

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

FORM 10-K

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

For the fiscal year ended December 31, 2019

OR

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

For the transition period from _____ to _____
Commission file number 1-12378

NVR, Inc.

(Exact Name of Registrant as Specified in its Charter)

Virginia

(State or other jurisdiction of incorporation or organization)

54-1394360

(IRS Employer Identification No.)

11700 Plaza America Drive, Suite 500

Reston, Virginia

(Address of principal executive offices)

20190

(Zip Code)

Registrant's telephone number, including area code: **(703) 956-4000**

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

Title of each class

Trading Symbol(s)

Name of each exchange on which registered

Common stock, par value \$0.01 per share

NVR

New York Stock Exchange

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

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

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

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

Indicate by check mark whether the registrant has submitted electronically 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 and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

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 Act). Yes No

The aggregate market value of the voting stock held by non-affiliates of NVR, Inc. on June 30, 2019, the last business day of NVR, Inc.'s most recently completed second fiscal quarter, was approximately \$11,522,681,000.

As of February 14, 2020 there were 3,677,676 total shares of common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Proxy Statement of NVR, Inc. to be filed with the Securities and Exchange Commission pursuant to Regulation 14A of the Securities Exchange Act of 1934 on or prior to April 30, 2020 are incorporated by reference into Part III of this report.

NVR, Inc.
Form 10-K

TABLE OF CONTENTS

	Page
<u>PART I</u>	
Item 1.	Business 1
Item 1A.	Risk Factors 4
Item 1B.	Unresolved Staff Comments 8
Item 2.	Properties 8
Item 3.	Legal Proceedings 9
Item 4.	Mine Safety Disclosures 9
<u>PART II</u>	
Item 5.	Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities 9
Item 6.	Selected Financial Data 11
Item 7.	Management’s Discussion and Analysis of Financial Condition and Results of Operations 12
Item 7A.	Quantitative and Qualitative Disclosure About Market Risk 26
Item 8.	Financial Statements and Supplementary Data 28
Item 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure 28
Item 9A.	Controls and Procedures 28
Item 9B.	Other Information 28
<u>PART III</u>	
Item 10.	Directors, Executive Officers, and Corporate Governance 28
Item 11.	Executive Compensation 29
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters 29
Item 13.	Certain Relationships and Related Transactions, and Director Independence 29
Item 14.	Principal Accountant Fees and Services 29
<u>PART IV</u>	
Item 15.	Exhibits and Financial Statement Schedules 30

PART I

Item 1. Business.

General

NVR, Inc., a Virginia corporation, was formed in 1980 as NVHomes, Inc. Our primary business is the construction and sale of single-family detached homes, townhomes and condominium buildings, all of which are primarily constructed on a pre-sold basis. To more fully serve customers of our homebuilding operations, we also operate a mortgage banking and title services business. We conduct our homebuilding activities directly. Our mortgage banking operations are operated primarily through a wholly owned subsidiary, NVR Mortgage Finance, Inc. (“NVRM”). Unless the context otherwise requires, references to “NVR”, “we”, “us” or “our” include NVR, Inc. and its consolidated subsidiaries.

We are one of the largest homebuilders in the United States. We operate in multiple locations in fourteen states, which are primarily in the eastern part of the country, and in Washington, D.C. During 2019, approximately 22% and 9% of our home settlements occurred in the Washington, D.C. and Baltimore, MD metropolitan areas, respectively, which accounted for approximately 27% and 11%, respectively, of our 2019 homebuilding revenues. Our homebuilding operations include the construction and sale of single-family detached homes, townhomes and condominium buildings under three trade names: Ryan Homes, NVHomes and Heartland Homes. Our Ryan Homes product is marketed primarily to first-time and first-time move-up buyers. Ryan Homes operates in thirty-two metropolitan areas located in Maryland, Virginia, Washington, D.C., West Virginia, Pennsylvania, New York, North Carolina, South Carolina, Florida, Ohio, New Jersey, Delaware, Indiana, Illinois and Tennessee. Our NVHomes and Heartland Homes products are marketed primarily to move-up and luxury buyers. NVHomes operates in Delaware and the Washington, D.C., Baltimore, MD and Philadelphia, PA metropolitan areas. Heartland Homes operates in the Pittsburgh, PA metropolitan area.

We generally do not engage in land development (see discussion below of our land development activities). Instead, we typically acquire finished building lots at market prices from various third party land developers pursuant to fixed price finished lot purchase agreements (“Lot Purchase Agreements”) that require deposits that may be forfeited if we fail to perform under the Lot Purchase Agreements. The deposits required under the Lot Purchase Agreements are in the form of cash or letters of credit in varying amounts and typically range up to 10% of the aggregate purchase price of the finished lots.

We believe that our lot acquisition strategy avoids the financial requirements and risks associated with direct land ownership and land development. We may, at our option, choose for any reason and at any time not to perform under these Lot Purchase Agreements by delivering notice of our intent not to acquire the finished lots under contract. Our sole legal obligation and economic loss for failure to perform under these Lot Purchase Agreements is limited to the amount of the deposit pursuant to the liquidated damage provision contained within the Lot Purchase Agreements. We do not have any financial guarantees or completion obligations and we typically do not guarantee lot purchases on a specific performance basis under these Lot Purchase Agreements. None of the creditors of any of the development entities with which we have entered these Lot Purchase Agreements have recourse to our general credit. We generally seek to maintain control over a supply of lots believed to be suitable to meet our five-year business plan.

In addition to constructing homes primarily on a pre-sold basis and utilizing what we believe is a conservative lot acquisition strategy, we focus on obtaining and maintaining a leading market position in each market we serve. This strategy allows us to gain valuable efficiencies and competitive advantages in our markets, which we believe contributes to minimizing the adverse effects of regional economic cycles and provides growth opportunities within these markets. Our continued success is contingent upon our ability to control an adequate supply of finished lots on which to build. As a result, in certain specific strategic circumstances we deviate from our historical lot acquisition strategy and engage in joint venture arrangements with land developers or directly acquire raw ground already zoned for its intended use for development. Once we acquire control of raw ground, we determine whether to sell the raw parcel to a developer and enter into a Lot Purchase Agreement with the developer to purchase the finished lots or hire a developer to develop the land on our behalf. While joint venture arrangements and direct land development activity are not our preferred method of acquiring finished building lots, we may enter into additional transactions in the future on a limited basis where there exists a compelling strategic or prudent financial reason to do so. We expect, however, to continue to acquire substantially all of our finished lot inventory using Lot Purchase Agreements with forfeitable deposits. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in Item 7 of this Form 10-K for additional discussion of lots controlled. In addition, see Notes 3, 4 and 5 in the accompanying consolidated financial statements included herein for additional information regarding Lot Purchase Agreements, joint ventures and land under development, respectively.

In addition to building and selling homes, we provide a number of mortgage-related services through our mortgage banking operations. Through operations in each of our homebuilding markets, NVRM originates mortgage loans almost exclusively for our homebuyers. NVRM generates revenues primarily from origination fees, gains on sales of loans and title fees. NVRM sells all of the mortgage loans it closes into the secondary markets on a servicing released basis.

Segment information for our homebuilding and mortgage banking businesses is included in Note 2 in the accompanying consolidated financial statements.

Homebuilding

Products

We offer single-family detached homes, townhomes and condominium buildings with many different basic home designs. These home designs have a variety of elevations and numerous other options. Our homes combine traditional, transitional, cottage or urban exterior designs with contemporary interior designs and amenities, generally include two to four bedrooms and range from approximately 1,000 to 9,500 finished square feet. During 2019, the prices at which we settled homes ranged from approximately \$140,000 to \$1.5 million and averaged \$367,100. During 2018, our average price of homes settled was \$379,700.

Markets

Our four reportable homebuilding segments operate in the following geographic regions:

<i>Mid Atlantic:</i>	Maryland, Virginia, West Virginia, Delaware and Washington, D.C.
<i>North East:</i>	New Jersey and Eastern Pennsylvania
<i>Mid East:</i>	New York, Ohio, Western Pennsylvania, Indiana and Illinois
<i>South East:</i>	North Carolina, South Carolina, Florida and Tennessee

Backlog

Backlog, which represents homes sold but not yet settled with the customer, totaled 8,233 units and approximately \$3.1 billion at December 31, 2019 compared to 8,365 units and approximately \$3.2 billion at December 31, 2018. Backlog may be impacted by customer cancellations for various reasons that are beyond our control, such as the customer's failure to obtain mortgage financing, inability to sell an existing home, job loss or a variety of other reasons. In any period, a portion of the cancellations that we experience are related to new sales that occurred during the same period, and a portion are related to sales that occurred in prior periods and therefore appeared in the opening backlog for the current period. Expressed as the total of all cancellations during the period as a percentage of gross sales during the period, our cancellation rate was 14.6%, 14.5% and 14.0% in 2019, 2018, and 2017, respectively. Additionally, approximately 6% in 2019, 5% in 2018, and 6% in 2017 of a reporting quarter's opening backlog balance cancelled during the quarter. We can provide no assurance that our historical cancellation rates are indicative of the actual cancellation rate that may occur in future periods. Other than those units that are cancelled, we expect to settle substantially all of our December 31, 2019 backlog during 2020. See "Risk Factors" in Item 1A and "Seasonality" in Item 7 of this Form 10-K.

Further discussion of settlements, new orders and backlog activity by our homebuilding reportable segment for each of the last three years can be found in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Item 7 of this Form 10-K.

Construction

We utilize independent subcontractors under fixed price contracts to perform construction work on our homes. We use many independent subcontractors in our various markets and we are not dependent on any single subcontractor or on a small number of subcontractors.

Sales and Marketing

Our preferred marketing method is for customers to visit a furnished model home featuring many built-in options and a landscaped lot. The garages of these model homes are usually converted into temporary sales centers where alternative facades and floor plans are displayed and designs for other models are available for review. Sales representatives are compensated predominantly on a commission basis.

Regulation

We and our subcontractors must comply with various federal, state and local zoning, building, environmental, advertising and consumer credit statutes, rules and regulations, as well as other regulations and requirements in connection with our construction and sales activities. All of these regulations have increased the cost to produce and market our products, and in some instances, have delayed our developers' ability to deliver finished lots to us. Counties and cities in which we build homes have at times declared moratoriums on the issuance of building permits and imposed other restrictions in the areas in which sewage treatment facilities and other public facilities do not reach minimum standards. In addition, our homebuilding operations are regulated in certain areas by restrictive zoning and density requirements that limit the number of homes that can be built within the boundaries of a particular area. To date, restrictive zoning laws and the imposition of moratoriums have not had a material adverse effect on our construction activities.

Competition and Market Factors

The housing industry is highly competitive. We compete with numerous homebuilders of varying size, ranging from local to national in scope, some of which have greater financial resources than we do. We also face competition from the home resale market.

Our homebuilding operations compete primarily on the basis of price, location, design, quality, service and reputation. Historically, we have been one of the market leaders in each of the markets where we build homes.

The housing industry is cyclical and is affected by consumer confidence levels, prevailing economic conditions and interest rates. Other factors that affect the housing industry and the demand for new homes include: the availability and the cost of land, labor and materials; changes in consumer preferences; demographic trends; and the availability of mortgage finance programs. See “Risk Factors” in Item 1A of this Form 10-K for additional information regarding these risks.

We are dependent upon building material suppliers for a continuous flow of raw materials. Whenever possible, we utilize standard products available from multiple sources. In the past, such raw materials have been generally available to us in adequate supply.

Mortgage Banking

We provide a number of mortgage related services to our homebuilding customers through our mortgage banking operations. Our mortgage banking operations also include separate subsidiaries that broker title insurance and perform title searches in connection with mortgage loan closings for which they receive commissions and fees. Because NVRM originates mortgage loans almost exclusively for our homebuilding customers, NVRM is dependent on our homebuilding segment. In 2019, NVRM closed approximately 16,500 loans with an aggregate principal amount of approximately \$5.2 billion as compared to approximately 15,100 loans with an aggregate principal amount of approximately \$4.8 billion in 2018.

NVRM sells all of the mortgage loans it closes to investors in the secondary markets on a servicing released basis, typically within 30 days from the loan closing. NVRM is an approved seller/servicer for Fannie Mae (“FNMA”) and Freddie Mac (“FHLMC”) mortgage loans and an approved seller/issuer of Ginnie Mae (“GNMA”), Department of Veterans Affairs (“VA”) and Federal Housing Administration (“FHA”) mortgage loans.

Regulation

NVRM is subject to the rules and regulations of FNMA, GNMA, FHLMC, VA and FHA. These rules and regulations restrict certain activities of NVRM. NVRM is currently eligible and expects to remain eligible to participate in such programs. In addition, NVRM is subject to regulation at the state and federal level, including regulations issued by the Consumer Financial Protection Bureau (the “CFPB”) with respect to specific origination, selling and servicing practices.

Competition and Market Factors

NVRM’s main competition comes from national, regional, and local mortgage bankers, mortgage brokers, credit unions and banks in each of these markets. NVRM competes primarily on the basis of customer service, variety of products offered, interest rates offered, prices of ancillary services and relative financing availability and costs.

Pipeline

NVRM’s mortgage loans in process that had not closed had an aggregate principal balance of approximately \$2.2 billion as of both December 31, 2019 and 2018. NVRM’s cancellation rate was approximately 36%, 32% and 31% in 2019, 2018 and 2017, respectively. We can provide no assurance that our historical loan cancellation rates are indicative of the actual loan cancellation rate that may occur in future periods. See “Risk Factors” in Item 1A in this Form 10-K for additional information about factors that could increase our cancellation rate.

Employees

At December 31, 2019, we employed approximately 5,700 full-time persons. None of our employees are subject to a collective bargaining agreement and we have never experienced a work stoppage. We believe that our employee relations are good.

Available Information

We file annual, quarterly and current reports, proxy statements and other information with the Securities and Exchange Commission (the “SEC”). These filings are available to the public over the internet at the SEC’s website at www.sec.gov.

Our principal internet website can be found at www.nvrinc.com. We make available free of charge on or through our website, access to our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports as soon as reasonably practicable after such material is electronically filed, or furnished, to the SEC.

Our website also includes a corporate governance section which contains our Corporate Governance Guidelines (which includes our Directors’ Independence Standards), Code of Ethics, Board Committee Charters, Policies and Procedures for the Consideration of Board of Director Candidates, and Policies and Procedures Regarding Communications with the NVR, Inc. Board of Directors, the Independent Lead Director and the Non-Management Directors as a Group.

