDA, adjusted EBITDA, non-generally accepted accounting principles (GAAP) net income, non-GAAP net income per share, weighted-average outstanding shares, taxable income, cash flow from operating activities, available cash, operating costs, amortization expense, intangible asset recovery, capital and other expenditures, legal proceedings and claims, legal costs, effective tax rate, equity compensation charges, future taxable income, pending acquisitions, the anticipated benefits of completed or proposed acquisitions, the anticipated benefits of cross-selling efforts, product development and release, sales and marketing campaigns, product integrations, elimination and de-emphasizing of services, contract renewal rate, the timing of future payments of principal under our \$400.0 million term loan facility available to us under a credit agreement dated April 1, 2014 (as amended, the Credit Agreement), expectations regarding our compliance with financial and restrictive covenants in our 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.

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 comparative 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

1

TABLE OF CONTENTS

addition to those discussed or referred to under the heading Risk Factors, and other unforeseen events or circumstances, could affect our future results and could cause those results or other outcomes to differ materially from those expressed or implied in our forward-looking statements:

- commercial real estate market conditions;
- general economic conditions, both domestic and international;
- our ability to identify, acquire and integrate acquisition candidates;
- our ability to realize the expected benefits, cost savings or other synergies from acquisitions, on a timely basis or at all;
- our ability to combine acquired businesses successfully or in a timely and cost-efficient manner;
- business disruption relating to integration of acquired businesses or other business initiatives;
- theft of any personally identifiable information we maintain or process;
- any actual or perceived failure to comply with privacy or data protection laws, regulations or standards;
- the amount of investment for sales and marketing and our ability to realize a return on investments in sales and marketing;
- our ability to effectively and strategically combine, eliminate or de-emphasize service offerings;
- reductions in revenues as a result of service changes;
- the time and resources required to develop upgraded or new services and to expand service offerings;
- changes or consolidations within the commercial real estate industry;
- customer retention;
- our ability to attract new clients;
- our ability to sell additional services to existing clients;
- our ability to integrate our North America and International product offerings;
- our ability to integrate the backend systems of CoStar and LoopNet and subsequently create operating efficiencies and provide improved data to our customers;
- our ability to successfully transition LoopNet to a pure marketing site, where all listings are paid and searches are free, in a timely manner, and minimize the impact of that transition on revenue;
- our ability to successfully introduce and cross-sell new products or upgraded services in U.S. and foreign markets;
- our ability to attract consumers to our online marketplaces;
- our ability to increase traffic on our network of sites;
- the success of our marketing campaigns in generating brand awareness and site traffic;
- competition;
- foreign currency fluctuations;
- global credit market conditions affecting investments;
- our ability to continue to expand successfully, timely and in a cost-efficient manner, including internationally;
- our ability to effectively penetrate and gain acceptance in new sectors and geographies;
- our ability to control costs;
- litigation or government investigations in which we become involved;
- changes in accounting policies or practices;

TABLE OF CONTENTS

• 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 Registration Statement. 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 Registration Statement or to reflect the occurrence of unanticipated events.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We are subject to the informational requirements of the Exchange Act, and, in accordance with these requirements, we file annual, quarterly and current reports, amendments to such reports, proxy statements and other information relating to our business, financial condition and other matters with the SEC. We are required to disclose in such reports certain information, as of particular dates, concerning our operating results and financial condition, officers and directors, principal holders of securities, any material interests of such persons in transactions with us and other matters. You may read and copy any of this information filed with the SEC at the SEC's public reference room:

Public Reference Room
100 F Street NE
Washington, DC 20549

For information regarding the operation of the Public Reference Room, you may call the SEC at 1-800-SEC-0330. Our filings are also available to the public through the website maintained by the SEC at www.sec.gov or from commercial document retrieval services. Our filings are also available free of charge as soon as reasonably practicable after we electronically file such material with, or furnish it to the SEC, on our website at www.costargroup.com/investors/sec-filings. You are encouraged to read the materials that we file with the SEC, which disclose important information about us. This information includes any filing we have made with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act. The information on our website or any other website is not incorporated by reference in the prospectus and should not be considered part of this prospectus or any other filing we make with the SEC.

INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference into this prospectus, which means that we can disclose important information to you by referring you to another document that we filed separately with the SEC. The information incorporated by reference is deemed to be part of this prospectus, except for any information superseded by information contained directly in this prospectus. These documents contain important information about us and our financial condition, business and results.

We are incorporating by reference our filings listed below and any additional documents that we may file with the SEC pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act on or after the date we file this

3

TABLE OF CONTENTS

prospectus and prior to the termination of any offering; except we are not incorporating by reference any information furnished (but not filed) under Item 2.02 or Item 7.01 of any Current Report on Form 8-K, unless specifically noted below for such report or in a prospectus supplement:

- our Annual Report on Form 10-K for the year ended December 31, 2016 (including the portions of our proxy statement for our 2017 annual meeting of stockholders incorporated by reference therein);
- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2017 and June 30, 2017, filed on April 27, 2017 and July 27, 2017, respectively;
- our Current Reports on Form 8-K filed with the SEC on June 7, 2017 and September 13, 2017 (as to Item 1.01 only);
- and

the description of our common stock, par value \$0.01 per share, contained in our Form 8-A filed on June 25, 1998 (SEC File Number 000-24531), and any amendment or report filed for the purpose of updating such description. We will provide, without charge, to each person to whom a copy of this prospectus has been delivered, including any beneficial owner, a copy of any and all of the documents referred to herein that are summarized in this prospectus, if such person makes a written or oral request directed to:

