

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-Q

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended June 30, 2020

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from ___ to ___

Commission file number 001-38160

Redfin Corporation

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

1099 Stewart Street **Suite 600**
Seattle **WA**

(Address of Principal Executive Offices)

74-3064240

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

98101

(Zip Code)

(206) 576-8333

Registrant's telephone number, including area code

(Former name, former address and former fiscal year, if changed since last report)

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, \$0.001 par value per share	RDFN	The Nasdaq Global Select Market

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

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

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes No

The registrant had 99,476,640 shares of common stock outstanding as of July 23, 2020.

Redfin Corporation
Quarterly Report on Form 10-Q
For the Quarter Ended June 30, 2020

Table of Contents

	Page
PART I	
Item 1.	<u>Financial Statements (unaudited)</u>
	<u>Consolidated Balance Sheets</u>
	<u>Consolidated Statements of Comprehensive Loss</u>
	<u>Consolidated Statements of Cash Flows</u>
	<u>Consolidated Statements of Changes in Mezzanine Equity and Stockholders' Equity</u>
	<u>Index to Notes to Consolidated Financial Statements</u>
Item 2.	<u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>
Item 3.	<u>Quantitative and Qualitative Disclosures About Market Risk</u>
Item 4.	<u>Controls and Procedures</u>
PART II	
Item 1.	<u>Legal Proceedings</u>
Item 1A.	<u>Risk Factors</u>
Item 2.	<u>Unregistered Sales of Equity Securities and Use of Proceeds</u>
Item 6.	<u>Exhibits</u>
	<u>Signatures</u>

As used in this quarterly report, the terms "Redfin," "we," "us," and "our" refer to Redfin Corporation and its subsidiaries taken as a whole, unless otherwise noted or unless the context indicates otherwise.

Note Regarding Forward-Looking Statements

This quarterly report contains forward-looking statements. All statements contained in this report other than statements of historical fact, including statements regarding COVID-19's anticipated impacts on our business, our future operating results and financial position, our business strategy and plans, our market growth and trends, and our objectives for future operations, are forward-looking statements. The words "believe," "may," "will," "estimate," "continue," "anticipate," "intend," "expect," "could," "would," "project," "plan," "hope," "potentially," "preliminary," "likely," and similar expressions are intended to identify forward-looking statements. We have based these forward-looking statements largely on our current expectations and projections about future events and trends that we believe may affect our financial condition, results of operations, business strategy, short-term and long-term business operations and objectives, and financial needs. These forward-looking statements are subject to a number of risks, uncertainties, and assumptions, including those described under Item 1A of our annual report for the year ended December 31, 2019, as supplemented by Part II, Item 1A of this report. Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the effect of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties, and assumptions, the future events and trends discussed in this report may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements. Accordingly, you should not rely on forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, performance, or events and circumstances reflected in the forward-looking statements will be achieved or occur. We undertake no obligation to update any of these forward-looking statements for any reason after the date of this report or to conform these statements to actual results or revised expectations.

Note Regarding Industry and Market Data

This quarterly report contains information using industry publications that generally state that the information contained therein has been obtained from sources believed to be reliable, but such information may not be accurate or complete. While we are not aware of any misstatements regarding the information from these industry publications, we have not independently verified any of the data from third-party sources nor have we ascertained the underlying economic assumptions relied on therein.

PART I - FINANCIAL INFORMATION

Item 1. Financial Statements.

Redfin Corporation and Subsidiaries
Consolidated Balance Sheets
(in thousands, except share and per share amounts, unaudited)

	June 30, 2020	December 31, 2019
Assets		
Current assets		
Cash and cash equivalents	\$ 325,352	\$ 234,679
Restricted cash	35,102	12,769
Short-term investments	128,056	70,029
Accounts receivable, net	34,182	19,223
Inventory	9,437	74,590
Loans held for sale	42,439	21,985
Prepaid expenses	7,624	14,822
Other current assets	4,555	3,496
Total current assets	586,747	451,593
Property and equipment, net	41,414	39,577
Right-of-use assets, net	47,697	52,004
Long-term investments	18,792	30,978
Goodwill and intangibles, net	11,260	11,504
Other non-current assets	9,430	10,557
Total assets	\$ 715,340	\$ 596,213
Liabilities, mezzanine equity and stockholders' equity		
Current liabilities		
Accounts payable	\$ 3,389	\$ 2,122
Accrued liabilities	48,967	38,022
Other payables	27,614	7,884
Warehouse credit facilities	40,566	21,302
Secured revolving credit facility	7,215	4,444
Current lease liabilities	11,614	11,408
Total current liabilities	139,365	85,182
Non-current lease liabilities	54,362	59,869
Convertible senior notes, net	122,884	119,716
Non-current payroll tax liabilities	3,668	—
Total liabilities	320,279	264,767
Commitments and contingencies (Note 7)		
Series A convertible preferred stock—par value \$0.001 per share; 10,000,000 shares authorized; 40,000 and no shares issued and outstanding, respectively	39,801	—
Stockholders' equity		
Common stock—par value \$0.001 per share; 500,000,000 shares authorized; 99,394,432 and 93,001,597 shares issued and outstanding, respectively	99	93
Additional paid-in capital	673,234	583,097
Accumulated other comprehensive income	441	42
Accumulated deficit	(318,514)	(251,786)
Total stockholders' equity	355,260	331,446
Total liabilities, mezzanine equity and stockholders' equity	\$ 715,340	\$ 596,213

See Notes to the consolidated financial statements.

Redfin Corporation and Subsidiaries
Consolidated Statements of Comprehensive Loss
(in thousands, except share and per share amounts, unaudited)

	Three Months Ended June 30,		Six Months Ended June 30, 2020	
	2020	2019	2020	2019
Revenue				
Service	\$ 141,135	\$ 157,872	\$ 252,613	\$ 246,641
Product	72,530	39,908	152,047	61,281
Total revenue	213,665	197,780	404,660	307,922
Cost of revenue				
Service	93,891	108,528	192,259	192,923
Product	73,735	40,906	153,483	63,898
Total cost of revenue	167,626	149,434	345,742	256,821
Gross profit	46,039	48,346	58,918	51,101
Operating expenses				
Technology and development	17,961	16,063	38,235	31,620
Marketing	9,482	27,050	35,190	60,250
General and administrative ⁽¹⁾	23,022	17,654	47,349	39,102
Total operating expenses	50,465	60,767	120,774	130,972
Loss from operations	(4,426)	(12,421)	(61,856)	(79,871)
Interest income	437	1,913	1,540	4,229
Interest expense	(2,665)	(2,153)	(5,109)	(4,290)
Other income (expense), net	43	36	(1,303)	128
Net loss	\$ (6,611)	\$ (12,625)	\$ (66,728)	\$ (79,804)
Dividend on convertible preferred stock	(1,284)	—	(1,284)	—
Net loss attributable to common stock—basic and diluted	\$ (7,895)	\$ (12,625)	\$ (68,012)	\$ (79,804)
Net loss per share attributable to common stock—basic and diluted	\$ (0.08)	\$ (0.14)	\$ (0.71)	\$ (0.88)
Weighted average shares of common stock—basic and diluted	98,785,318	91,216,886	96,114,012	90,915,334
Other comprehensive income (loss)				
Net loss	\$ (6,611)	\$ (12,625)	\$ (66,728)	\$ (79,804)
Foreign currency translation adjustments	3	37	(22)	38
Unrealized gain (loss) on available-for-sale securities	(137)	6	421	6
Total comprehensive loss	\$ (6,745)	\$ (12,582)	\$ (66,329)	\$ (79,760)

(1) Includes direct and incremental costs related to COVID-19 of \$ 7,525, which are partially offset by \$ 1,292 in employee retention credits allowed under the CARES Act, for the three and six months ended June 30, 2020.

See Notes to the consolidated financial statements.

Redfin Corporation and Subsidiaries
Consolidated Statements of Cash Flows
(in thousands, unaudited)

	Six Months Ended June 30,	
	2020	2019
Operating Activities		
Net loss	\$ (66,728)	\$ (79,804)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Depreciation and amortization	6,865	3,809
Stock-based compensation	14,416	12,282
Amortization of debt discount and issuance costs	3,477	3,031
Non-cash lease expense	4,522	2,943
Impairment costs	1,420	—
Other	(1,190)	(100)
Change in assets and liabilities:		
Accounts receivable, net	(14,959)	(23,323)
Inventory	65,153	(62,960)
Prepaid expenses and other assets	5,446	1,230
Accounts payable	1,040	1,350
Accrued liabilities, other payables, and non-current payroll tax liabilities	14,244	26,489
Lease liabilities	(5,481)	(3,301)
Origination of loans held for sale	(294,076)	(153,335)
Proceeds from sale of loans originated as held for sale	274,595	128,080
Net cash provided by (used in) operating activities	8,744	(143,609)
Investing activities		
Purchases of property and equipment	(6,072)	(9,504)
Purchases of investments	(88,724)	(70,312)
Sales of investments	3,183	100
Maturities of investments	40,351	—
Net cash used in investing activities	(51,262)	(79,716)
Financing activities		
Proceeds from the issuance of convertible preferred stock, net of issuance costs	39,801	—
Proceeds from the issuance of common stock, net of issuance costs	69,701	—
Proceeds from the issuance of shares resulting from employee equity plans	11,052	8,965
Tax payments related to net share settlements on restricted stock units	(6,065)	(1,792)
Borrowings from warehouse credit facilities	290,891	149,900
Repayments to warehouse credit facilities	(271,627)	(125,206)
Borrowings from secured revolving credit facility	39,587	—
Repayments to secured revolving credit facility	(36,816)	—
Other payables—deposits held in escrow	19,056	11,602
Principal payments for finance lease obligations	(30)	—
Cash paid for debt issuance costs	(4)	—
Net cash provided by financing activities	155,546	43,469
Effect of exchange rate changes on cash and cash equivalents	(22)	38
Net change in cash, cash equivalents, and restricted cash	113,006	(179,818)
Cash, cash equivalents, and restricted cash:		
Beginning of period	247,448	439,055
End of period	\$ 360,454	\$ 259,237
Supplemental disclosure of cash flow information		
Cash paid for interest	2,133	1,202
Non-cash transactions		
Stock-based compensation capitalized in property and equipment	1,151	561
Property and equipment additions in accounts payable and accrued liabilities	1,492	620
Leasehold improvements paid directly by lessor	—	3,444

See Notes to the consolidated financial statements.

Redfin Corporation and Subsidiaries
Consolidated Statements of Changes in Mezzanine Equity and Stockholders' Equity
(in thousands, except share amounts, unaudited)

	Series A Convertible Preferred Stock		Common Stock			Accumulated Deficit	Accumulated Other Comprehensive Income	Total Stockholders' Equity
	Shares	Amount	Shares	Amount	Additional Paid-in Capital			
Balance, March 31, 2019	—	\$ —	90,926,249	\$ 91	\$ 552,418	\$ (238,160)	\$ 1	\$ 314,349
Issuance of common stock pursuant to employee stock purchase program	—	—	262,110	—	3,246	—	—	3,246
Issuance of common stock pursuant to exercise of stock options	—	—	420,104	1	2,038	—	—	2,039
Issuance of common stock pursuant to settlement of restricted stock units	—	—	227,026	—	—	—	—	—
Common stock surrendered for employees' tax liability upon settlement of restricted stock units	—	—	(57,952)	—	(975)	—	—	(975)
Stock-based compensation	—	—	—	—	6,167	—	—	6,167
Other comprehensive income	—	—	—	—	—	—	43	43
Net loss	—	—	—	—	—	(12,625)	—	(12,625)
Balance, June 30, 2019	—	\$ —	91,777,537	\$ 92	\$ 562,894	\$ (250,785)	\$ 44	\$ 312,245
Balance, March 31, 2020	—	\$ —	93,957,774	\$ 94	\$ 591,420	\$ (311,903)	\$ 575	\$ 280,186
Issuance of convertible preferred stock, net	40,000	39,801	—	—	—	—	—	—
Issuance of common stock, net	—	—	4,484,305	4	69,697	—	—	69,701
Issuance of common stock pursuant to employee stock purchase program	—	—	186,925	—	3,436	—	—	3,436
Issuance of common stock pursuant to exercise of stock options	—	—	519,432	1	3,588	—	—	3,589
Issuance of common stock pursuant to settlement of restricted stock units	—	—	344,075	—	—	—	—	—
Common stock surrendered for employees' tax liability upon settlement of restricted stock units	—	—	(98,079)	—	(2,758)	—	—	(2,758)
Stock-based compensation	—	—	—	—	7,851	—	—	7,851
Other comprehensive loss	—	—	—	—	—	—	(134)	(134)
Net loss	—	—	—	—	—	(6,611)	—	(6,611)
Balance, June 30, 2020	40,000	\$ 39,801	99,394,432	\$ 99	\$ 673,234	\$ (318,514)	\$ 441	\$ 355,260

	Series A Convertible Preferred Stock		Common Stock			Accumulated Deficit	Accumulated Other Comprehensive Income	Total Stockholders' Equity
	Shares	Amount	Shares	Amount	Additional Paid-in Capital			
Balance, December 31, 2018	—	\$ —	90,151,341	\$ 90	\$ 542,829	\$ (170,981)	\$ —	\$ 371,938
Issuance of common stock pursuant to employee stock purchase program	—	—	262,110	—	3,246	—	—	3,246
Issuance of common stock pursuant to exercise of stock options	—	—	1,099,599	2	5,768	—	—	5,770
Issuance of common stock pursuant to settlement of restricted stock units	—	—	366,915	—	—	—	—	—
Common stock surrendered for employees' tax liability upon settlement of restricted stock units	—	—	(102,428)	—	(1,792)	—	—	(1,792)
Stock-based compensation	—	—	—	—	12,843	—	—	12,843
Other comprehensive income	—	—	—	—	—	—	44	44
Net loss	—	—	—	—	—	(79,804)	—	(79,804)
Balance, June 30, 2019	—	\$ —	91,777,537	\$ 92	\$ 562,894	\$ (250,785)	\$ 44	\$ 312,245
Balance, December 31, 2019	—	\$ —	93,001,597	\$ 93	\$ 583,097	\$ (251,786)	\$ 42	\$ 331,446
Issuance of convertible preferred stock, net	40,000	39,801	—	—	—	—	—	—
Issuance of common stock, net	—	—	4,484,305	4	69,697	—	—	69,701
Issuance of common stock pursuant to employee stock purchase program	—	—	186,925	—	3,436	—	—	3,436
Issuance of common stock pursuant to exercise of stock options	—	—	1,257,830	1	7,503	—	—	7,504
Issuance of common stock pursuant to settlement of restricted stock units	—	—	664,515	1	(1)	—	—	—
Common stock surrendered for employees' tax liability upon settlement of restricted stock units	—	—	(200,740)	—	(6,065)	—	—	(6,065)
Stock-based compensation	—	—	—	—	15,567	—	—	15,567
Other comprehensive income	—	—	—	—	—	—	399	399
Net loss	—	—	—	—	—	(66,728)	—	(66,728)
Balance, June 30, 2020	40,000	\$ 39,801	99,394,432	\$ 99	\$ 673,234	\$ (318,514)	\$ 441	\$ 355,260

See Notes to the consolidated financial statements.

Index to Notes to Consolidated Financial Statements

Note 1:	Summary of Accounting Policies	7
Note 2:	Segment Reporting and Revenue	9
Note 3:	Financial Instruments	10
Note 4:	Inventory	13
Note 5:	Property and Equipment	14
Note 6:	Leases	14
Note 7:	Commitments and Contingencies	15
Note 8:	Acquired Intangible Assets	16
Note 9:	Accrued Liabilities	16
Note 10:	Other Payables	16
Note 11:	Mezzanine Equity	16
Note 12:	Equity and Equity Compensation Plans	18
Note 13:	Net Loss per Share Attributable to Common Stock	20
Note 14:	Income Taxes	21
Note 15:	Debt	21
Note 16:	Subsequent Events	23

Redfin Corporation and Subsidiaries
Notes to Consolidated Financial Statements
(in thousands, except share and per share amounts, unaudited)

Note 1: Summary of Accounting Policies

Basis of Presentation—The consolidated financial statements and accompanying notes have been prepared in accordance with generally accepted accounting principles in the United States of America (“GAAP”).

The financial information as of December 31, 2019 that is included in this quarterly report is derived from the audited consolidated financial statements and notes for the year ended December 31, 2019 included in Item 8 in our annual report for the year ended December 31, 2019. Such financial information should be read in conjunction with the notes and management’s discussion and analysis of the consolidated financial statements included in our annual report.

The unaudited consolidated interim financial statements, in the opinion of management, reflect all adjustments, consisting only of normal recurring adjustments, necessary to present fairly our financial position as of June 30, 2020, the statements of comprehensive loss and statements of changes in mezzanine equity and stockholders’ equity for the three and six months ended June 30, 2020 and 2019, and the statement of cash flows for the six months ended June 30, 2020 and 2019. The results for the three and six months ended June 30, 2020 are not necessarily indicative of the results to be expected for the year ending December 31, 2020 or for any interim period or for any other future year.

Principles of Consolidation—The unaudited consolidated interim financial statements include the accounts of Redfin and its wholly owned subsidiaries, including those entities in which we have a variable interest and of which we are the primary beneficiary. Intercompany transactions and balances have been eliminated.

COVID-19 Risks, Impacts and Uncertainties—We are subject to the risks arising from COVID-19’s impacts on the residential real estate industry. Our management believes that these impacts, which include but are not limited to the following, could have a significant negative effect on our future financial position, results of operations, and cash flows: (i) prohibitions or limitations on in-person activities associated with residential real estate transactions; (ii) lack of consumer desire for in-person interactions and physical home tours; and (iii) deteriorating economic conditions, such as increased unemployment rates, recessionary conditions, lower yields on individuals’ investment portfolios, and more stringent mortgage financing conditions. In addition, we have considered the impacts and uncertainties of COVID-19 in our use of estimates in preparation of our consolidated financial statements. These estimates include, but are not limited to, likelihood of achieving performance conditions under performance-based equity awards, net realizable value of inventory, and the fair value of reporting units and goodwill for impairment.

In April 2020, we reduced our number of employees by approximately 400 people and placed an additional 1,000 employees on furlough. As of the effective date of any furlough, we provided transition pay to each employee and for any employee enrolled in our health-care benefit plans, we continue to provide benefits through the duration of their furlough. These actions taken in response to the economic impact of COVID-19 on our business resulted in a charge of \$7,525 for the three and six months ended June 30, 2020. These costs are included in general and administrative expenses, as these costs were determined to be direct and incremental, and not related to revenue generating activities. These costs were partially offset by \$1,292 in employee retention credits claimed under the Coronavirus Aid, Relief, and Economic Security Act (the “CARES Act”) for the three and six months ended June 30, 2020, which are also included as a reduction to general and administrative expenses. Pursuant to the CARES Act, we elected to defer eligible payroll taxes beginning in April 2020, which will be due in two equal installments in 2021 and 2022.

Use of Estimates—The preparation of consolidated financial statements, in conformity with GAAP, requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and results of operations during the respective periods. We evaluate our estimates on an ongoing basis. In January 2020 we adopted ASU 2016-13, *Financial Instruments—Credit Losses (Topic 326)*, which modifies the measurement of credit losses on financial instruments. As part of the adoption we estimated the

current expected credit losses for certain classes of relevant assets. The amounts realized from the affected assets will depend on, among other factors, general business conditions, including the impacts from COVID-19, and could differ in the near term from carrying amounts reflected in the consolidated financial statements. Further description of the impact of this pronouncement is included in "—Recently Adopted Accounting Pronouncements."

Accounts Receivable and Allowance for Credit Losses—We have two material classes of receivables: (i) real estate services receivables and (ii) receivables from the sale of homes through our properties business. Accounts receivable related to these classes represent closed transactions for which cash has not yet been received. We establish an allowance for expected credit losses based on historical experience of collectibility, current external economic conditions that may affect collectibility, and current or expected changes to the regulatory environment in which we operate our real estate services and properties businesses. As the majority of our transactions are processed through escrow, collectibility is not a significant risk, and we have determined the nature of our receivables to have similar credit quality indicators. We evaluate for changes in credit quality indicators on an annual basis or in the event of a material economic event or material change in the regulatory environment in which we operate, with the most recent assessment being performed in June 2020.

Investments—We have two types of investments: (i) available-for-sale investments that are available to support our operational needs, which are reported on the balance sheets as short-term and long-term investments, and (ii) long-term equity investments accounted for under the cost method, which are reported in other non-current assets.

Available-for-sale

Our short-term and long-term investments consist primarily of U.S. treasury securities and other federal or local government issued securities, all of which are classified as available-for-sale. Available-for-sale debt securities are recorded at fair value, and unrealized holding gains and losses are recorded as a component of accumulated other comprehensive income. Available-for-sale securities with maturities of one year or less and those identified by management at the time of purchase to be used to fund operations within one year are classified as short-term. All other available-for-sale securities are classified as long-term. We evaluate our available-for-sale securities, both ones classified as cash equivalents and as investments, for expected credit losses on a quarterly basis. An expected credit loss reserve is charged against the fair value of an available-for-sale debt security when it is identified, with a credit loss charged against net earnings. We review factors to determine whether an expected credit loss exists based on credit quality indicators, such as the extent to which the fair value as of the reporting date is less than the amortized cost basis, present value of cash flows expected to be collected, the financial condition and prospects of the issuer, adverse conditions specifically related to the security, and any changes to the credit rating of the security by a rating agency. Realized gains and losses are accounted for using the specific identification method. Purchases and sales are recorded on a trade date basis.