Forward-Looking Statements

Some of the statements in this Form 10-K, as well as statements made by us in periodic press releases or other public communications, constitute “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Certain, but not necessarily all, of such forward-looking statements can be identified by the use of forward-looking terminology, such as “believes,” “expects,” “may,” “will,” “should,” or “anticipates” or the negative thereof or other comparable terminology. All statements other than of historical facts are forward looking statements. Forward-looking statements contained in this document include those regarding market trends, NVR’s financial position, business strategy, the outcome of pending litigation, investigations or similar contingencies, projected plans and objectives of management for future operations. Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the actual results or performance of NVR to be materially different from future results, performance or achievements expressed or implied by the forward-looking statements. Such risk factors include, but are not limited to the following: general economic and business conditions (on both a national and regional level); interest rate changes; access to suitable financing by NVR and NVR’s customers; increased regulation in the mortgage banking industry; the ability of our mortgage banking subsidiary to sell loans it originates into the secondary market; competition; the availability and cost of land and other raw materials used by NVR in its homebuilding operations; shortages of labor; weather related slow-downs; building moratoriums; governmental regulation; fluctuation and volatility of stock and other financial markets; mortgage financing availability; and other factors over which NVR has little or no control. NVR undertakes no obligation to update such forward-looking statements except as required by law.

Item 1A. Risk Factors.

Our business is affected by the risks generally incident to the residential construction business, including, but not limited to:

- actual and expected direction of interest rates, which affect the availability of mortgage financing for potential purchasers of homes;
- the availability of adequate land in desirable locations on favorable terms;
- employment levels, consumer confidence and spending and unexpected changes in customer preferences; and
- changes in the national economy and in the local economies of the markets in which we operate.

All of these risks are discussed in detail below.

An economic downturn or decline in economic conditions could adversely affect our business and our results of operations.

Demand for new homes is sensitive to economic changes driven by conditions such as employment levels, job growth, consumer confidence and interest rates. If the housing industry suffers a downturn, our sales may decline which could have a material adverse effect on our profitability, stock performance, ability to service our debt obligations and future cash flows.

Interest rate movements, inflation and other economic factors can negatively impact our business.

High rates of inflation generally affect the homebuilding industry adversely because of their adverse impact on interest rates. High interest rates not only increase the cost of borrowed funds to homebuilders but also have a significant adverse effect on housing demand and on the affordability of permanent mortgage financing to prospective purchasers. We are also subject to potential volatility in the price of commodities that impact costs of materials used in our homebuilding business. Increases in prevailing interest rates could have a material adverse effect on our sales, profitability, stock performance, ability to service our debt obligations and future cash flows.

Our financial results also are affected by the risks generally incident to our mortgage banking business, including interest rate levels, the impact of government regulation on mortgage loan originations and servicing and the need to issue forward commitments to fund and sell mortgage loans. Our homebuilding customers account for almost all of our mortgage banking business. The volume of our continuing homebuilding operations therefore affects our mortgage banking business.

Our mortgage banking business also is affected by interest rate fluctuations. We also may experience marketing losses resulting from daily increases in interest rates to the extent we are unable to match interest rates and amounts on loans we have committed to originate with forward commitments from third parties to purchase such loans. Increases in interest rates may have a material adverse effect on our mortgage banking revenue, profitability, stock performance, ability to service our debt obligations and future cash flows.

Our operations may also be adversely affected by other economic factors within our markets such as negative changes in employment levels, job growth, wage growth, consumer confidence and household formation and availability of mortgage financing, one or all of which could result in reduced demand or price depression from current levels. Such negative trends could have a material adverse effect on homebuilding operations.

These factors and thus, the homebuilding and mortgage banking businesses, have at times in the past been cyclical in nature. Any downturn in the national economy or the local economies of the markets in which we operate could have a material adverse effect

on our sales, profitability, stock performance and ability to service our debt obligations. In particular, during 2019, approximately 22% and 9% of our home settlements occurred in the Washington, D.C. and Baltimore, MD metropolitan areas, respectively, which accounted for approximately 27% and 11%, respectively, of our 2019 homebuilding revenues. Thus, we are dependent to a significant extent on the economy and demand for housing in those areas.

Because almost all of our customers require mortgage financing, the availability of suitable mortgage financing could impair the affordability of our homes, lower demand for our products, and limit our ability to fully deliver our backlog.

Our business and earnings depend on the ability of our potential customers to obtain mortgages for the purchase of our homes. In addition, many of our potential customers must sell their existing homes in order to buy a home from us. The tightening of credit standards and the availability of suitable mortgage financing could prevent customers from buying our homes and could prevent buyers of our customers' homes from obtaining mortgages they need to complete that purchase, either of which could result in potential customers' inability to buy a home from us. If potential customers or the buyers of our customers' current homes are not able to obtain suitable financing, the result could have a material adverse effect on our sales, profitability, stock performance, ability to service our debt obligations and future cash flows.

If our ability to sell mortgages to investors is impaired, we may be required to fund these commitments ourselves, or we may not be able to originate loans at all.

Our mortgage banking business sells all of the loans it originates into the secondary market, usually within 30 days from the date of closing, and has up to \$150 million available under a repurchase agreement to fund mortgage closings. See "Management's Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources" in Item 7 of this Form 10-K for more information about the repurchase agreement. In the event that disruptions to the secondary markets tighten or eliminate the available liquidity within the secondary markets for mortgage loans, or the underwriting requirements by our secondary market investors continue to become more stringent, our ability to sell future mortgages could decline and we could be required, among other things, to fund our commitments to our buyers with our own financial resources, which is limited, or require our home buyers to find another source of financing. The result of such secondary market disruption could have a material adverse effect on our sales, profitability, stock performance, ability to service our debt obligations and future cash flows.

If the market value of our inventory or controlled lot position declines, our profit could decrease and we may incur losses.

Inventory risk can be substantial for homebuilders. The market value of building lots and housing inventories can fluctuate significantly as a result of changing market conditions. In addition, inventory carrying costs can be significant and can result in losses in a poorly performing community or market. We must continuously seek and make acquisitions of lots for expansion into new markets as well as for replacement and expansion within our current markets, which we generally accomplish by entering into Lot Purchase Agreements and paying forfeitable deposits under the Lot Purchase Agreements to developers for the contractual right to acquire the lots. In the event of adverse changes in economic, market or community conditions, we may cease further building activities in certain communities or restructure existing Lot Purchase Agreements, resulting in forfeiture of some or all of any remaining land contract deposit paid to the developer. We may also have significant impairments of land under development. The forfeiture of land contract deposits or inventory impairments may result in a loss that could have a material adverse effect on our profitability, stock performance, ability to service our debt obligations and future cash flows.

If the underwriting quality of our mortgage originations is found to be deficient, our profit could decrease and we may incur losses.

We originate several different loan products to our customers to finance the purchase of their home. We sell all of the loans we originate into the secondary mortgage market generally within 30 days from the date of closing. All of the loans that we originate are underwritten to the standards and specifications of the ultimate investor. Insofar as we underwrite our originated loans to those standards, we bear no increased concentration of credit risk from the issuance of loans, except in certain limited instances where repurchases or early payment default occur. In the event that a substantial number of the loans that we have originated fall into default and the investors to whom we sold the loans determine that we did not underwrite the loans in accordance with their requirements, we could be required to repurchase the loans from the investor or indemnify the investor for any losses incurred. Any resulting losses could have a material adverse effect on our profitability, stock performance, ability to service our debt obligations and future cash flows.

We may be subject to claims on mortgage loans sold to third parties.

Our mortgage banking operations may be responsible for losses associated with mortgage loans originated and sold to investors in the event of errors or omissions relating to certain representations and warranties that the loans sold meet certain requirements, including representations as to underwriting standards, the type of collateral, the existence of private mortgage insurance, and the validity of certain borrower representations in connection with the loan. The resolution of claims related to alleged breaches of these representations and warranties and repurchase claims could have a material adverse effect on our financial condition, cash flows and results of operations and could result in losses that exceed existing estimates and accruals. Because of the uncertainties inherent in estimating these matters, there can be no assurance that any amounts reserved will be adequate or that any potential inadequacies will not have a material adverse effect on our results of operations.

Our inability to secure and control an adequate inventory of lots could adversely impact our operations.

The results of our homebuilding operations depend upon our continuing ability to control an adequate number of homebuilding lots in desirable locations. There can be no assurance that an adequate supply of building lots will continue to be available to us on terms similar to those available in the past, or that we will not be required to devote a greater amount of capital to controlling building lots than we have historically. An insufficient supply of building lots in one or more of our markets, an inability of our developers to deliver finished lots in a timely fashion due to their inability to secure financing to fund development activities or for other reasons, or our inability to purchase or finance building lots on reasonable terms could have a material adverse effect on our sales, profitability, stock performance, ability to service our debt obligations and future cash flows.

Volatility in the credit and capital markets may impact our ability to access necessary financing.

If we require working capital greater than that provided by our operations and our credit facility, we may be required to seek to increase the amount available under the facility or seek alternative financing, which might not be available on terms that are favorable or acceptable. If we are required to seek financing to fund our working capital requirements, volatility in credit or capital markets may restrict our flexibility to access financing. If we are at any time unsuccessful in obtaining sufficient capital to fund our planned homebuilding expenditures, we may experience a substantial delay in the completion of homes then under construction, or we may be unable to control or purchase finished building lots. Any delay could result in cost increases and could have a material adverse effect on our sales, profitability, stock performance, ability to service our debt obligations and future cash flows.

Our mortgage banking operations depend in part on the availability, cost and other terms of mortgage financing facilities, and may be adversely affected by any shortage or increased cost of such financing. Additional or replacement financing might not be available on terms that are favorable or acceptable. Our mortgage banking operations are also dependent upon the securitization market for mortgage-backed securities, and could be materially adversely affected by any fluctuation or downturn in such market.

Our current indebtedness may impact our future operations.

Our existing indebtedness contains restrictive covenants and any future indebtedness may also contain such covenants. These covenants include, or could include, restrictions on our ability to create, incur, assume or guarantee secured debt, enter into sale and leaseback transactions and conditions related to mergers and/or the sale of assets. Substantial losses by us or other action or inaction by us or our subsidiaries could result in the violation of one or more of these covenants, which could result in decreased liquidity or a default on our current or future indebtedness, thereby having a material adverse effect on our sales, profitability, stock performance, ability to service our debt obligations and future cash flows.

Government regulations and environmental matters could negatively affect our operations.

We are subject to various local, state and federal statutes, ordinances, rules and regulations concerning zoning, building design, construction and similar matters, including local regulations that impose restrictive zoning and density requirements in order to limit the number of homes that can eventually be built within the boundaries of a particular area. These regulations may further increase the cost to produce and market our products. In addition, we have from time to time been subject to, and may also be subject in the future to, periodic delays in our homebuilding projects due to building moratoriums in the areas in which we operate or delays in receiving the necessary governmental approvals. Changes in regulations that restrict homebuilding activities in one or more of our principal markets could have a material adverse effect on our sales, profitability, stock performance, ability to service our debt obligations and future cash flows.

In addition, new housing developments are often subject to various assessments or impact fees for schools, parks, streets, highways and other public improvements. The cost of these assessments is subject to substantial change and could cause increases in the construction cost of our homes, which, in turn, could reduce our profitability.

We are also subject to a variety of local, state and federal statutes, ordinances, rules and regulations concerning the protection of health and the environment. We are subject to a variety of environmental conditions that can affect our business and our homebuilding projects. The particular environmental laws that apply to any given homebuilding site vary greatly according to the location and environmental condition of the site and the present and former uses of the site and adjoining properties. Environmental laws and conditions may result in delays, cause us to incur substantial compliance and other costs, or prohibit or severely restrict homebuilding activity in certain environmentally sensitive regions or areas, thereby adversely affecting our sales, profitability, stock performance, ability to service our debt obligations and future cash flows.

Increased regulation of the mortgage industry could harm our future sales and earnings.

The mortgage industry remains under intense scrutiny and continues to face increasing regulation at the federal, state and local level. Potential changes to federal laws and regulations could have the effect of limiting the activities of FNMA and FHLMC, the entities that provide liquidity to the secondary mortgage market, which could lead to increases in mortgage interest rates. Tighter underwriting requirements and fee restrictions and the increasingly complex regulatory environment may negatively impact our mortgage loan origination business in the form of lower demand, decreased revenue and increased operating costs.

We are an approved seller/servicer of FNMA and FHLMC mortgage loans and an approved seller/issuer of GNMA, VA and FHA mortgage loans, and are subject to all of those agencies' rules and regulations. Any significant impairment of our eligibility to sell/service these loans could have a material adverse impact on our mortgage operations. In addition, we are subject to regulation at the state and federal level with respect to specific origination, selling and servicing practices including the Real Estate Settlement and Protection Act. Adverse changes in governmental regulation may have a negative impact on our mortgage loan origination business.

We face competition in our homebuilding and mortgage banking operations.

The homebuilding industry is highly competitive. We compete with numerous homebuilders of varying size, ranging from local to national in scope, some of whom have greater financial resources than we do. We face competition:

- for suitable and desirable lots at acceptable prices;
- from selling incentives offered by competing builders within and across developments; and
- from the existing home resale market.

Our homebuilding operations compete primarily on the basis of price, location, design, quality, service and reputation.

The mortgage banking industry is also competitive. Our main competition comes from national, regional and local mortgage bankers, credit unions, banks and mortgage brokers in each of these markets. Our mortgage banking operations compete primarily on the basis of customer service, variety of products offered, interest rates offered, prices of ancillary services and relative financing availability and costs.

We might not be able to continue to compete successfully in our homebuilding or mortgage banking operations. An inability to effectively compete may have an adverse impact on our sales, profitability, stock performance, ability to service our debt obligations and future cash flows.

A shortage of building materials or labor, or increases in materials or labor costs may adversely impact our operations.

The homebuilding business has from time to time experienced building material and labor shortages, including fluctuating lumber prices and supply. In addition, strong construction market conditions could restrict the labor force available to our subcontractors and us in one or more of our markets. Significant increases in costs resulting from these shortages, or delays in construction of homes, could have a material adverse effect on our sales, profitability, stock performance, ability to service our debt obligations and future cash flows.

We rely on subcontractors to construct our homes. The failure of our subcontractors to properly construct our homes may be costly.

We engage subcontractors to perform the actual construction of our homes. Despite our quality control efforts, we may discover that our subcontractors have engaged in improper construction practices. The occurrence of such events could require us to repair the homes in accordance with our standards and as required by law. The cost of satisfying our legal obligations in these instances may be significant, and we may be unable to recover the cost of repair from subcontractors, suppliers and insurers.

Product liability litigation and warranty claims may adversely impact our operations.

Construction defect and home warranty claims are common and can represent a substantial risk for the homebuilding industry. The cost of insuring against construction defect and product liability claims, as well as the claims themselves, can be high. In addition, insurance companies limit coverage offered to protect against these claims. Further restrictions on coverage availability, or significant increases in premium costs or claims, could have a material adverse effect on our financial results.

We are subject to litigation proceedings that could harm our business if an unfavorable ruling were to occur.

From time to time, we are involved in litigation and other legal proceedings relating to claims arising from our operations in the normal course of business. As described in, but not limited to, Item 3, "Legal Proceedings" of this Form 10-K, we are currently subject to certain legal proceedings. Litigation is subject to inherent uncertainties, and unfavorable rulings may occur. These or other litigation or legal proceedings could materially affect our ability to conduct our business in the manner that we expect or otherwise adversely affect us should an unfavorable ruling occur.

The loss of key personnel could adversely impact our business.