CoStar Group, Inc.
1331 L Street, NW
Washington, DC 20005
Attention: Investor Relations
(202) 346-6500

YOU SHOULD RELY ONLY ON THE INFORMATION CONTAINED OR INCORPORATED BY REFERENCE IN THIS PROSPECTUS AND ANY ACCOMPANYING PROSPECTUS SUPPLEMENT, OR TO WHICH WE HAVE REFERRED YOU, IN MAKING YOUR DECISIONS WHETHER TO INVEST IN THE SECURITIES. WE HAVE NOT AUTHORIZED ANYONE TO PROVIDE YOU WITH INFORMATION THAT DIFFERS FROM THAT CONTAINED IN THIS PROSPECTUS AND ANY ACCOMPANYING PROSPECTUS SUPPLEMENT. THIS PROSPECTUS IS DATED SEPTEMBER 25, 2017. YOU SHOULD NOT ASSUME THAT THE INFORMATION CONTAINED IN THIS PROSPECTUS IS ACCURATE AS OF ANY DATE OTHER THAN THAT DATE, UNLESS WE OTHERWISE NOTE IN THIS PROSPECTUS OR ANY ACCOMPANYING PROSPECTUS SUPPLEMENT.

OUR COMPANY

We are the number one provider of information, analytics and online marketplaces to the commercial real estate industry in the United States (U.S.) and United Kingdom (U.K.) based on the fact that we offer the most comprehensive commercial real estate database available; have the largest research department in the industry; own and operate leading online marketplaces for commercial real estate and apartment listings in the U.S. based on the numbers of unique visitors and site visits per month; provide more information, analytics and marketing services than any of our competitors and believe that we generate more revenues than any of our commercial real estate information 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.

The principal trading market for CoStar's common stock (NASDAQ: CSGP) is the Nasdaq Global Select Market. Our principal executive office is located at 1331 L Street, NW, Washington, DC 20005, telephone number (202) 346-6500. We maintain a website at www.costargroup.com. The information on our website is not part of this prospectus nor is it incorporated by reference.

USE OF PROCEEDS

We will specify the use of the proceeds from the offering and sale of any securities registered hereby in the applicable prospectus supplement for such offering.

4

TABLE OF CONTENTS**RATIO OF EARNINGS TO FIXED CHARGES**

The following table sets forth our historical ratios of earnings to fixed charges for the periods indicated. This information should be read in conjunction with the consolidated financial statements and the accompanying notes incorporated by reference in this prospectus.

	Three Months Ended June 30,	Years Ended December 31,				
	2017	2016	2015	2014	2013	2012
Ratios of earnings to fixed charges	4.4x	8.9x	1.2x	5.2x	4.9x	3.4x

Earnings available for fixed charges represent earnings before income taxes, noncontrolling interests and fixed charges excluding capitalized interest, net of amortization, reduced by undistributed earnings of our less than 50% owned affiliates. Fixed charges represent interest expense, amortization of debt discount and expenses, capitalized interest, plus that portion of rental expense deemed to be the equivalent of interest. Interest expense excludes interest related to uncertain tax positions, which has been included in the provision for income taxes.

DESCRIPTION OF DEBT SECURITIES

The following is a general description of the debt securities that we may offer from time to time. The particular terms of the debt securities offered by any prospectus supplement and the extent, if any, to which the general provisions described below may apply to those securities will be described in the applicable prospectus supplement. We may also sell hybrid securities that combine certain features of debt securities and other securities described in this prospectus. As you read this section, please remember that the specific terms of a debt security as described in the applicable prospectus supplement will supplement and may modify or replace the general terms described in this section. If there are any differences between the applicable prospectus supplement and this prospectus, the applicable prospectus supplement will control. As a result, the statements we make in this section may not apply to the debt security you purchase.

In this description of debt securities, the words *we*, *us* or *our* refer only to CoStar Group, Inc. and not to any of our subsidiaries. The registered holder of any debt security will be treated as the owner of it for all purposes. Only registered holders will have rights under the applicable indenture.

General

The debt securities that we may offer will be either senior debt securities or subordinated debt securities. Any senior debt securities will be issued under an indenture, which we refer to as the senior indenture, to be entered into between us and the trustee named in the applicable prospectus supplement. Any subordinated debt securities will be issued under a different indenture, which we refer to as the subordinated indenture, to be entered into between us and the trustee named in the applicable prospectus supplement. We refer to both the senior indenture and the subordinated indenture as the indentures, and to each of the trustees under the indentures as a trustee. In addition, the indentures may be supplemented or amended as necessary to set forth the terms of the debt securities issued under the indentures. You should read the indentures, including any amendments or supplements, carefully to fully understand the terms of the debt securities. The forms of the indentures have been filed as exhibits to the registration statement of which this prospectus is a part. The terms of the debt securities will include those stated in the indentures and those made part of the indentures by reference to the Trust Indenture Act of 1939, as amended.