Cost Method Investments

We have purchased equity interests in privately held companies, which are classified as long-term. The investments are equity securities without readily determinable fair values that are accounted for at cost minus any impairment, plus or minus changes resulting from observable price changes in orderly transactions for identical or similar investments of the same issuer. We perform a qualitative assessment considering impairment indicators to evaluate whether the investments are impaired as of the end of each reporting period. See Note 3 for information on our assessment.

Mezzanine Equity—We have issued convertible preferred stock that we have determined is a financial instrument with both equity and debt characteristics and are such classified as mezzanine equity in our consolidated financial statements. The instrument is initially recognized at fair value net of issuance costs. We reassess whether the instrument is currently redeemable or probable to become redeemable in the future as of each reporting date, in which, if the instrument meets either criteria, we will accrete the carrying value to the redemption value based on the effective interest method over the remaining term. To assess classification, we

review all features of the instrument, including mandatory redemption features and conversion features that may be substantive. All financial instruments that are classified as mezzanine equity are evaluated for embedded derivative features by evaluating each feature against the nature of the host instrument (e.g. more equity-like or debt-like). Features identified as embedded derivatives that are material are recognized separately as a derivative asset or liability in the consolidated financial statements. We have evaluated our convertible preferred stock and determined that its nature is that of an equity host and no material embedded derivatives exist that would require bifurcation on our balance sheet. See Note 11 for more information.

Advertising and Advertising Production Costs—We expense advertising costs as they are incurred and advertising production costs as of the first date the advertisement takes place. Advertising costs totaled \$7,058 and \$23,845 for the three months ended June 30, 2020 and 2019, respectively, and \$29,587 and \$54,078 for the six months ended June 30, 2020 and 2019, respectively, and are included in marketing expenses. Advertising production costs totaled \$27 and \$101 for the three months ended June 30, 2020 and 2019, respectively, and \$ 201 and \$149 for the six months ended June 30, 2020 and 2019, respectively, and are included in marketing expenses.

Recently Adopted Accounting Pronouncements—In January 2020, we adopted ASU 2016-13, *Financial Instruments—Credit Losses (Topic 326)*, using a modified-retrospective approach. The adoption of this guidance requires a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is effective. The pronouncement, along with the related subsequent pronouncements that include clarifications, modifies the measurement of credit losses on financial instruments. This guidance requires the use of an expected loss impairment model for instruments measured at amortized cost based on relevant information about past events, including historical experience, current conditions, and reasonable and supportable forecasts that affect the collectibility of the reported amount. The adoption of this pronouncement did not have a material impact on our consolidated financial statements. See "—Accounts Receivable and Allowance for Credit Losses" for specific accounting policies for accounts receivable and available-for-sale debt securities, and see Note 2 and Note 3 for additional impacts from the adoption.

Recently Issued Accounting Pronouncements—Recent accounting pronouncements issued by the Financial Accounting Standards Board (including its Emerging Issues Task Force), the American Institute of Certified Public Accountants, and the Securities and Exchange Commission did not have, or are not expected to have, a material impact on our present or future consolidated financial statements.

Note 2: Segment Reporting and Revenue

In operation of the business, our management, including our chief operating decision maker, who is also our chief executive officer, evaluates the performance of our operating segments based on revenue and gross profit. We do not analyze discrete segment balance sheet information related to long-term assets, all of which are located in the United States. All other financial information is presented on a consolidated basis. We have five operating segments and two reportable segments, real estate services and properties.

We generate revenue primarily from commissions and fees charged on real estate services transactions closed by our lead agents or partner agents, and from the sale of homes. Our key revenue components are brokerage revenue, partner revenue, properties revenue, and other revenue.

Information on each of the reportable and other segments and reconciliation to consolidated net loss is as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Real estate services				
Brokerage revenue	\$ 128,543	\$ 145,399	\$ 230,894	\$ 226,713
Partner revenue	6,506	7,447	12,791	12,023
Total real estate services revenue	135,049	152,846	243,685	238,736
Cost of revenue	88,799	103,616	182,361	184,399
Gross profit	46,250	49,230	61,324	54,337
Properties				
Revenue	72,184	39,908	151,282	61,281
Cost of revenue	73,348	40,906	152,647	63,898
Gross profit	(1,164)	(998)	(1,365)	(2,617)
Other				
Revenue	7,246	5,281	11,496	8,329
Cost of revenue	6,293	5,167	12,537	8,948
Gross profit	953	114	(1,041)	(619)
Intercompany eliminations				
Revenue	(814)	(255)	(1,803)	(424)
Cost of revenue	(814)	(255)	(1,803)	(424)
Gross profit	—	—	—	—
Consolidated				
Revenue	213,665	197,780	404,660	307,922
Cost of revenue	167,626	149,434	345,742	256,821
Gross profit	46,039	48,346	58,918	51,101
Operating expenses	50,465	60,767	120,774	130,972
Interest income	437	1,913	1,540	4,229
Interest expense	(2,665)	(2,153)	(5,109)	(4,290)
Other income (expense), net	43	36	(1,303)	128
Net loss	\$ (6,611)	\$ (12,625)	\$ (66,728)	\$ (79,804)

Revenue earned but not received is recorded as accounts receivable on our consolidated balance sheets, net of an allowance for expected credit losses. Accounts receivable consists primarily of commission revenue and proceeds from the sale of homes in-transit through the escrow process, and therefore it is not estimated. Based on the regulated environment in which we operate and the nature of our receivables, we do not expect material credit losses, and write-offs were immaterial in the periods presented.

Note 3: Financial Instruments

Derivatives

Our primary market exposure is to interest rate risk, specifically U.S. treasury and mortgage interest rates, due to their impact on mortgage-related assets and commitments. We use forward sales commitments on whole loans and mortgage-backed securities to manage and reduce this risk. We do not have any derivative instruments designated as hedging instruments.

Interest Rate Lock Commitments—Interest rate lock commitments ("IRLCs") represent an agreement to extend credit to a mortgage loan applicant. We commit (subject to loan approval) to fund the loan at the specified rate, regardless of changes in market interest rates between the commitment date and the funding date. Outstanding IRLCs are subject to interest rate risk and related price risk during the period from the date of commitment through the loan funding date or expiration date. Loan commitments generally range between 30 and 90 days and the borrower is not obligated to obtain the loan. Therefore, IRLCs are subject to fallout risk, which occurs when approved borrowers choose not to close on the underlying loans. We review our commitment-to-closing ratio (pull-through rate) as part of an estimate of the number of mortgage loans that will fund according to the IRLCs.

Forward Sales Commitments—We are exposed to interest rate and price risk on loans held for sale from the funding date until the date the loan is sold. Forward sales commitments on whole loans and mortgage-backed securities are used to fix the forward sales price that will be realized at the sale of each loan.

Notional Amounts	June 30, 2020	December 31, 2019
Interest rate lock commitments	\$ 72,641	\$ 37,453
Forward sales commitments	113,573	39,447

The locations and amounts of gains (losses) recognized in income related to our derivatives are as follows:

Instrument	Classification	Three Months Ended June 30,		Six Months Ended June 30,	
		2020	2019	2020	2019
Interest rate lock commitments	Service revenue	\$ (142)	\$ (11)	\$ 1,053	\$ 435
Forward sales commitments	Service revenue	1,460	3	(110)	241

Fair Value of Financial Instruments

A summary of assets and liabilities related to our financial instruments, measured at fair value on a recurring basis and as reflected in our consolidated balance sheets, is set forth below:

	Balance at June 30, 2020	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets				
Cash equivalents				
Money market funds	\$ 310,115	\$ 310,115	\$ —	\$ —
U.S. treasury securities	4,300	4,300	—	—
Total cash equivalents	314,415	314,415	—	—
Short-term investments				
U.S. treasury securities	128,056	128,056	—	—
Loans held for sale	42,439	—	42,439	—
Prepaid expenses and other current assets				
Interest rate lock commitments	1,835	—	—	1,835
Forward sales commitments	45	—	45	—
Total prepaid expenses and other current assets	1,880	—	45	1,835
Long-term investments				
U.S. treasury securities	13,783	13,783	—	—
Agency bonds	5,009	5,009	—	—
Total long-term investments	18,792	18,792	—	—
Total assets	\$ 505,582	\$ 461,263	\$ 42,484	\$ 1,835
Liabilities				
Accrued liabilities				
Interest rate lock commitments	\$ 42	\$ —	\$ —	\$ 42
Forward sales commitments	498	—	498	—
Total liabilities	\$ 540	\$ —	\$ 498	\$ 42

	Balance at December 31, 2019	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets				
Cash equivalents				
Money market funds	\$ 221,442	\$ 221,442	\$ —	\$ —
Short-term investments				
U.S. treasury securities	70,029	70,029	—	—
Loans held for sale	21,985	—	21,985	—
Prepaid expenses and other current assets				
Interest rate lock commitments	496	—	—	496
Forward sales commitments	4	—	4	—
Total prepaid expenses and other current assets	500	—	4	496
Long-term investments				
U.S. treasury securities	30,978	30,978	—	—
Total assets	<u>\$ 344,934</u>	<u>\$ 322,449</u>	<u>\$ 21,989</u>	<u>\$ 496</u>
Liabilities				
Accrued liabilities				
Interest rate lock commitments	\$ 58	\$ —	\$ —	\$ 58
Forward sales commitments	57	—	57	—
Total liabilities	<u>\$ 115</u>	<u>\$ —</u>	<u>\$ 57</u>	<u>\$ 58</u>

The significant unobservable input used in the fair value measurement of IRLCs is the pull-through rate. Significant changes in the input could result in a significant change in fair value measurement.

The following is a quantitative summary of key unobservable inputs used in the valuation of IRLCs:

Key Inputs	Valuation Technique	June 30, 2020	December 31, 2019
Weighted-average pull-through rate	Market pricing	73.6%	78.2%

The following is a summary of changes in the fair value of IRLCs for the period ended June 30, 2020:

Balance, net—January 1, 2020	\$ 430
Issuances of interest rate lock commitments	7,527
Settlements of interest rate lock commitments	(6,629)
Net gain recognized in earnings	155
Balance, net—June 30, 2020	<u>\$ 1,483</u>
Changes in fair value recognized during the period relating to assets still held at June 30, 2020	\$ 1,053

There were no transfers into or out of Level 3 financial instruments during the period.

See Note 15 for the carrying amount and estimated fair value of our convertible senior notes.

See Note 11 for the carrying amount of our convertible preferred stock.

Assets and liabilities recognized or disclosed at fair value on a nonrecurring basis include items such as property and equipment, goodwill and other intangible assets, cost method investments, and other assets. These assets are measured at fair value if determined to be impaired. During the three months ended March 31, 2020, we determined that the fair value of one of our cost method investment in a privately-held company was less than the carrying value of \$2,000 based on a variety of impairment indicators, including the historical performance and future prospects of the company; therefore, we recognized a non-cash impairment charge of \$1,420 related to this investment. The impairment charge is included in Impairment costs within our consolidated statement of cash flows and is included in Other income (expense), net within our consolidated statements of operations. We did not record any other significant nonrecurring fair value measurements after initial recognition for the period ended June 30, 2020.

The following table summarizes the cost or amortized cost, gross unrealized gains and losses, and estimated fair market value of our cash, money market funds, restricted cash, and available-for-sale investments.

June 30, 2020							
	Cost or Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value	Cash, Cash Equivalents, Restricted Cash	Short-term Investments	Long-term Investments
Cash	\$ 10,937	\$ —	\$ —	\$ 10,937	\$ 10,937	\$ —	\$ —
Money markets funds	310,115	—	—	310,115	310,115	—	—
Restricted cash	35,102	—	—	35,102	35,102	—	—
U.S. treasury securities	145,718	421	—	146,139	4,300	128,056	13,783
Agency bonds	5,000	9	—	5,009	—	—	5,009
Total	\$ 506,872	\$ 430	\$ —	\$ 507,302	\$ 360,454	\$ 128,056	\$ 18,792

December 31, 2019							
	Cost or Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value	Cash, Cash Equivalents, Restricted Cash	Short-term Investments	Long-term Investments
Cash	\$ 13,237	\$ —	\$ —	\$ 13,237	\$ 13,237	\$ —	\$ —
Money markets funds	221,442	—	—	221,442	221,442	—	—
Restricted cash	12,769	—	—	12,769	12,769	—	—
U.S. treasury securities	100,998	31	(22)	101,007	—	70,029	30,978
Total	\$ 348,446	\$ 31	\$ (22)	\$ 348,455	\$ 247,448	\$ 70,029	\$ 30,978

As of June 30, 2020 and December 31, 2019, the aggregate fair value of available-for-sale debt securities in an unrealized loss position totaled \$ 0 and \$46,550, with aggregate unrealized losses of \$ 0 and \$22, respectively. We have evaluated our portfolio of available-for-sale debt securities based on credit quality indicators for expected credit losses and do not believe there are any expected credit losses. Our portfolio consists of U.S. government securities, all with a high quality credit rating issued by various credit agencies.

As of June 30, 2020 and December 31, 2019, we had accrued interest of \$ 149 and \$183, respectively, on our available-for-sale investments, of which we have recorded no expected credit losses. Accrued interest receivable is presented within other current assets in our consolidated balance sheets.

Note 4: Inventory

The following is a summary of inventory as of the dates presented:

	June 30, 2020	December 31, 2019
Homes for sale	\$ 4,383	\$ 36,982
Homes not available for sale	426	3,163
Homes under improvement	4,628	34,445
Inventory	\$ 9,437	\$ 74,590

Inventory costs include direct home acquisition costs and any capitalized improvements, net of lower of cost or net realizable value write-downs applied on a specific home basis. As of June 30, 2020 and December 31, 2019, lower of cost or net realizable value write-downs were \$151 and \$143, respectively.

The following is the inventory activity for the six months ended June 30, 2020:

Inventory as of January 1, 2020	\$ 74,590
Purchases and capitalized improvements to inventory	74,757
Relief of inventory to cost of revenue	(139,902)
Lower of cost or net realizable value write-downs, net	(8)
Inventory as of June 30, 2020	\$ 9,437

Note 5: Property and Equipment

The following is a summary of property and equipment as of the dates presented:

	Useful Lives (Years)	June 30, 2020		December 31, 2019	
Leasehold improvements	Shorter of lease term or economic life	\$	29,435	\$	28,141
Website and software development costs	2-3		32,932		27,602
Computer and office equipment	3		5,859		4,846
Software	3		1,125		595
Furniture	7		7,093		6,965
Construction in progress	N/A		497		475
Property and equipment, gross			76,941		68,624
Accumulated depreciation and amortization			(35,527)		(29,047)
Property and equipment, net		\$	41,414	\$	39,577

Depreciation and amortization expense for property and equipment amounted to \$ 3,435 and \$2,049 for the three months ended June 30, 2020 and 2019, respectively, and \$6,621 and \$3,565 for the six months ended June 30, 2020 and 2019, respectively. We capitalized software development costs, including stock-based compensation, of \$2,836 and \$2,064 for the three months ended June 30, 2020 and 2019, respectively, and \$5,513 and \$3,974 for the six months ended June 30, 2020 and 2019, respectively.

Note 6: Leases

The following are the components of lease activity as of the dates presented:

Lease Cost	Classification	Three Months Ended June 30,		Six Months Ended June 30,	
		2020	2019	2020	2019
Operating lease cost:					
Operating lease cost ⁽¹⁾	Cost of revenue	\$ 2,144	\$ 2,091	\$ 4,282	\$ 3,785
Operating lease cost ⁽¹⁾	Operating expenses	1,093	855	2,187	1,710
Total operating lease cost		\$ 3,237	\$ 2,946	\$ 6,469	\$ 5,495
Finance lease cost:					
Amortization of right-of-use assets	Cost of revenue	\$ 17	\$ —	\$ 34	\$ —
Interest on lease liabilities	Cost of revenue	3	—	5	—
Total finance lease cost		\$ 20	\$ —	\$ 39	\$ —

(1) Includes lease expense with initial terms of twelve months or less of \$ 247 and \$668 for the three months ended June 30, 2020 and 2019, respectively, and \$ 473 and \$1,489 for the six months ended June 30, 2020 and 2019, respectively.

Maturity of Lease Liabilities	Operating Leases	Finance Leases
2020, excluding the six months ended June 30, 2020	\$ 7,655	\$ 30
2021	14,800	60
2022	14,437	60
2023	13,488	45
2024	12,223	—
Thereafter	22,163	—
Total lease payments	\$ 84,766	\$ 195
Less: Interest and other ⁽¹⁾	18,969	16
Present value of lease liabilities	\$ 65,797	\$ 179

(1) Interest and other consists of interest expense related to capitalized right of use operating lease liabilities of \$ 8,664, interest expense related to capitalized right of use financing lease liabilities of \$ 16, commitments related to operating leases that have not yet commenced, and operating leases with initial terms of twelve months or less.

There were no leases entered into during the six months ended June 30, 2020 that provided a readily determinable implicit rate; therefore, we used our estimated incremental borrowing rate for each type of lease to discount the lease payments based on information available at lease commencement. Additionally, we evaluated the performance of existing leases in relation to our leasing strategy and have determined that most renewal options would not be reasonably certain to be exercised.

Lease Term and Discount Rate	June 30, 2020	December 31, 2019
Weighted average remaining operating lease term (years)	5.7	6.1
Weighted average remaining finance lease term (years)	3.3	3.8
Weighted average discount rate for operating leases	4.4 %	4.4 %
Weighted average discount rate for finance leases	5.4 %	5.4 %

Supplemental Cash Flow Information	Six Months Ended June 30,	
	2020	2019
Cash paid for amounts included in the measurement of lease liabilities		
Operating cash flows from operating leases	\$ 6,994	\$ 4,445
Operating cash flows from finance leases	5	—
Financing cash flows from finance leases	25	—
Right of use assets obtained in exchange for lease liabilities		
Operating leases	\$ 214	\$ 47,773
Finance leases	—	—

Note 7: Commitments and Contingencies

Legal Proceedings—On August 28, 2019, Devin Cook, who is one of our former independent contractor licensed sales associates, filed a complaint against us in the Superior Court of California, County of San Francisco alleging that we misclassified her as an independent contractor instead of an employee. Additionally, on June 3, 2020, another former independent contractor licensed sales associate threatened to file a complaint us in California, alleging violations similar to those alleged by Ms. Cook.

On May 11, 2020, David Eraker, our co-founder and former chief executive officer who departed Redfin in 2006, filed two complaints against us. Mr. Eraker filed 1 complaint in his individual capacity in the Superior Court of Washington for King County against us and Madrona Venture Group, LLC ("Madrona"). In this complaint, Mr. Eraker asserts claims related to events prior to his departure from Redfin in 2006, including that (i) Madrona and Paul Goodrich, one of Madrona's principals and one of our former directors, concealed a provisional patent application from Mr. Eraker while evaluating an investment in us in 2005 and (ii) we continued this concealment following Madrona's investment. Mr. Eraker filed another complaint through through Appliance Computing III, Inc. (d/b/a Surefield) ("Surefield"), which is a company that Mr. Eraker founded and that we believe he controls, in the U.S. District Court for the Western District of Texas, Waco Division. In this complaint, Surefield alleges that we are infringing patents claimed to be owned by Surefield without its authorization or license.

Given the preliminary stage of these cases and the claims and issues presented, we cannot estimate a range of reasonably possible losses.

In addition to the matters discussed above, from time to time, we are involved in litigation, claims, and other proceedings arising in the ordinary course of our business. Except for the matters discussed above, we do not believe that any of the pending litigation, claims, and other proceedings are material to our business.

Leases and Other Commitments—We lease office space under noncancelable operating leases with terms ranging from one to 11 years and vehicles under noncancelable finance leases with terms of four years. Generally, the operating leases require a fixed minimum rent with contractual minimum rent increases over the lease term. Other commitments relate to homes that are under contract to purchase through our properties business but that have not closed, and network infrastructure for our data operations.

The following are future minimum payments due under these agreements as of June 30, 2020:

	Leases	Other Commitments
2020, excluding the six months ended June 30, 2020	\$ 7,685	\$ 12,731
2021	14,860	5,204
2022	14,497	5,426
2023	13,534	—
2024 and thereafter	34,383	—
Total future minimum payments	<u>\$ 84,959</u>	<u>\$ 23,361</u>

Note 8: Acquired Intangible Assets

The following are the details of our intangible assets subject to amortization as of the dates presented:

	Useful Lives (Years)	June 30, 2020			December 31, 2019		
		Gross	Accumulated Amortization	Net	Gross	Accumulated Amortization	Net
Trade names	10	\$ 1,040	\$ (598)	\$ 442	\$ 1,040	\$ (546)	\$ 494
Developed technology	10	2,980	(1,713)	1,267	2,980	(1,564)	1,416
Customer relationships	10	860	(495)	365	860	(452)	408
		<u>\$ 4,880</u>	<u>\$ (2,806)</u>	<u>\$ 2,074</u>	<u>\$ 4,880</u>	<u>\$ (2,562)</u>	<u>\$ 2,318</u>

Acquired intangible assets are amortized using the straight-line method over their estimated useful life, which approximates the expected use of these assets. Amortization expense amounted to \$122 and \$244 for each of the three and six months ended June 30, 2020 and 2019, respectively. We will recognize the remaining amortization expense of \$2,074 over a five-year period, with the first four years recognizing expense of \$ 488 per year and the fifth year recognizing expense of \$122.