We rely on our key personnel to effectively operate and manage our business. Specifically, our future success depends heavily on the performance of our senior management team. Our business may be adversely affected if we are unable to retain key personnel or attract qualified personnel to manage our business.

Our failure to maintain the security of our electronic and other confidential information could expose us to liability and materially adversely affect our financial condition and results of operations.

Privacy, security, and compliance concerns have continued to increase as technology has evolved. As part of our normal business activities, we collect and store certain confidential information, including personal information of homebuyers/borrowers and information about employees, vendors and suppliers. This information is entitled to protection under a number of federal and state

laws. We may share some of this information with vendors who assist us with certain aspects of our business, particularly our mortgage and title businesses. We have implemented systems and processes intended to secure our information technology systems and prevent unauthorized access to or loss of sensitive, confidential and personal data, including through the use of encryption and authentication technologies. Additionally, we have increased our monitoring capabilities to enhance early detection and rapid response to potential security anomalies. These security measures may not be sufficient for all possible occurrences and may be vulnerable to hacking, employee error, malfeasance, system error, faulty password management or other irregularities. Further, development and maintenance of these measures are costly and require ongoing monitoring and updating as technologies change and efforts to overcome security measures become increasingly sophisticated. Our failure to maintain the security of the data we are required to protect, including via the penetration of our network security and the misappropriation of confidential and personal information, could result in business disruption, damage to our reputation, financial obligations to third parties, fines, penalties, regulatory proceedings and private litigation with potentially large costs, and also in deterioration in customers' confidence in us and other competitive disadvantages, and thus could have a material adverse effect on our sales, profitability, stock performance, ability to service our debt obligations and future cash flows.

Our continued success is dependent on positive perceptions of us and our brands which, if eroded, could adversely affect our business and our relationships with our customers.

We believe that one of the reasons our customers buy from us, our team members choose NVR as a place of employment, and our vendors choose to do business with us is the reputation we have built over many years. To be successful in the future, we must continue to preserve our reputation. Reputational value is based in large part on perceptions, and broad access to social media makes it easy for anyone to provide public feedback that can influence perceptions of the brands under which we do business. It may be difficult to control negative publicity, regardless of whether it is accurate. While reputations may take decades to build, negative incidents can quickly erode trust and confidence, could damage our reputation, reduce the demand for our homes or negatively impact the morale and performance of our employees, all of which could adversely affect our business.

Weather-related and other events beyond our control may adversely impact our operations.

Extreme weather or other events, such as significant snowfalls, hurricanes, tornadoes, earthquakes, forest fires, floods, terrorist attacks or war may affect our markets, our operations and our profitability. These events may impact our physical facilities or those of our suppliers or subcontractors and our housing inventories, causing us material increases in costs, or delays in construction of homes, which could have a material adverse effect upon our sales, profitability, stock performance, ability to service our debt obligations and future cash flows.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

Our corporate offices are located in Reston, Virginia, where we currently lease approximately 61,000 square feet of office space. The current corporate office lease expires in April 2026.

In connection with the operation of the homebuilding segment, we lease production facilities in the following seven locations: Thurmont, Maryland; Burlington County, New Jersey; Farmington, New York; Kings Mountain, North Carolina; Darlington, Pennsylvania; Portland, Tennessee; and Richmond, Virginia. These facilities range in size from approximately 40,000 square feet to 400,000 square feet and total approximately one million square feet. Each of these leases contains various options for extensions of the lease and for the purchase of the facility. Additionally, certain facility leases have early termination options. These leases currently expire between 2022 and 2039. In addition, we own a production facility of approximately 100,000 square feet in Dayton, Ohio. Our plant utilization was 49% and 52% of total capacity in 2019 and 2018, respectively.

In connection with both our homebuilding and mortgage banking businesses, we also lease office space in multiple locations for homebuilding divisional offices and mortgage banking and title services branches under leases expiring at various times through 2027, none of which are individually material to our business.

We anticipate that, upon expiration of existing production facility and office leases, we will be able to renew them or obtain comparable facilities on terms acceptable to us.

Item 3. Legal Proceedings.

We are involved in various litigation matters arising in the ordinary course of business. In the opinion of management, and based on advice of legal counsel, these matters are not expected to have a material adverse effect on our financial position, results of operations or cash flows. Legal costs incurred in connection with outstanding litigation matters are expensed as incurred.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II**Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.**

(dollars in thousands, except per share data)

Our shares of common stock are listed and principally traded on the New York Stock Exchange under the trading symbol “NVR.” As of the close of business on February 14, 2020, there were 196 shareholders of record of our common stock.

We have never paid a cash dividend on our shares of common stock and have no current intention to do so in the future.

We had three share repurchase authorizations outstanding during the quarter ended December 31, 2019. On December 12, 2018, May 2, 2019 and November 6, 2019, we publicly announced the Board of Directors’ approval to repurchase our outstanding common stock in one or more open market and/or privately negotiated transactions, up to an aggregate of \$300,000 per authorization. The repurchase authorizations do not have expiration dates. The following table provides information regarding common stock repurchases during the quarter ended December 31, 2019:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs
October 1 - 31, 2019 (1)	17,432	\$ 3,625.92	17,432	\$ 286,809
November 1 - 30, 2019	42,088	\$ 3,556.51	42,088	\$ 437,122
December 1 - 31, 2019	31,766	\$ 3,777.03	31,766	\$ 317,141
Total	91,286	\$ 3,646.51	91,286	

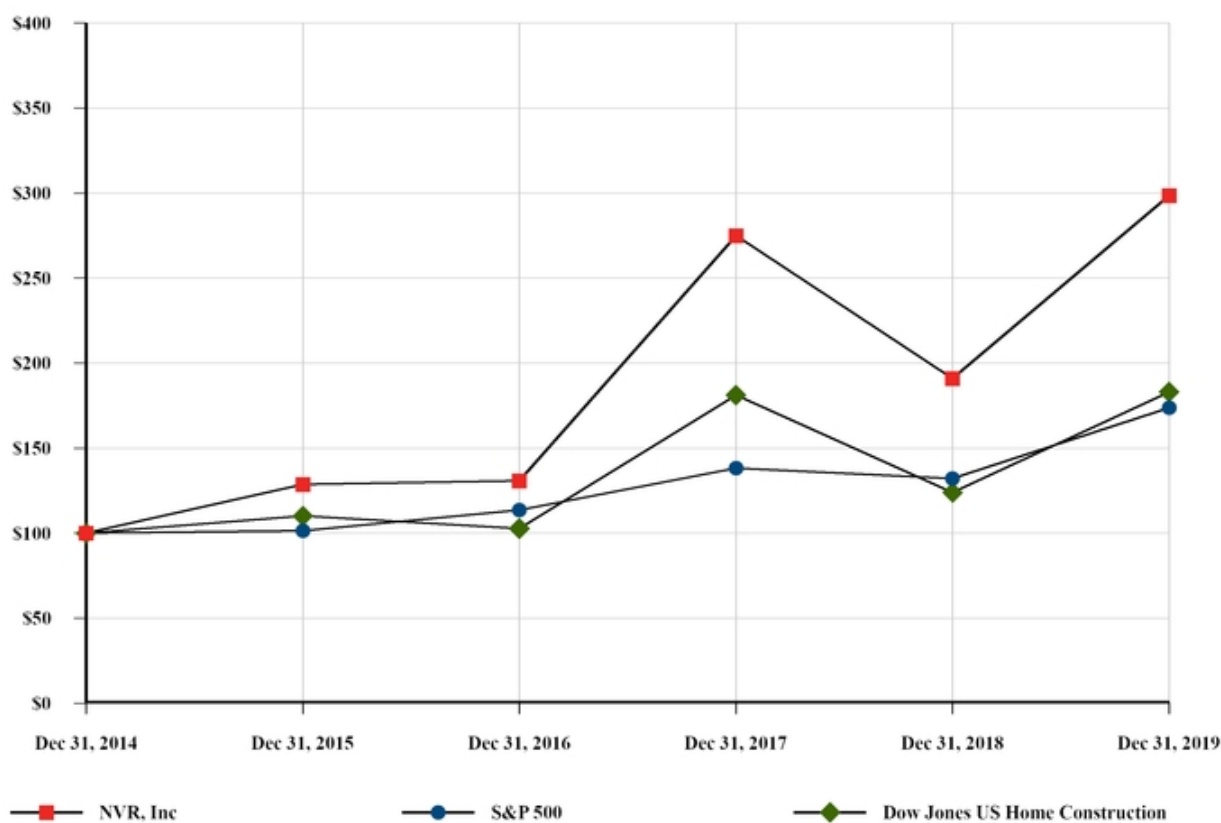
- (1) 13,811 outstanding shares were repurchased under the December 12, 2018 share repurchase authorization, which fully utilized the authorization. The remaining 3,621 outstanding shares were repurchased under the May 2, 2019 share repurchase authorization.

On February 12, 2020, the Board of Directors approved a repurchase authorization providing us authorization to repurchase up to an aggregate of \$300,000 of our common stock in one or more open market and/or privately negotiated transactions.

The information required by this item in respect to securities authorized for issuance under equity compensation plans is provided under Item 12 of this annual report on Form 10-K.

STOCK PERFORMANCE GRAPH

The following graph compares the cumulative total return to holders of our common stock since December 31, 2014 with the Dow Jones US Home Construction Index and the S&P 500 Index for that same period, assuming that \$100 was invested in NVR stock and the indices on December 31, 2014.



Comparison of 5 Year Cumulative Total Return	For the Year Ended December 31,					
	2014	2015	2016	2017	2018	2019
NVR, Inc.	\$ 100	\$ 129	\$ 131	\$ 275	\$ 191	\$ 299
S&P 500	\$ 100	\$ 101	\$ 114	\$ 138	\$ 132	\$ 174
Dow Jones US Home Construction	\$ 100	\$ 110	\$ 103	\$ 181	\$ 124	\$ 183

Item 6. Selected Financial Data.

(in thousands, except per share amounts)

The following tables set forth selected consolidated financial data. The selected income statement and balance sheet data have been derived from our consolidated financial statements for each of the periods presented and are not necessarily indicative of results of future operations. The selected financial data should be read in conjunction with, and are qualified in their entirety by, the accompanying consolidated financial statements and related notes included herein.

	Year Ended December 31,				
	2019	2018	2017	2016	2015
Consolidated income statement data:					
Homebuilding data:					
Revenues	\$ 7,220,844	\$ 7,004,304	\$ 6,175,521	\$ 5,709,223	\$ 5,065,200
Gross profit	\$ 1,370,982	\$ 1,312,177	\$ 1,185,143	\$ 1,001,362	\$ 946,418
Homebuilding income	\$ 923,879	\$ 871,106	\$ 776,370	\$ 601,102	\$ 555,329
Mortgage Banking data:					
Mortgage banking fees	\$ 167,820	\$ 159,370	\$ 130,319	\$ 113,321	\$ 93,808
Mortgage banking income	\$ 101,916	\$ 88,626	\$ 70,541	\$ 60,595	\$ 47,883
Consolidated data:					
Net income	\$ 878,539	\$ 797,197	\$ 537,521	\$ 425,262	\$ 382,927
Earnings per share:					
Basic	\$ 241.31	\$ 219.58	\$ 144.00	\$ 110.53	\$ 95.21
Diluted	\$ 221.13	\$ 194.80	\$ 126.77	\$ 103.61	\$ 89.99
Weighted average number of shares outstanding:					
Basic	3,641	3,631	3,733	3,847	4,022
Diluted	3,973	4,092	4,240	4,104	4,255

	December 31,				
	2019	2018	2017	2016	2015
Consolidated balance sheet data:					
Homebuilding inventory	\$ 1,347,288	\$ 1,253,110	\$ 1,246,199	\$ 1,092,100	\$ 1,006,526
Contract land deposits, net	\$ 413,851	\$ 396,177	\$ 370,429	\$ 379,844	\$ 343,295
Total assets	\$ 3,809,815	\$ 3,165,933	\$ 2,989,279	\$ 2,643,943	\$ 2,511,718
Senior notes	\$ 598,301	\$ 597,681	\$ 597,066	\$ 596,455	\$ 595,847
Shareholders' equity	\$ 2,341,244	\$ 1,808,562	\$ 1,605,492	\$ 1,304,441	\$ 1,239,165
Cash dividends per share	\$ —	\$ —	\$ —	\$ —	\$ —

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

(dollars in thousands, except per share data)

Results of Operations

This section of this Form 10-K generally discusses 2019 and 2018 items and year-to-year comparisons between 2019 and 2018. Discussions of 2017 items and year-to-year comparisons between 2018 and 2017 that are not included in this Form 10-K can be found in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7 of the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2018.

Overview

Business

Our primary business is the construction and sale of single-family detached homes, townhomes and condominium buildings, all of which are primarily constructed on a pre-sold basis. To fully serve customers of our homebuilding operations, we also operate a mortgage banking and title services business. We primarily conduct our operations in mature markets. Additionally, we generally grow our business through market share gains in our existing markets and by expanding into markets contiguous to our current active markets. Our four homebuilding reportable segments consist of the following regions:

<i>Mid Atlantic:</i>	Maryland, Virginia, West Virginia, Delaware and Washington, D.C.
<i>North East:</i>	New Jersey and Eastern Pennsylvania
<i>Mid East:</i>	New York, Ohio, Western Pennsylvania, Indiana and Illinois
<i>South East:</i>	North Carolina, South Carolina, Florida and Tennessee

Our lot acquisition strategy is predicated upon avoiding the financial requirements and risks associated with direct land ownership and development. We generally do not engage in land development (see discussion below of our land development activities). Instead, we typically acquire finished lots at market prices from various third party land developers pursuant to Lot Purchase Agreements. These Lot Purchase Agreements require deposits, typically ranging up to 10% of the aggregate purchase price of the finished lots, in the form of cash or letters of credit that may be forfeited if we fail to perform under the Lot Purchase Agreement. This strategy has allowed us to maximize inventory turnover, which we believe enables us to minimize market risk and to operate with less capital, thereby enhancing rates of return on equity and total capital.

In addition to constructing homes primarily on a pre-sold basis and utilizing what we believe is a conservative lot acquisition strategy, we focus on obtaining and maintaining a leading market position in each market we serve. This strategy allows us to gain valuable efficiencies and competitive advantages in our markets, which we believe contributes to minimizing the adverse effects of regional economic cycles and provides growth opportunities within these markets. Our continued success is contingent upon our ability to control an adequate supply of finished lots on which to build.

In limited specific strategic circumstances, we deviate from our historical lot acquisition strategy and engage in joint venture arrangements with land developers or directly acquire raw ground already zoned for its intended use for development. Once we acquire control of raw ground, we determine whether to sell the raw parcel to a developer and enter into a Lot Purchase Agreement with the developer to purchase the finished lots or to hire a developer to develop the land on our behalf. While joint venture arrangements and direct land development activity are not our preferred method of acquiring finished building lots, we may enter into additional transactions in the future on a limited basis where there exists a compelling strategic or prudent financial reason to do so. We expect, however, to continue to acquire substantially all of our finished lot inventory using Lot Purchase Agreements with forfeitable deposits.