Any senior debt securities that we may issue will be our unsubordinated obligations. They will rank equally with each other and all of our other unsubordinated debt, unless otherwise indicated in the applicable prospectus supplement. Any subordinated debt securities that we may issue will be subordinated in right of payment to the prior payment in full of our senior debt. See Ranking. The subordinated debt securities will rank equally with each other, unless otherwise indicated in the applicable prospectus supplement. We will indicate in each applicable prospectus supplement, as of the most recent practicable date, the aggregate amount of our outstanding debt that would rank senior to the subordinated debt securities.

The indentures will not limit the amount of debt securities that can be issued thereunder and will provide that debt securities of any series may be issued thereunder up to the aggregate principal amount that we may authorize from time to time. Unless otherwise provided in the applicable prospectus supplement, the indentures

TABLE OF CONTENTS

will not limit the amount of other indebtedness or securities that we may issue. We may issue debt securities of the same series at more than one time and, unless prohibited by the terms of the series, we may reopen a series for issuances of additional debt securities without the consent of the holders of the outstanding debt securities of that series. All debt securities issued as a series, including those issued pursuant to any reopening of a series, will vote together as a single class.

Reference is made to the prospectus supplement for the following and other possible terms of each series of the debt securities with respect to which this prospectus is being delivered:

- the title of the debt securities;
- any limit upon the aggregate principal amount of the debt securities of that series that may be authenticated and delivered under the applicable indenture, except for debt securities authenticated and delivered upon registration of transfer of, or in exchange for or in lieu of, other debt securities of that series;
- the date or dates on which the principal and premium, if any, of the debt securities of the series is payable;
- the rate or rates, which may be fixed or variable, at which the debt securities of the series shall bear interest or the manner of calculation of such rate or rates, if any, including any procedures to vary or reset such rate or rates, and the basis upon which interest will be calculated if other than that of a 360-day year of twelve 30-day months;
- the place or places where the principal of and interest, if any, on the debt securities of the series shall be payable, where the debt securities of such series may be surrendered for registration of transfer or exchange and where notices and demands to or upon us with respect to the debt securities of such series and the applicable indenture may be served, and the method of such payment, if by wire transfer, mail or other means if other than as set forth in the applicable indenture;
- the date or dates from which such interest shall accrue, the dates on which such interest will be payable or the manner of determination of such dates, and the record date for the determination of holders to whom interest is payable on any such dates;
- any trustees, authenticating agents or paying agents with respect to such series, if different from those set forth in the applicable indenture;
- the right, if any, to extend the interest payment periods or defer the payment of interest and the duration of such extension or deferral;
- if applicable, the period or periods within which, the price or prices at which and the terms and conditions upon which, debt securities of the series may be redeemed, in whole or in part, at our option;
- our obligation, if any, to redeem, purchase or repay debt securities of the series pursuant to any sinking fund or analogous provisions, including payments made in cash in anticipation of future sinking fund obligations, or at the option of a holder thereof and the period or periods within which, the price or prices at which, and the terms and conditions upon which, debt securities of the series shall be redeemed, purchased or repaid, in whole or in part, pursuant to such obligation;
- the form of the debt securities of the series, including the form of the trustee's certificate of authentication for such series;
- if other than denominations of \$1,000 or integral multiples of \$1,000 in excess thereof, the denominations in which the debt securities of the series shall be issuable;
- the currency or currencies in which payment of the principal of, premium, if any, and interest on, debt securities of the series shall be payable;
- if the principal amount payable at the stated maturity of debt securities of the series will not be determinable as of any one or more dates prior to such stated maturity, the amount which will be deemed to be such principal amount as of any such date for any purpose, including the portion of the

TABLE OF CONTENTS

principal amount thereof that will be due and payable upon declaration of acceleration of the maturity thereof or upon any maturity other than the stated maturity or that will be deemed to be outstanding as of any such date, or, in any such case, the manner in which such deemed principal amount is to be determined;

the terms of any repurchase or remarketing rights;

if the debt securities of the series shall be issued in whole or in part in the form of a global security or securities, the type of global security to be issued; the terms and conditions, if different from those contained in the applicable indenture, upon which such global security or securities may be exchanged in whole or in part for other individual securities in definitive registered form; the depositary for such global security or securities; and the form of any legend or legends to be borne by any such global security or securities in addition to or in lieu of the legends referred to in the indenture;

whether the debt securities of the series will be convertible into or exchangeable for other securities, and, if so, the terms and conditions upon which such debt securities will be so convertible or exchangeable, including the initial conversion or exchange price or rate or the method of calculation, how and when the conversion price or exchange ratio may be adjusted, whether conversion or exchange is mandatory, at the option of the holder or at our option, the conversion or exchange period, and any other provision in addition to or in lieu of those described herein;

any additional restrictive covenants or events of default that will apply to the debt securities of the series, or any changes to the restrictive covenants set forth in the applicable indenture that will apply to the debt securities of the series, which may consist of establishing different terms or provisions from those set forth in the applicable indenture or eliminating any such restrictive covenant or event of default with respect to the debt securities of the series;

any provisions granting special rights to holders when a specified event occurs;