Note 9: Accrued Liabilities

The following are details of accrued liabilities as of the dates presented:

	June 30, 2020	December 31, 2019
Accrued compensation and benefits	\$ 32,978	\$ 30,462
Miscellaneous accrued liabilities	15,989	7,560
Total accrued liabilities	<u>\$ 48,967</u>	<u>\$ 38,022</u>

The increase in miscellaneous accrued liabilities since December 31, 2019 was driven primarily by an increase in marketing activity during the quarter ended June 30, 2020, which was a result of increased marketing spend and timing of those expenses.

Note 10: Other Payables

Other payables consists primarily of customer deposits for cash held in escrow on behalf of real estate buyers using our title and settlement services. Since we do not have rights to the cash, the customer deposits are recorded as a liability with a corresponding asset in the same amount recorded within restricted cash.

The following are details of other payables as of the dates presented:

	June 30, 2020	December 31, 2019
Customer deposits	\$ 26,165	\$ 7,109
Miscellaneous payables	1,449	775
Total other payables	<u>\$ 27,614</u>	<u>\$ 7,884</u>

Note 11: Mezzanine Equity

On April 1, 2020, we issued 4,484,305 shares of our common stock, at a price of \$ 15.61 per share, and 40,000 shares of our preferred stock, at a price of \$1,000 per share, for aggregate gross proceeds of \$ 110,000.

We designated this preferred stock as Series A Convertible Preferred Stock (our "convertible preferred stock"). Our convertible preferred stock is classified as mezzanine equity in our consolidated financial statements as the substantive conversion features at the option of the holder precludes liability classification. We have determined there are no material embedded features that require recognition as a derivative asset or liability.

We allocated the gross proceeds of \$ 110,000 to the common stock issuance and the convertible preferred stock issuance based on the standalone fair value of the issuances, resulting in a fair valuation of \$40,000 for the preferred stock, which is also the value of the mandatory redemption amount.

As of June 30, 2020, the carrying value of our convertible preferred stock, net of issuance costs, is \$ 39,801, and holders have earned stock dividends in the amount of 30,640 shares of common stock. The stock dividend was issued on July 1, 2020. These shares are included in basic and diluted net loss per share attributable to common stock in Note 13. As of June 30, 2020, no shares of the preferred stock have been converted, and the preferred stock was not redeemable, nor probable to become redeemable in the future as there is a more than remote chance the shares will be automatically converted prior to the mandatory redemption date. The number of shares of common stock reserved for future issuance resulting from dividends, conversion, or redemption with respect to the preferred stock was 2,622,177 as of the issuance date.

Dividends—The holders of our convertible preferred stock are entitled to dividends. Dividends accrue daily based on a 360 day fiscal year at a rate of 5.5% per annum based on the issue price and are payable quarterly in arrears on the first business day following the end of each calendar quarter. Assuming we satisfy certain conditions, we will pay dividends in shares of common stock at a rate of the dividend payable divided by \$17.95. If we do not satisfy such conditions, we will pay dividends in a cash amount equal to (i) the dividend shares otherwise issuable on the dividends multiplied by (ii) the volume-weighted average closing price of our common stock for the ten trading days preceding the date the dividends are payable.

Participation Rights—Holders of our convertible preferred stock are entitled to dividends paid and distributions made to holders of our common stock to the same extent as if such preferred stockholders had converted their shares of preferred stock into common stock and held such shares on the record date for such dividends and distributions.

Conversion—Holders may convert their convertible preferred stock into common stock at any time at a rate per share of preferred stock equal to the issue price divided by \$19.51 (the "conversion price"). A holder that converts will also receive any dividend shares resulting from accrued dividends.

Our convertible preferred stock may also be automatically converted to shares of our common stock. If the closing price of our common stock exceeds \$27.32 per share (i) for each day of the 30 consecutive trading days immediately preceding April 1, 2023 or (ii) following April 1, 2023 until 30 trading days prior to November 30, 2024, for each day of any 30 consecutive trading days, then each outstanding share of preferred stock will automatically convert into a number of shares of our common stock at a rate per share of preferred stock equal to the issue price divided by the conversion price. Upon an automatic conversion, a holder will also receive any dividend shares resulting from accrued dividends.

Redemption—On November 30, 2024, we will be required to redeem any outstanding shares of our convertible preferred stock, and each holder may elect to receive cash, shares of common stock, or a combination of cash and shares. If a holder elects to receive cash, we will pay, for each share of preferred stock, an amount equal to the issue price plus any accrued dividends. If a holder elects to receive shares, we will issue, for each share of preferred stock, a number of shares of common stock at a rate of the issue price divided by the conversion price plus any dividend shares resulting from accrued dividends.

A holder of our convertible preferred stock has the right to require us to redeem up to all shares of preferred stock it holds following certain events outlined in the document governing the preferred stock. If a holder redeems as the result of such events, such holder may elect to receive cash or shares of common stock, as calculated in the same manner as the mandatory redemption described above. Additionally, such holder will also receive, in cash or shares of common stock as elected by the holder, an amount equal to all scheduled dividend payments on the preferred stock for all remaining dividend periods from the date the holder gives its notice of redemption.

Liquidation Rights—Upon our liquidation, dissolution, or winding up, holders of our convertible preferred stock will be entitled to receive cash out of our assets prior to holders of the common stock.

Note 12: Equity and Equity Compensation Plans

Common Stock—As of June 30, 2020 and December 31, 2019, our amended and restated certificate of incorporation authorized us to issue 500,000,000 shares of common stock with a par value of \$ 0.001 per share.

Preferred Stock—As of June 30, 2020 and December 31, 2019, our amended and restated certificate of incorporation authorized us to issue 10,000,000 shares of preferred stock with a par value of \$ 0.001.

Amended and Restated 2004 Equity Incentive Plan—We granted options under our 2004 Equity Incentive Plan, as amended (our "2004 Plan"), until July 26, 2017, when we terminated it in connection with our initial public offering. Accordingly, no shares are available for future issuance under our 2004 Plan. Our 2004 Plan continues to govern outstanding equity awards granted thereunder. The term of each stock option under the plan is no more than 10 years, and each stock option generally vests over a four-year period.

2017 Equity Incentive Plan—Our 2017 Equity Incentive Plan (our "2017 EIP") became effective on July 26, 2017, and provides for the issuance of incentive and nonqualified common stock options and restricted stock units to employees, directors, and consultants. The number of shares of common stock initially reserved for issuance under our 2017 EIP was 7,898,159. The number of shares reserved for issuance under our 2017 EIP will increase automatically on January 1 of each calendar year beginning on January 1, 2018, and continuing through January 1, 2028, by the number of shares equal to the lesser of 5% of the total outstanding shares of our common stock as of the immediately preceding December 31 or an amount determined by our board of directors. The term of each stock option and restricted stock unit under the plan will not exceed 10 years, and each award generally vests over a two-year or four-year period.

We have reserved shares of common stock for future issuance under our 2017 EIP as follows:

	June 30, 2020	December 31, 2019
Stock options issued and outstanding	6,493,269	7,792,181
Restricted stock units issued and outstanding or deferred	4,356,392	5,023,412
Shares available for future equity grants	11,994,905	7,100,499
Total shares reserved for future issuance	<u>22,844,566</u>	<u>19,916,092</u>

2017 Employee Stock Purchase Plan—Our 2017 Employee Stock Purchase Plan (our "ESPP") was approved by our board of directors on July 27, 2017 and enables eligible employees to purchase shares of our common stock at a discount. Purchases will be accomplished through participation in discrete offering periods. We initially reserved 1,600,000 shares of common stock for issuance under our ESPP. The number of shares reserved for issuance under our ESPP will increase automatically on January 1 of each calendar year beginning after the first offering date and continuing through January 1, 2028, by the number of shares equal to the lesser of 1% of the total outstanding shares of our common stock as of the immediately preceding December 31 or an amount determined by our board of directors. On each purchase date, eligible employees will purchase our common stock at a price per share equal to 85% of the lesser of (i) the fair market value of our common stock on the first trading day of the offering period and (ii) the fair market value of our common stock on the purchase date.

We have reserved shares of common stock for future issuance under our ESPP as follows:

	Six Months Ended June 30, 2020	Year Ended December 31, 2019
Shares available for issuance at beginning of period	3,330,271	2,890,973
Shares issued during the period	186,925	490,717
Total shares available for future issuance at end of period	<u>3,143,346</u>	<u>2,400,256</u>

Stock Options—The following table summarizes activity for stock options for the six months ended June 30, 2020 :

	Number of Options	Weighted- Average Exercise Price	Weighted-Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value
Outstanding as of January 1, 2020	7,792,181	\$ 7.00	5.28	\$ 111,122
Options exercised	(1,257,830)	5.97		
Options forfeited	(31,103)	8.93		
Options expired	(9,979)	8.95		
Outstanding at June 30, 2020	6,493,269	7.19	4.90	225,447
Options exercisable at June 30, 2020	6,095,505	6.58	4.72	215,368

The grant date fair value of options to purchase common stock is recorded as stock-based compensation over the vesting period. As of June 30, 2020, there was \$1,528 of total unrecognized compensation cost related to stock options. These costs are expected to be recognized over a weighted-average period of 0.93 years. The total fair value of stock options vested for the three months ended June 30, 2020 and 2019 was \$ 643 and \$1,297, respectively, and \$1,382 and \$2,746 for the six months ended June 30, 2020 and 2019, respectively. The total intrinsic value of stock options exercised for the three months ended June 30, 2020 and 2019 was \$11,224 and \$5,402, respectively, and \$26,475 and \$14,084 for the six months ended June 30, 2020 and 2019, respectively.

On June 1, 2019, we granted stock options subject to performance conditions, with a target of 150,000 shares and a maximum 300,000 shares, to our chief executive officer. The options have an exercise price of \$27.50 per share and have the same performance and vesting conditions as the restricted stock units subject to performance conditions that we granted in 2019 (the "2019 PSUs"). None of the options vested in the six months ended June 30, 2020.

Restricted Stock Units—The following table summarizes activity for restricted stock units for the six months ended June 30, 2020 :

	Restricted Stock Units	Weighted Average Grant-Date Fair Value
Outstanding as of January 1, 2020	5,023,412	\$ 18.69
Granted	551,441	29.14
Vested ⁽¹⁾	(664,515)	18.77
Forfeited or canceled	(553,946)	18.84
Outstanding or deferred as of June 30, 2020 ⁽¹⁾	4,356,392	\$ 19.98

(1) Starting with the restricted stock units granted to them in June 2019, our non-employee directors have the option to defer the issuance of common stock receivable upon vesting of such restricted stock units until 60 days following the day they are no longer providing services to us or, if earlier, upon a change in control transaction. The amount reported as vested excludes restricted stock units that have vested but whose settlement into shares have been deferred. The amount reported as outstanding or deferred as of June 30, 2020 includes these restricted stock units. As no further conditions exist to prevent the issuance of the shares of common stock underlying these restricted stock units, the shares are included in basic and diluted weighted shares outstanding used to calculate net loss per share attributable to common stock. The amount of shares whose issuance have been deferred is not considered material and is not reported separately from stock-based compensation in our consolidated statements of changes in mezzanine equity and stockholders' equity.

The grant date fair value of restricted stock units is recorded as stock-based compensation over the vesting period. As of June 30, 2020, there was \$75,941 of total unrecognized compensation cost related to restricted stock units, which is expected to be recognized over a weighted-average period of 2.68 years.

As of June 30, 2020, there were outstanding 314,999 restricted stock units subject to performance conditions (the "PSUs") at 100% of the target level. Depending on our achievement of the performance conditions, the actual number of shares of common stock issuable upon vesting of PSUs will range from 0% to 200% of the target amount. For each PSU recipient, the award will vest, subject to the recipient continuing to provide service to us, upon our board of directors, or its compensation committee, certifying that we have achieved the PSU's related performance conditions. Stock-based compensation expense for PSUs will be recognized when it is probable that the performance conditions will be achieved. During the six months ended June 30, 2020, we recognized a net \$(254) for share-based compensation expense for PSUs, which included (i) an adjustment of \$(590) for the reversal of expense from the the year ended December 31, 2019 related to expense for the PSUs we granted in 2019, as the probability of achieving the performance conditions was determined to be lower, and (ii) a charge of \$336 for the six months ended June 30, 2020. During the six months ended June 30, 2019, we recognized a net \$(494) for share-based compensation expense for PSUs,

which included (i) an adjustment of \$(610) for the reversal of expense from the year ended December 31, 2018 related to the expense for PSUs we granted during 2018, as the probability of achieving the performance conditions was determined to not be probable, and (ii) an expense of \$116 for PSUs granted in June 2019.

Compensation Cost—The following table details, for each period indicated, (i) our stock-based compensation, net of forfeitures, and the amount capitalized in internally developed software and (ii) changes to the probability of achieving outstanding performance-based equity awards, each as included in our consolidated statements of operations:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Cost of revenue	\$ 1,769	\$ 1,328	\$ 3,407	\$ 2,793
Technology and development	3,124	2,685	6,772	5,341
Marketing	352	349	727	635
General and administrative	1,960	1,514	3,510	3,513
Total stock-based compensation	\$ 7,205	\$ 5,876	\$ 14,416	\$ 12,282

We capitalize stock-based compensation related to work performed on internally developed software. There was \$647 and \$291 of stock-based compensation that was capitalized in the three months ended June 30, 2020 and 2019, respectively, and \$1,151 and \$561 in the six months ended June 30, 2020 and 2019, respectively. All capitalized stock-based compensation is related to employees in technology and development.

Note 13: Net Loss per Share Attributable to Common Stock

Net loss per share attributable to common stock is computed by dividing the net loss attributable to common stock by the weighted-average number of common shares outstanding. We have outstanding stock options, restricted stock units, options to purchase shares under our ESPP, convertible preferred stock, and convertible senior notes, which are considered in the calculation of diluted net income per share whenever doing so would be dilutive.

We calculate basic and diluted net loss per share attributable to common stock in conformity with the two-class method required for companies with participating securities. We consider our convertible preferred stock to be participating securities. Under the two-class method, net loss attributable to common stock is not allocated to the preferred stock as its holders do not have a contractual obligation to share in losses, as discussed in Note 11.

The following table sets forth the calculation of basic and diluted net loss per share attributable to common stock during the periods presented:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Numerator:				
Net loss	\$ (6,611)	\$ (12,625)	\$ (66,728)	\$ (79,804)
Dividend on convertible preferred stock	(1,284)	—	(1,284)	—
Net loss attributable to common stock—basic and diluted	\$ (7,895)	\$ (12,625)	\$ (68,012)	\$ (79,804)
Denominator:				
Weighted average shares—basic and diluted ⁽¹⁾	98,785,318	91,216,886	96,114,012	90,915,334
Net loss per share:				
Net loss attributable to common stock—basic and diluted	\$ (0.08)	\$ (0.14)	\$ (0.71)	\$ (0.88)

(1) Basic and diluted weighted average shares outstanding include (i) common shares earned but not yet issued related to share-based dividends on our convertible preferred stock, and (ii) restricted stock units whose settlement into common stock were deferred at the option of certain non-employee directors.

The following outstanding shares of common stock equivalents were excluded from the computation of the diluted net loss per share for the periods presented because their effect would have been anti-dilutive:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Stock options outstanding	6,493,269	8,411,868	6,493,269	8,411,868
Restricted stock units outstanding ⁽¹⁾	4,339,964	3,936,774	4,339,964	3,936,774
Employee stock purchase plan	—	—	—	—
Convertible preferred stock, as if converted	2,040,000	—	2,040,000	—
Total	12,873,233	12,348,642	12,873,233	12,348,642

(1) Net of vested restricted stock units whose settlement into common stock were deferred at the option of certain non-employee directors. The deferred shares of common stock are included in basic weighted average shares outstanding. See Note 12 for more information.

We are required to consider the impact of our convertible senior notes on our diluted net income per share based on the treasury stock method as we have the ability, and intent, to settle any conversions of the notes solely in cash. The treasury stock method requires that the dilutive effect of common stock issuable upon conversion of the notes be computed in the periods in which we report net income. For the three and six months ended June 30, 2020 there was no dilutive impact from the notes.

Note 14: Income Taxes

Our effective tax rate for the six months ended June 30, 2020 and 2019 was 0% as a result of our recording a full valuation allowance against the deferred tax assets.

In determining the realizability of the net U.S. federal and state deferred tax assets, we consider numerous factors including historical profitability, estimated future taxable income, prudent and feasible tax planning strategies, and the industry in which we operate. Management reassesses the realization of the deferred tax assets each reporting period, which resulted in a valuation allowance against the full amount of our U.S. deferred tax assets for the six months ended June 30, 2020 and 2019. To the extent that the financial results of our U.S. operations improve in the future and the deferred tax assets become realizable, we will reduce the valuation allowance through earnings.

Under Section 382 of the Internal Revenue Code of 1986, as amended, substantial changes in our ownership may limit the amount of net operating loss ("NOL") carryforwards that could be utilized annually in the future to offset taxable income. Any such annual limitation may significantly reduce the utilization of the NOLs before they expire. A Section 382 limitation study performed as of March 31, 2017 determined there was an ownership change in 2006 and \$1,538 of the 2006 net operating loss is unavailable.

As of December 31, 2019, we had accumulated approximately \$ 195,133 of federal tax losses and approximately \$ 10,421 (tax effected) of state tax losses. Federal net operating losses are available to offset federal taxable income and begin to expire in 2025. Federal net operating loss carryforwards of \$109,484 generated during 2018 and 2019 are available to offset future U.S. federal taxable income over an indefinite period.

Our material income tax jurisdiction is the United States (federal). As a result of NOL carryforwards, we are subject to audit for all tax years for federal purposes. All tax years remain subject to examination in various other jurisdictions that are not material to our consolidated financial statements.

Note 15: Debt

Warehouse Credit Facilities—To provide capital for the mortgage loans that it originates, Redfin Mortgage, our wholly owned mortgage origination subsidiary, utilizes warehouse credit facilities that are classified as current liabilities in our consolidated balance sheets. Borrowings under each warehouse credit facility are secured by the related mortgage loan and rights and income associated with the loan. The following table summarizes borrowings under these facilities as of the periods presented:

Lender	Borrowing Capacity as of June 30, 2020	Borrowings as of June 30, 2020	Borrowings as of December 31, 2019
Western Alliance Bank	\$ 24,500	\$ 17,375	\$ 8,489
Texas Capital Bank, N.A.	24,500	17,945	10,210
Flagstar Bank	15,000	5,245	2,603
Total	\$ 64,000	\$ 40,565	\$ 21,302

Borrowings under the facility with Western Alliance Bank ("Western Alliance") mature on August 14, 2020 and generally bear interest at a rate equal to the greater of (i) one-month LIBOR plus 2.00% or (ii) 3.50%. The weighted average interest rate on outstanding borrowings as of June 30, 2020 and December 31, 2019 was 3.52% and 3.79%, respectively. The agreement governing the facility requires Redfin Mortgage to maintain certain financial covenants. Additionally, Redfin Corporation has agreed to make capital contributions in an amount necessary for Redfin Mortgage to satisfy its adjusted tangible net worth financial covenant under the agreement. Redfin Mortgage is in default of this facility because it failed to satisfy a financial covenant as of June 30, 2020, but Western Alliance has not enforced its remedy under the agreement of requiring Redfin Mortgage to repurchase all outstanding loans held by the lender.

Borrowings under the facility with Texas Capital Bank, N.A. ("Texas Capital") mature on July 5, 2020 and generally bear interest at a rate equal to the greater of (i) the rate of interest accruing on the outstanding principal balance of the loan minus 0.50% or (ii) 3.50%. The weighted average interest rate on outstanding borrowings as of June 30, 2020 and December 31, 2019 was 3.50% and 3.51%, respectively. The agreement governing the facility requires Redfin Mortgage to maintain certain financial covenants. Additionally, Redfin Corporation has guaranteed Redfin Mortgage's obligations under the agreement. Redfin Mortgage is in default of this facility because it failed to satisfy a financial covenant as of June 30, 2020, but Texas Capital has not enforced its remedies under the agreement of (i) requiring Redfin Mortgage to repurchase Texas Capital's interest in all outstanding loans subject to the agreement or (ii) selling all outstanding loans subject to the agreement. See Note 16 for developments subsequent to June 30, 2020 with respect to this facility.

Borrowings under the facility with Flagstar Bank, FSB ("Flagstar") generally bear interest at a rate equal to the greater of (i) one-month LIBOR plus 2.00% or (ii) 3.00%. The weighted average interest rate on outstanding borrowings as of June 30, 2020 and December 31, 2019 was 3.00% and 3.69%, respectively. This facility does not have a stated maturity date, but Flagstar may terminate the facility upon 30 days prior notice. Redfin Mortgage would be required to pay all amounts owed to Flagstar upon the facility's termination.