As of December 31, 2019, we controlled lots as described below.

Lot Purchase Agreements

We controlled approximately 101,300 lots under Lot Purchase Agreements with third parties through deposits in cash and letters of credit totaling approximately \$439,500 and \$5,500, respectively. Included in the number of controlled lots are approximately 4,600 lots for which we have recorded a contract land deposit impairment reserve of approximately \$27,600 as of December 31, 2019.

Joint Venture Limited Liability Corporations ("JVs")

We had an aggregate investment totaling approximately \$26,700 in five JVs, expected to produce approximately 6,300 lots. Of the lots to be produced by the JVs, approximately 2,950 lots were controlled by us and approximately 3,350 lots were either under contract with unrelated parties or currently not under contract.

Land Under Development

We directly owned five separate raw land parcels, zoned for their intended use, with a current cost basis, including development costs, of approximately \$69,200 that we intend to develop into approximately 650 finished lots. We had additional funding

commitments of approximately \$6,100 under a joint development agreement related to one parcel, a portion of which we expect will be offset by development credits of approximately \$2,800.

See Notes 3, 4 and 5 to the consolidated financial statements included herein for additional information regarding Lot Purchase Agreements, JVs and land under development, respectively.

Raw Land Purchase Agreements

In addition to the lots we currently control as discussed above, we have certain properties under contract with land owners that are expected to yield approximately 7,000 lots. Some of these properties may require rezoning or other approvals to achieve the expected yield. These properties are controlled with cash deposits and letters of credit totaling approximately \$1,900 and \$100, respectively, as of December 31, 2019, of which approximately \$900 is refundable if we do not perform under the contract. We generally expect to assign the raw land contracts to a land developer and simultaneously enter into a Lot Purchase Agreement with the assignee if the project is determined to be feasible.

Current Business Environment and Key Financial Results

During 2019, general market conditions were favorably impacted by low unemployment and strong consumer confidence. Additionally, affordability issues which had slowed demand for new homes during the second half of 2018, were favorably impacted by a pull back in interest rates throughout 2019, which contributed to improved demand.

Our consolidated revenues for the year ended December 31, 2019 totaled \$7,388,664, an increase of 3% from \$7,163,674 in 2018. Our net income for 2019 was \$878,539, or \$221.13 per diluted share, increases of 10% and 14% compared to 2018 net income and diluted earnings per share, respectively. Our homebuilding gross profit margin percentage increased to 19.0% in 2019 from 18.7% in 2018. New orders, net of cancellations (“New Orders”) during 2019 were 19,536, an increase of 7% from 2018 while our average New Order sales price decreased 2% to \$368.4 in 2019. Our backlog of homes sold but not yet settled with the customer as of December 31, 2019 decreased on a unit basis by 2% to 8,233 units and decreased on a dollar basis by 1% to \$3,130,282 when compared to December 31, 2018.

We believe that the strength in demand for new homes is dependent upon sustained economic growth, driven by favorable unemployment levels and continued improvements in wage growth and household formation. Demand is also impacted by homebuyer affordability concerns, which are driven by both home prices and interest rate movements. We expect to continue to face gross profit margin pressure which will be impacted by modest pricing power and our ability to manage land and construction costs. We also expect to face pressure on mortgage banking profit due to the competitive pricing pressures in the mortgage market. We believe that we are well positioned to take advantage of opportunities that may arise from future economic and homebuilding market volatility due to the strength of our balance sheet.

Homebuilding Operations

The following table summarizes the results of our consolidated homebuilding operations and certain operating activity for each of the last three years:

	Year Ended December 31,		
	2019	2018	2017
<i>Financial data:</i>			
Revenues	\$ 7,220,844	\$ 7,004,304	\$ 6,175,521
Cost of sales	\$ 5,849,862	\$ 5,692,127	\$ 4,990,378
Gross profit margin percentage	19.0%	18.7%	19.2%
Selling, general and administrative expenses	\$ 447,547	\$ 428,874	\$ 392,272
<i>Operating data:</i>			
New orders (units)	19,536	18,281	17,608
Average new order price	\$ 368.4	\$ 376.3	\$ 383.2
Settlements (units)	19,668	18,447	15,961
Average settlement price	\$ 367.1	\$ 379.7	\$ 386.9
Backlog (units)	8,233	8,365	8,531
Average backlog price	\$ 380.2	\$ 376.9	\$ 384.2
New order cancellation rate	14.6%	14.5%	14.0%

Consolidated Homebuilding

Homebuilding revenues increased 3% in 2019 compared to 2018, as a result of a 7% increase in the number of units settled, offset by a 3% decrease in the average settlement price year over year. The increase in the number of units settled was primarily attributable to a higher backlog turnover rate year over year. The decrease in the average settlement price was attributable to a 2% lower average price of units in backlog entering 2019 compared to the same period in 2018 and to a shift in settlements to smaller, lower priced products and to lower priced markets in 2019. Gross profit margin percentage in 2019 increased slightly, to 19.0% from 18.7% in 2018.

The number of New Orders increased 7% while the average sales price of New Orders decreased 2% in 2019 when compared to 2018. The increase in New Orders was attributable primarily to an increase in New Orders in our Mid East and South East market segments, partially driven by an increase in the average number of active communities in each of these segments. Additionally, more favorable market conditions in 2019 led to a higher community absorption rate year over year. The decrease in the average sales price of New Orders was attributable to a shift to markets with lower average sales prices, as well as a continued shift to smaller, lower priced products.

Selling, general and administrative ("SG&A") expenses in 2019 increased by 4% compared to 2018, and as a percentage of revenue increased slightly to 6.2% in 2019 from 6.1% in 2018. SG&A expenses were higher primarily due to an approximate \$12,100 increase in personnel costs and an increase in equity-based compensation attributable to incurring a full year of expense for the equity awards granted in the second quarter of 2018.

Backlog units and dollars were 8,233 units and \$3,130,282, respectively, as of December 31, 2019 compared to 8,365 units and \$3,152,873, respectively, as of December 31, 2018. The 2% decrease in backlog units is attributable primarily to a higher backlog turnover rate year over year. The decrease in backlog dollars was primarily attributable to the decrease in backlog units.

Backlog may be impacted by customer cancellations for various reasons that are beyond our control, such as failure to obtain mortgage financing, inability to sell an existing home, job loss, or a variety of other reasons. In any period, a portion of the cancellations that we experience are related to New Orders that occurred during the same period, and a portion are related to New Orders that occurred in prior periods and therefore appeared in the beginning backlog for the current period. Expressed as the total of all cancellations during the period as a percentage of gross New Orders during the period, our cancellation rate was 14.6%, 14.5% and 14.0% in 2019, 2018, and 2017, respectively. Additionally, approximately 6% in 2019, 5% in 2018 and 6% in 2017, of a reporting quarter's opening backlog cancelled during the quarter. We can provide no assurance that our historical cancellation rates are indicative of the actual cancellation rate that may occur in future years. Other than those units that are cancelled, we expect to settle substantially all of our December 31, 2019 backlog during 2020. See "Risk Factors" in Item 1A of this Form 10-K.

The backlog turnover rate is impacted by various factors, including, but not limited to, changes in New Order activity, internal production capacity, external subcontractor capacity and other external factors over which we do not exercise control.

Reportable Homebuilding Segments

Homebuilding segment profit before tax includes all revenues and income generated from the sale of homes, less the cost of homes sold, SG&A expenses, and a corporate capital allocation charge determined by corporate management. The corporate capital allocation charge eliminates in consolidation and is based on the segment's average net assets employed. The corporate capital allocation charged to the operating segment allows the Chief Operating Decision Maker to determine whether the operating segment is providing the desired rate of return after covering our cost of capital.

We record charges on contract land deposits when we determine that it is probable that recovery of the deposit is impaired. For segment reporting purposes, impairments on contract land deposits are generally charged to the operating segment upon the termination of a Lot Purchase Agreement with the developer or the restructuring of a Lot Purchase Agreement resulting in the forfeiture of the deposit. We evaluate our entire net contract land deposit portfolio for impairment each quarter. For presentation purposes below, the contract land deposit reserve at December 31, 2019 and 2018 has been allocated to the reportable segments for the respective years to show contract land deposits on a net basis. The net contract land deposit balances below also include approximately \$5,500 and \$3,900 at December 31, 2019 and 2018, respectively, of letters of credit issued as deposits in lieu of cash.

The following tables summarize certain homebuilding operating activity by reportable segment for each of the last three years:

Selected Segment Financial Data:

	Year Ended December 31,		
	2019	2018	2017
Revenues:			
Mid Atlantic	\$ 3,901,573	\$ 3,893,358	\$ 3,543,687
North East	514,804	580,726	517,141
Mid East	1,501,139	1,455,834	1,250,165
South East	1,303,328	1,074,386	864,528

	Year Ended December 31,		
	2019	2018	2017
Gross profit margin:			
Mid Atlantic	\$ 734,017	\$ 726,655	\$ 663,650
North East	100,520	115,169	104,501
Mid East	285,091	279,050	244,832
South East	260,804	211,870	173,961

	Year Ended December 31,		
	2019	2018	2017
Gross profit margin percentage:			
Mid Atlantic	18.8%	18.7%	18.7%
North East	19.5%	19.8%	20.2%
Mid East	19.0%	19.2%	19.6%
South East	20.0%	19.7%	20.1%

	Year Ended December 31,		
	2019	2018	2017
Segment profit:			
Mid Atlantic	\$ 478,537	\$ 462,178	\$ 398,494
North East	51,728	69,789	60,218
Mid East	173,374	175,134	149,639
South East	155,144	118,296	95,826

Segment Operating Activity:

	Year Ended December 31,					
	2019		2018		2017	
	Units	Average Price	Units	Average Price	Units	Average Price
New orders, net of cancellations:						
Mid Atlantic	8,799	\$ 424.4	8,906	\$ 429.4	8,654	\$ 438.9
North East	1,349	\$ 390.8	1,296	\$ 400.4	1,362	\$ 409.7
Mid East	4,628	\$ 323.2	4,314	\$ 328.0	4,171	\$ 332.7
South East	4,760	\$ 302.6	3,765	\$ 297.7	3,421	\$ 293.5
Total	19,536	\$ 368.4	18,281	\$ 376.3	17,608	\$ 383.2

	Year Ended December 31,					
	2019		2018		2017	
	Units	Average Price	Units	Average Price	Units	Average Price
Settlements:						
Mid Atlantic	9,335	\$ 417.9	8,982	\$ 433.4	7,971	\$ 444.5
North East	1,325	\$ 388.5	1,415	\$ 410.4	1,288	\$ 401.5
Mid East	4,621	\$ 324.8	4,406	\$ 330.4	3,772	\$ 331.4
South East	4,387	\$ 297.1	3,644	\$ 294.8	2,930	\$ 295.1
Total	<u>19,668</u>	<u>\$ 367.1</u>	<u>18,447</u>	<u>\$ 379.7</u>	<u>15,961</u>	<u>\$ 386.9</u>

	Year Ended December 31,					
	2019		2018		2017	
	Units	Average Price	Units	Average Price	Units	Average Price
Backlog:						
Mid Atlantic	3,612	\$ 440.1	4,148	\$ 423.4	4,224	\$ 432.2
North East	587	\$ 408.8	563	\$ 404.1	682	\$ 424.3
Mid East	1,813	\$ 332.0	1,806	\$ 336.2	1,898	\$ 341.2
South East	2,221	\$ 314.6	1,848	\$ 304.1	1,727	\$ 298.4
Total	<u>8,233</u>	<u>\$ 380.2</u>	<u>8,365</u>	<u>\$ 376.9</u>	<u>8,531</u>	<u>\$ 384.2</u>

Operating Data:

	Year Ended December 31,		
	2019	2018	2017
New order cancellation rate:			
Mid Atlantic	15.0%	15.2%	15.2%
North East	13.0%	12.5%	13.3%
Mid East	14.1%	12.9%	11.5%
South East	14.9%	15.5%	14.3%

	Year Ended December 31,		
	2019	2018	2017
Average active communities:			
Mid Atlantic	206	234	238
North East	33	36	42
Mid East	134	119	121
South East	97	88	84
Total	<u>470</u>	<u>477</u>	<u>485</u>

Homebuilding Inventory:

	As of December 31,	
	2019	2018
Sold inventory:		
Mid Atlantic	\$ 575,216	\$ 622,997
North East	77,965	79,530
Mid East	190,700	195,149
South East	230,640	182,458
Total (1)	<u>\$ 1,074,521</u>	<u>\$ 1,080,134</u>

	As of December 31,	
	2019	2018
Unsold lots and housing units inventory:		
Mid Atlantic	\$ 104,459	\$ 74,689
North East	28,331	11,088
Mid East	15,333	9,045
South East	35,420	20,611
Total (1)	\$ 183,543	\$ 115,433

- (1) Total segment inventory differs from consolidated inventory due to certain consolidation adjustments necessary to convert the reportable segments' results, which are predominantly maintained on a cash basis, to a full accrual basis for external financial statement presentation purposes. These consolidation adjustments are not allocated to our operating segments.

Lots Controlled and Land Deposits:

	As of December 31,	
	2019	2018
Total lots controlled:		
Mid Atlantic	42,400	40,350
North East	9,900	8,950
Mid East	24,200	24,350
South East	28,400	26,050
Total	104,900	99,700

	As of December 31,	
	2019	2018
Contract land deposits, net:		
Mid Atlantic	\$ 205,433	\$ 199,917
North East	50,348	42,591
Mid East	57,053	52,899
South East	106,523	104,693
Total	\$ 419,357	\$ 400,100

	Year Ended December 31,		
	2019	2018	2017
Contract land deposit impairments (recoveries), net:			
Mid Atlantic	\$ (141)	\$ 2,743	\$ 2,945
North East	1,050	1,033	290
Mid East	175	211	11
South East	21	1,911	99
Total	\$ 1,105	\$ 5,898	\$ 3,345

Mid Atlantic

The Mid Atlantic segment had an approximate \$16,400, or 4%, increase in segment profit in 2019 compared to 2018, driven primarily by improved margins year over year and reduced marketing costs attributable to a 12% decrease in the average number of active communities year over year. Segment revenues were relatively flat year over year as the 4% increase in the number of units settled was offset by a 4% decrease in the average settlement price year over year. The increase in the number of units settled is attributable primarily to a higher backlog turnover rate year over year. The average settlement price in the current year was negatively impacted by a shift in settlements to lower priced products and lower priced markets within the segment. The Mid Atlantic segment's gross profit margin percentage was essentially flat, increasing to 18.8% in 2019 from 18.7% in 2018.

Segment New Orders and the average sales price of New Orders each decreased 1% in 2019 compared to 2018. The decrease in New Orders was due primarily to a 12% decrease in the average number of active communities year over year, offset by a higher community absorption rate year over year. The decrease in the average sales price of New Orders is attributable to a relative shift in New Orders to lower priced products and a shift to markets with lower average sales prices within the segment.