- if the amount of principal or any premium or interest on debt securities of a series may be determined with reference to an index or pursuant to a formula, the manner in which such amounts will be determined;

any special tax implications of the debt securities, including provisions for original issue discount securities, if offered;

whether and upon what terms debt securities of a series may be defeased if different from the provisions set forth in the applicable indenture;

with regard to the debt securities of any series that do not bear interest, the dates for certain required reports to the trustee;

whether the debt securities of the series will be issued as unrestricted securities or restricted securities, and, if issued as restricted securities, the rule or regulation promulgated under the Securities Act in reliance on which they will be sold;

any guarantees of the debt securities, and the terms and conditions upon which any guarantees may be released or terminated;

the provisions, if any, relating to any security provided for the debt securities of the series;

any depositaries, interest rate calculation agents, exchange rate calculation agents or other agents with respect to debt securities of such series if other than those appointed in the applicable indenture;

if the debt securities are subordinated debt securities, the subordination terms of the debt securities; and

any and all additional, eliminated or changed terms that shall apply to the debt securities of the series, including any terms that may be required by or advisable under United States laws or regulations, including the Securities Act and the rules and regulations promulgated thereunder, or advisable in connection with the marketing of debt securities of that series.

TABLE OF CONTENTS

We will comply with Section 14(e) under the Exchange Act, to the extent applicable, and any other tender offer rules under the Exchange Act that may then be applicable, in connection with any obligation to purchase debt securities at the option of the holders thereof. Any such obligation applicable to a series of debt securities will be described in the prospectus supplement relating thereto.

Unless otherwise described in a prospectus supplement relating to any debt securities, there will be no covenants or provisions contained in the indentures that may afford the holders of debt securities protection in the event that we enter into a highly leveraged transaction.

The statements made hereunder relating to the indentures and any debt securities that we may issue are summaries of certain provisions thereof and are qualified in their entirety by reference to all provisions of the indentures and the debt securities and the descriptions thereof, if different, in the applicable prospectus supplement.

Payments on the Debt Securities

Principal of, premium, if any, and interest on the debt securities will be payable at the office or agency maintained by us for such purposes; *provided* that all payments of principal, premium, if any, and interest with respect to the debt securities represented by one or more global securities registered in the name of or held by The Depository Trust Company (DTC) or its nominee will be made through the facilities of DTC. Until otherwise designated by us, our office or agency will be the office of the trustee maintained for such purpose.

Paying Agent and Registrar for the Debt Securities

The trustee will initially act as paying agent and registrar. We may change the paying agent or registrar without prior notice to the holders, and we or any of our subsidiaries may act as paying agent or registrar.

Transfer and Exchange

A holder may transfer or exchange debt securities in accordance with the applicable indenture. Holders will be required to pay all taxes due on transfer. We will not be required to transfer or exchange any debt security selected for redemption or repurchase. Also, we will not be required to transfer or exchange any debt security for a period of 15 days before a selection of debt securities to be redeemed or repurchased.

Ranking

Senior Debt Securities

Any series of senior debt securities will be our general obligations that rank senior in right of payment to all existing and future indebtedness that is expressly subordinated in right of payment to the senior debt securities. Any series of senior debt securities will rank equally in right of payment with all of our existing and future liabilities that are not so subordinated. Any series of senior unsecured debt securities will be effectively subordinated to all of our secured indebtedness (to the extent of the value of the assets securing such indebtedness) and liabilities of our subsidiaries that do not guarantee the series of senior debt securities.

Subordinated Debt Securities

We will set forth in the applicable prospectus supplement the terms and conditions, if any, upon which any series of subordinated debt securities is subordinated to debt securities of another series or to our other indebtedness. The terms will include a description of:

the indebtedness ranking senior to the debt securities being offered;

- the restrictions, if any, on payments to the holders of the debt securities being offered while a default with respect to the senior indebtedness is continuing; and

the provisions requiring holders of the debt securities being offered to remit some payments to the holders of senior indebtedness.

Redemption

If specified in the applicable prospectus supplement, we may redeem the debt securities of any series, as a whole or in part, at our option on and after the dates and in accordance with the terms established for such series, if any, in the applicable indenture. If we redeem the debt securities of any series, we also must pay accrued and unpaid interest, if any, to the date of redemption on such debt securities.

TABLE OF CONTENTS

Certain Covenants

Merger, Consolidation or Sale of Assets

We may not, directly or indirectly: (1) consolidate or merge with or into or wind up into another person; or (2) sell, assign, transfer, convey or otherwise dispose of all or substantially all of our properties or assets, in one or more related transactions, to another person; unless:

- either: (a) we are the surviving person; or (b) the person formed by or surviving any such consolidation or merger or to which such sale, assignment, transfer, conveyance or other disposition has been made is a corporation, limited liability company or limited partnership organized or existing under the laws of the United States, any state of the United States, the District of Columbia or any territory thereof (such person, hereinafter referred to as the Successor Company);
- (1) the Successor Company expressly assumes all of our obligations under the debt securities and the applicable indenture;
 - (2) immediately after such transaction no default or Event of Default exists; and
 - (3) we shall have delivered to the trustee a certificate from a responsible officer and an opinion of counsel, each stating that such consolidation, merger or transfer and such amendment or supplement, if any, comply with the applicable indenture.

The Successor Company will succeed to, and be substituted for us under the applicable indenture and the debt securities.