Secured Revolving Credit Facility—To provide capital for the homes that it purchases, RedfinNow has, through a special purpose entity called RedfinNow Borrower, entered into a secured revolving credit facility with Goldman Sachs. Borrowings under the facility are secured by RedfinNow Borrower's assets, including the financed homes, as well as the equity interests in RedfinNow Borrower. The following table summarizes borrowings under this facility as of the periods presented:

Lender	Borrowing Capacity as of June 30, 2020	Borrowings as of June 30, 2020	Borrowings as of December 31, 2019
Goldman Sachs Bank USA	\$ 100,000	\$ 7,215	\$ 4,444

The facility matures on January 26, 2021, but we may extend the maturity date for an additional six months to repay outstanding borrowings. Goldman Sachs may, at its sole option, finance a portion of RedfinNow Borrower's acquisition costs of qualified homes that have been purchased. The portion financed is based, in part, on how long the qualifying home has been owned by a Redfin entity. Borrowings under the facility prior to March 24, 2020 generally bore interest at a rate of one-month LIBOR (subject to a floor of 0.50%) plus 2.65%. For borrowings under the facility on and after March 24, 2020, each new borrowing generally bears interest at a rate of one-month LIBOR (subject to a floor of 0.50%) plus an additional rate agreed upon between RedfinNow Borrower and Goldman Sachs. The weighted average interest rate on outstanding borrowings as of June 30, 2020 and December 31, 2019 was 4.33% and 4.45%, respectively.

RedfinNow Borrower must repay all borrowings and accrued interest upon the termination of the facility, and it has the option to repay the borrowings, and the related interest, with respect to a specific financed home upon the sale of such home. In certain situations involving a financed home remaining unsold after a certain time period or becoming ineligible for financing under the facility, RedfinNow Borrower may be obligated to

repay all or a portion of the borrowings, and related interest, with respect to such home prior to the sale of such home. In instances involving "bad acts," Redfin Corporation has guaranteed repayment of amounts owed under the facility, in some situations, and indemnification of certain expenses incurred, in other situations.

As of June 30, 2020, RedfinNow Borrower had \$ 30,047 of total assets, of which \$ 6,331 related to inventory and \$ 17,559 in cash and cash equivalents. As of December 31, 2019, RedfinNow Borrower had \$16,200 of total assets, of which \$ 7,456 related to inventory and \$ 5,663 in cash and equivalents.

For the three months ended June 30, 2020 and 2019, we amortized \$ 155 and \$0 of the debt issuance costs, respectively, and recognized \$ 251 and \$0 of interest expense, respectively. For the six months ended June 30, 2020 and 2019, we amortized \$309 and \$0 of the debt issuance costs, respectively, and recognized \$331 and \$0 of interest expense, respectively.

Convertible Senior Notes—On July 23, 2018, we issued \$ 143,750 aggregate principal amount of convertible senior notes. The notes are senior, unsecured obligations of Redfin Corporation, and bear interest at a fixed rate of 1.75% per year, payable semi-annually in arrears on January 15 and July 15. The effective interest rate of the liability portion of the debt is 7.25%. The notes mature on July 15, 2023, unless earlier repurchased, redeemed or converted. As of June 30, 2020, no conversion events have occurred. We will settle conversions of the notes by paying or delivering, as the case may be, cash, shares of our common stock, or a combination of cash and shares of our common stock, at our election. We have the ability, and intend, to settle any conversions solely in cash.

The following details the carrying value of the convertible senior notes as of the dates presented:

	June 30, 2020		December 31, 2019	
Principal	\$	143,750	\$	143,750
Less: debt discount, net of amortization		(18,435)		(21,231)
Less: debt issuance costs, net of amortization		(2,430)		(2,803)
Net carrying amount of the convertible senior notes	\$	122,885	\$	119,716

The total estimated fair value of the convertible senior notes as of June 30, 2020 and December 31, 2019 was approximately \$213,397 and \$142,672, respectively, based on the closing trading price of the notes on last day of trading for the period. The fair value has been classified as Level 2 within the fair value hierarchy given the limited trading activity of the notes.

The following table sets forth total interest expense recognized related to the convertible senior notes for the periods presented:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Amortization of debt discount	\$ 1,405	\$ 1,343	\$ 2,796	\$ 2,672
Amortization of debt issuance costs	187	180	373	359
Total amortization of debt issuance costs and accretion of equity portion	1,592	1,523	3,169	3,031
Contractual interest expense	629	629	1,258	1,258
Total interest expense related to the notes	\$ 2,221	\$ 2,152	\$ 4,427	\$ 4,289

Note 16: Subsequent Events

Texas Capital Warehouse Credit Facility—On July 5, 2020, Redfin Mortgage extended the expiration date of its warehouse credit facility with Texas Capital to August 4, 2020. On July 24, 2020, Redfin Mortgage renewed its warehouse credit facility with Texas Capital to July 14, 2021. In connection with this renewal, the borrowing capacity under this facility temporarily increased to \$40,000 through August 15, 2020.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The following discussion and analysis of our financial condition and results of operations should be read together with our consolidated financial statements, the accompanying notes, and other information included in this quarterly report and our annual report for the year ended December 31, 2019. In particular, the disclosure contained in Item 1A in our annual report, as updated by Part II, Item 1A in this quarterly report, may reflect trends, demands, commitments, events, or uncertainties that could materially impact our results of operations and liquidity and capital resources.

The following discussion contains forward-looking statements, such as statements regarding COVID-19's anticipated impacts on our business, our future operating results and financial position, our business strategy and plans, our market growth and trends, and our objectives for future operations. Please see "Note Regarding Forward-Looking Statements" for more information about relying on these forward-looking statements. The following discussion also contains information using industry publications. Please see "Note Regarding Industry and Market Data" for more information about relying on these industry publications.

When we use the term "basis points" in the following discussion, we refer to units of one-hundredth of one percent.

Overview

We help people buy and sell homes. Our primary business is a residential real estate brokerage, representing customers in over 90 markets throughout the United States and Canada. We pair our own agents with our own technology to create a service that is faster, better, and costs less. We meet customers through our listings-search website and mobile application.

We use the same combination of technology and local service to originate mortgage loans and offer title and settlement services; we also buy homes directly from homeowners who want an immediate sale, taking responsibility for selling the home while the original owner moves on.

Our mission is to redefine real estate in the consumer's favor.

COVID-19 Impact and Associated Actions

Impact on Customer Demand

Beginning in March 2020, COVID-19 began having a negative effect on our customer demand, which affects our real estate services transaction volume, and in turn our revenue growth and cash flow. Subsequently, in May, customer demand rebounded and has continued to rebound. We had taken actions in March and April as our customer demand began to decline and then, since May, adjusted our actions as customer demand returned. Given the lengthy process to buy or sell a home, a change in customer demand trends may not impact our real estate services transaction volume or affect our financial results until at least one to two months following the change, if at all.

One way that we assess our customer demand is growth in our monthly average visitors. In January and February 2020, our monthly average visitors increased 20% as compared with the same period in 2019. In March and April 2020, our monthly average visitors increased only 0.5% as compared with the same period in 2019. However, monthly average visitor growth has since returned to and exceeded early-year levels, with 20% growth in May and 31% growth in June as compared with the same period in 2019.

One way that we have assessed COVID-19's impact on our customer demand is homebuyer inquiries. For this assessment, we compare the average daily number of inquiries from prospective homebuyers that our lead agents or our partner agents received during a particular week, to that average daily number in January and February 2020, which we refer to as the threshold level, adjusted for seasonality. We count each of the following as an inquiry: (i) requesting to tour a home; (ii) requesting to speak to an agent about buying a home; and (iii) submitting an offer to buy a home. At its lowest level, since the beginning of March 2020, the average daily number of inquiries for the week ended April 5 decreased 30% from the threshold level. Since then, our homebuyer inquiries have rebounded to exceed the threshold level, reaching 33% above the threshold level for

the week ended June 14. For the week ended July 26, the average daily number of inquiries increased 27% from the threshold level.

Our Actions in March and April

In March and April, we took the following actions in response to COVID-19 and the associated impact on our business:

- built and enhanced technology to allow our agents to virtually tour customers through homes, instead of touring homes in person, while significant parts of the country were subject to stay-at-home or similar isolation orders; and during April, 31% of our tours were virtual, compared to 8% during March; the percentage of our tours that were virtual declined to 12% during June, which we believe correlates to the resumption of in-person activities across the country;
- shifted demand across our markets to our lead agents, instead of having our partner agents serve some of the demand;
- ceased most performance and mass media advertising campaigns to the extent possible;
- with respect to our RedfinNow business:
 - temporarily paused making new offers to purchase homes on March 17;
 - beginning in mid-March and continuing through mid-May, regularly evaluated inventory levels to reasonably avoid extended holding periods for owned properties, due in part to significant economic uncertainty at the time; this evaluation resulted in a relatively shorter holding period for certain properties;
- sold \$110 million in capital stock, consisting of \$70 million of our common stock and \$40 million of our convertible preferred stock, on April 1;
- to ensure that our workforce numbers and compensation levels reflected declining demand, we
 - reduced, in April, our number of employees by approximately 400 people, which represented approximately ten percent of our employees, and placed approximately an additional 1,000 employees on furlough; as a result of these actions, as of April 30, we had 1,123 lead agents; and
 - moved to further reduce compensation expenses by (i) reducing our chief executive officer's salary for 2020 to \$0, effective from March 17, (ii) temporarily reducing the salary of our employees earning above a certain threshold by 10% or 15% depending on their compensation structure, effective from April 12, (iii) canceling executive bonuses and bonuses for our technology and development, marketing, and general and administrative teams, and (iv) eliminating cash compensation for our board of directors for 2020.

We recorded the incremental and non-recurring costs associated with these actions as restructuring charges and are included in our general and administrative expenses. See Note 1 to our consolidated financial statements and "—Results of Operations" for further information.

Our Actions since the Beginning of May

As we have seen customer demand rebound, we have:

- shifted demand across our markets to partner agents, if we did not have enough lead agents to serve some of the demand;
- restarted most performance and mass media campaigns, including beginning to run a new television commercial in early June; accordingly, we expect our marketing expenses for the third quarter of 2020 to increase from the second quarter of 2020;

- resumed making offers to purchase homes in ten of 13 RedfinNow markets;
- returned approximately 815 employees from furlough and, in some cases, began hiring for new positions; as a result of these actions, as of July 27, we had 1,738 lead agents;
- eliminated, effective June 7, employee salary reductions that went into effect on April 12, and reinstated bonuses for our technology and development, marketing, and general and administrative teams effective July 1.

Our Outlook

As a result of our decision to temporarily suspend making offers to purchase homes through our RedfinNow business from March 17 to May 6, and with only some RedfinNow markets resuming making offers since that time, we expect a significant decline in the number of properties sold during the third quarter of 2020 compared to the second quarter of 2020 and the third quarter of 2019. This decline will adversely affect our properties revenue for the third quarter of 2020. We also expect that our customer demand may continue to fluctuate through the rest of 2020 in response to COVID-19 developments and their associated economic impacts. We believe that COVID-19's future impact on our customer demand may vary by market and be highly sensitive to COVID-19 developments and economic conditions in that market. Any future downturn in our customer demand will adversely affect our financial condition, results of operations, and liquidity.

Impact of the CARES Act on Us

Pursuant to the CARES Act's relief related to federal employment taxes, we have (i) elected to defer payment of such taxes beginning in April 2020, with \$3.7 million in deferred taxes as of June 30, 2020, which will be due in two equal installments in 2021 and 2022, and (ii) claimed the legislation's employee retention credit to reduce our costs for such taxes by \$1.3 million for the three months ended June 30, 2020.

Key Business Metrics

In addition to the measures presented in our consolidated financial statements, we use the following key metrics to evaluate our business, develop financial forecasts, and make strategic decisions.

	Three Months Ended									
	Jun. 30, 2020	Mar. 31, 2020	Dec. 31, 2019	Sep. 30, 2019	Jun. 30, 2019	Mar. 31, 2019	Dec. 31, 2018	Sep. 30, 2018	Jun. 30, 2018	
Monthly average visitors (in thousands)	42,537	35,519	30,595	35,633	36,557	31,107	25,212	29,236	28,777	
Real estate services transactions										
Brokerage	13,828	10,751	13,122	16,098	15,580	8,435	9,822	12,876	12,971	
Partner	2,691	2,479	2,958	3,499	3,357	2,125	2,749	3,333	3,289	
Total	16,519	13,230	16,080	19,597	18,937	10,560	12,571	16,209	16,260	
Real estate services revenue per transaction										
Brokerage	\$ 9,296	\$ 9,520	\$ 9,425	\$ 9,075	\$ 9,332	\$ 9,640	\$ 9,569	\$ 9,227	\$ 9,510	
Partner	2,417	2,535	2,369	2,295	2,218	2,153	2,232	2,237	2,281	
Aggregate	8,175	8,211	8,127	7,865	8,071	8,134	7,964	7,790	8,048	
Aggregate home value of real estate services transactions (in millions)	\$ 7,576	\$ 6,098	\$ 7,588	\$ 9,157	\$ 8,986	\$ 4,800	\$ 5,825	\$ 7,653	\$ 7,910	
U.S. market share by value	0.93 %	0.93 %	0.94 %	0.96 %	0.94 %	0.83 %	0.81 %	0.85 %	0.83 %	
Revenue from top-10 Redfin markets as a percentage of real estate services revenue	63 %	61 %	62 %	63 %	64 %	64 %	66 %	66 %	68 %	
Average number of lead agents	1,399	1,826	1,526	1,579	1,603	1,503	1,419	1,397	1,415	

Monthly Average Visitors

The number of, and growth in, visitors to our website and mobile application are important leading indicators of our business activity because these channels are the primary ways we meet customers. For a

particular period, monthly average visitors refers to the average of the number of unique visitors to our website and mobile application for each of the months in that period. Monthly average visitors are influenced by, among other things, market conditions that affect interest in buying or selling homes, the level and success of our marketing programs, seasonality, and how our website appears in search results. We believe we can continue to increase monthly visitors, which helps our growth.

Given the lengthy process to buy or sell a home, a visitor during one month may not convert to a revenue-generating customer until many months later, if at all.

When we refer to "monthly average visitors" for a particular period, we are referring to the average number of unique visitors to our website and our mobile applications for each of the months in that period, as measured by Google Analytics, a product that provides digital marketing intelligence. Google Analytics tracks visitors using cookies, with a unique cookie being assigned to each browser or mobile application on a device. For any given month, Google Analytics counts all of the unique cookies that visited our website and mobile applications during that month. Google Analytics considers each unique cookie as a unique visitor. Due to third-party technological limitations, user software settings, or user behavior, it is possible that Google Analytics may assign a unique cookie to different visits by the same person to our website or mobile application. In such instances, Google Analytics would count different visits by the same person as separate visits by unique visitors. Accordingly, reliance on the number of unique cookies counted by Google Analytics may overstate the actual number of unique persons who visit our website or our mobile applications for a given month.

Real Estate Services Transactions

We record a brokerage real estate services transaction when one of our lead agents represented the homebuyer or home seller in the purchase or sale, respectively, of a home. We record a partner real estate services transaction (i) when one of our partner agents represented the homebuyer or home seller in the purchase or sale, respectively, of a home or (ii) since the third quarter of 2019 after we commenced a referral partnership with Opendoor, when a Redfin customer sold his or her home to a third-party institutional buyer following our introduction of that customer to the buyer. We include a single transaction twice when our lead agents or our partner agents serve both the homebuyer and the home seller of the transaction. Additionally, when one of our lead agents represents RedfinNow in its sale of a home, we include that transaction as a brokerage real estate services transaction.

Increasing the number of real estate services transactions is critical to increasing our revenue and, in turn, to achieving profitability. Real estate services transaction volume is influenced by, among other things, the pricing and quality of our services as well as market conditions that affect home sales, such as local inventory levels and mortgage interest rates. Real estate services transaction volume is also affected by seasonality and macroeconomic factors.

Real Estate Services Revenue per Transaction

Real estate services revenue per transaction, together with the number of real estate services transactions, is a factor in evaluating revenue growth. We also use this metric to evaluate pricing changes. Changes in real estate services revenue per transaction can be affected by, among other things, our pricing, the mix of transactions from homebuyers and home sellers, changes in the value of homes in the markets we serve, the geographic mix of our transactions, and the transactions we refer to partner agents and third-party institutional buyer. We calculate real estate services revenue per transaction by dividing brokerage, partner, or aggregate revenue, as applicable, by the corresponding number of real estate services transactions in any period.

We generally generate more real estate services revenue per transaction from representing homebuyers than home sellers. However, we believe that representing home sellers has unique strategic value, including the marketing power of yard signs and digital marketing campaigns, and the market effect of controlling listing inventory. To keep revenue per brokerage transaction about the same from year to year, we expect to reduce our commission refund to homebuyers if more of our brokerage transactions come from home sellers.

Aggregate Home Value of Real Estate Services Transactions

The aggregate home value of brokerage and partner real estate services transactions is an important indicator of the health of our business, because our revenue is largely based on a percentage of each home's sale price. This metric is affected chiefly by the number of customers we serve, but also by changes in home values in the markets we serve. We compute this metric by summing the sale price of each home represented in a real estate services transaction. We include the value of a single transaction twice when our lead agents or our partner agents serve both the homebuyer and home seller of the transaction.

U.S. Market Share by Value

Increasing our U.S. market share by value is critical to our ability to grow our business and achieve profitability over the long term. We believe there is a significant opportunity to increase our share in the markets we currently serve.

We calculate the aggregate value of U.S. home sales by multiplying the total number of U.S. existing home sales by the mean sale price of these homes, each as reported by the National Association of REALTORS®. We calculate our market share by aggregating the home value of brokerage and partner real estate services transactions. Then, in order to account for both the sell- and buy-side components of each transaction, we divide that value by two-times the estimated aggregate value of U.S. home sales.

Revenue from Top-10 Markets as a Percentage of Real Estate Services Revenue

Our top-10 markets by real estate services revenue are the metropolitan areas of Boston, Chicago, Denver (including Boulder and Colorado Springs), Los Angeles (including Santa Barbara), Maryland, Northern Virginia, Portland (including Bend), San Diego, San Francisco, and Seattle. This metric is an indicator of the geographic concentration of our real estate services segment. We expect our revenue from top-10 markets to decline as a percentage of our total real estate services revenue over time.

Average Number of Lead Agents

The average number of lead agents, in combination with our other key metrics such as the number of brokerage transactions, is a basis for calculating agent productivity and is one indicator of the potential future growth of our business. We systematically evaluate traffic to our website and mobile application and customer activity to anticipate changes in customer demand, helping determine when and where to hire lead agents.

We calculate the average number of lead agents by taking the average of the number of lead agents at the end of each month included in the period.

Components of Our Results of Operations

Revenue

We generate revenue primarily from commissions and fees charged on each real estate services transaction closed by our lead agents or partner agents, and from the sale of homes .

Real Estate Services Revenue

Brokerage Revenue—Brokerage revenue includes our offer and listing services, where our lead agents represent homebuyers and home sellers. We recognize commission-based brokerage revenue upon closing of a brokerage transaction, less the amount of any commission refunds, closing-cost reductions, or promotional offers that may result in a material right. Brokerage revenue is affected by the number of brokerage transactions we close, the mix of brokerage transactions, home-sale prices, commission rates, and the amount we give to customers.

Partner Revenue—Partner revenue consists of fees paid to us from partner agents or under other referral agreements, less the amount of any payments we make to customers. We recognize these fees as revenue on the closing of a transaction. Partner revenue is affected by the number of partner transactions closed, home-sale prices, commission rates, and the amount we refund to customers. If the portion of customers we introduce to our own lead agents increases, we expect the portion of revenue closed by partner agents to decrease.

Properties Revenue

Properties Revenue—Properties revenue consists of revenue earned when we sell homes that we previously bought directly from homeowners. Properties revenue is recorded at closing on a gross basis, representing the sales price of the home. RedfinNow is our primary properties offering.

Other Revenue

Other Revenue—Other services revenue includes fees earned from mortgage origination services, title settlement services, Walk Score data services, and advertising. Substantially all fees and revenue from other services are recognized when the service is provided.

Intercompany Eliminations

Intercompany Eliminations—Revenue earned from transactions between operating segments are eliminated in consolidating our financial statements. Intercompany transactions primarily consist of services performed from our real estate services segment for our properties segment.

Cost of Revenue and Gross Margin

Cost of revenue consists primarily of personnel costs (including base pay, benefits, and stock-based compensation), transaction bonuses, home-touring and field expenses, listing expenses, home costs related to our properties segment, office and occupancy expenses, and depreciation and amortization related to fixed assets and acquired intangible assets. Home costs related to our properties segment include home purchase costs, capitalized improvements, selling expenses directly attributable to the transaction, and home maintenance expenses.

Gross profit is revenue less cost of revenue. Gross margin is gross profit expressed as a percentage of revenue. Our gross margin has and will continue to be affected by a number of factors, but the most important are the mix of revenue from our relatively higher-gross-margin real estate services segment and our relatively lower-gross-margin properties segment, real estate services revenue per transaction, agent and support-staff productivity, personnel costs and transaction bonuses, and, for properties, the home purchase costs.

Operating Expenses

Technology and Development

Our primary technology and development expenses are building software for our customers, lead agents, and support staff to work together on a transaction, and building a website and mobile application to meet customers looking to move. These expenses primarily include personnel costs (including base pay, benefits, and stock-based compensation), data licenses, software and equipment, and infrastructure such as for data centers and hosted services. The expenses also include amortization of capitalized internal-use software and website and mobile application development costs. We expense research and development costs as incurred and record them in technology and development expenses.

Marketing

Marketing expenses consist primarily of media costs for online and offline advertising, as well as personnel costs (including base pay, benefits, and stock-based compensation).

General and Administrative

General and administrative expenses consist primarily of personnel costs (including base pay, benefits, and stock-based compensation), facilities costs and related expenses for our executive, finance, human resources, and legal organizations, depreciation related to our fixed assets, and fees for outside services. Outside services are principally comprised of external legal, audit, and tax services. General and administrative expenses also include expenses related to actions taken in response to COVID-19, as these costs were determined to be direct and incremental and not related to revenue generating activities.