North East

The North East segment had an approximate \$18,100, or 26%, decrease in segment profit in 2019 compared to 2018, driven primarily by a decrease in segment revenues of approximately \$65,900, or 11%, year over year. The decrease in segment revenues was attributable to decreases in the number of units settled and the average settlement price of 6% and 5%, respectively, due primarily to a 17% lower backlog unit balance and a 5% lower average sales price of units in backlog entering 2019 compared to the backlog entering 2018. Additionally, the average settlement price was negatively impacted by a shift in settlements to lower priced products. The North East segment's gross profit margin percentage decreased to 19.5% in 2019 from 19.8% in 2018, due primarily to higher construction costs, offset partially by lower lot costs as a percentage of revenue.

Segment New Orders increased 4%, while the average sales price of New Orders decreased 2% in 2019 compared to 2018. New Orders increased primarily due to a 7% increase in the average number of active communities in the fourth quarter of 2019 compared to the same period in 2018, coupled with favorable market conditions which led to a higher segment absorption rate year over year. The average sales price of New Orders was negatively impacted primarily by a relative shift in New Orders to lower priced products.

Mid East

The Mid East segment had an approximate \$1,800, or 1%, decrease in segment profit in 2019 compared to 2018. Segment profit was lower despite an increase in segment revenues of approximately \$45,300, or 3%, year over year. Segment revenues increased due to a 5% increase in the number of units settled, offset partially by a 2% decrease in the average settlement price year over year. The increase in the number of units settled is attributable to a higher backlog turnover rate year over year. The average settlement price was negatively impacted by a shift in settlements to lower priced products and to lower priced markets within the segment. The segment's gross profit margin percentage decreased slightly, to 19.0% in 2019 from 19.2% in 2018.

Segment New Orders increased 7%, while the average sales price of New Orders decreased 2%, in 2019 compared to 2018. New Orders increased primarily due to a 12% increase in the average number of active communities in 2019 compared to 2018. The average sales price of New Orders was negatively impacted by a relative shift to lower priced products and a shift to markets with lower average sales prices within the segment.

South East

The South East segment had an approximate \$36,800, or 31%, increase in segment profit in 2019 compared to 2018. The increase in segment profit was driven primarily by an increase in segment revenues of approximately \$228,900, or 21%, year over year, due primarily to a 20% increase in the number of units settled. The increase in settlements was primarily attributable to a 7% higher backlog unit balance entering 2019 compared to the backlog unit balance entering 2018, coupled with a 19% increase in New Orders for the first six months of 2019 compared to the same period in 2018. The South East segment's gross profit margin percentage increased to 20.0% in 2019 from 19.7% in 2018 primarily due to lower lumber costs, offset partially by higher lot costs as a percentage of revenue year over year.

Segment New Orders and the average sales price of New Orders increased 26% and 2%, respectively, in 2019 compared to 2018. New Orders increased primarily due to an 11% increase in the average number of active communities and by favorable market conditions which led to a higher segment absorption rate year over year. The average sales price of New Orders was favorably impacted by a relative shift to markets within the segment with higher average sales prices.

Homebuilding Segment Reconciliations to Consolidated Homebuilding Operations

In addition to the corporate capital allocation and contract land deposit impairments discussed above, the other reconciling items between homebuilding segment profit and homebuilding consolidated profit before tax include unallocated corporate overhead (which includes all management incentive compensation), equity-based compensation expense, consolidation adjustments and external corporate interest expense. Our overhead functions, such as accounting, treasury and human resources, are centrally performed and the costs are not allocated to our operating segments. Consolidation adjustments consist of such items to convert the reportable segments' results, which are predominantly maintained on a cash basis, to a full accrual basis for external financial statement presentation purposes, and are not allocated to our operating segments. External corporate interest expense is primarily comprised of interest charges on our 3.95% Senior Notes due 2022 (the "Senior Notes"), and is not charged to the operating segments because the charges are included in the corporate capital allocation discussed above.

	Year Ended December 31,		
	2019	2018	2017
Homebuilding consolidated gross profit:			
Mid Atlantic	\$ 734,017	\$ 726,655	\$ 663,650
North East	100,520	115,169	104,501
Mid East	285,091	279,050	244,832
South East	260,804	211,870	173,961
Consolidation adjustments and other	(9,450)	(20,567)	(1,801)
Homebuilding consolidated gross profit	\$ 1,370,982	\$ 1,312,177	\$ 1,185,143

	Year Ended December 31,		
	2019	2018	2017
Homebuilding consolidated profit before taxes:			
Mid Atlantic	\$ 478,537	\$ 462,178	\$ 398,494
North East	51,728	69,789	60,218
Mid East	173,374	175,134	149,639
South East	155,144	118,296	95,826
Reconciling items:			
Equity-based compensation expense (1)	(75,156)	(70,865)	(41,144)
Corporate capital allocation (2)	224,468	213,903	198,384
Unallocated corporate overhead	(105,125)	(89,973)	(89,514)
Consolidation adjustments and other	45,130	16,612	27,450
Corporate interest expense	(24,221)	(23,968)	(22,983)
Reconciling items sub-total	65,096	45,709	72,193
Homebuilding consolidated profit before taxes	\$ 923,879	\$ 871,106	\$ 776,370

- (1) The increase in equity-based compensation expense for the year ended December 31, 2018 was primarily attributable to equity grants in the second quarter of 2018. See Note 12 in the accompanying consolidated financial statements for additional discussion of equity-based compensation.
- (2) This item represents the elimination of the corporate capital allocation charge included in the respective homebuilding reportable segments. The corporate capital allocation charge is based on the segment's monthly average asset balance and is as follows for the years presented:

	Year Ended December 31,		
	2019	2018	2017
Corporate capital allocation charge:			
Mid Atlantic	\$ 123,130	\$ 123,855	\$ 123,028
North East	19,755	17,893	16,115
Mid East	37,263	35,803	29,663
South East	44,320	36,352	29,578
Total corporate capital allocation charge	\$ 224,468	\$ 213,903	\$ 198,384

Mortgage Banking Segment

We conduct our mortgage banking activity through NVRM, a wholly owned subsidiary. NVRM focuses almost exclusively on serving the homebuilding segment customer base. The following table summarizes the results of our mortgage banking operations and certain statistical data for each of the last three years:

	Year Ended December 31,		
	2019	2018	2017
Loan closing volume:			
Total principal	\$ 5,164,725	\$ 4,829,406	\$ 4,229,507
Loan volume mix:			
Adjustable rate mortgages	8%	10%	9%
Fixed-rate mortgages	92%	90%	91%
Operating profit:			
Segment profit	\$ 105,292	\$ 93,462	\$ 73,959
Equity-based compensation expense	(3,376)	(4,836)	(3,418)
Mortgage banking income	\$ 101,916	\$ 88,626	\$ 70,541
Capture rate:	90%	88%	88%
Mortgage banking fees:			
Net gain on sale of loans	\$ 128,642	\$ 122,755	\$ 99,132
Title services	38,537	36,001	30,626
Servicing fees	641	614	561
	\$ 167,820	\$ 159,370	\$ 130,319

Loan closing volume in 2019 increased by approximately \$335,300, or 7%, from 2018. The increase was primarily attributable to a 10% increase in the number of loans closed year over year due primarily to the aforementioned increase in the homebuilding segment's number of settlements in 2019 as compared to 2018 and was partially offset by a 2% decrease in the average loan amount in 2019 as compared to 2018.

Segment profit in 2019 increased by approximately \$11,800, or 13%, from 2018. The increase in segment profit was primarily attributable to an increase in mortgage banking fees. Mortgage banking fees increased by approximately \$8,500, or 5%, resulting from the aforementioned increase in loan closing volume.

Mortgage Banking – Other

We sell all of the loans we originate into the secondary mortgage market. Insofar as we underwrite our originated loans to the standards and specifications of the ultimate investor, we have no further financial obligations from the issuance of loans, except in certain limited instances where repurchases or early payment default occur. Those underwriting standards are typically equal to or more stringent than the underwriting standards required by FNMA, GNMA, FHLMC, VA and FHA. Because we sell all of our loans and do not service them, there is often a substantial delay between the time that a loan goes into default and the time that the investor requests us to reimburse them for losses incurred because of the default. We believe that all of the loans that we originate are underwritten to the standards and specifications of the ultimate investor to whom we sell our originated loans. We employ a quality control department to ensure that our underwriting controls are effective, and further assess the underwriting function as part of our assessment of internal controls over financial reporting.

We maintain a reserve for losses on mortgage loans originated that reflects our judgment of the present loss exposure from the loans that we have originated and sold. At December 31, 2019, we had a repurchase reserve of approximately \$18,500.

NVRM is dependent on our homebuilding operation's customers for business. If new orders and selling prices of the homebuilding segment decline, NVRM's operations will also be adversely affected. In addition, NVRM's operating results may be adversely affected in future periods due to tightening and volatility of the credit markets, changes in investor funding times, increased regulation of mortgage lending practices and increased competition in the mortgage market.

Seasonality

We generally have higher New Order activity in the first half of the year and higher home settlements, revenues and net income in the second half of the year.

Effective Tax Rate

Our consolidated effective tax rate in 2019, 2018 and 2017 was 14.36%, 16.94% and 36.53%, respectively. The lower effective tax rate in 2019 compared to 2018 is attributable primarily to the retroactive reinstatement of certain expired energy tax credits under The Further Consolidated Appropriations Act, which resulted in the recognition of a tax benefit of approximately \$15,100 in 2019 related to homes settled in 2018 and 2019. The lower effective tax rate in 2018 compared to 2017 resulted primarily from the enactment of the Tax Cuts and Jobs Act (the "Act") in December 2017, which had the following impacts on comparability between periods:

- reduction in our federal statutory rate from 35% to 21% in 2018, and
- remeasurement of our net deferred tax assets in the fourth quarter of 2017, which resulted in a charge to income tax expense of \$62,702 in 2017.

Excluding the charge related to the net deferred tax asset remeasurement, our effective tax rate in 2017 would have been 29.13%.

Additionally, our effective tax rates in 2019, 2018 and 2017 were favorably impacted by the recognition of an income tax benefit related to excess tax benefits from stock option exercises of \$101,466, \$77,478 and \$58,681, respectively. We expect continued rate volatility in future years attributable to the recognition of excess tax benefits from equity plan activity and distributions from the deferred compensation plans.

The Act eliminated the "performance-based compensation" exception from Section 162(m). The Act included a grandfathering provision for compensation pursuant to a written binding contract which was in effect on November 2, 2017, and which was not modified in any material respect after such date. We believe that our outstanding equity grants and amounts in the deferred compensation plans as of December 31, 2017 are in compliance with the grandfathering provision of the Act, and thus, will remain deductible to the extent they are considered "performance-based compensation."

Recent Accounting Pronouncements Pending Adoption

See Note 1 to the accompanying consolidated financial statements for discussion of recently issued accounting pronouncements applicable to us.

Liquidity and Capital Resources

Lines of Credit and Notes Payable

Senior Notes

Our homebuilding segment funds its operations from cash flows provided by operating activities, a short-term unsecured working capital revolving credit facility and capital raised in the public debt and equity markets. On September 10, 2012, we completed an offering for \$600,000 aggregate principal amount of 3.95% Senior Notes due 2022 under a Shelf Registration Statement filed on September 5, 2012 with the SEC. The Senior Notes were issued at a discount to yield 3.97% and have been reflected net of the unamortized discount in the accompanying consolidated balance sheet. The Senior Notes mature on September 15, 2022 and bear interest at 3.95%, payable semi-annually in arrears on March 15 and September 15.

The Senior Notes are senior unsecured obligations and rank equally in right of payment with any of our existing and future unsecured senior indebtedness, will rank senior in right of payment to any of our future indebtedness that is by its terms expressly subordinated to the Senior Notes and will be effectively subordinated to any of our existing and future secured indebtedness to the extent of the value of the collateral securing such indebtedness. The indenture governing the Senior Notes does not contain any financial covenants; however, it does contain, among other items, and subject to certain exceptions, covenants that restrict our ability to create, incur, assume or guarantee secured debt, enter into sale and leaseback transactions and conditions related to mergers and/or the sale of assets. We were in compliance with all covenants under the Senior Notes at December 31, 2019.

Credit Agreement

On July 15, 2016, we entered into an unsecured Credit Agreement (the "Credit Agreement") with Bank of America, N.A., as Administrative Agent, Swing Line Lender and L/C Issuer, Merrill Lynch, Pierce, Fenner & Smith Incorporated as Sole Lead Arranger and Sole Book Runner, and the other lenders party thereto, which provides for aggregate revolving loan commitments of \$200,000 (the "Facility"). Proceeds of the borrowings under the Facility will be used for working capital and general corporate purposes. Under the Credit Agreement, we may request increases of up to \$300,000 to the Facility in the form of revolving loan commitments or term loans to the extent that new or existing lenders agree to provide additional revolving loan or term loan commitments.

The Credit Agreement provides for a \$100,000 sublimit for the issuance of letters of credit of which there was approximately \$9,700 outstanding at December 31, 2019, and a \$25,000 sublimit for a swing line commitment. Borrowings under the Credit Agreement generally bear interest for Base Rate Loans at a Base Rate equal to the highest of (i) a Federal Funds Rate plus one-half of one percent, (ii) Bank of America's publicly announced "prime rate," and (iii) the Eurodollar Rate plus one percent, plus the Applicable Rate which is based on our debt rating, or for Eurodollar Rate Loans, at the Eurodollar Rate equal to LIBOR plus the Applicable Rate.

The Credit Agreement contains various representations and affirmative and negative covenants that are generally customary for credit facilities of this type. Such covenants include, among others, the following financial maintenance covenants: (i) minimum consolidated tangible net worth, (ii) minimum interest coverage ratio or minimum liquidity and (iii) a maximum leverage ratio. The negative covenants include, among others, certain limitations on liens, investments and fundamental changes. The Credit Agreement termination date is July 15, 2021. We were in compliance with all covenants under the Credit Agreement at December 31, 2019. There were no borrowings outstanding under the Credit Agreement as of December 31, 2019.

Repurchase Agreement

Our mortgage banking subsidiary, NVRM, provides for its mortgage origination and other operating activities using cash generated from operations, borrowings from its parent company, NVR, as well as a revolving mortgage repurchase facility, which is non-recourse to NVR. On July 24, 2019, NVRM entered into the Eleventh Amendment (the "Amendment") to its Amended and Restated Master Repurchase Agreement dated August 2, 2011 with U.S. Bank National Association (as amended by the Amendment and ten earlier amendments, the "Repurchase Agreement"). The Repurchase Agreement provides borrowing capacity up to \$150,000, subject to certain sublimits. The purpose of the Repurchase Agreement is to finance the origination of mortgage loans by NVRM. The Repurchase Agreement expires on July 22, 2020. Advances under the Repurchase Agreement carry a Pricing Rate based on the LIBOR Rate plus the LIBOR Margin, as determined under the Repurchase Agreement, provided that the Pricing Rate shall not be less than 1.85%. There are several restrictions on purchased loans, including that they cannot be sold to others, they cannot be pledged to anyone other than the agent, and they cannot support any other borrowing or repurchase agreement.