Reports

So long as any debt securities are outstanding, we shall file with the trustee, within 15 days after we file with the SEC, copies of our annual reports and of the information, documents and other reports (or copies of such portions of any of the foregoing as the SEC may from time to time by rules and regulations prescribe) that we may be required to file with the SEC pursuant to Section 13 or Section 15(d) of the Exchange Act. We shall be deemed to have complied with the previous sentence to the extent that such information, documents and reports are filed with the SEC via EDGAR, or any successor electronic delivery procedure. Delivery of such reports, information and documents to the trustee is for informational purposes only and the trustee's receipt of such shall not constitute constructive notice of any information contained therein or determinable from information contained therein, including our compliance with any of our covenants under the applicable indenture (as to which the trustee is entitled to rely exclusively on officer's certificates).

Events of Default and Remedies

The following will be Events of Default with respect to debt securities of a particular series, except to the extent provided in the supplemental indenture or resolution of our board of directors pursuant to which a series of debt securities is issued:

- (1) we default in payment when due and payable, upon redemption, acceleration or otherwise, of principal of, or premium, if any, on the debt securities;
- (2) we default in the payment when due of interest on or with respect to the debt securities and such default continues for a period of 30 days;
- (3) we default in the performance of, or breach any covenant, warranty or other agreement contained in the applicable indenture (other than a default in the performance or breach of a covenant, warranty or agreement which is specifically dealt with in clauses (1) or (2) above) and such default or breach continues for a period of 90 days after the notice specified below;
- (4) certain events involving our bankruptcy, insolvency or reorganization; or

(5) any other Event of Default provided in the applicable supplemental indenture or resolution of the board of directors under which such series of securities is issued or in the form of security for such series.
A default under one series of debt securities issued under the indenture will not necessarily be a default under another series of debt securities under the indenture. The trustee may withhold notice to the holders of a

9

TABLE OF CONTENTS

series of debt securities issued under such indenture of any default or Event of Default (except in any payment on the debt securities of such series) if the trustee considers it in the interest of the holders of the debt securities of that series to do so.

If an Event of Default (other than an Event of Default specified in clause (4) above) for a series of debt securities shall occur and be continuing, the trustee or the holders of at least 25% in principal amount of outstanding debt securities of that series may declare the principal of and accrued interest on such debt securities to be due and payable by notice in writing to us and the trustee specifying the respective Event of Default and that it is a notice of acceleration (Acceleration Notice), and the same shall become immediately due and payable. Notwithstanding the foregoing, if an Event of Default specified in clause (4) above occurs and is continuing, then all unpaid principal of, and premium, if any, and accrued and unpaid interest on all of the outstanding debt securities shall ipso facto become and be immediately due and payable without any declaration or other act on the part of the trustee or any holder of the debt securities.

The holders of a majority in principal amount of the debt securities of such series then outstanding may waive any existing default or Event of Default and its consequences, except a default in the payment of the principal of or interest on such debt securities.

Holders of debt securities of any series may not enforce the applicable indenture or the debt securities of that series except as provided in the applicable indenture and under the Trust Indenture Act of 1939, as amended. Subject to the provisions of the applicable indenture relating to the duties of the trustee, the trustee will be under no obligation to exercise any of its rights or powers under the indenture at the request, order or direction of any of the holders of the debt securities of any series, unless such holders have offered to the trustee reasonable indemnity. Subject to all provisions of the applicable indenture and applicable law, the holders of a majority in aggregate principal amount of a series of the then outstanding debt securities of such series issued under such indenture will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee or exercising any trust or power conferred on the trustee.

We will be required to deliver to the trustee annually a statement regarding compliance with the indenture.

No Personal Liability of Directors, Officers, Employees and Stockholders

No director, officer, employee, incorporator or stockholder of the Company will have any liability for any obligations of the Company under the debt securities, the indenture, or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each holder of debt securities by accepting a debt security waives and releases all such liability. The waiver and release are part of the consideration for issuance of the debt securities. The waiver may not be effective to waive liabilities under the federal securities laws.

Satisfaction and Discharge of Indenture

The indenture shall cease to be of further effect with respect to a series of debt securities when either:

- (1) we have delivered to the trustee for cancellation all outstanding securities of such series, other than any securities that have been destroyed, lost or stolen and that have been replaced or paid as provided in the indenture;
- (2) all outstanding securities of such series have become due and payable or are by their terms to become due and payable within one year or are to be called for redemption within one year under arrangements satisfactory to the trustee for the giving of notice of redemption, and we shall have irrevocably deposited with the trustee as trust funds the entire amount, in funds or governmental obligations, or a combination thereof, sufficient, in the opinion of a nationally recognized firm of independent public accountants, to pay at maturity or upon redemption all

securities of such series; or
(3) we have properly fulfilled any other means of satisfaction and discharge that may be set forth in the terms of the securities of such series.

In each case, we will also pay all other sums payable by us under the indenture with respect to the securities of such series.

10

TABLE OF CONTENTS

Defeasance

The term defeasance means the discharge of some or all of our obligations under an indenture. If we deposit with the trustee funds or government securities sufficient to make payments on any series of debt securities on the dates those payments are due and payable, then, at our option, either of the following will occur:

- (1) we will be discharged from obligations with respect to the debt securities of such series (legal defeasance); or
- (2) we will no longer have any obligation to comply with the restrictive covenants under the indenture, and the related events of default will no longer apply to us (covenant defeasance).