Interest Income

Interest income consists primarily of interest earned on our cash, cash equivalents and investments.

Interest Expense

Interest expense consists primarily of interest payable and the amortization of debt discounts and issuance cost related to our convertible senior notes, which we issued in July 2018. Interest is payable on the notes at the rate of 1.75% semiannually in arrears on January 15 and July 15.

For the six months ended June 30, 2020, interest expense also includes interest on borrowings and the amortization of debt issuance costs related to our secured revolving credit facility. Borrowings under the facility prior to March 24, 2020 generally bore interest at a rate of one-month LIBOR (subject to a floor of 0.50%) plus 2.65%. For borrowings under the facility on and after March 24, 2020, each new borrowing generally bears interest at a rate of one-month LIBOR (subject to a floor of 0.50%) plus an agreed upon additional rate.

Results of Operations

The following tables set forth our results of operations for the periods presented and as a percentage of our revenue for those periods.

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
	(in thousands)			
Revenue	\$ 213,665	\$ 197,780	\$ 404,660	\$ 307,922
Cost of revenue ⁽¹⁾	167,626	149,434	345,742	256,821
Gross profit	46,039	48,346	58,918	51,101
Operating expenses				
Technology and development ⁽¹⁾	17,961	16,063	38,235	31,620
Marketing ⁽¹⁾	9,482	27,050	35,190	60,250
General and administrative ⁽¹⁾⁽²⁾	23,022	17,654	47,349	39,102
Total operating expenses	50,465	60,767	120,774	130,972
Loss from operations	(4,426)	(12,421)	(61,856)	(79,871)
Interest income	437	1,913	1,540	4,229
Interest expense	(2,665)	(2,153)	(5,109)	(4,290)
Other income (expense), net	43	36	(1,303)	128
Net loss	\$ (6,611)	\$ (12,625)	\$ (66,728)	\$ (79,804)

(1) Includes stock-based compensation as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
	(in thousands)			
Cost of revenue	\$ 1,769	\$ 1,328	\$ 3,407	\$ 2,793
Technology and development	3,124	2,685	6,772	5,341
Marketing	352	349	727	635
General and administrative	1,960	1,514	3,510	3,513
Total	\$ 7,205	\$ 5,876	\$ 14,416	\$ 12,282

(2) Includes direct and incremental costs related to COVID-19 of \$7,525, which are partially offset by \$1,292 in employee retention credits allowed under the CARES Act, for the three and six months ended June 30, 2020.

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
	(as a percentage of revenue)			
Revenue	100.0 %	100.0 %	100.0 %	100.0 %
Cost of revenue ⁽¹⁾	78.5	75.6	85.4	83.4
Gross profit	21.5	24.4	14.6	16.6
Operating expenses				
Technology and development ⁽¹⁾	8.4	8.1	9.4	10.3
Marketing ⁽¹⁾	4.4	13.7	8.7	19.6
General and administrative ⁽¹⁾⁽²⁾	10.8	8.9	11.7	12.7
Total operating expenses	23.6	30.7	29.8	42.6
Loss from operations	(2.1)	(6.3)	(15.3)	(26.0)
Interest income	0.2	1.0	0.4	1.4
Interest expense	(1.2)	(1.1)	(1.3)	(1.4)
Other income (expense), net	—	—	(0.3)	—
Net loss	(3.1)%	(6.4)%	(16.5)%	(26.0)%

(1) Includes stock-based compensation as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
	(as a percentage of revenue)			
Cost of revenue	0.8 %	0.7 %	0.8 %	0.9 %
Technology and development	1.5	1.4	1.7	1.7
Marketing	0.2	0.2	0.2	0.2
General and administrative	0.9	0.8	0.9	1.1
Total	3.4 %	3.1 %	3.6 %	3.9 %

(2) Includes direct and incremental costs related to COVID-19, which are partially offset by employee retention credits allowed under the CARES Act, for the three months ended June 30, 2020.

Comparison of the Three Months Ended June 30, 2020 and 2019

Revenue

	Three Months Ended June 30,		Change	
	2020	2019	Dollars	Percentage
	(in thousands, except percentages)			
Real estate services revenue				
Brokerage revenue	\$ 128,543	\$ 145,399	\$ (16,856)	(12) %
Partner revenue	6,506	7,447	(941)	(13)
Total real estate services revenue	135,049	152,846	(17,797)	(12)
Properties revenue	72,184	39,908	32,276	81
Other revenue	7,246	5,281	1,965	37
Intercompany elimination	(814)	(255)	(559)	219
Total revenue	\$ 213,665	\$ 197,780	\$ 15,885	8
<i>Percentage of revenue</i>				
Real estate services revenue				
Brokerage	60.2 %	73.4 %		
Partner revenue	3.0	3.8		
Total real estate services revenue	63.2	77.2		
Properties revenue	33.8	20.2		
Other revenue	3.4	2.7		
Intercompany elimination	(0.4)	(0.1)		
Total revenue	100.0 %	100.0 %		

For the three months ended June 30, 2020, revenue increased by \$15.9 million, or 8%, as compared with the same period in 2019. This increase in revenue was primarily attributable to a \$32.3 million increase in properties revenue, and a \$2.0 million increase in other revenue. Properties revenue increased by 81% as compared with 2019, driven by (i) a greater market presence and consumer awareness of RedfinNow and (ii) our actions discussed in "—COVID-19 Impact and Associated Actions," both of which contributed to a 103% increase in the number of properties sold. This was partially offset by a \$16.9 million decrease in brokerage revenue, and a \$0.9 million decrease in partner revenue. Brokerage revenue decreased by 12% as compared with 2019, driven by a 11% decrease in brokerage transactions and a 0.4% decrease in brokerage revenue per transaction. We believe this decrease in brokerage transactions is the result of COVID-19's impact on the U.S. residential real estate industry, including lower customer demand to buy homes or list homes for sale.

Cost of Revenue and Gross Margin

	Three Months Ended June 30,		Change	
	2020	2019	Dollars	Percentage
(in thousands, except percentages)				
Cost of revenue				
Real estate services	\$ 88,799	\$ 103,616	\$ (14,817)	(14) %
Properties	73,348	40,906	32,442	79
Other	6,293	5,167	1,126	22
Intercompany elimination	(814)	(255)	(559)	219
Total cost of revenue	\$ 167,626	\$ 149,434	\$ 18,192	12
Gross profit (loss)				
Real estate services	\$ 46,250	\$ 49,230	\$ (2,980)	(6) %
Properties	(1,164)	(998)	(166)	17
Other	953	114	839	736
Total gross profit	\$ 46,039	\$ 48,346	\$ (2,307)	(5)
Gross margin (percentage of revenue)				
Real estate services	34.2 %	32.2 %		
Properties	(1.6)	(2.5)		
Other	13.2	2.2		
Total gross margin	21.5	24.4		

For the three months ended June 30, 2020, total cost of revenue increased by \$18.2 million, or 12%, as compared with the same period in 2019. This increase was primarily attributable to a \$31.1 million increase in home purchase costs and related capitalized improvements, due to selling more homes by our properties business. This was partially offset by a \$4.8 million decrease in personnel costs and transaction bonuses, a \$4.3 million decrease in home-touring and field expenses, and a \$1.6 million decrease in listing expenses. These decreases in expense were driven by lower customer demand to buy homes or list homes for sales, which we believe was the result of COVID-19's impact on the U.S. residential real estate industry.

For the three months ended June 30, 2020, total gross margin decreased 290 basis points as compared with the same period in 2019, driven primarily by our properties business contributing to a greater proportion of our revenue relative to our real estate services and other businesses, partially offset by improvements in real estate services, properties, and other gross margin.

For the three months ended June 30, 2020, real estate services gross margin increased 200 basis points as compared with the same period in 2019. This was primarily attributable to a 140 basis-point decrease in home-touring and field expenses, an 80 basis-point decrease in personal technology expenses, a 70 basis-point decrease in listing expenses, and a 50 basis-point decrease in travel and entertainment expenses, each as a percentage of revenue. This was partially offset by a 170 basis-point increase in personnel costs and transaction bonuses as a percentage of revenue.

For the three months ended June 30, 2020, properties gross margin increased 90 basis points as compared with the same period in 2019. This was primarily attributable to a 270 basis-point decrease in personnel costs and transaction bonuses as a percentage of revenue. This was partially offset by a 220 basis-point increase in home purchase costs and related capitalized improvements as a percentage of revenue.

For the three months ended June 30, 2020, other gross margin increased 1,100 basis points as compared with the same period in 2019. This was primarily attributable to a 690 basis-point decrease in outside services costs as a percentage of revenue.

Operating Expenses

	Three Months Ended June 30,		Change	
	2020	2019	Dollars	Percentage
(in thousands, except percentages)				
Technology and development	\$ 17,961	\$ 16,063	\$ 1,898	12 %
Marketing	9,482	27,050	(17,568)	(65)
General and administrative	23,022	17,654	5,368	30
Total operating expenses	\$ 50,465	\$ 60,767	\$ (10,302)	(17)
<i>Percentage of revenue</i>				
Technology and development	8.4 %	8.1 %		
Marketing	4.4	13.7		
General and administrative	10.8	8.9		
Total operating expenses	23.6 %	30.7 %		

For the three months ended June 30, 2020, technology and development expenses increased by \$1.9 million, or 12%, as compared with the same period in 2019. The increase was primarily attributable to a \$1.0 million increase in personnel costs due to increased headcount, and a \$0.7 million increase in infrastructure expenses, primarily hosted services.

For the three months ended June 30, 2020, marketing expenses decreased by \$17.6 million, or 65%, as compared with the same period in 2019. The decrease was primarily attributable to a \$17.5 million decrease in marketing media costs due to our temporary cessation of advertising campaigns as a result of COVID-19.

For the three months ended June 30, 2020, general and administrative expenses increased by \$5.4 million, or 30%, as compared with the same period in 2019. The increase was primarily attributable to a \$7.5 million increase in direct and incremental costs associated with our actions taken in response to COVID-19, primarily from severance payments. These costs were partially offset by \$1.3 million of employee retention credits claimed under the CARES Act. These costs for restructuring are classified as general and administrative expenses for employees across our organization, including approximately \$5.0 million, net, that would otherwise be classified as cost of revenue. We had no such restructuring expenses for any periods prior to the three months ended June 30, 2020. This was partially offset by a \$1.3 million decrease in personnel costs.

Comparison of the Six Months Ended June 30, 2020 and 2019

Revenue

	Six Months Ended June 30,		Change	
	2020	2019	Dollars	Percentage
(in thousands, except percentages)				
Real estate services revenue				
Brokerage revenue	\$ 230,894	\$ 226,713	\$ 4,181	2 %
Partner revenue	12,791	12,023	768	6
Total real estate services revenue	243,685	238,736	4,949	2
Properties revenue	151,282	61,281	90,001	147
Other revenue	11,496	8,329	3,167	38
Intercompany elimination	(1,803)	(424)	(1,379)	325
Total revenue	\$ 404,660	\$ 307,922	\$ 96,738	31
<i>Percentage of revenue</i>				
Real estate services revenue				
Brokerage	57.1 %	73.6 %		
Partner revenue	3.2	3.9		
Total real estate services revenue	60.3	77.5		
Properties revenue	37.4	19.9		
Other revenue	2.8	2.7		
Intercompany elimination	(0.5)	(0.1)		
Total revenue	100.0 %	100.0 %		

For the six months ended June 30, 2020, revenue increased by \$96.7 million, or 31%, as compared with the same period in 2019. This increase in revenue was primarily attributable to a \$90.0 million increase in properties revenue, and a \$4.2 million increase in brokerage revenue. Properties revenue increased by 147% as compared with 2019, driven by (i) a greater market presence and consumer awareness of RedfinNow and (ii) our actions discussed in "—COVID-19 Impact and Associated Actions," both of which contributed to a 171% increase in the number of properties sold. Brokerage revenue increased by 2% as compared with 2019, driven by a 2% increase in brokerage transactions and a 0.5% decrease in brokerage revenue per transaction. We believe this increase in brokerage transactions was attributable to higher levels of customer awareness of Redfin and greater customer demand generally that was partially offset by lower customer demand in March and April due to the impact of COVID-19.

Cost of Revenue and Gross Margin

	Six Months Ended June 30,		Change	
	2020	2019	Dollars	Percentage
(in thousands, except percentages)				
Cost of revenue				
Real estate services	\$ 182,361	\$ 184,399	\$ (2,038)	(1) %
Properties	152,647	63,898	88,749	139
Other	12,537	8,948	3,589	40
Intercompany elimination	(1,803)	(424)	(1,379)	325
Total cost of revenue	\$ 345,742	\$ 256,821	\$ 88,921	35
Gross profit (loss)				
Real estate services	\$ 61,324	\$ 54,337	\$ 6,987	13 %
Properties	(1,365)	(2,617)	1,252	(48)
Other	(1,041)	(619)	(422)	68
Total gross profit	\$ 58,918	\$ 51,101	\$ 7,817	15
Gross margin (percentage of revenue)				
Real estate services	25.2 %	22.8 %		
Properties	(0.9)	(4.3)		
Other	(9.1)	(7.4)		
Total gross margin	14.6	16.6		

For the six months ended June 30, 2020, total cost of revenue increased by \$88.9 million, or 35%, as compared with the same period in 2019. This increase was primarily attributable to a \$83.1 million increase in home purchase costs and related capitalized improvements, due to selling more homes by our properties business, and a \$6.5 million increase in personnel costs and transaction bonuses due to increased headcount and increased brokerage transactions, respectively.

For the six months ended June 30, 2020, total gross margin decreased 200 basis points as compared with the same period in 2019, driven primarily by (i) our properties business contributing to a greater proportion of our revenue relative to our real estate services and other businesses and (ii) a decrease in other gross margin, partially offset by improvements in real estate services and properties gross margin.

For the six months ended June 30, 2020, real estate services gross margin increased 240 basis points as compared with the same period in 2019. This was primarily attributable to a 120 basis-point decrease in home-touring and field expenses, a 70 basis-point decrease in personal technology expenses, and a 70 basis-point decrease in listing expenses, each as a percentage of revenue.

For the six months ended June 30, 2020, properties gross margin increased 340 basis points as compared with the same period in 2019. This was primarily attributable to a 280 basis-point decrease in personnel costs and transaction bonuses as a percentage of revenue.

For the six months ended June 30, 2020, other gross margin decreased 170 basis points as compared with the same period in 2019. This was primarily attributable to an 870 basis-point increase in personnel costs and transaction bonuses as a percentage of revenue. This was partially offset by a 290 basis-point decrease in outside services costs, a 130 basis point decrease in office and occupancy expenses, a 100 basis-point decrease in personal technology expenses, an 80 basis-point decrease in travel and entertainment expenses, and an 80 basis-point decrease in depreciation and amortization, each as a percentage of revenue.

Operating Expenses

	Six Months Ended June 30,		Change	
	2020	2019	Dollars	Percentage
(in thousands, except percentages)				
Technology and development	\$ 38,235	\$ 31,620	\$ 6,615	21 %
Marketing	35,190	60,250	(25,060)	(42)
General and administrative	47,349	39,102	8,247	21
Total operating expenses	\$ 120,774	\$ 130,972	\$ (10,198)	(8)
<i>Percentage of revenue</i>				
Technology and development	9.4 %	10.3 %		
Marketing	8.7	19.6		
General and administrative	11.7	12.7		
Total operating expenses	29.8 %	42.6 %		

For the six months ended June 30, 2020, technology and development expenses increased by \$6.6 million, or 21%, as compared with the same period in 2019. The increase was primarily attributable to a \$4.9 million increase in personnel costs due to increased headcount, and a \$1.1 million increase infrastructure expenses primarily hosted services.

For the six months ended June 30, 2020, marketing expenses decreased by \$25.1 million, or 42%, as compared with the same period in 2019. The decrease was attributable to a \$25.4 million decrease in marketing media costs due to our temporary cessation of advertising campaigns as a result of COVID-19.

For the six months ended June 30, 2020, general and administrative expenses increased by \$8.2, or 21%, as compared with the same period in 2019. The increase was primarily attributable to a \$7.5 million increase in direct and incremental costs associated with our actions taken in response to COVID-19, primarily from severance payments. These costs were partially offset by \$1.3 million of employee retention credits claimed under the CARES Act. These costs for restructuring are classified as general and administrative expenses for employees across our organization, including approximately \$5.0 million, net, that would otherwise be classified as cost of revenue. We had no such restructuring expenses for any periods prior to the six months ended June 30, 2020.

Liquidity and Capital Resources

As of June 30, 2020, we had cash and cash equivalents of \$325.4 million and investments of \$146.8 million, which consist primarily of operating cash on deposit with financial institutions, money market instruments, and U.S. treasury securities. These balances increased from March 31, 2020 primarily due to proceeds we received from our sale of (i) 4,484,305 shares of our common stock, at a price of \$15.61 per share, and (ii) 40,000 shares of our convertible preferred stock, at a price of \$1,000 per share, on April 1, 2020. Unless earlier redeemed or converted, on November 30, 2024, we will be required to redeem any outstanding shares of the preferred stock, and each holder may elect to receive cash, shares of our common stock, or a combination of cash and shares, as payment for the preferred stock that it holds. Dividends will accrue on each \$1,000 of the preferred stock at a rate of 5.5% per year and are payable quarterly in arrears on the first business day following the end of each calendar quarter. Assuming we satisfy certain conditions, we will pay dividends in shares of our common stock, but if we fail to satisfy those conditions, we will be required to pay dividends in cash.

Also as of June 30, 2020, we had \$143.8 million aggregate principal amount of convertible senior notes outstanding. The notes mature on July 15, 2023, unless earlier repurchased, redeemed or converted, and interest is payable in arrears on January 15 and July 15 of each year.

With respect to the cash outlay for our properties business, for the six months ended June 30, 2020, we relied (i) on a combination of our cash on hand and borrowings from a secured revolving credit facility to fund home purchase prices and (ii) solely on our cash on hand to fund capitalized improvement costs and home maintenance expenses. See Note 4 to our consolidated financial statements for more information on changes to inventory related to home purchases, additions to inventory from capitalized improvements, and relief of inventory from the sales of homes for our properties business. See Note 15 to our consolidated financial statements for more information regarding the secured revolving credit facility.

As discussed in "—COVID-19 Impact and Associated Actions," our properties business temporarily paused making offers to purchase homes on March 17, 2020, but since early-May, has resumed making offers in ten of its 13 markets. With its resumption of making offers, we expect that our cash outlay for costs related to our properties business will increase for the three months ending September 30, 2020, compared to the three months ended June 30, 2020. We also expect that, with the resumption of making offers, our borrowings from the secured revolving credit facility will increase during the third quarter of 2020.

Our mortgage business has significant cash requirements due to the period of time between its origination of a mortgage loan and the sale of that loan. It has relied on warehouse credit facilities with different lenders to fund substantially the entire portion of the mortgage loans that it originates. Once our mortgage business sells a loan in the secondary mortgage market, it uses the proceeds to reduce the outstanding balance under the related facility. See Note 15 to our consolidated financial statements and the discussion under "Risks Related to Our Indebtedness" in Part II, Item 1A for more information regarding these warehouse credit facilities, including our mortgage business's failure to satisfy a financial covenant under two facilities.

We believe that our existing cash and cash equivalents and investments, together with cash we expect to generate from future operations, borrowings from our properties business's secured revolving credit facility and our mortgage business's warehouse credit facilities, and the cost savings resulting from the actions we have taken in response to COVID-19, will provide sufficient liquidity to meet our operational needs, satisfy payments required by our convertible preferred stock, and fulfill our debt obligations. However, our liquidity assumptions may change or prove to be incorrect, and we could exhaust our available financial resources sooner than we currently expect. As a result, we may seek new sources of credit financing or elect to raise additional funds through equity, equity-linked, or debt financing arrangements. We cannot assure you that any additional financing will be available to us on acceptable terms or at all.

Cash Flows

The following table summarizes our cash flows for the periods presented:

	Six Months Ended June 30,	
	2020	2019
	(in thousands)	
Net cash provided by (used in) operating activities	\$ 8,744	\$ (143,609)
Net cash used in investing activities	(51,262)	(79,716)
Net cash provided by financing activities	155,546	43,469

Net Cash Provided By (Used In) Operating Activities

Our operating cash flows result primarily from cash generated by commissions paid from our real estate services business and sales of homes from our properties business. Our primary uses of cash from operating activities include payments for personnel-related costs, including employee benefits and bonus programs, marketing and advertising activities, purchases of homes for our properties business, and outside services costs. Additionally, our mortgage business generates a significant amount of operating cash flow activity from the origination and sale of loans held for sale.

Net cash provided by operating activities was \$8.7 million for the six months ended June 30, 2020, primarily attributable to a net loss of \$66.7 million, offset by changes in assets and liabilities of \$46.0 million and \$29.5 million of non-cash items related to stock based compensation, depreciation and amortization, amortization of debt discounts and issuance costs, lease expense related to right-of-use assets, impairment charge on our cost method investment, and other non-cash items. Changes in assets and liabilities increased cash provided by operating activities driven primarily by a reduction in inventory of \$65.2 million, a \$13.6 million increase in accrued liabilities, primarily related to timing of payments, a \$7.2 million decrease in prepaid expenses. This was partially offset by an increase of \$15.0 million in accounts receivable primarily related to higher revenue, \$19.5 million in net loans held for sale related to our mortgage business. A majority of the loans held for sale as of June 30, 2020 have been subsequently sold.