The Repurchase Agreement contains various affirmative and negative covenants. The negative covenants include among others, certain limitations on transactions involving acquisitions, mergers, the incurrence of debt, sale of assets and creation of liens upon any of its Mortgage Notes. Additional covenants include (i) a tangible net worth requirement, (ii) a minimum liquidity requirement, (iii) a minimum net income requirement, and (iv) a maximum leverage ratio requirement. NVRM was in compliance with all covenants under the Repurchase Agreement at December 31, 2019. At December 31, 2019, there was no debt outstanding under the Repurchase Agreement and there were no borrowing base limitations.

Equity Repurchases

In addition to funding growth in our homebuilding and mortgage banking operations, we historically have used a substantial portion of our excess liquidity to repurchase outstanding shares of our common stock in open market and privately negotiated transactions. This ongoing repurchase activity is conducted pursuant to publicly announced Board authorizations, and is typically executed in accordance with the safe-harbor provisions of Rule 10b-18 promulgated under the Securities Exchange Act of 1934, as amended. In addition, the Board resolutions authorizing us to repurchase shares of our common stock specifically prohibit us from purchasing shares from our officers, directors, Profit Sharing Plan Trust or Employee Stock Ownership Plan Trust. The repurchase program assists us in accomplishing our primary objective, creating increases in shareholder value. See "Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities" in Item 5 of this Form 10-K for disclosure of amounts repurchased during the fourth quarter of 2019. For the year ended December 31, 2019, we repurchased 220,965 shares of our common stock at an aggregate purchase price of \$698,417. As of December 31, 2019, we had \$317,141 available under Board approved repurchase authorizations.

Cash Flows

For the year ended December 31, 2019, cash, restricted cash and cash equivalents increased by \$428,556. Net cash provided by operating activities was \$866,535, due primarily to cash provided by earnings in 2019 and net proceeds of \$91,178 from mortgage loan activity. Cash was primarily used to fund the increase in inventory of \$94,178, attributable to an increase in units under construction at December 31, 2019 compared to December 31, 2018. Net cash used in investing activities in 2019 of \$13,284 was attributable primarily to cash used for purchases of property, plant and equipment of \$22,699, offset partially by the receipt of capital distributions from our unconsolidated JVs totaling \$8,247. Net cash used in financing activities of \$424,695, resulted primarily from our repurchase of 220,965 shares of our common stock for an aggregate purchase price of \$698,417 under our ongoing common stock repurchase program as discussed above, offset partially by \$274,028 in proceeds from stock option exercises.

For the year ended December 31, 2018, cash and cash equivalents increased by \$42,691. Net cash provided by operating activities was \$723,126, due primarily to cash provided by earnings and net proceeds of \$17,384 from mortgage loan activity. Cash was primarily used to fund the increase in contract land deposits of \$30,863 and the decrease in accounts payable and accrued expenses of \$30,713. Net cash used in investing activities in 2018 of \$8,177 was attributable primarily to cash used for purchases of property, plant and equipment of \$19,665, offset partially by the receipt of capital distributions from our unconsolidated JVs totaling

\$10,515. Net cash used in financing activities of \$672,258, resulted primarily from our repurchase of 300,815 shares of our common stock for an aggregate purchase price of \$846,134, offset partially by \$174,110 in proceeds from stock option exercises.

At December 31, 2019 and 2018, the homebuilding segment had restricted cash of \$17,943 and \$16,982, respectively. Restricted cash in each year was attributable to customer deposits for certain home sales.

We believe that our current cash holdings, cash generated from operations, and cash available under our short-term unsecured credit agreement, revolving mortgage repurchase facility and the public debt and equity markets will be sufficient to satisfy near and long term cash requirements for working capital and debt service in both our homebuilding and mortgage banking operations.

Off-Balance Sheet Arrangements

Lot Acquisition Strategy

We generally do not engage in land development. Instead, we typically acquire finished building lots at market prices from various land developers under Lot Purchase Agreements that require deposits that may be forfeited if we fail to perform under the agreement. The deposits required under the Lot Purchase Agreements are in the form of cash or letters of credit in varying amounts and represent a percentage, typically ranging up to 10%, of the aggregate purchase price of the finished lots.

We believe that our lot acquisition strategy reduces the financial requirements and risks associated with direct land ownership and land development. We may, at our option, choose for any reason and at any time not to perform under these Lot Purchase Agreements by delivering notice of our intent not to acquire the finished lots under contract. Our sole legal obligation and economic loss for failure to perform under these purchase agreements is limited to the amount of the deposit pursuant to the liquidated damage provision contained in the Lot Purchase Agreements. We do not have any financial guarantees or completion obligations and we typically do not guarantee lot purchases on a specific performance basis under these Lot Purchase Agreements.

At December 31, 2019, we controlled approximately 104,900 lots through Lot Purchase Agreements, JVs and land under development, with an aggregate purchase price of approximately \$10,000,000. These lots are controlled by making or committing to make deposits of approximately \$656,500 in the form of cash and letters of credit. Our entire risk of loss pertaining to the aggregate purchase price contractual commitment resulting from our non-performance under the contracts is limited to \$439,500 in deposits paid and \$5,500 in letters of credit issued as of December 31, 2019, plus approximately \$211,500 related to deposits to be paid subsequent to December 31, 2019 assuming that contractual development milestones are met by the developers and we exercise our option. As of December 31, 2019, we had recorded an impairment valuation allowance of approximately \$27,600 related to certain cash deposits currently outstanding. Additionally, as of December 31, 2019, we had funding commitments totaling \$4,300 to two of our JVs and approximately \$6,100 under a joint development agreement related to our land under development, a portion of which we expect will be offset by development credits of approximately \$2,800.

In addition, we have certain properties under contract with land owners that are expected to yield approximately 7,000 lots, which are not included in our number of total lots controlled above. Some of these properties may require rezoning or other approvals to achieve the expected yield. These properties are controlled with cash deposits and letters of credit of approximately \$1,900 and \$100, respectively, as of December 31, 2019, of which approximately \$900 is refundable if we do not perform under the contract and the remainder is at risk of loss. We generally expect to assign the raw land contracts to a land developer and simultaneously enter into a Lot Purchase Agreement with the assignee if the project is determined to be feasible. Please refer to Note 1 in the accompanying consolidated financial statements for a further discussion of the contract land deposits and Note 3 in the accompanying consolidated financial statements for a description of our lot acquisition strategy in relation to our accounting for variable interest entities.

Bonds and Letters of Credit

We enter into bond or letter of credit arrangements with local municipalities, government agencies, or land developers to collateralize our obligations under various contracts. We had approximately \$40,600 of contingent obligations under such agreements as of December 31, 2019, inclusive of the \$5,500 of lot acquisition deposits in the form of letters of credit discussed above. We believe we will fulfill our obligations under the related contracts and do not anticipate any material losses under these bonds or letters of credit.

Mortgage Commitments and Forward Sales

In the normal course of business, NVRM enters into contractual commitments to extend credit to our homebuyers with fixed expiration dates. The commitments become effective when the borrowers "lock-in" a specified interest rate within time frames established by us. All mortgagors are evaluated for credit worthiness prior to the extension of the commitment. Market risk arises if interest rates move adversely between the time of the "lock-in" of rates by the borrower and the sale date of the loan to a broker/dealer. To mitigate the effect of the interest rate risk inherent in providing rate lock commitments to borrowers, we enter into optional or mandatory delivery forward sale contracts to sell whole loans and mortgage-backed securities to broker/dealers. The forward sale contracts lock in an interest rate and price for the sale of loans similar to the specific rate lock commitments. We do not engage in speculative or trading derivative activities. Both the rate lock commitments to borrowers and the forward sale contracts to broker/dealers are undesignated derivatives, and, accordingly, are marked to fair value through earnings. At December 31, 2019, we had

contractual commitments to extend credit to borrowers aggregating \$581,065 and open forward delivery contracts aggregating \$986,041, which hedge both the rate lock commitments and closed loans held for sale (see Note 15 in the accompanying consolidated financial statements for a description of our fair value accounting).

Contractual Obligations

Our fixed, non-cancelable obligations as of December 31, 2019, were as follows:

	Payments due by year				
	Total	2020	2021 to 2022	2023 to 2024	2025 and Later
Debt (1)	\$ 600,000	\$ —	\$ 600,000	\$ —	\$ —
Interest on debt (1)	64,122	23,700	40,422	—	—
Finance leases (2)	7,919	996	1,993	1,994	2,936
Operating leases (2)	99,184	30,670	37,505	21,098	9,911
Purchase obligations (3)	217,649	*	*	*	*
Uncertain tax positions (4)	31,090	*	*	*	*
Total	\$ 1,019,964	\$ 55,366	\$ 679,920	\$ 23,092	\$ 12,847

- (1) See Note 9 in the accompanying consolidated financial statements for additional information regarding the Senior Notes.
- (2) See Note 13 in the accompanying consolidated financial statements for additional information regarding our finance and operating leases.
- (3) Amount represents expected payments of forfeitable deposits with land developers under existing Lot Purchase Agreements assuming that contractual development milestones are met by the developers and we exercise our option, and estimated contractual obligations for land development agreements. We expect to make the majority of payments of the deposits with land developers within the next three years, but due to the nature of the contractual development milestones that must be met we are unable to accurately estimate the portion of the deposit obligation that will be made within one year and that portion that will be made within one to three years.
- (4) Due to the nature of the uncertain tax positions, we are unable to make a reasonable estimate as to the period of settlement with the respective taxing authorities.

Critical Accounting Policies

General

The preparation of financial statements in conformity with GAAP requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting periods. We continually evaluate the estimates we use to prepare the consolidated financial statements and update those estimates as necessary. In general, our estimates are based on historical experience, on information from third party professionals, and other various assumptions that are believed to be reasonable under the facts and circumstances. Actual results could differ materially from those estimates made by management.

Homebuilding Inventory

The carrying value of inventory is stated at the lower of cost or market value. Cost of lots and completed and uncompleted housing units represent the accumulated actual cost of the units. Field construction supervisors' salaries and related direct overhead expenses are included in inventory costs. Interest costs are not capitalized into inventory, with the exception of land under development and joint venture investments, as applicable (see below). Upon settlement, the cost of the unit is expensed on a specific identification basis. Cost of building materials is determined on a first-in, first-out basis.

Sold inventory is evaluated for impairment based on the contractual selling price compared to the total estimated cost to construct. Unsold inventory is evaluated for impairment by analyzing recent comparable sale prices within the applicable community compared to the costs incurred to date plus the expected costs to complete. Any calculated impairments are recorded immediately in cost of sales.

Contract Land Deposits and Land Under Development

Contract Land Deposits

We purchase finished lots under Lot Purchase Agreements that require deposits that may be forfeited if we fail to perform under the contract. The deposits are in the form of cash or letters of credit in varying amounts and represent a percentage of the aggregate purchase price of the finished lots.

We maintain an allowance for losses on contract land deposits that reflects our judgment of the present loss exposure in the existing contract land deposit portfolio at the end of the reporting period. To analyze contract land deposit impairments, we conduct a

loss contingency analysis each quarter. In addition to considering market and economic conditions, we assess contract land deposit impairments on a community-by-community basis pursuant to the purchase contract terms, analyzing, as applicable, current sales absorption levels, recent sales' direct profit, the dollar differential between the contractual purchase price and the current market price for lots, a developer's performance, a developer's financial ability or willingness to reduce lot prices to current market prices, if necessary, and the contract's default status by either us or the developer along with an analysis of the expected outcome of any such default.

Our analysis is focused on whether we can sell houses at an acceptable margin and sales pace in a particular community in the current market with which we are faced. Because we do not own the finished lots on which we had placed a contract land deposit, if the above analysis leads to a determination that we cannot sell homes at an acceptable margin and sales pace at the current contractual lot price, we then determine whether we will elect to default under the contract, forfeit our deposit and terminate the contract, or whether we will attempt to restructure the lot purchase contract, which may require us to forfeit the deposit to obtain contract concessions from a developer. We also assess whether an impairment is present due to collectability issues resulting from a developer's non-performance because of financial or other conditions.

Although we consider the allowance for losses on contract land deposits reflected on the December 31, 2019 consolidated balance sheet to be adequate (see Note 1 to the accompanying consolidated financial statements included herein), there can be no assurance that this allowance will prove to be adequate over time to cover losses due to unanticipated adverse changes in the economy or other events adversely affecting specific markets or the homebuilding industry.

Land Under Development

On a limited basis, we directly acquire raw parcels of land already zoned for its intended use to develop into finished lots. Land under development includes the land acquisition costs, direct improvement costs, capitalized interest, where applicable, and real estate taxes.

Land under development, including the land under development held by our unconsolidated JVs and the related joint venture investments, is reviewed for potential write-downs when impairment indicators are present. In addition to considering market and economic conditions, we assess land under development impairments on a community-by-community basis, analyzing, as applicable, current sales absorption levels, recent sales' direct profit, and the dollar differential between the projected fully-developed cost of the lots and the current market price for lots. If indicators of impairment are present for a community, we perform an analysis to determine if the undiscounted cash flows estimated to be generated by those assets are less than their carrying amounts, and if so, impairment charges are required to be recorded in an amount by which the carrying amount of the assets exceeds the fair value of such assets. Our determination of fair value is primarily based on discounting the estimated future cash flows at a rate commensurate with the inherent risks associated with the assets and related estimated cash flow streams.

At December 31, 2019, we had approximately \$69,200 in land under development in five separate communities. In addition, at December 31, 2019, we had an aggregate investment totaling approximately \$26,700 in five separate JVs that controlled land under development. None of the communities classified as land under development nor any of the undeveloped land held by the JVs had any indicators of impairment at December 31, 2019. As such, we do not believe that any of the land under development is impaired at this time. However, there can be no assurance that we will not incur impairment charges in the future due to unanticipated adverse changes in the economy or other events adversely affecting specific markets or the homebuilding industry.

Warranty/Product Liability Accruals

We establish warranty and product liability reserves to provide for estimated future expenses as a result of construction and product defects, product recalls and litigation incidental to our homebuilding business. Liability estimates are determined based on our judgment considering such factors as historical experience, the likely current cost of corrective action, manufacturers' and subcontractors' participation in sharing the cost of corrective action, consultations with third party experts such as engineers, and discussions with our General Counsel and outside counsel retained to handle specific product liability cases. Although we consider the warranty and product liability accrual reflected on the December 31, 2019 consolidated balance sheet to be adequate (see Note 14 to the accompanying consolidated financial statements included herein), there can be no assurance that this accrual will prove to be adequate over time to cover losses due to increased costs for material and labor, the inability or refusal of manufacturers or subcontractors to financially participate in corrective action, unanticipated adverse legal settlements, or other unanticipated changes to the assumptions used to estimate the warranty and product liability accrual.