If we defease any series of debt securities, the holders of the defeased debt securities of such series will not be entitled to the benefits of the indenture under which such series was issued, except for our obligation to register the transfer or exchange of the debt securities of such series, replace stolen, lost or mutilated debt securities or maintain paying agencies and hold moneys for payment in trust. In the case of covenant defeasance, our obligation to pay principal, premium and interest on the debt securities of such series will also survive. We will be required to deliver to the trustee an opinion of counsel that the deposit and related defeasance would not cause the holders of the debt securities of such series to recognize income, gain or loss for federal income tax purposes. If we elect legal defeasance, that opinion of counsel must be based upon a ruling from the United States Internal Revenue Service or a change in law to that effect.

Amendment, Supplement and Waiver

Except as provided in the next two succeeding paragraphs, an indenture or the debt securities of any series issued thereunder may be amended or supplemented with the consent of the holders of at least a majority in principal amount of the debt securities of each series at the time outstanding that is affected voting as a single class (including, without limitation, consents obtained in connection with a purchase of, or tender offer or exchange offer for, debt securities), and any existing default or compliance with any provision of the indenture or the debt securities of any series issued thereunder may be waived with the consent of the holders of a majority in principal amount of each series of debt securities at the time outstanding that is affected voting as a single class (including, without limitation, consents obtained in connection with a purchase of, or tender offer or exchange offer for, debt securities).

Without the consent of each holder affected thereby, an amendment or waiver may not (with respect to any debt securities held by a non-consenting holder):

- (1) reduce the amount of debt securities of any series whose holders must consent to an amendment, supplement or waiver;
- (2) reduce the rate of or change the time for payment of interest on the debt securities of any series;
- (3) reduce the principal or change the stated maturity of any debt securities of any series;
- (4) reduce any premium payable on the redemption of any debt security or change the time at which any debt security may or must be redeemed;
- (5) make payments on any debt security payable in currency other than as originally stated in such debt security;
- (6) impair the holder's right to institute suit for the enforcement of any payment on any debt security;
- (7) make any change in the percentage of principal amount of the debt securities of any series necessary to waive compliance with certain provisions of the indenture under which such debt securities were issued or to make any change in this provision for modification; or
- (8) waive a continuing default or Event of Default regarding any payment on the debt securities of any series.

Notwithstanding the preceding, without the consent of any holder of debt securities, we and the trustee may amend or supplement an indenture or the applicable debt securities issued thereunder:

(1) to cure any ambiguity, omission, defect or inconsistency;

11

TABLE OF CONTENTS

- (2) to provide for the assumption of our obligations under the indenture by a successor upon any merger, consolidation or transfer of substantially all of our assets, as applicable;
 - (3) to provide for uncertificated debt securities in addition to or in place of certificated debt securities;
- (4) to provide any security for or guarantees of the debt securities or for the addition of an additional obligor on the debt securities;
- (5) to comply with any requirement to effect or maintain the qualification of the indenture under the Trust Indenture Act of 1939, as amended, if applicable;
- (6) to add covenants that would benefit the holders of any outstanding series of debt securities or to surrender any of our rights under the indenture;
- (7) to add additional Events of Default with respect to any series of debt securities;
 - to change or eliminate any of the provisions of the indenture, provided that any such change or elimination shall
- (8) not become effective with respect to any outstanding debt security of any series created prior to the execution of such supplemental indenture which is entitled to the benefit of such provision;
- (9) to provide for the issuance of and establish forms and terms and conditions of a new series of debt securities;
 - (10) to permit or facilitate the defeasance and discharge of the debt securities;
 - to issue additional debt securities of any series; *provided* that such additional debt securities have the same terms
- (11) as, and be deemed part of the same series as, the applicable series of debt securities to the extent required under the indenture;
- (12) to make any change that does not adversely affect the rights of any holder of outstanding debt securities in any material respect; or
 - to evidence and provide for the acceptance of appointment by a successor trustee with respect to the debt
- (13) securities of one or more series and to add to or change any of the provisions of the indenture as shall be necessary to provide for or facilitate the administration of the trust by more than one trustee.

Concerning the Trustee

If an Event of Default occurs and is continuing, the trustee will be required to use the degree of care and skill of a prudent person in the conduct of his own affairs. The trustee will become obligated to exercise any of its powers under the indenture at the request of any of the holders of any debt securities issued under the indenture only after those holders have furnished the trustee indemnity reasonably satisfactory to it.

If the trustee becomes a creditor of ours, it will be subject to limitations in the indenture on its rights to obtain payment of claims or to realize on certain property received for any such claim, as security or otherwise. The trustee is permitted to engage in other transactions with us. If, however, it acquires any conflicting interest, it must eliminate such conflict, resign or obtain an order from the SEC permitting it to remain as trustee.

Governing Law

The indentures and the debt securities will be governed by, and construed in accordance with, the laws of the State of New York.

DESCRIPTION OF COMMON STOCK

The following description of our share capital is a summary. This summary is not complete and is subject to the complete text of our certificate of incorporation and bylaws, each as amended to date. Our certificate of incorporation and bylaws, each as amended, are incorporated by reference as exhibits to the registration statement of which this prospectus forms a part.

Common Stock

We are authorized to issue 60,000,000 shares of common stock, par value \$0.01 per share. As of August 31, 2017 we had 32,824,152 outstanding shares of common stock.

12

TABLE OF CONTENTS

All outstanding shares of common stock are, and the shares offered hereby upon issuance and sale will be, fully paid and non-assessable.