Net cash used in operating activities was \$143.6 million for the six months ended June 30, 2019, primarily attributable to a net loss of \$79.8 million, offset by \$22.0 million of non-cash items related to stock-based

compensation, depreciation and amortization, amortization of debt discounts and issuance costs, and lease expense related to right-of-use assets. Changes in assets and liabilities increased cash used in operating activities by \$85.8 million driven primarily by a \$63.0 million increase in inventory related to our properties business, a \$25.3 million increase in net loans held for sale related to our mortgage business, and a \$23.3 million increase in accrued revenue as a result of higher revenue and timing of real estate services transactions at the end of the period. This was partially offset by an increase of \$26.4 million in accrued liabilities primarily related to timing of marketing payments.

Net Cash Used In Investing Activities

Our primary investing activities include the purchase of investments and property and equipment, primarily related to capitalized software development expenses and leasehold improvements.

Net cash used in investing activities was \$51.3 million for the six months ended June 30, 2020. We had \$88.7 million of purchases of investments that was partially offset by \$43.5 million of maturities and sales of investments of similar type investments. In addition, we had \$4.4 million of capitalized software development expenses.

Net cash used in investing activities was \$79.7 million for the six months ended June 30, 2019, primarily attributable to \$70.3 million in purchases of investments, \$5.6 million related to equipment, furnishings, and leasehold improvements for new or expansion of existing office spaces, and \$3.4 million of capitalized software development costs.

Net Cash Provided By Financing Activities

Our primary financing activities have come from (i) our initial public offering in August 2017, (ii) our follow-on offerings of common stock and convertible senior notes in July 2018 and our common stock and convertible preferred stock offering in April 2020, and (iii) the sale of shares pursuant to stock option exercises and our ESPP. Additionally, our mortgage business generates a significant amount of financing cash flow activity due to borrowings from and repayments to its warehouse credit facilities. Furthermore, in July 2019, a special purpose entity for our properties business entered in to a secured revolving credit facility to support financing home purchases in our properties segment.

Net cash provided by financing activities was \$155.5 million for the six months ended June 30, 2020, primarily attributable to net proceeds of \$109.5 million from our April 2020 common stock and convertible preferred stock offering, a \$19.3 million increase in our net borrowings under warehouse credit facilities, and \$11.1 million in proceeds from the sale of shares under our equity compensation plans.

Net cash provided by financing activities was \$43.5 million for the six months ended June 30, 2019, primarily attributable to a \$24.7 million increase in our net borrowings under our warehouse credit facilities, an \$11.6 million increase in customer escrow deposits related to our title service business, which is offset in our restricted cash balance, and \$9.0 million in proceeds from the exercise of stock options.

Critical Accounting Policies and Estimates

Discussion and analysis of our financial condition and results of operations are based on our consolidated financial statements, which we prepared in accordance with GAAP. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets and liabilities and related disclosure of contingent assets and liabilities, revenue, and expenses at the date of the financial statements. Generally, we base our estimates on historical experience and on various other assumptions in accordance with GAAP that we believe to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions.

Critical accounting policies and estimates are those that we consider the most important to the portrayal of our financial condition and results of operations because they require our most difficult, subjective, or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. Our critical accounting policies and estimates are described in Note 1 of our annual report for the year ended December 31, 2019, and there have been no material changes to those critical accounting policies and estimates.

Recent Accounting Standards

See Note 1 to our consolidated financial statements for recently adopted accounting pronouncements and recently issued accounting pronouncements not yet adopted.

Item 3. Qualitative and Quantitative Disclosures About Market Risk.

Our primary operations are within the United States and in the first quarter of 2019 we launched limited operations in Canada. We are exposed to market risks in the ordinary course of our business. These risks primarily consist of fluctuations in interest rates.

Interest Rate Risk

Our investment policy allows us to maintain a portfolio of cash equivalents and investments in a variety of securities, including U.S. treasury and agency issues, bank certificates of deposit that are 100% insured by the Federal Deposit Insurance Corporation, and SEC-registered money market funds that consist of a minimum of \$1 billion in assets and meet the above requirements. The goals of our investment policy are liquidity and capital preservation. We do not enter into investments for trading or speculative purposes.

As of June 30, 2020, we had cash and cash equivalents of \$325.4 million and investments of \$146.8 million. Our investments are comprised of available-for-sale securities that consist primarily of U.S. treasury securities with maturities of two years or less. We believe that we do not have any material exposure to changes in the fair value of these assets as a result of changes in interest rates due to the relatively short-term nature and risk profile of our portfolio. Declines in interest rates, however, would reduce future investment income. We estimate a 100 basis-point decline in interest rates, occurring throughout the third quarter of 2020, will not have a material impact on our financial results for that quarter.

We are exposed to interest rate risk on our mortgage loans held for sale and IRLCs associated with our mortgage loan origination services. We manage this interest rate risk through the use of forward sales commitments on both a best effort whole loans basis and on a mandatory basis. Forward sales commitments entered into on a mandatory basis are done through the use of commitments to sell mortgage-backed securities. If the value of the loans held for sale and mortgage-backed securities do not correlate as expected, then our hedging activity will be less effective and there will be an impact on the profitability of the loans we originate. We do not enter into or hold derivatives for trading or speculative purposes. The fair value of our IRLCs and forward sales commitments are reflected in other current assets and accrued liabilities, as applicable, with changes in the fair value of these commitments recognized as revenue. The net fair value change for the periods presented were not material. See Note 3 to our consolidated financial statements for a summary of the fair value of our IRLCs and forward sales commitments.

We are subject to interest rate risk on borrowings under the secured revolving credit facility used to support the financing of home purchases by our properties business. See Note 15 to our consolidated financial statements for a description of this facility. Changes in the market interest rate will increase or decrease our interest expense. Assuming no change in the outstanding borrowings under the facility during the third quarter of 2020, we estimate a 100 basis-point increase in the interest rate applicable to outstanding borrowings will not have a material impact on our financial results for that quarter.

Foreign Currency Exchange Risk

As our operations in Canada have been limited, and we do not maintain a significant balance of foreign currency, we do not currently face significant risk with respect to foreign currency exchange rates.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our principal executive and principal financial officers, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934), as of the end of the period covered by this quarterly report. Based on such evaluation, our principal executive and principal financial officers have concluded that as of such date, our disclosure controls and procedures were effective at the reasonable assurance level described below.

Changes in Internal Control

In connection with the evaluation required by Rule 13a-15(d) under the Securities Exchange Act of 1934, there were no changes in our internal control over financial reporting that occurred during the quarter ended June 30, 2020 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

Our management does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within our company have been detected. The design of any system of controls is also based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings.

On May 11, 2020, David Eraker, our co-founder and former chief executive officer who departed Redfin in 2006, filed two complaints against us. Mr. Eraker filed one complaint in his individual capacity and the other complaint through Appliance Computing III, Inc. (d/b/a Surefield) ("Surefield"), which is a company that Mr. Eraker founded and that we believe he controls.

In a complaint filed in the Superior Court of Washington for King County against us and Madrona Venture Group, LLC ("Madrona"), Mr. Eraker asserts claims related to events prior to his departure from Redfin in 2006, including that (i) Madrona and Paul Goodrich, one of Madrona's principals and one of our former directors, concealed a provisional patent application from Mr. Eraker while evaluating an investment in us in 2005 and (ii) we continued this concealment following Madrona's investment. Mr. Eraker further alleges that he would not have accepted Madrona's investment if he had known about the alleged concealment of the patent application. Mr. Eraker is seeking an unspecified amount of damages.

In a complaint filed by Surefield in the U.S. District Court for the Western District of Texas, Waco Division, Surefield alleges that we are infringing patents claimed to be owned by Surefield without its authorization or license. Surefield is seeking an unspecified amount of damages and an injunction against us offering products and services that allegedly infringe the patents at issue.

Item 1A. Risk Factors.

Except as discussed below, there have not been any material changes from the risk factors included in Item 1A of our annual report for the year ended December 31, 2019. You should carefully consider the risks described below, together with all other information in this quarterly report, before investing in any of our securities. The occurrence of any single risk or any combination of risks could materially and adversely affect our business, operating results, financial condition, liquidity, or competitive position, and consequently, the value of our securities. The material adverse effects include, but are not limited to, not growing our revenue or market share at the pace that they have grown historically or at all, our revenue and market share fluctuating on a quarterly and annual basis, an extension of our history of losses and a failure to become profitable, not achieving the revenue and net income (loss) guidance that we provide, and harm to our reputation and brand.

Risks Related to Our Business and Industry

COVID-19 has significantly and adversely affected our business and may continue to significantly and adversely affect our business.

Our success depends on a high volume of residential real estate transactions throughout the markets in which we operate. This transaction volume affects all of the ways that we generate revenue, including our number of real estate services transaction, RedfinNow's ability to sell homes that it owns, the number of loans our mortgage business originates and potentially resells, and the number of deals our title and settlement business closes. COVID-19 has significantly and adversely affected, and may continue to significantly and adversely affect, residential real estate transaction volume.

We believe that COVID-19's impact on our residential real estate transaction volume depends largely on the existence and prevalence of the two factors described below. If one or both of these factors exists to a large extent in the markets in which we operate, our residential real estate transaction volume may significantly decline.

- Prohibitions or limitations on in-person activities associated with residential real estate transactions, whether imposed (i) by a city, county, or state, government through shelter-in-place, stay-at-home, or similar isolation orders or otherwise or (ii) by us to protect the health of our customers, agents, and communities.
- Lack of consumer desire for in-person interactions and physical home tours that have historically been important aspects of the homebuying and home selling process.

Additionally, we believe that COVID-19's economic impacts, including those described below, will also adversely affect residential real estate transaction volume, to the extent they continue.

- Increased unemployment rates and stagnant or declining wages.
- Decreased consumer confidence in the economy and recessionary conditions.
- Volatility and declines in the stock market and lower yields on individuals' investment portfolios.
- More stringent mortgage financing conditions, including increased down payment requirements.

In addition to the volume of residential real estate transactions, our success also depends on the U.S. residential real estate industry not experiencing a significant decline in the prices at which homes are bought and sold. If COVID-19's economic impacts cause home transaction prices to decline, and especially if the decline occurs at an accelerated rate, our business will be adversely effected.

Our business is concentrated in certain geographic markets. Disruptions in these markets or events that disproportionately affect these markets could harm our business. Furthermore, our failure to adapt to any substantial shift in the relative percentage of residential housing transactions from these markets to other markets in the United States could adversely affect our financial performance.

For the quarter ended June 30, 2020, our top-10 markets by real estate services revenue consisted of the metropolitan areas of Boston, Chicago, Denver (including Boulder and Colorado Springs), Los Angeles (including Santa Barbara), Maryland, Northern Virginia, Portland (including Bend), San Diego, San Francisco, and Seattle.

Local and regional conditions, including those arising from COVID-19's impacts discussed elsewhere in this Item 1A, in these markets may differ significantly from prevailing conditions in the United States or other parts of the country. Accordingly, events, such as COVID-19, may adversely and disproportionately affect demand for and sales prices of homes in these markets. Any overall or disproportionate downturn in demand or home prices in any of our largest markets, particularly if we are unable to increase revenue from our other markets, could adversely affect growth of our revenue and market share or otherwise harm our business.

Our top markets are primarily major metropolitan areas, where home prices and transaction volumes are generally higher than other markets. As a result, our real estate services revenue and gross margin are generally higher in these markets than in our smaller markets. To the extent people migrate to cities outside of these markets due to lower home prices or other factors, such as COVID-19, and this migration continues to take place over the long-term, then the relative percentage of residential housing transactions may shift away from our historical top markets where we have historically generated most of our revenue. Our inability to effectively adapt to any shift, including failing to increase revenue from other markets, could adversely affect our financial performance and market share.

We may be unable to maintain or improve our current technology offerings at a competitive level or develop new technology offerings that meet customer or agent expectations. Our technology offerings may also contain undetected errors or vulnerabilities.

Our technology offerings, including tools, features, and products, are key to our competitive plan for attracting potential customers and hiring and retaining lead agents. Maintaining or improving our current technology to meet evolving industry standards and customer and agent expectations, as well as developing commercially successful and innovative new technology, is challenging and expensive. For example, the nature of development cycles may result in delays between the time we incur expenses and the time we introduce new technology and generate revenue, if any, from those investments. Anticipated customer demand for a technology offering could also decrease after the development cycle has commenced, and we would not be able to recoup costs, which may be substantial, we incurred.

As standards and expectations evolve and new technology becomes available, we may be unable to identify, design, develop, and implement, in a timely and cost-effective manner, new technology offerings to

meet those standards and expectations. As a result, we may be unable to compete effectively, and to the extent our competitors develop new technology offerings faster than us, they may render our offerings noncompetitive or obsolete. Additionally, even if we implemented new technology offerings in a timely manner, our customers and agents may not accept or be satisfied by the offerings.

For example, COVID-19 has, for at least the short-term, affected the way that customers tour homes and interact with their real estate agent, as more tours and interactions have shifted towards electronic or virtual mediums. While we have updated our technology offerings in an attempt to respond to this change, there is no assurance that customers will adopt our updated technology offerings over those of our competitors. To the extent that the shift in customer touring and interaction develop into a long-term trend and we fail to update our technology offerings to respond to this shift, then we may be unable to attract potential customers. Furthermore, it is also possible that customers will revert to more traditional ways of touring homes and interacting with their agents when COVID-19's impacts have subsided. In that scenario, our updated technology offerings focused on electronic or virtual mediums may become obsolete or less frequently used than we anticipated, and we will be unable to recoup the costs that we have incurred and are currently incurring in developing these offerings.

Furthermore, our development and testing processes may not detect errors and vulnerabilities in our technology offerings prior to their implementation. Any inefficiencies, errors, technical problems, or vulnerabilities arising in our technology offerings after their release could reduce the quality of our services or interfere with our customers' and agents' access to and use of our technology and offerings.

Our business model of employing lead agents subjects us to challenges not faced by our competitors. Our ability to hire and retain a sufficient number of lead agents is critical to our ability to maintain and grow our market share and to provide an adequate level of service to customers who want to work with our lead agents.

As a result of our business model of employing our lead agents, our lead agents generally earn less on a per transaction basis than traditional agents who work as independent contractors at traditional brokerages. Because our model is uncommon in our industry, agents considering working for us may not understand our compensation model or may not perceive it to be more attractive than the independent contractor, commission-driven compensation model used by most traditional brokerages. If we are unable to attract, retain, effectively train, motivate, and utilize lead agents, we will be unable to grow our business and we may be required to change our compensation model, which could significantly increase our lead agent compensation or other costs.

Also as a result of employing our lead agents, we incur costs that our brokerage competitors do not, such as base pay, employee benefits, expense reimbursement, training, and employee transactional support staff. As a result, we have significant costs that, in the event of downturns in demand in the markets we serve, may result in us being unable to adjust as rapidly as some of our competitors. In turn, such downturns may impact us more than our competitors.

Conversely, in times of rapidly rising demand we may face a shortfall of lead agents. As discussed in "Management's Discussion and Analysis of Financial Condition and Results of Operations—COVID-19 Impact and Associated Actions," we reduced our number of lead agents in April 2020 in response to falling customer demand driven by COVID-19 at the time. As our customer demand increases from those levels, our ability to adequately serve the additional customers, and in turn grow our revenue and U.S. market share by value, depends, in part, on our ability to timely hire and retain additional lead agents. To the extent we are unable to hire, either timely or at all, or retain the required number of lead agents to serve our customer demand, we will be unable to maximize our revenue and market share growth. Although we are able to refer excess demand to our partner agents, historically our partner agents have closed transactions with customers they meet at a lower rate than our lead agents and have generated lower revenue per transaction.

Additionally, due to the costs of employing our lead agents, lead agent turnover may be more costly to us than to traditional brokerages. Our business may be harmed if we are unable to achieve the necessary level of lead agent productivity and retention to offset their related costs.

Referring customers to our partner agents and our third-party partnerships may harm our business.

We refer customers to third-party partner agents when we do not have a lead agent available due to high demand or geographic limitations. Our dependence on partner agents can be particularly heavy in certain new markets as we build our operations to scale in those markets or during times of rapidly rising demand for our services. Our partner agents are independent licensed agents affiliated with other brokerages, and we do not have any control over their actions. If our partner agents were to provide poor customer service, engage in malfeasance, or otherwise violate the laws and rules to which we are subject, we may be subject to legal claims and our reputation and business may be harmed.

In certain markets where RedfinNow does not currently operate, we have a partnership with Opendoor whereby home sellers can request, through Redfin's website and mobile applications, an instant offer from Opendoor to purchase their home. Home sellers will have this ability to request an Opendoor offer in addition, and as an alternative, to retaining a Redfin agent to represent them during the home selling process.

From time to time we may enter into additional arrangements to refer consumers to, or partner with, third parties when we are unable or unwilling to serve those consumers directly.

RedfinNow may overestimate the amount it should pay to purchase a home, and homes owned by it may significantly decline in value prior to being sold.

RedfinNow uses automated valuations and forecasts in concert with our real estate knowledge to assess what a home is worth and how much to pay for its purchase. This assessment includes estimates on time of possession, market conditions and proceeds on resale, renovation costs, and holding costs. The assessment may not be accurate, and RedfinNow may pay too much for the home to realize our desired investment return. Additionally, following its acquisition of a home, RedfinNow may need to decrease its anticipated resale price for the home if it discovers a defect in the home that was unknown at the time of acquisition. This adjustment to the price may also affect our investment return on the home.

Homes that RedfinNow owns may also rapidly lose in value or become more difficult to sell for an acceptable price due to changing market conditions, natural disasters, or other forces outside of our control, including COVID-19's impacts discussed elsewhere in this Item 1A. RedfinNow's geographic concentration in four states - California, Colorado, Nevada, and Texas - particularly exposes it to the factors affecting home value and saleability in those states that may not apply to the United States generally. As a result, we may be required to significantly write down the inventory value of homes and, to the extent we are able to resell homes at all, resell them at a price that is substantially less than our costs of acquiring and renovating the homes.

The net proceeds that Redfin Mortgage receives from its sale of mortgage loans that it originates may not exceed the loan amount. Additionally, Redfin Mortgage may also be unable to sell its originated loans at all. In that situation, Redfin Mortgage will need to service the loans and potentially foreclose on the home by itself or through a third party, and either option could impose significant costs, time, and resources on Redfin Mortgage. Redfin Mortgage's inability to sell its originated loans could also expose us to adverse market conditions affecting mortgage loans.

Redfin Mortgage intends to sell the mortgage loans that it originates to investors in the secondary mortgage market. Redfin Mortgage's ability to sell its originated loans in the secondary market, and receive net proceeds from the sale that exceed the loan amount, depends largely on there being sufficient liquidity in the secondary market and its compliance with contracts with investors who have purchased the loans.

COVID-19 has adversely affected, and may adversely affect in the future, Redfin Mortgage's ability to receive net proceeds from the sale of originated loans that exceed the loan amount. COVID-19 has also increased the risk that Redfin Mortgage (i) will be unable to sell originated loans at all or (ii) will be required to repurchase an originated loan that it had previously sold to an investor. We expect that investors may be less likely to purchase certain loans due to the (i) ability of borrowers of qualified mortgage loans to seek forbearance of loan payments for up to 12 months under the CARES Act or similar legislation and (ii) potentially increased financial hardship faced by some borrowers as a result of COVID-19's economic impacts discussed elsewhere in this Item 1A. Furthermore, with respect to originated loans that Redfin Mortgage has already sold to investors, Redfin Mortgage may be obligated to repurchase the loan from, or pay additional fees to, the investor if the borrower seeks forbearance for a monthly loan payment before the investor has sold the loan to a government-sponsored enterprise, such as Fannie Mae and Freddie Mac.

If Redfin Mortgage were unable to sell its originated loans, either initially or following a repurchase, then it may need to establish a servicing platform or hire a third party to service the loans. Redfin Mortgage does not currently have a robust servicing platform and establishing such a platform may result in significant costs and require substantial time and resources from its management. Additionally, Redfin Mortgage may be unable to retain a third-party servicer on economically feasible terms.

To the extent that Redfin Mortgage is unable to sell its originated loans, either initially or following a repurchase, we would be exposed to adverse market conditions, including those stemming from COVID-19, affecting mortgage loans. For example, we may be required to write down the value of the loan, which reduces the amount of our current assets. Additionally, if Redfin Mortgage borrowed under one of its warehouse credit facilities for the loan, then it will be required to repay the borrowed amount, which reduces our cash on hand that is available for other corporate uses. Finally, if a homeowner were unable to make his or her mortgage payments, then we may be required to foreclose on the home securing the loan. Redfin Mortgage does not currently have processes to foreclose a home, and it may be unable to establish such processes or retain a third party on economically feasible terms to foreclose the home. Furthermore, any proceeds from selling a foreclosed home may be significantly less than the remaining amount of the loan due to Redfin Mortgage.

Our decision to launch new service offerings or expand existing service offerings into new markets may consume significant financial and other resources and may not achieve the desired results.

We regularly evaluate launching new service offerings or expanding our brokerage and non-brokerage services into new markets. Any launch or expansion may require significant expenses and the time of our key personnel, particularly at the outset of the process. New service offerings or markets may also subject us to new regulatory environments, which could increase our costs as we evaluate compliance with the new regulatory regime. Notwithstanding the expenses and time devoted to launching a new service offering or expanding an existing service offering into a new market, we may fail to achieve the financial and market share goals associated with the expansion.