Equity-Based Compensation Expense

We recognize equity-based compensation expense within our income statement for all share-based payment arrangements, which include non-qualified stock options to purchase shares of NVR common stock ("Options") and restricted share units ("RSUs"). Compensation expense is based on the grant-date fair value of the Options and RSUs granted, and is recognized on a straight-line basis over the requisite service period for the entire award (from the date of grant through the period of the last separately vesting portion of the grant). Options and RSUs which are subject to a performance condition are treated as a separate award from the "service-only" Options and RSUs, and compensation expense is recognized when it becomes probable that the stated performance target will be achieved. We calculate the fair value of our Options, which are non-publicly traded, using the Black-Scholes option-

pricing model. The grant date fair value of the RSUs is the closing price of our common stock on the day immediately preceding the date of grant. The reversal of compensation expense previously recognized for grants forfeited is recorded in the period in which the forfeiture occurs.

As noted above, we calculate the fair value of our Options, which are non-publicly traded, using the Black-Scholes option-pricing model. While the Black-Scholes model is a widely accepted method to calculate the fair value of options, its results are dependent on input variables, two of which, expected term and expected volatility, are significantly dependent on management's judgment. We have concluded that our historical exercise experience is the best estimate of future exercise patterns to determine an Option's expected term. To estimate expected volatility, we analyze the historical volatility of our common stock over a period equal to the Option's expected term. Changes in management's judgment of the expected term and the expected volatility could have a material effect on the grant-date fair value calculated and expensed within the income statement.

In addition, when recognizing equity-based compensation cost related to "performance condition" Option and RSU grants, we are required to make a determination as to whether the performance conditions will be met prior to the completion of the actual performance period. The performance metric is based on our return on capital performance during a specified three year period based on the date of Option grant. While we currently believe that this performance condition will be satisfied at the target level and are recognizing compensation expense related to such Options and RSUs accordingly, our future expected activity levels could cause us to make a different determination, resulting in a change to the compensation expense to be recognized related to performance condition Option and RSU grants that would otherwise have been recognized to date.

Although we believe that the compensation costs recognized in 2019 are representative of the cumulative ratable amortization of the grant-date fair value of unvested Options and RSUs outstanding, changes to the estimated input values such as expected term and expected volatility and changes to the determination of whether performance condition grants will vest, could produce widely different expense valuations and recognition.

Mortgage Repurchase Reserve

We originate several different loan products to our customers to finance the purchase of their home. We sell all of the loans we originate into the secondary mortgage market, on a servicing released basis, typically within 30 days from closing. All of the loans that we originate are underwritten to the standards and specifications of the ultimate investor. Those underwriting standards are typically equal to or more stringent than the underwriting standards required by FNMA, GNMA, FHLMC, VA and FHA. Insofar as we underwrite our originated loans to those standards, we bear no increased concentration of credit risk from the issuance of loans, except in certain limited instances where repurchases or early payment default occur. We employ a quality control department to ensure that our underwriting controls are effectively operating, and further assess the underwriting function as part of our assessment of internal controls over financial reporting. We maintain a reserve for losses on mortgage loans originated that reflects our judgment of the present loss exposure in the loans that we have originated and sold. The reserve is calculated based on an analysis of historical experience and exposure. Although we consider the mortgage repurchase reserve reflected on the December 31, 2019 consolidated balance sheet to be adequate (see Note 16 to the accompanying consolidated financial statements included herein), there can be no assurance that this reserve will prove to be adequate over time to cover losses due to unanticipated changes to the assumptions used to estimate the mortgage repurchase reserve.

Impact of Inflation, Changing Prices and Economic Conditions

See "Risk Factors" included in Item 1A of this Form 10-K for a description of the impact of inflation, changing prices and economic conditions on our business and our financial results. See also the discussion of the current business environment in the *Overview* section above.

Item 7A. Quantitative and Qualitative Disclosure About Market Risk.

(dollars in thousands)

Market risk is the risk of loss arising from adverse changes in market prices and interest rates. Our market risk arises from interest rate risk inherent in our financial instruments and debt obligations. Interest rate risk results from the possibility that changes in interest rates will cause unfavorable changes in net income or in the value of interest rate-sensitive assets, liabilities and commitments. Lower interest rates tend to increase demand for mortgage loans for home purchasers, while higher interest rates make it more difficult for potential borrowers to purchase residential properties and to qualify for mortgage loans. We have no market rate sensitive instruments held for speculative or trading purposes.

Our homebuilding segment is exposed to interest rate risk as it relates to its debt obligations. In September 2012, we issued \$600,000 of Senior Notes. The Senior Notes mature on September 15, 2022 and bear interest at 3.95%, payable semi-annually in arrears on March 15 and September 15. Changes to interest rates generally affect the fair value of fixed-rate debt instruments, but not earnings or cash flows. We generally have no obligation to prepay the Senior Notes prior to maturity, and therefore, interest rate fluctuations should not have a significant impact on our fixed-rate debt.

In July 2016, we entered into a Credit Agreement which provides for aggregate revolving loan commitments of \$200,000. Under the Credit Agreement, we may request increases of up to \$300,000 to the Facility in the form of revolving loan commitments or term loans to the extent that new or existing lenders agree to provide additional revolving loan or term loan commitments. The Credit Agreement provides for a \$100,000 sublimit for the issuance of letters of credit of which there was approximately \$9,700 outstanding at December 31, 2019, and a \$25,000 sublimit for a swing line commitment. Borrowings under the Credit Agreement generally bear interest for Base Rate Loans at a Base Rate equal to the highest of (i) a Federal Funds Rate plus one-half of one percent, (ii) Bank of America’s publicly announced “prime rate,” and (iii) the Eurodollar Rate plus one percent, plus the Applicable Rate which is based on our debt rating, or for Eurodollar Rate Loans, at the Eurodollar Rate equal to LIBOR plus the Applicable Rate. At December 31, 2019, there was no debt outstanding under the Facility.

Our mortgage banking segment is exposed to interest rate risk as it relates to its lending activities. The mortgage banking segment originates mortgage loans, which are sold through either optional or mandatory forward delivery contracts into the secondary markets. All of the mortgage banking segment’s loan portfolio is held for sale and subject to forward sale commitments. NVRM also sells all of its mortgages held for sale on a servicing released basis.

NVRM has available a mortgage Repurchase Agreement, which as of December 31, 2019 provided for loan repurchases up to \$150,000. The Repurchase Agreement is used to fund NVRM’s mortgage origination activities. Advances under the Repurchase Agreement carry a Pricing Rate based on the LIBOR Rate plus the LIBOR Margin, as determined under the Repurchase Agreement, provided that the Pricing Rate shall not be less than 1.85%. At December 31, 2019, there was no debt outstanding under the Repurchase Agreement.

The following table represents the contractual balances of our on-balance sheet financial instruments at the expected maturity dates, as well as the fair values of those on-balance sheet financial instruments at December 31, 2019. The expected maturity categories take into consideration the actual and anticipated amortization of principal and do not take into consideration the reinvestment of cash or the refinancing of existing indebtedness. Because we sell all of the mortgage loans we originate into the secondary markets, we have made the assumption that the portfolio of mortgage loans held for sale will mature in the first year.

	Maturities (000's)						Total	Fair Value
	2020	2021	2022	2023	2024	Thereafter		
Mortgage banking segment								
<i>Interest rate sensitive assets:</i>								
Mortgage loans held for sale	\$ 485,106	—	—	—	—	—	\$ 485,106	\$ 492,125
Average interest rate	3.8%	—	—	—	—	—	3.8%	
<i>Other:</i>								
Forward trades of mortgage-backed securities (a)	\$ (543)	—	—	—	—	—	\$ (543)	\$ (543)
Forward loan commitments (a)	\$ 7,635	—	—	—	—	—	\$ 7,635	\$ 7,635
Homebuilding segment								
<i>Interest rate sensitive assets:</i>								
Interest-bearing deposits	\$ 1,043,205	—	—	—	—	—	\$ 1,043,205	\$ 1,043,205
Average interest rate	1.8%	—	—	—	—	—	1.8%	
<i>Interest rate sensitive liabilities:</i>								
Fixed rate obligations	\$ —	—	\$ 600,000	—	—	—	\$ 600,000	\$ 626,520
Average interest rate	—	—	4.0%	—	—	—	4.0%	

(a) Represents the fair value recorded pursuant to ASC 815, *Derivatives and Hedging*.

Item 8. Financial Statements and Supplementary Data.

The financial statements listed in Item 15 are filed as part of this report and are incorporated herein by reference.

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

None.

Item 9A. Controls and Procedures.**Evaluation of Disclosure Controls and Procedures**

As of the end of the period covered by this report, an evaluation was performed under the supervision and with the participation of our management, including the principal executive officer and principal financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (“Exchange Act”).

Based on that evaluation, the principal executive officer and principal financial officer concluded that the design and operation of these disclosure controls and procedures as of December 31, 2019 were effective to provide reasonable assurance that information required to be disclosed in our reports under the Exchange Act, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission’s rules and forms and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure.

Management’s Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) under the Exchange Act. Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under the framework in *Internal Control – Integrated Framework (2013)*, our management concluded that our internal control over financial reporting was effective as of December 31, 2019. There have been no changes in our internal control over financial reporting identified in connection with the evaluation referred to above that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Our internal control over financial reporting as of December 31, 2019 has been audited by KPMG LLP, an independent registered public accounting firm, as stated in their attestation report which is included herein.

Item 9B. Other Information.

None.

PART III**Item 10. Directors, Executive Officers, and Corporate Governance.****Executive Officers of the Registrant**

<u>Name</u>	<u>Age</u>	<u>Positions</u>
Paul C. Saville	64	President and Chief Executive Officer of NVR
Daniel D. Malzahn	50	Senior Vice President, Chief Financial Officer and Treasurer of NVR
Jeffrey D. Martchek	54	President of Homebuilding Operations of NVR
Paul W. Praylo	48	Senior Vice President and Chief Operating Officer of NVR
Eugene J. Bredow	50	President of NVRM

Paul C. Saville was named President and Chief Executive Officer of NVR effective July 1, 2005. Mr. Saville has been employed by NVR since 1981.

Daniel D. Malzahn was named Senior Vice President in February 2016, and continues to serve as Chief Financial Officer and Treasurer of NVR, roles he has occupied since February 20, 2013. From February 1, 2004 through February 20, 2013, Mr. Malzahn was Vice President of Planning and Investor Relations of NVR. Mr. Malzahn has been employed by NVR since 1994.

Jeffrey D. Martchek was named President of Homebuilding Operations of NVR effective January 1, 2016. From February 2011 through January 1, 2016, Mr. Martchek was Area President for the Maryland and Virginia homebuilding operations. Mr. Martchek has been employed by NVR since 1988. In January 2020, Mr. Martchek provided notice of his intention to retire from NVR. Mr. Martchek's retirement will be effective upon the orderly transition of his duties.

Paul W. Praylo was hired as Senior Vice President and Chief Operating Officer effective January 28, 2019. Prior to joining NVR, Mr. Praylo was employed by AECOM as Chief Operating Officer of the Construction Services Group from January 2017 to January 2019 and Chief Financial Officer of the Construction Services Group from July 2010 to December 2016.

Eugene J. Bredow was named President of NVRM effective April 1, 2019. Mr. Bredow served as Senior Vice President and Chief Administrative Officer from March 1, 2018 through March 31, 2019. Mr. Bredow served as Vice President and Controller from June 1, 2012 and Chief Accounting Officer from February 2016 until March 1, 2018. Mr. Bredow has been employed by NVR since 2004.

The other information required by Item 10 is incorporated herein by reference to our Proxy Statement expected to be filed with the Securities and Exchange Commission on or prior to April 30, 2020.

Item 11. Executive Compensation.

Item 11 is incorporated herein by reference to our Proxy Statement expected to be filed with the Securities and Exchange Commission on or prior to April 30, 2020.

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

Item 12 is incorporated herein by reference to our Proxy Statement expected to be filed with the Securities and Exchange Commission on or prior to April 30, 2020.

Equity Compensation Plan Information

The table below sets forth information as of December 31, 2019 for (i) all equity compensation plans approved by our shareholders and (ii) all equity compensation plans not approved by our shareholders:

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in the first column)
Equity compensation plans approved by security holders (1)	753,796	\$ 2,007.52	287,291
Equity compensation plans not approved by security holders	10,504	\$ 703.00	—
Total	764,300	\$ 1,989.60	287,291

- (1) This category includes the restricted share units ("RSUs") authorized to be issued under the 2010 Equity Incentive Plan, which was approved by our shareholders at our May 4, 2010 Annual Meeting. At December 31, 2019, there were 15,368 RSUs outstanding. Of the total 287,291 shares remaining available for future issuance under the shareholder approved plans, up to a total of 40,200 may be issued as RSUs. The weighted-average exercise price of outstanding options under security holder approved plans was \$2,049.30.

Equity compensation plans approved by our shareholders include: the 2010 Equity Incentive Plan, the 2014 Equity Incentive Plan, and the 2018 Equity Incentive Plan. The only equity compensation plan that was not approved by our shareholders is the 2000 Broadly-Based Stock Option Plan. See Note 12 in the accompanying consolidated financial statements for a description of each of our equity compensation plans.

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

Item 13 is incorporated herein by reference to our Proxy Statement expected to be filed with the Securities and Exchange Commission on or prior to April 30, 2020.

Item 14. Principal Accountant Fees and Services.