Voting and Other Rights

Each stockholder of record is entitled to one vote for each outstanding share of common stock owned by him on every matter properly submitted to the stockholders for their vote. Our bylaws provide that in an uncontested election, directors will be elected by a majority of votes cast at a meeting of stockholders by the stockholders entitled to vote in the election and, in all other elections of directors, the nominees for election as a director will be elected by a plurality of the votes cast at a meeting of stockholders by the stockholders entitled to vote in the election. Except as otherwise required by law, whenever any corporate action, other than the election of directors is to be taken, it shall be authorized by a majority of the votes cast at a meeting of stockholders by the stockholders entitled to vote thereon.

Distribution

The holders of our common stock are entitled to receive ratably such dividends as are declared by the board of directors out of funds legally available therefor. In the event of our liquidation, dissolution or winding up, holders of common stock have the right to a ratable portion of assets remaining after payment of liabilities. Holders of common stock have neither preemptive rights nor rights to convert their common stock into any other securities and are not subject to future calls or assessments by us. There are no redemption or sinking fund provisions applicable to our common stock.

Number and Classification of Directors

Our certificate of incorporation provides that the number of directors on our board will be fixed from time to time by a majority of the total number of authorized directors. Our certificate of incorporation sets the minimum number of directors at two and our bylaws further provide that the number of members of the board will not exceed ten. Our board of directors currently consists of eight members.

Our bylaws provide that our stockholders may, at any special meeting the notice of which shall state that it is called for that purpose, remove, with or without cause, any director.

Any vacancy on our board of directors which occurs between annual meetings will be filled only by a majority vote of the remaining directors then in office, even if less than a quorum. However, whenever the holders of one or more classes or series of preferred stock have the right, voting separately, to elect directors, the election, term of office, filling of vacancies, removal and other features of such directorships will be governed by the terms of resolutions adopted by our board of directors.

We do not have a classified board. Our certificate of incorporation provides that the directors are elected at each annual meeting of stockholders to hold office until their successors have been duly elected and qualified, or until they sooner resign, are removed or become disqualified.

Section 203 of Delaware General Corporation Law

Section 203 of the Delaware General Corporation Law (DGCL) prohibits certain transactions between a Delaware corporation and an interested stockholder, which is defined as a person who, together with any affiliates or associates of such person, beneficially owns, directly or indirectly, 15% or more of the outstanding voting shares of a Delaware corporation. This provision prohibits certain business combinations (defined broadly to include mergers, consolidations, sales or other dispositions of assets having an aggregate value in excess of 10% of the consolidated

assets of the corporation, and certain transactions that would increase the interested stockholder's proportionate share ownership in the corporation) between an interested stockholder and a corporation for a period of three years after the date the interested stockholder becomes an interested stockholder, unless (i) the business combination or the transaction which resulted in the stockholder becoming an interested stockholder is approved by the board of directors prior to the date the interested stockholder becomes an interested stockholder, (ii) the interested stockholder acquired at least 85% of the voting stock of the corporation (other than stock held by directors who are also officers or by certain employee stock plans) in the transaction in which it becomes an interested stockholder or (iii) the business combination is approved by a majority of the board of directors and by the affirmative vote of 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

TABLE OF CONTENTS

Although stockholders may elect to exclude a corporation from Section 203's restrictions, our certificate of incorporation and bylaws do not exclude us from Section 203's restrictions. The provisions of Section 203 may encourage companies interested in acquiring us to negotiate in advance with the board of directors, since Section 203 does not require stockholder approval for a corporation to engage in any business combination with any interested stockholder, if the board of directors prior to the time that such stockholder became an interested stockholder approved either the business combination or the transaction in which the stockholder became an interested stockholder. Business combinations are discussed more fully in the paragraph above.

Certain Antitakeover Provisions

Our certificate of incorporation contains provisions that may have the effect of discouraging a third party from making an acquisition proposal for the Company. Our certificate of incorporation, among other things, (i) permits the board of directors, but not our stockholders, to fill vacancies and newly created directorships on the board of directors and (ii) provides that any action required or permitted to be taken by our stockholders must be effected at an annual or special meeting of stockholders and not by any consent in writing by such stockholders. Such provisions would make the removal of incumbent directors more difficult and time-consuming and may have the effect of discouraging a tender offer or other takeover attempt not previously approved by the board of directors.

Except as otherwise provided in our certificate of incorporation or by the DGCL, our bylaws provide that special meetings of our stockholders may be called at any time by the Chairman of the board of directors or our President, and will be called by our President or Secretary at the request in writing of a majority of our board of directors. Special meetings of stockholders may not be called by our stockholders in their capacity as such. Any special meeting of the stockholders shall be held on such date and at such time as our board of directors or the officer calling the meeting may designate.

The provisions prohibiting stockholder action by written consent and prohibiting stockholders from calling a special meeting could delay consideration of a stockholder proposal until our next annual meeting. This would prevent the holders of our stock from unilaterally using the written consent procedure to take stockholder action. Moreover, a stockholder cannot force stockholder consideration of a proposal over the opposition of the Chairman and the board of directors by calling a special meeting of stockholders.

Amendments

We can amend, alter, change or repeal any provision of our certificate of incorporation in the manner prescribed by the DGCL.