For example, in response to COVID-19, we launched several new offerings that have historically not been frequently used in the residential real estate industry. These include: (i) video-chat tours of a home led by one of our lead agents; (ii) an option for potential homebuyers to use our mobile application to unlock the door and tour certain vacant homes where we represent the home seller; and (iii) live-video open houses in some of our markets. These methods for homebuyers to tour a home, and for home sellers to make their homes available for tour, have not been widely adopted in the residential real estate industry. Accordingly, there is uncertainty regarding regulatory issues associated with these methods, and we may be subject to government enforcement actions or third-party claims due to our new offerings or increased use of existing offerings.

Our website is hosted at a single facility, the failure of which could interrupt our website and mobile application.

Our website and mobile application are hosted at a single facility in Seattle, Washington. If this facility experiences outages or downtimes for any reason, including human error, natural disaster, power loss, telecommunications failure, physical or electronic break-ins, terrorist attack, act of war, or other forces outside of our control, we could suffer a significant interruption of our website and mobile application while we implement the disaster recovery procedures we have developed to restore the function of our website and mobile application on a cloud-based hosting service. This service interruption may be extended if we discover previously unknown errors in our disaster recovery procedures.

We are subject to costs associated with defending and resolving proceedings brought by government entities and claims brought by private parties.

We are from time to time involved in, and may in the future be subject to, government investigations or enforcement actions and private third-party claims arising from the laws to which we are subject or the contracts to which we are a party. Such investigations, actions, and claims include, but are not limited to, matters relating to employment law (including misclassification), intellectual property, privacy and consumer protection, the Real Estate Settlement Procedures Act of 1974, the Fair Housing Act of 1968 or other fair housing statutes, cybersecurity incidents, data breaches, and commercial or contractual disputes. They may also relate to

ordinary-course brokerage disputes, including, but not limited to, failure to disclose property defects, failure to meet client legal obligations, commission disputes, personal injury or property damage claims, and vicarious liability based upon conduct of individuals or entities outside of our control, including partner agents and third-party contractor agents.

Additionally, given the relative frequency of in-person interactions our employees and associate agents have with homebuyers and home sellers, as well as our role in representing a homebuyer or home seller in a residential real estate transaction, we may become subject to third-party or employee claims arising from individuals who contract COVID-19 following in-person real estate services that we provide. Any such claims may raise novel legal issues for which little or no jurisprudence exists.

Any such investigations, actions, or claims can be costly to defend or resolve, require significant time from management, or result in negative publicity. Furthermore, to the extent we are unsuccessful in defending an action or claim, we may be subject to civil or criminal penalties, including significant fines or damages, the loss of ability to operate in a jurisdiction, or the need to change certain business practices (including redesigning, or obtaining a license for, our technology or modifying or ceasing to offer certain services).

As described in Note 7 to our consolidated financial statements, we are currently the subject of a claim by one of our former associate agents alleging that we had misclassified her, and similarly-situated associate agents, as independent contractors instead of employees. Additionally, another one of our former associate agents has threatened to file a similar claim. While we have previously settled similar complaints, there is no assurance that we will be able to settle either of these claims on similar terms or at all. Accordingly, these complaints may be costly to resolve, require significant time from management, result in negative publicity, or require us to change certain business practices related to our associate agents. Furthermore, we may be subject to additional lawsuits or administrative proceedings for similar claims, which may have similar negative effects on us.

We have also, in the past, been the subject of complaints alleging that we had improperly classified certain of our employees as exempt from minimum wage and overtime laws. The legal tests for determining overtime exemptions consider many factors that vary from state to state and have evolved based on case law, regulations, and legislative changes, as well as complicated factual analysis. We may be subject to additional complaints or administrative proceedings regarding our employee classification.

We may fail to maintain an effective system of disclosure controls or internal control over financial reporting as our employees work in a remote environment or as we grow our business.

We have established, and intend to maintain, effective disclosure controls and internal control over financial reporting. However, we may fail to maintain effective control systems due to our employees continuing to work in a remote environment or as we grow our business.

As a result of COVID-19, most of our employees - including those critical to maintaining an effective system of disclosure controls and internal control over financial reporting - are working, and may continue to work for the near term, in a remote environment and not in the office environment from which they have historically performed their duties. We have limited experience maintaining effective control systems with our employees working in remote environments, and risks that we have not contemplated may arise and result in our failure to maintain effective disclosure controls or internal control over financial reporting.

Additionally, as our current lines of business grow or if we enter into new lines business, we may need to develop new, or revise existing, controls. Any failure to develop new, or revise existing, controls could result in our failure to maintain effective disclosure controls or internal control over financial reporting.

Any failure to maintain effective control systems could cause us to not meet our financial reporting obligations, require us to restate previously issued financial statements, or cause investors to lose confidence in our reported financial statements, even after we remedy the failure.

Some of our potential losses may not be covered by insurance. We may not be able to obtain or maintain adequate insurance coverage.

We maintain insurance to cover costs and losses from certain risk exposures in the ordinary course of our operations, but our insurance may not cover one hundred percent of the costs and losses from all events, including those arising from litigation or other actions related directly or indirectly to COVID-19. We are responsible for certain retentions and deductibles that vary by policy, and we may suffer losses that exceed our insurance coverage limits by a material amount. We may also incur costs or suffer losses arising from events against which we have no insurance coverage. In addition, large-scale market trends or the occurrence of adverse events in our business may raise our cost of procuring insurance or limit the amount or type of insurance we are able to secure. We may not be able to maintain our current coverage, or obtain new coverage, in the future on commercially reasonable terms or at all. Incurring uninsured or underinsured costs or losses could harm our business.

Risks Related to Our Indebtedness

If Redfin Mortgage is unable to obtain sufficient financing through warehouse credit facilities to fund its origination of mortgage loans, then we may be unable to grow our mortgage origination business.

Redfin Mortgage relies on borrowings from its warehouse credit facilities to fund substantially all of the mortgage loans that it originates. See Note 15 to our consolidated financial statements for the current terms of Redfin Mortgage's warehouse credit facilities. To grow its business, Redfin Mortgage depends, in part, on having sufficient borrowing capacity under its current facilities or obtaining additional borrowing capacity under new facilities. If it were unable to receive the necessary capacity on acceptable terms, and did not have sufficient liquidity or established operations to fund originations itself, then Redfin Mortgage may be unable to maintain or increase the amount of mortgage loans that it originates, which will adversely affect its growth.

Redfin Mortgage has historically been unable to meet certain financial covenants contained in its warehouse credit facilities. While each lender has historically waived these breaches of the financial covenants, there is no assurance that every lender will continue to do so in the event of future covenant breaches, especially in light of the economic environment that has resulted from COVID-19. If a lender were to enforce its remedies for a future breach, which may include the right to seize pledged mortgage loans and obtain rights and income related to the loans, then Redfin Mortgage may lose a portion of its assets and will be unable to rely on the facility to fund its mortgage originations, which may adversely affect Redfin Mortgage's business.

Risks Related to Our Convertible Preferred Stock

We may be required to make cash payments to our preferred stockholders before our preferred stock's final redemption date of November 30, 2024, and any cash payments may materially reduce our net working capital.

On November 30, 2024, we will be required to redeem all shares of our convertible preferred stock then outstanding and pay accrued dividends on those shares. A preferred stockholder has the option of receiving cash, shares of our common stock, or a combination of cash and shares for this redemption. However, before this redemption, we may be required to make cash payments to our preferred stockholders in the two situations described below, and any such cash payments will reduce our cash available for other corporate uses and may materially reduce our net working capital.

Dividends accrue on each \$1,000 of our outstanding convertible preferred stock at a rate of 5.5% per year and are payable quarterly. Assuming we satisfy the "equity conditions" (as defined in the certificate of designation governing our preferred stock), we will pay dividends in shares of our common stock. These conditions principally include (i) we have ensured the liquidity and transferability of our common stock held by the preferred stockholders, (ii) we have issued common stock and paid cash to the preferred stockholders, as required by the certificate of designation, (iii) we are not in bankruptcy or have had a bankruptcy proceeding instituted against us, and (iv) we have not breached an agreement that governs the preferred stockholders' rights with respect to the preferred stock and such breach materially and adversely impacts our business or a preferred stockholder's economic benefits under the agreement. However, if we fail to satisfy these "equity conditions," then we must pay cash dividends in amount equal to (i) the number of shares of our common stock that we would have issued as dividends, assuming we satisfied the conditions, multiplied by (ii) the volume-weighted average closing price of our common stock for the ten trading days preceding the date the dividends are payable.

A preferred stockholder has the right to require us to redeem its preferred stock for cash following the occurrence of a "triggering event" (as defined in the certificate of designation governing our preferred stock). These events are similar in nature to the "equity conditions" described above. The cash payment, for each share of preferred stock, would equal the sum of (i) \$1,000, (ii) any accrued dividends on the preferred stock, and (iii) an amount equal to all scheduled dividend payments (excluding any accrued dividends) on the preferred stock for all remaining dividend periods from the date the preferred stockholder requests redemption through November 29, 2024.

The dividends payable upon, and any conversion or redemption of, our convertible preferred stock will dilute the ownership interest of our common stockholders and may depress the price of our common stock.

Assuming we satisfy certain conditions, we will pay dividends that have accrued on our convertible preferred stock in shares of our common stock. We may also issue shares of our common stock upon (i) a preferred stockholder's conversion of its shares of preferred stock or (ii) the automatic conversion of our preferred stock upon the satisfaction of certain conditions. Furthermore, a preferred stockholder may request to receive shares of our common stock upon our redemption of the preferred stock (i) on November 30, 2024 and (ii) following the occurrence of certain events and the preferred stockholder requests redemption. The issuance of our common stock in these situations will dilute the ownership interests of our common stockholders and may depress the trading price of our common stock.

Risks Relating to Ownership of Our Common Stock

Our restated certificate of incorporation designates the Court of Chancery of the State of Delaware and the U.S. federal district courts as the exclusive forums for certain types of actions that may be initiated by our stockholders. These provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers, or employees, which may discourage lawsuits with respect to such claims.

Our restated certificate of incorporation provides that, unless we consent in writing to an alternative forum, the Court of Chancery of the State of Delaware (the "Court of Chancery") will be the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, or employees to us or our stockholders, (iii) any action asserting a claim arising pursuant to any provision of the DGCL, our restated certificate of incorporation, or our restated bylaws, (iv) any action to interpret, apply, enforce or determine the validity of our restated certificate of incorporation or our restated bylaws, or (v) any action asserting a claim that is governed by the internal affairs doctrine. This exclusive forum provision does not apply to actions arising under the Securities Exchange Act of 1934, or, as described below, the Securities Act of 1933.

Our restated certificate of incorporation further provides that, unless we consent in writing to an alternative forum, the U.S. federal district courts will be the exclusive forum for any complaint asserting a cause of action arising under the Securities Act of 1933. Notwithstanding this provision, stockholders will not be deemed to have waived our compliance with the federal securities laws and the rules and regulations thereunder.

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

On July 27, 2017, the U.S. Securities and Exchange Commission declared effective the Registration Statement on Form S-1 (file number 333-219093) for our initial public offering. There has been no change to the information provided under "Use of Proceeds" in Part II, Item 2 of our Quarterly Report on Form 10-Q for the quarter ended June 30, 2017.

Item 6. Exhibits.

The exhibits required to be filed or furnished as part of this Quarterly Report are listed below. Notwithstanding any language to the contrary, exhibits 32.1, 32.2, 101, and 104 shall not be deemed to be filed as part of this Quarterly Report for purposes of Section 18 of the Securities Exchange Act of 1934.

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed or Furnished Herewith
		Form	Exhibit	Filing Date	
3.1	Amended and Restated Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock	8-K	3.1	June 15, 2020	
10.1	Registration Rights Agreement, dated as of April 1, 2020, by and among Redfin Corporation and Durable Capital Master Fund LP				X
31.1	Certification of Principal Executive Officer, pursuant to Rule 13a-14(a)				X
31.2	Certification of Principal Financial Officer, pursuant to Rule 13a-14(a)				X
32.1	Certification of Chief Executive Officer, pursuant to 18 U.S.C. Section 1350				X
32.2	Certification of Chief Financial Officer, pursuant to 18 U.S.C. Section 1350				X
101	Interactive data files				X
104	Cover page interactive data file, submitted using inline XBRL (contained in Exhibit 101)				X

SIGNATURES

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

Redfin Corporation
(Registrant)

July 30, 2020
(Date)

/s/ Glenn Kelman
Glenn Kelman
President and Chief Executive Officer
(Duly Authorized Officer)

July 30, 2020
(Date)

/s/ Chris Nielsen
Chris Nielsen
Chief Financial Officer
(Principal Financial Officer)

REGISTRATION RIGHTS AGREEMENT

This Registration Rights Agreement (the “Agreement”) is made and entered into as of April 1, 2020 (the “Closing Date”) by and among Redfin Corporation, a Delaware corporation (the “Company”), and Durable Capital Master Fund LP, a limited partnership organized under the laws of the Cayman Islands (the “Buyer”). Capitalized terms used herein have the respective meanings ascribed thereto in the Purchase Agreement (as defined below) unless otherwise defined herein.

The parties hereby agree as follows:

1. Certain Definitions.

As used in this Agreement, the following terms shall have the following meanings:

“Holders” means the Buyer and any affiliate or permitted transferee of the Buyer who is a subsequent holder of any Registrable Securities.

“Prospectus” means (i) any prospectus (preliminary or final) included in any Registration Statement, as amended or supplemented by any prospectus supplement, with respect to the terms of the offering of any portion of the Registrable Securities covered by such Registration Statement and by all other amendments and supplements to the prospectus, including post-effective amendments and all material incorporated by reference in such prospectus, and (ii) any “issuer free writing prospectus” as defined in Rule 433 under the Securities Act.

“Purchase Agreement” means that certain Securities Purchase Agreement by and between the Company and the Buyer, dated on or about March 29, 2020.

“Register,” “registered” and “registration” refer to a registration made by preparing and filing a Registration Statement or similar document in compliance with the Securities Act, and the declaration or ordering of effectiveness of such Registration Statement or document.

“Registrable Securities” means (i) the Common Shares, (ii) the Conversion Shares, (iii) the Dividend Shares and (iv) any other securities issued or issuable with respect to or in exchange for the Common Shares, Conversion Shares or Dividend Shares, whether by merger, charter amendment, or otherwise; provided that a security shall cease to be a Registrable Security upon (A) sale pursuant to a Registration Statement or Rule 144, or (B) such security becoming eligible for sale by a Holder pursuant to Rule 144 without the requirement for the Company to be in compliance with the current public information requirement under Rule 144(c)(i).

“Registration Statement” means any registration statement of the Company filed under the Securities Act that covers the resale of any of the Registrable Securities pursuant to the provisions of this Agreement, amendments and supplements to such Registration Statement, including post-effective amendments, all exhibits and all material incorporated by reference in such Registration Statement.

“Required Holders” means the Holders beneficially owning a majority of the then Registrable Securities.

2. Registration.

a. Registration Statements.

i. Initial Registration Statement. On or before the 90th day after the Closing Date (the “Filing Deadline”), the Company shall prepare and file with the SEC one Registration Statement on Form S-3ASR (or, if Form S-3ASR is not then available to the Company, on such form of registration statement as is then available to effect a registration for resale of the Registrable Securities) (the “Initial Registration Statement”), covering the resale of the Registrable Securities. Subject to any SEC comments, such Registration Statement shall include a plan of distribution in substantially the form attached hereto as Exhibit A; provided, however, that no Holder shall be named as an “underwriter” in the Registration Statement without the Holder’s prior written consent, provided, further, that, in the event that, despite the Company’s commercially reasonable efforts and compliance with the terms of this Agreement, the SEC requires a Holder to be named as an “underwriter” in the Registration Statement, any Holder who unreasonably refuses to be named as an underwriter in the Registration Statement shall be excluded as a selling shareholder from the Registration Statement. Such Registration Statement also shall cover, to the extent allowable under the Securities Act and the rules promulgated thereunder (including Rule 416), such indeterminate number of additional shares of Common Stock resulting from stock splits, stock dividends or similar transactions with respect to the Registrable Securities. Such Registration Statement shall not include any shares of

Common Stock or other securities of the Company for the account of any other person without the prior written consent of the Required Holders (but may include a primary registration by the Company). The Registration Statement (and each amendment or supplement thereto, and each request for acceleration of effectiveness thereof) shall be provided by the Company to the Holders in accordance with Section 3(c) prior to its filing or other submission. If a Registration Statement covering the Registrable Securities is not effective on or prior to the Filing Deadline, the Company will make pro rata payments to each Holder, as liquidated damages and not as a penalty, in an amount equal to 0.5% of the aggregate amount invested by the Holder pursuant to the Purchase Agreement for each full month or pro rata for any portion thereof following the Filing Deadline for which no Registration Statement is effective with respect to the Registrable Securities. Such payments shall constitute the Holders' exclusive monetary remedy for such events, but shall not affect the right of the Holders to seek injunctive relief. Such payments shall be made to each Holder in cash no later than three (3) business days after the end of each 30-day period.

b. Expenses. The Company will pay all expenses associated with effecting the registration of the Registrable Securities, including filing and printing fees, the Company's counsel and accounting fees and expenses, costs associated with clearing the Registrable Securities for sale under applicable state securities laws, listing fees and the Holders' other reasonable expenses in connection with the registration, but excluding discounts, commissions, fees of underwriters, selling brokers, dealer managers or similar securities industry professionals with respect to the Registrable Securities being sold and excluding the fees and disbursements of counsel to any Holder.

c. Effectiveness.

i. The Company shall use commercially reasonable efforts to have any Registration Statement declared effective as soon as practicable, and in no event later than five (5) days after the date that the Company is notified (orally or in writing, whichever is earlier) by the SEC that such Registration Statement will not be "reviewed," or not be subject to further review and the effectiveness of such Registration Statement may be accelerated. The Company shall notify the Holders by e-mail as promptly as practicable, and in any event, within twenty-four (24) hours, after any Registration Statement is declared effective and shall simultaneously provide the Holders with copies of any related Prospectus to be used in connection with the sale or other disposition of the securities covered thereby.

ii. For not more than thirty-five (35) consecutive days or for a total of not more than sixty (60) days in any twelve (12) month period, the Company may suspend the use of any Prospectus included in any Registration Statement contemplated by this Section in the event that the Company determines in good faith that such suspension is necessary to (A) delay the disclosure of material non-public information concerning the Company, the disclosure of which at the time is not, in the good faith opinion of the Company, in the best interests of the Company or (B) amend or supplement the affected Registration Statement or the related Prospectus so that such Registration Statement or Prospectus shall not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the case of the Prospectus in light of the circumstances under which they were made, not misleading (an "Allowed Delay"); provided, that the Company shall promptly (and no later than one (1) business day after the occurrence of the event causing the Allowed Delay) (a) notify each Holder in writing of the commencement of an Allowed Delay, but shall not (without the prior written consent of an Holder) disclose to such Holder any material non-public information giving rise to an Allowed Delay, (b) advise the Holders in writing to cease all sales under the Registration Statement until the end of the Allowed Delay, and (c) use commercially reasonable efforts to terminate an Allowed Delay as promptly as practicable.

d. Rule 415; Cutback. If at any time the SEC takes the position that the offering of some or all of the Registrable Securities in a Registration Statement is not eligible to be made on a delayed or continuous basis under the provisions of Rule 415 under the Securities Act or requires any Holder to be named as an "underwriter", the Company shall use its commercially reasonable efforts to persuade the SEC that the offering contemplated by a Registration Statement is a bona fide secondary offering and not an offering "by or on behalf of the issuer" as defined in Rule 415 and that none of the Holders is an "underwriter". In the event that, despite the Company's commercially reasonable efforts and compliance with the terms of this Section 2(d), the SEC refuses to alter its position, the Company shall (i) remove from the Registration Statement such portion of the Registrable Securities (the "Cut Back Shares") and/or (ii) agree to such restrictions and limitations on the registration and resale of the Registrable Securities as the SEC may require to assure the Company's compliance with the requirements of Rule 415 (collectively, the "SEC Restrictions"). Any cut-back imposed pursuant to this Section 2(d) shall be allocated among the Holders on a pro rata basis, unless the SEC Restrictions otherwise require or provide or the Holders otherwise agree. Any cut-back imposed pursuant to a SEC comment shall be applied, first, to securities of the Company that are registered pursuant to an agreement subsequent to the date of this Agreement and, second, to the Registrable Securities on a pro rata basis taken together. No liquidated damages shall accrue as to any Cut Back Shares until such date as the Company is able to effect the registration of such Cut Back Shares in accordance with any SEC Restrictions (such date, the "Restriction Termination Date" of such Cut Back Shares). From and after the Restriction Termination Date applicable to any Cut Back Shares, all of the provisions of this Section 2 (including the liquidated damages provisions) shall again be applicable to such Cut Back Shares; provided, however, that (i) the Filing Deadline for the Registration Statement including such Cut Back Shares shall be ten (10)

business days after such Restriction Termination Date, and (ii) the date by which the Company is required to obtain effectiveness with respect to such Cut Back Shares under Section 2(d) shall be the 60th day immediately after the Restriction Termination Date.

3. Company Obligations. The Company will use commercially reasonable efforts to effect the registration of the Registrable Securities in accordance with the terms hereof, and pursuant thereto the Company will, as expeditiously as possible:

a. Use commercially reasonable efforts to cause such Registration Statement to become effective and to remain continuously effective for a period that will terminate upon the earlier of (i) the date on which all Registrable Securities covered by such Registration Statement as amended from time to time, have been sold, or (ii) the date on which all Registrable Securities covered by such Registration Statement may be sold pursuant to Rule 144 without the requirement for the Company to be in compliance with the current public information requirement under Rule 144(c)(i) (the "Effectiveness Period") and advise each Holder in writing when the Effectiveness Period has expired as to their respective Registrable Securities;

b. Prepare and file with the SEC such amendments and post-effective amendments to the Registration Statement and the Prospectus as may be necessary to keep the Registration Statement effective for the Effectiveness Period and to comply with the provisions of the Securities Act and the Exchange Act with respect to the distribution of all of the Registrable Securities covered thereby;

c. Provide to the Holders for review copies of each Registration Statement and all amendments and supplements thereto no fewer than seven (7) days prior to their filing with the SEC and not file any document to which a Holder reasonably objects; provided, however, that the Company shall not be required to provide in advance to Holders any periodic or current reports to be filed under the Exchange Act and available at www.sec.gov, regardless of whether such reports would be deemed a post-effective amendment to the Registration Statement;

d. Use commercially reasonable efforts to (i) prevent the issuance of any stop order or other suspension of effectiveness and, (ii) if such order is issued, obtain the withdrawal of any such order at the earliest possible moment;

e. Prior to any public offering of Registrable Securities, use commercially reasonable efforts to register or qualify or cooperate with the Holders in connection with the registration or qualification of such Registrable Securities for offer and sale under the securities or blue sky laws of such U.S. jurisdictions reasonably requested by the Holders and do any and all other commercially reasonable acts or things necessary or advisable to enable the distribution in such U.S. jurisdictions of the Registrable Securities covered by the Registration Statement; provided, however, that the Company shall not be required in connection therewith or as a condition thereto to (i) qualify to do business in any U.S. jurisdiction where it would not otherwise be required to qualify but for this Section 3(e), (ii) subject itself to general taxation in any jurisdiction where it would not otherwise be so subject but for this Section 3(e), or (iii) file a general consent to service of process in any such jurisdiction;

f. Use commercially reasonable efforts to cause all Registrable Securities covered by a Registration Statement to be listed on each securities exchange, interdealer quotation system or other market on which similar securities issued by the Company are then listed;

g. Promptly, and no later than one (1) business day following the occurrence of the specified event, notify the Holders, at any time prior to the end of the Effectiveness Period, upon discovery that, or upon the happening of any event as a result of which, the Prospectus includes an untrue statement of a material fact or omits to state any material fact required to be stated therein or necessary to make the statements therein not misleading in light of the circumstances then existing, but shall not (without the prior written consent of an Holder) disclose to such Holder any material non-public information giving rise to such event, and promptly prepare, file with the SEC and furnish to such holder a supplement to or an amendment of such Prospectus as may be necessary so that such Prospectus shall not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading in light of the circumstances then existing;

h. Otherwise use commercially reasonable efforts to comply with all applicable rules and regulations of the SEC under the Securities Act and the Exchange Act, including, without limitation, Rule 172 under the Securities Act, file any final Prospectus, including any supplement or amendment thereof, required to be filed with the SEC pursuant to Rule 424 under the Securities Act, promptly inform the Holders in writing if, at any time during the Effectiveness Period, the Company does not satisfy the conditions specified in Rule 172 and, as a result thereof, the Holders are required to deliver a Prospectus in connection with any disposition of Registrable Securities and take such other actions as may be reasonably necessary to facilitate the registration of the Registrable Securities hereunder; and, beginning after the effective date of each Registration Statement, make available to its security holders, as soon as reasonably practicable, but not later than the Availability Date (as defined below), an earnings statement covering a period of at least twelve (12) months, which earnings statement shall satisfy the provisions of Section 11(a) of the Securities Act, including Rule 158 promulgated thereunder (for the purpose of this Section 3(h), "Availability Date" means the 45th day following the end of the

fourth fiscal quarter that includes the effective date of such Registration Statement, except that, if such fourth fiscal quarter is the last quarter of the Company's fiscal year, "Availability Date" means the 90th day after the end of such fourth fiscal quarter); and

i. With a view to making available to the Holders the benefits of Rule 144 (or its successor rule) and any other rule or regulation of the SEC that may at any time permit the Holders to sell shares of the Registrable Securities to the public without registration, the Company covenants and agrees to: (i) make and keep public information available, as those terms are understood and defined in Rule 144, until such date as all of the Registrable Securities shall have been resold pursuant to a Registration Statement, Rule 144 or otherwise in a transaction in which the transferee receives freely tradable shares; (ii) file with the SEC in a timely manner all reports and other documents required of the Company under the Exchange Act; and (iii) furnish to each Holder upon request, as long as such Holder owns any Registrable Securities, (A) a written statement by the Company that it has complied with the reporting requirements of the Exchange Act and (B) such other information as may be reasonably requested in order to avail the Holder of any rule or regulation of the SEC that permits the selling of any such Registrable Securities without registration. In the event that the Company fails to comply with the requirements of this Section 3(i) after the 90th day after the Closing Date, the Company will make pro rata payments to each Holder, as liquidated damages and not as a penalty, in an amount equal to 0.5% of the aggregate amount invested by the Holder pursuant to the Purchase Agreement for each full month or pro rata for any portion thereof until such failure is cured; provided, however, that such liquidated damages shall be payable to a Holder only to the extent such Holder continues to hold Registrable Securities prior to such failure. Such payments shall constitute the Holders' exclusive monetary remedy for such events, but shall not affect the right of the Holders to seek injunctive relief. Such payments shall be made to each Holder in cash no later than three (3) business days after the end of each 30-day period.

4. Obligations of the Holders.

a. Each Holder shall furnish in writing to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of the Registrable Securities held by it if substantially different from Exhibit A, as shall be reasonably required to effect the registration of such Registrable Securities and shall execute such documents in connection with such registration as the Company may reasonably request. At least five (5) business days prior to the first anticipated filing date of any Registration Statement, the Company shall notify each Holder of the information the Company requires from the Holder if it elects to have any of its Registrable Securities included in the Registration Statement. A Holder shall provide the information to the Company at least three (3) business days prior to the first anticipated filing date of such Registration Statement if the Holder elects to have any of the Registrable Securities included in the Registration Statement. In the event that a Holder does not provide such information on a timely basis, the Company shall provide prompt written notice to the Holder that the Registrable Securities attributable to that Holder will be excluded from the Registration Statement unless the Holder provides the required information within one (1) business day after its receipt of such notice. If the Holder does not provide the required information to the Company by the end of the next business day after its receipt of such notice, the Company shall have the right to exclude the Registrable Securities attributable to that Holder from the Registration Statement and the Holder shall not be entitled to receive any liquidated damages pursuant to the provisions of this Agreement with respect to such Registration Statement. Notwithstanding anything in this Agreement to the contrary, any Holder that elects not to have any of its Registrable Securities included in the Registration Statement, shall not be entitled to receive any liquidated damages pursuant to the provisions of this Agreement with respect to such Registration Statement.

b. Each Holder, by its acceptance of the Registrable Securities agrees to cooperate with the Company as reasonably requested by the Company in connection with the preparation and filing of a Registration Statement hereunder, unless the Holder has notified the Company in writing of its election to exclude all of its Registrable Securities from such Registration Statement.

c. Each Holder agrees that, upon receipt of any notice from the Company of either (i) the commencement of an Allowed Delay pursuant to Section 2(c)(ii) or (ii) the happening of an event pursuant to Section 3(g) hereof, the Holder will immediately discontinue disposition of Registrable Securities pursuant to the Registration Statement covering such Registrable Securities, until the Holder is advised by the Company that such dispositions may again be made.

d. Each Holder shall promptly notify the Company in writing when all Registrable Securities held by such Holder have been sold.

5. Indemnification.

a. Indemnification by the Company. The Company will indemnify and hold harmless each Holder and its respective officers, directors, members, managers, partners, trustees, employees and agents and other representatives, successors and assigns, and each other person, if any, who controls such Holder within the meaning of the Securities Act, against any losses, claims, damages or liabilities, joint or several, to which they may become subject under the Securities Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon: (i) any untrue statement or alleged untrue statement or omission or alleged omission of any material fact contained in any Registration Statement, any Prospectus, or any amendment or

supplement thereof; (ii) any blue sky application or other document executed by the Company specifically for that purpose or based upon written information furnished by the Company filed in any state or other jurisdiction in order to qualify any or all of the Registrable Securities under the securities laws thereof (any such application, document or information herein called a “Blue Sky Application”); (iii) the omission or alleged omission to state in a Blue Sky Application a material fact required to be stated therein or necessary to make the statements therein not misleading; (iv) any violation by the Company or its agents of any rule or regulation promulgated under the Securities Act applicable to the Company or its agents and relating to action or inaction required of the Company in connection with such registration; or (v) any failure to register or qualify the Registrable Securities included in any such Registration Statement in any state where the Company or its agents has affirmatively undertaken or agreed in writing that the Company will undertake such registration or qualification on a Holder’s behalf and will reimburse such Holder, and each such officer, director, shareholder or member and each such controlling person for any legal or other expenses reasonably incurred by them in connection with investigating or defending any such loss, claim, damage, liability or action; provided, however, that the Company will not be liable in any such case if and to the extent that any such loss, claim, damage or liability arises out of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission so made in conformity with information furnished by the Holder or any such controlling person in writing to the Company specifically for use in such Registration Statement or Prospectus.

b. Indemnification by the Holders. Each Holder agrees, severally but not jointly, to indemnify and hold harmless, to the fullest extent permitted by law, the Company, its directors, officers, employees, stockholders and each person who controls the Company (within the meaning of the Securities Act) against any losses, claims, damages, liabilities and expense (including reasonable attorney fees) resulting from any untrue statement of a material fact or any omission of a material fact required to be stated in the Registration Statement or Prospectus or amendment or supplement thereto or necessary to make the statements therein not misleading, to the extent, but only to the extent that such untrue statement or omission is contained in any information furnished in writing by the Holder to the Company specifically for inclusion in such Registration Statement or Prospectus or amendment or supplement thereto. In no event shall the liability of a Holder be greater in amount than the dollar amount of the proceeds (net of all expenses paid by the Holder in connection with any claim relating to this Section 5 and the amount of any damages the Holder has otherwise been required to pay by reason of such untrue statement or omission) received by the Holder upon the sale of the Registrable Securities included in the Registration Statement giving rise to such indemnification obligation.

c. Conduct of Indemnification Proceedings. Any person entitled to indemnification hereunder shall (i) give prompt notice to the indemnifying party of any claim with respect to which it seeks indemnification and (ii) permit such indemnifying party to assume the defense of such claim with counsel reasonably satisfactory to the indemnified party; provided that any person entitled to indemnification hereunder shall have the right to employ separate counsel and to participate in the defense of such claim, but the fees and expenses of such counsel shall be at the expense of such person unless (a) the indemnifying party has agreed to pay such fees or expenses, (b) the indemnifying party shall have failed to assume the defense of such claim and employ counsel reasonably satisfactory to such person or (c) in the reasonable judgment of any such person, based upon written advice of its counsel, a conflict of interest exists between such person and the indemnifying party with respect to such claims (in which case, if the person notifies the indemnifying party in writing that such person elects to employ separate counsel at the expense of the indemnifying party, the indemnifying party shall not have the right to assume the defense of such claim on behalf of such person); and provided, further, that the failure of any indemnified party to give notice as provided herein shall not relieve the indemnifying party of its obligations hereunder, except to the extent that such failure to give notice shall materially and adversely affect the indemnifying party in the defense of any such claim or litigation. It is understood that the indemnifying party shall not, in connection with any proceeding in the same jurisdiction, be liable for fees or expenses of more than one separate firm of attorneys at any time for all such indemnified parties. No indemnifying party will, except with the consent of the indemnified party, consent to entry of any judgment or enter into any settlement that does not include as an unconditional term thereof the giving by the claimant or plaintiff to such indemnified party of a release from all liability in respect of such claim or litigation. The indemnifying party shall not be liable hereunder for any settlements entered into by an indemnified party without the indemnifying party’s prior written consent, which shall not be unreasonably withheld, conditioned or delayed.

d. Contribution. If for any reason the indemnification provided for in the preceding paragraphs (a) and (b) is unavailable to an indemnified party or insufficient to hold it harmless, other than as expressly specified therein, then the indemnifying party shall contribute to the amount paid or payable by the indemnified party as a result of such loss, claim, damage or liability in such proportion as is appropriate to reflect the relative fault of the indemnified party and the indemnifying party, as well as any other relevant equitable considerations. No person guilty of fraudulent misrepresentation within the meaning of Section 11(f) of the Securities Act shall be entitled to contribution from any person not guilty of such fraudulent misrepresentation. In no event shall the contribution obligation of a holder of Registrable Securities be greater in amount than the dollar amount of the proceeds (net of all expenses paid by such holder in connection with any claim relating to this Section 5 and the amount of any damages such holder has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission) received by it upon the sale of the Registrable Securities giving rise to such contribution obligation.

6. Miscellaneous.

- a. Amendments and Waivers. Any term of this Agreement may be amended and the observance of any term of this Agreement may be waived (either generally or in a particular instance and either retroactively or prospectively), only with the written consent of the Company and the Required Holders.
- b. Notices. All notices and other communications provided for or permitted hereunder shall be made as set forth in Section 12.1 of the Purchase Agreement.
- c. Maximum Liquidated Damages. The maximum amount of liquidated damages due to a Holder will be 5% of the aggregate amount invested by the Holder pursuant to the Purchase Agreement.
- d. Assignments and Transfers by Holders. The provisions of this Agreement shall be binding upon and inure to the benefit of the Holders and their respective successors and assigns. A Holder may transfer or assign, in whole or from time to time in part, to one or more Persons its rights hereunder in connection with the transfer of Registrable Securities by the Holder to such person, provided that the Holder complies with all laws applicable thereto and provides written notice of assignment to the Company promptly after such assignment is effected.
- e. Assignments and Transfers by the Company. This Agreement may not be assigned by the Company (whether by operation of law or otherwise) without the prior written consent of the Required Holders; *provided, however*, that in the event that the Company is a party to a merger, consolidation, share exchange or similar business combination transaction in which the Common Stock is converted into the equity securities of another Person, from and after the effective time of such transaction, such Person shall, by virtue of such transaction, be deemed to have assumed the obligations of the Company hereunder. The term "Company" shall be deemed to refer to such Person and the term "Registrable Securities" shall be deemed to include the securities received by the Holders in connection with such transaction unless such securities are otherwise freely tradable by the Holders after giving effect to such transaction.
- f. Benefits of the Agreement. The terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and permitted assigns of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.
- g. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, e.g. DocuSign) or other transmission method and any counterpart so delivered shall be deemed to have been validly delivered and be valid and effective for all purposes.
- h. Titles and Subtitles. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.
- i. Severability. Any provision of this Agreement that is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof but shall be interpreted as if it were written so as to be enforceable to the maximum extent permitted by applicable law, and any such prohibition or unenforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction. To the extent permitted by applicable law, the parties hereby waive any provision of law which renders any provisions hereof prohibited or unenforceable in any respect.
- j. Further Assurances. The parties shall execute and deliver all such further instruments and documents and take all such other actions as may reasonably be required to carry out the transactions contemplated hereby and to evidence the fulfillment of the agreements herein contained.
- k. Entire Agreement. This Agreement is intended by the parties as a final expression of their agreement and intended to be a complete and exclusive statement of the agreement and understanding of the parties hereto in respect of the subject matter contained herein. This Agreement supersedes all prior agreements and understandings between the parties with respect to such subject matter.
- l. Governing Law; Consent to Jurisdiction; Waiver of Jury Trial. This Agreement shall be construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Agreement shall be

governed by, the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. The Company hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. In the event that any provision of this Agreement is invalid or unenforceable under any applicable statute or rule of law, then such provision shall be deemed inoperative to the extent that it may conflict therewith and shall be deemed modified to conform with such statute or rule of law. Any such provision which may prove invalid or unenforceable under any law shall not affect the validity or enforceability of any other provision of this Agreement. Nothing contained herein shall be deemed or operate to preclude the Holder from bringing suit or taking other legal action against the Company in any other jurisdiction to collect on the Company's obligations to the Holder, to realize on any collateral or any other security for such obligations, or to enforce a judgment or other court ruling in favor of the Holder. EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY WAIVES ANY RIGHT SUCH PARTY MAY HAVE TO, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.

[SIGNATURES ON THE FOLLOWING PAGES]

IN WITNESS WHEREOF, the parties have executed this Agreement or caused their duly authorized officers to execute this Agreement as of the date first above written.

COMPANY

REDFIN CORPORATION

By: /s/ Chris Nielsen
Name: Chris Nielsen
Title: Chief Financial Officer

Signature Page to Registration Rights Agreement

IN WITNESS WHEREOF, the parties have executed this Agreement or caused their duly authorized officers to execute this Agreement as of the date first above written.

BUYER

DURABLE CAPITAL MASTER FUND LP

By: Durable Capital Partners LP, as investment manager

By: /s/ Michael Blandino
Name: Michael Blandino
Title: Authorized Representative

Signature Page to Registration Rights Agreement

Exhibit A

Plan of Distribution

We are registering the shares of Common Stock (i) issued to the selling stockholders and (ii) issuable upon the conversion of, or as dividends on, the Series A Convertible Preferred Stock issued to the selling stockholders, to permit the resale of the shares of Common Stock by the holders of such shares from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the selling stockholders of the shares of Common Stock. We will bear all fees and expenses incident to our obligation to register the shares of Common Stock.

The selling stockholders, which as used herein includes donees, pledgees, transferees or other successors-in-interest selling shares of Common Stock or interests in shares of Common Stock received after the date of this prospectus from a selling stockholder as a gift, pledge, partnership distribution or other transfer, may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of Common Stock or interests in shares of Common Stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices.

The selling stockholders may use any one or more of the following methods when disposing of shares or interests therein:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales effected after the date the registration statement of which this prospectus is a part is declared effective by the SEC;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted by applicable law.

The selling stockholders may, from time to time, pledge or grant a security interest in some or all of the shares of Common Stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of Common Stock, from time to time, under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer the shares of Common Stock in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

In connection with the sale of our Common Stock or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the Common Stock in the course of hedging the positions they assume. The selling stockholders may also sell shares of our Common Stock short and deliver these securities to close out their short positions, or loan or pledge the Common Stock to broker-dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of

shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The aggregate proceeds to the selling stockholders from the sale of the Common Stock offered by them will be the purchase price of the Common Stock less discounts or commissions, if any. Each of the selling stockholders reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of Common Stock to be made directly or through agents.

The selling stockholders also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act of 1933, provided that they meet the criteria and conform to the requirements of that rule.

The selling stockholders and any underwriters, broker-dealers or agents that participate in the sale of the Common Stock or interests therein may be “underwriters” within the meaning of Section 2(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of the shares may be underwriting discounts and commissions under the Securities Act. Selling stockholders who are “underwriters” within the meaning of Section 2(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act.

To the extent required, the shares of our Common Stock to be sold, the names of the selling stockholders, the respective purchase prices and public offering prices, the names of any agents, dealer or underwriter, any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

In order to comply with the securities laws of some states, if applicable, the Common Stock may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the Common Stock may not be sold unless it has been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

We have advised the selling stockholders that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of shares in the market and to the activities of the selling stockholders and their affiliates. In addition, to the extent applicable we will make copies of this prospectus (as it may be supplemented or amended from time to time) available to the selling stockholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The selling stockholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act.

We have agreed to indemnify the selling stockholders against liabilities, including liabilities under the Securities Act and state securities laws, relating to the registration of the shares offered by this prospectus.

We have agreed with the selling stockholders to keep the registration statement of which this prospectus constitutes a part effective until the earlier of (1) such time as all of the shares covered by this prospectus have been disposed of or (2) the date on which all of the shares may be sold without restriction pursuant to Rule 144 of the Securities Act.

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER

PURSUANT TO RULE 13a-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934

I, Glenn Kelman, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Redfin Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: July 30, 2020

/s/ Glenn Kelman

Glenn Kelman

Chief Executive Officer

(Principal Executive Officer)

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER

PURSUANT TO RULE 13a-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934

I, Chris Nielsen, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Redfin Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: July 30, 2020

/s/ Chris Nielsen

Chris Nielsen

Chief Financial Officer

(Principal Financial Officer)

CERTIFICATION OF CHIEF EXECUTIVE OFFICER

PURSUANT TO 18 U.S.C. SECTION 1350

I, Glenn Kelman, Chief Executive Officer of Redfin Corporation (the "Company"), certify pursuant to 18 U.S.C. Section 1350 that, to my knowledge, the Quarterly Report on Form 10-Q of the Company for the quarter ended June 30, 2020 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: July 30, 2020

/s/ Glenn Kelman

Glenn Kelman

Chief Executive Officer

CERTIFICATION OF CHIEF FINANCIAL OFFICER

PURSUANT TO 18 U.S.C. SECTION 1350

I, Chris Nielsen, Chief Financial Officer of Redfin Corporation (the "Company"), certify pursuant to 18 U.S.C. Section 1350 that, to my knowledge, the Quarterly Report on Form 10-Q of the Company for the quarter ended June 30, 2020 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: July 30, 2020

/s/ Chris Nielsen

Chris Nielsen

Chief Financial Officer