Our board of directors is authorized to make, alter or repeal our bylaws. In addition to any vote of the holders of any class or series of stock required by law, other provisions of our bylaws or by the certificate of incorporation to amend or repeal our bylaws, the affirmative vote of the holders of at least 66 2/3% of our voting stock, voting as a single class, is required to adopt, amend or repeal any provision of our bylaws inconsistent with certain provisions related to special meetings, stockholder proposals, indemnification and amendments of the bylaws.

Indemnification and Limitation of Liability

Our certificate of incorporation provides that we shall, subject to certain limitations, indemnify our directors and officers against expenses (including attorneys' fees, judgments, fines and certain settlements) actually and reasonably incurred by them in connection with any suit or proceeding to which they are a party so long as they acted in good faith and in a manner reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to a criminal action or proceeding, so long as they had no reasonable cause to believe their conduct to have

been unlawful. Our bylaws further provide that we may indemnify employees and agents against such expenses, in circumstances similar to those described above with respect to indemnification for directors and officers in our certificate of incorporation. We have entered into indemnification agreements with each of our directors and certain of our officers, which clarify and enhance our rights and obligations and the rights and obligations of our directors and officers with respect to indemnification of such persons.

Section 102 of the DGCL permits a Delaware corporation to include in its certificate of incorporation a provision eliminating or limiting a director's liability to a corporation or its stockholders for monetary damages

TABLE OF CONTENTS

for breaches of fiduciary duty. DGCL Section 102 provides, however, that liability for breaches of the duty of loyalty, acts or omissions not in good faith or involving intentional misconduct, or knowing violation of the law, and the unlawful purchase or redemption of stock or payment of unlawful dividends or the receipt of improper personal benefits cannot be eliminated or limited in this manner. Our certificate of incorporation includes a provision which eliminates, to the fullest extent permitted, director liability for monetary damages for breaches of fiduciary duty.

Pursuant to our certificate of incorporation and bylaws and Section 145 of the DGCL, we may purchase and maintain insurance on behalf of any director, officer, employee or agent of the corporation to the extent permitted by Section 145 of the DGCL. We have obtained directors' and officers' liability and corporate reimbursement insurance covering all of our and our subsidiaries' officers and directors and providing for the reimbursement of amounts paid by us or our subsidiaries to directors and officers pursuant to indemnification arrangements, subject to certain deductibles and coinsurance provisions.

Listing, Transfer Agent and Registrar

Our common stock is listed for trading on the NASDAQ Global Select Market. The transfer agent and registrar for our common stock is American Stock Transfer and Trust Company.

DESCRIPTION OF PREFERRED STOCK

We are authorized to issue 2,000,000 shares of preferred stock in one or more series. As of August 31, 2017, we had no outstanding shares of preferred stock. The rights, preferences, privileges and restrictions, including dividend rights, voting rights, terms of redemption, retirement, sinking fund provisions, liquidation preferences, conversion rights and exchange rights, if any, of the preferred stock of each series will be fixed or designated pursuant to a certificate of designation adopted by our board of directors or a duly authorized committee thereof.

DESCRIPTION OF OTHER SECURITIES

We will set forth in the applicable prospectus supplement a description of any warrants, depositary shares or purchase contracts issued by us that may be offered pursuant to this prospectus.

PLAN OF DISTRIBUTION

We may sell the securities offered pursuant to this prospectus in any of the following ways:

- directly to one or more purchasers;
- through agents;
- through underwriters, brokers or dealers; or
- through a combination of any of these methods of sale.

We will identify the specific plan of distribution, including any underwriters, brokers, dealers, agents or direct purchasers and their compensation in a prospectus supplement.

SELLING SECURITYHOLDERS

To the extent this prospectus is used by any selling securityholder to resell common stock or other securities, information with respect to the selling securityholder and the plan of distribution will be contained in a supplement to this prospectus, in a post-effective amendment or in filings we make with the SEC under the Exchange Act that are incorporated by reference.

TABLE OF CONTENTS

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited CoStar Group, Inc.'s consolidated financial statements and schedule included in our Annual Report on Form 10-K for the year ended December 31, 2016, and the effectiveness of our internal control over financial reporting as of December 31, 2016, as set forth in their reports, which are incorporated by reference in this prospectus and elsewhere in the registration statement. The CoStar Group, Inc. financial statements and schedule are incorporated by reference in reliance on Ernst & Young LLP's report, given their authority as experts in accounting and auditing.

VALIDITY OF THE SECURITIES

Gibson, Dunn & Crutcher LLP, New York, New York, will pass upon the validity of the securities that may be offered pursuant to this prospectus.

TABLE OF CONTENTS

\$750,000,000

Common Stock

CoStar Group, Inc.

Prospectus Supplement

Joint Bookrunners

J.P. Morgan

Goldman Sachs & Co.

Citigroup

BofA Merrill Lynch SunTrust Robinson Humphrey Wells Fargo Securities

Co-Managers

Needham & Company Stephens Inc. William Blair

JMP Securities

B. Riley & Co.

September , 2017

No action is being taken in any jurisdiction outside the United States to permit a public offering of the common stock or possession or distribution of this prospectus supplement in that jurisdiction. Persons who come into possession of this prospectus supplement in jurisdictions outside the United States are required to inform themselves about, and to observe any restrictions as to, this offering and the distribution of this prospectus supplement applicable to that jurisdiction.