Item 14 is incorporated herein by reference to our Proxy Statement expected to be filed with the Securities and Exchange Commission on or prior to April 30, 2020.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

The following documents are filed as part of this report:

1. Financial Statements

NVR, Inc. - Consolidated Financial Statements
 Reports of Independent Registered Public Accounting Firm
 Consolidated Balance Sheets
 Consolidated Statements of Income
 Consolidated Statements of Shareholders' Equity
 Consolidated Statements of Cash Flows
 Notes to Consolidated Financial Statements

2. Exhibits

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	File Number	Exhibit Number	Filing Date
3.1	Restated Articles of Incorporation of NVR, Inc.	10-K		3.1	2/25/2011
3.2	Bylaws, as amended, of NVR, Inc.	8-K		3.1	3/17/2016
4.1	Indenture dated as of April 14, 1998 between NVR, Inc., as issuer and the Bank of New York as trustee.	8-K		4.3	4/23/1998
4.2	Form of Note (included in Indenture).	8-K		4.5	4/23/1998
4.3	Fifth Supplemental Indenture dated September 10, 2012 among NVR, Inc. and U.S. Bank Trust National Association.	8-K		4.1	9/10/2012
4.4	Form of Global Note.	8-K		4.2	9/10/2012
4.5	Description of Securities of NVR, Inc. Filed herewith.				
10.1*	Amended and Restated Employment Agreement between NVR, Inc. and Paul C. Saville dated November 4, 2015.	10-Q		10.1	11/6/2015
10.2*	Amended and Restated Employment Agreement between NVR, Inc. and Daniel D. Malzahn dated November 4, 2015.	10-Q		10.2	11/6/2015
10.4*	Amended and Restated Employment Agreement between NVR, Inc. and Eugene J. Bredow dated November 4, 2015.	10-Q		10.4	11/6/2015
10.5*	Employment Agreement between NVR, Inc. and Jeffrey D. Martchek dated January 1, 2016.	10-K		10.5	2/17/2016
10.6*	Amendment No. 1 to Employment Agreement between NVR, Inc. and Jeffrey D. Martchek dated April 18, 2017.	8-K		10.1	4/18/2017
10.7*	Amendment No. 1 to Employment Agreement between NVR, Inc. and Eugene J. Bredow dated March 1, 2018.	10-Q		10.1	5/1/2018
10.8*	Amendment No. 2 to Employment Agreement between NVR, Inc. and Jeffrey D. Martchek dated April 1, 2019.	10-Q		10.1	5/1/2019
10.9*	Amendment No. 2 to Employment Agreement between NVR, Inc. and Eugene J. Bredow dated April 1, 2019.	10-Q		10.2	5/1/2019
10.10*	Employment Agreement between NVR, Inc. and Paul W. Praylo dated January 28, 2019.	10-K		10.8	2/13/2019
10.11*	Profit Sharing Plan of NVR, Inc. and Affiliated Companies.	S-8	333-29241	4.1	6/13/1997
10.12*	Employee Stock Ownership Plan of NVR, Inc.	10-K/A			12/31/1994

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	File Number	Exhibit Number	Filing Date
10.13*	NVR, Inc. 2000 Broadly-Based Stock Option Plan.	S-8	333-56732	99.1	3/8/2001
10.14*	Amended and Restated NVR, Inc. Nonqualified Deferred Compensation Plan.	10-Q		10.5	11/6/2015
10.15*	First Amendment to NVR, Inc. Nonqualified Deferred Compensation Plan.	10-K		10.36	2/15/2017
10.16*	Description of the Board of Directors' compensation arrangement.	10-K		10.15	2/13/2019
10.17*	NVR, Inc. 2018 Equity Incentive Plan	S-8	333-224629	10.1	5/3/2018
10.18*	The Form of Non-Qualified Stock Option Agreement (Management time-based grants) under the NVR, Inc. 2018 Equity Incentive Plan.	8-K		10.1	5/14/2018
10.19*	The Form of Non-Qualified Stock Option Agreement (Director time-based grants) under the NVR, Inc. 2018 Equity Incentive Plan.	8-K		10.2	5/14/2018
10.20*	The Form of Non-Qualified Stock Option Agreement (Management performance-based grants) under the NVR, Inc. 2018 Equity Incentive Plan.	8-K		10.3	5/14/2018
10.21*	The Form of Non-Qualified Stock Option Agreement (Director performance-based grants) under the NVR, Inc. 2018 Equity Incentive Plan.	8-K		10.4	5/14/2018
10.22*	The Form of Restricted Share Units Agreement (Management grants) under the NVR, Inc. 2018 Equity Incentive Plan.	8-K		10.5	5/14/2018
10.23*	The Form of Restricted Share Units Agreement (Director grants) under the NVR, Inc. 2018 Equity Incentive Plan.	8-K		10.6	5/14/2018
10.24*	NVR, Inc. 2014 Equity Incentive Plan.	S-8	333-195756	10.1	5/7/2014
10.25*	The Form of Non-Qualified Stock Option Agreement (Management time-based grants) under the NVR, Inc. 2014 Equity Incentive Plan.	10-K		10.2	2/14/2018
10.26*	The Form of Non-Qualified Stock Option Agreement (Director time-based grants) under the NVR, Inc. 2014 Equity Incentive Plan.	8-K		10.2	5/7/2014
10.27*	The Form of Non-Qualified Stock Option Agreement (Management performance-based grants) under the NVR, Inc. 2014 Equity Incentive Plan.	10-K		10.17	2/14/2018
10.28*	The Form of Non-Qualified Stock Option Agreement (Director performance-based grants) under the NVR, Inc. 2014 Equity Incentive Plan.	8-K		10.4	5/7/2014
10.29*	NVR, Inc. 2010 Equity Incentive Plan.	S-8	333-166512	10.1	5/4/2010
10.30*	The Amended Form of Non-Qualified Stock Option Agreement (Management grants) under the NVR, Inc. 2010 Equity Incentive Plan.	10-K		10.29	2/13/2019
10.31*	The Form of Non-Qualified Stock Option Agreement (Management performance-based grants) under the NVR, Inc. 2010 Equity Incentive Plan.	10-K		10.30	2/13/2019
10.32*	The Form of Non-Qualified Stock Option Agreement (Director grants) under the NVR, Inc. 2010 Equity Incentive Plan.	8-K		10.2	5/6/2010
10.33*	The Form of Restricted Share Units Agreement (Management grants) under the NVR, Inc. 2010 Equity Incentive Plan.	10-Q		10.2	7/30/2013

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	File Number	Exhibit Number	Filing Date
10.34*	The Form of Restricted Share Units Agreement (Director grants) under the NVR, Inc. 2010 Equity Incentive Plan.	8-K		10.4	5/6/2010
10.35*	The Form of Non-Qualified Stock Option Agreement under the NVR, Inc. 2000 Broadly-Based Stock Option Plan.	8-K		10.1	1/7/2008
10.36	Amended and Restated Master Repurchase Agreement dated as of August 2, 2011, between NVR Mortgage Finance, Inc. and U.S. Bank National Association.	8-K		10.1	1/21/2016
10.37	First Amendment to Amended and Restated Master Repurchase Agreement dated as of August 1, 2012, between NVR Mortgage Finance, Inc. and U.S. Bank National Association.	8-K		10.2	1/21/2016
10.38	Second Amendment to Amended and Restated Master Repurchase Agreement dated as of November 13, 2012, between NVR Mortgage Finance, Inc. and U.S. Bank National Association.	8-K		10.3	1/21/2016
10.39	Third Amendment to Amended and Restated Master Repurchase Agreement dated as of November 29, 2012, between NVR Mortgage Finance, Inc. and U.S. Bank National Association.	8-K		10.4	1/21/2016
10.40	Fourth Amendment to Amended and Restated Master Repurchase Agreement dated as of July 31, 2013, between NVR Mortgage Finance, Inc. and U.S. Bank National Association.	8-K		10.5	1/21/2016
10.41	Fifth Amendment to Amended and Restated Master Repurchase Agreement dated as of July 30, 2014, between NVR Mortgage Finance, Inc. and U.S. Bank National Association.	8-K		10.6	1/21/2016
10.42	Sixth Amendment to Amended and Restated Master Repurchase Agreement dated as of July 29, 2015, between NVR Mortgage Finance, Inc. and U.S. Bank National Association.	8-K		10.7	1/21/2016
10.43	Seventh Amendment to Amended and Restated Master Repurchase Agreement dated as of January 18, 2016, between NVR Mortgage Finance, Inc. and U.S. Bank National Association.	8-K		10.8	1/21/2016
10.44	Eighth Amendment to Amended and Restated Master Repurchase Agreement dated as of July 27, 2016, between NVR Mortgage Finance, Inc. and U.S. Bank National Association.	10-Q		10.2	7/28/2016
10.45	Ninth Amendment to Amended and Restated Master Repurchase Agreement dated as of July 26, 2017, between NVR Mortgage Finance, Inc. and U.S. Bank National Association.	10-Q		10.1	7/28/2017
10.46	Tenth Amendment to Amended and Restated Master Repurchase Agreement dated as of July 25, 2018 between NVR Mortgage Finance, Inc. and U.S. Bank National Association.	10-Q		10.1	7/30/2018
10.47	Eleventh Amendment to Amended and Restated Master Repurchase Agreement dated as of July 24, 2019 between NVR Mortgage Finance, Inc. and U.S. Bank National Association.	10-Q		10.1	7/31/2019
10.48	Credit Agreement dated as of July 15, 2016 among NVR, Inc. and the lenders party hereto, Bank of America, N.A., as Administrative Agent, Swing Line Lender and L/C Issuer, and Merrill Lynch, Pierce, Fenner & Smith Incorporated as Sole Lead Arranger and Sole Book Runner.	8-K		10.1	7/18/2016

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	File Number	Exhibit Number	Filing Date
10.49	Summary of 2020 Executive Officer annual incentive compensation plan. Filed herewith.				
21	NVR, Inc. Subsidiaries. Filed herewith.				
23	Consent of KPMG LLP (Independent Registered Public Accounting Firm). Filed herewith.				
31.1	Certification of NVR's Chief Executive Officer pursuant to Rule 13a-14(a). Filed herewith.				
31.2	Certification of NVR's Chief Financial Officer pursuant to Rule 13a-14(a). Filed herewith.				
32	Certification of NVR's Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. Filed herewith.				
101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because XBRL tags are embedded within the Inline XBRL document.				
101.SCH	XBRL Taxonomy Extension Schema Document				
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document				
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document				
101.LAB	XBRL Taxonomy Extension Label Linkbase Document				
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document				
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101). * Exhibit is a management contract or compensatory plan or arrangement.				

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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.

NVR, Inc.By: /s/ Paul C. Saville

Paul C. Saville

President and Chief Executive Officer

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Dwight C. Schar</u> Dwight C. Schar	Chairman	February 19, 2020
<u>/s/ C. E. Andrews</u> C. E. Andrews	Director	February 19, 2020
<u>/s/ Thomas D. Eckert</u> Thomas D. Eckert	Director	February 19, 2020
<u>/s/ Alfred E. Festa</u> Alfred E. Festa	Director	February 19, 2020
<u>/s/ Ed Grier</u> Ed Grier	Director	February 19, 2020
<u>/s/ Manuel H. Johnson</u> Manuel H. Johnson	Director	February 19, 2020
<u>/s/ Alexandra A. Jung</u> Alexandra A. Jung	Director	February 19, 2020
<u>/s/ Mel Martinez</u> Mel Martinez	Director	February 19, 2020
<u>/s/ William A. Moran</u> William A. Moran	Director	February 19, 2020
<u>/s/ David A. Preiser</u> David A. Preiser	Director	February 19, 2020
<u>/s/ W. Grady Rosier</u> W. Grady Rosier	Director	February 19, 2020
<u>/s/ Susan Williamson Ross</u> Susan Williamson Ross	Director	February 19, 2020
<u>/s/ Paul C. Saville</u> Paul C. Saville	Principal Executive Officer	February 19, 2020
<u>/s/ Daniel D. Malzahn</u> Daniel D. Malzahn	Principal Financial Officer	February 19, 2020
<u>/s/ Matthew B. Kelpy</u> Matthew B. Kelpy	Principal Accounting Officer	February 19, 2020

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors
NVR, Inc.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of NVR, Inc. and subsidiaries (the Company) as of December 31, 2019 and 2018, the related consolidated statements of income, shareholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2019, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2019, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 19, 2020 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Change in Accounting Principle

As discussed in Note 1 to the consolidated financial statements, the Company has changed its method of accounting for leases as of January 1, 2019 due to the adoption of Accounting Standards Update ("ASU") 2016-02, *Leases (Topic 842)*.

Basis for Opinion

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

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

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgment. The communication of a critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Assessment of the allowance for losses on contract land deposits

As discussed in Notes 1 and 3 to the consolidated financial statements, the Company's allowance for losses on contract land deposits ("lot deposit reserve") was \$27,572 recorded against total contract land deposit assets of \$441,423 as of December 31, 2019. The Company estimated the lot deposit reserve using a loss contingency analysis that assesses a combination of quantitative and qualitative data for each individual deposit associated with a community. As the Company does not own the lots on which they have placed a deposit, the loss contingency analysis assesses contracts on a community-by-community basis, and records an estimated lot deposit reserve for communities which may result in forfeiture of the lot deposit. In estimating this reserve, the Company evaluates whether it can sell houses at an acceptable profit margin and sales pace, and considers market and economic conditions.

We identified the assessment of the lot deposit reserve as a critical audit matter because it involved measurement uncertainty requiring subjective auditor judgment, and knowledge and experience in the industry. This assessment encompassed the evaluation of the loss contingency analysis, inclusive of the approach used to (1) estimate the reserve assigned to a deposit (2) determine the quantitative data metrics, as applicable, of profit margins and sales volumes, and (3) determine the qualitative factors, as applicable, of developer performance and community specific factors. In addition, it was challenging to obtain objective audit evidence, and evaluate the sufficiency of that audit evidence.

The primary procedures we performed to address the critical audit matter included the following. We tested internal controls over (1) the development and approval of the loss contingency analysis, (2) the determination of the quantitative data metrics and qualitative factors used in the analysis, and (3) the preparation and measurement of the lot deposit reserve estimate. We evaluated the process to develop the quantitative and qualitative data used to assess the lot deposit reserve rates. Specifically, we assessed the consistency of data used in the process with its source, evaluated the reliability of data sources, and considered if all relevant data points were used the analysis. We tested the reserve balance by:

- assessing the recoverability of a sample of individual lot deposits and comparing our results to those of the Company,
- analyzing the timing of changes for a sample of lot deposits for consistency with changes in quantitative or qualitative data,
- evaluating the consistency of the loss contingency analysis by comparing the reserve treatment of similar deposits and community positions between the current and prior years, and
- comparing prior reserve estimates to subsequent lot deposit forfeiture activity.

We evaluated the collective results of the procedures performed to assess the sufficiency of the audit evidence obtained related to the Company's lot deposit reserve.

KPMG LLP

We have served as the Company's auditor since 1987.

McLean, Virginia
February 19, 2020

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors
NVR, Inc.:

Opinion on Internal Control Over Financial Reporting

We have audited NVR, Inc.'s and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2019 and 2018, the related consolidated statements of income, shareholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2019, and the related notes (collectively, the consolidated financial statements), and our report dated February 19, 2020 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

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

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

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

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

KPMG LLP

McLean, Virginia
February 19, 2020

NVR, Inc.
Consolidated Balance Sheets
(in thousands, except share and per share data)

	December 31, 2019	December 31, 2018
ASSETS		
Homebuilding:		
Cash and cash equivalents	\$ 1,110,892	\$ 688,783
Restricted cash	17,943	16,982
Receivables	18,278	18,641
Inventory:		
Lots and housing units, covered under sales agreements with customers	1,075,420	1,076,904
Unsold lots and housing units	184,352	115,631
Land under development	69,196	38,857
Building materials and other	18,320	21,718
	<u>1,347,288</u>	<u>1,253,110</u>
Contract land deposits, net	413,851	396,177
Property, plant and equipment, net	52,260	42,234
Operating lease right-of-use assets	63,825	—
Reorganization value in excess of amounts allocable to identifiable assets, net	41,580	41,580
Deferred tax assets, net	115,731	112,333
Other assets	60,413	71,671
	<u>3,242,061</u>	<u>2,641,511</u>
Mortgage Banking:		
Cash and cash equivalents	29,412	23,092
Restricted cash	2,276	3,071
Mortgage loans held for sale, net	492,125	458,324
Property and equipment, net	5,828	6,510
Operating lease right-of-use assets	13,345	—
Reorganization value in excess of amounts allocable to identifiable assets, net	7,347	7,347
Other assets	17,421	26,078
	<u>567,754</u>	<u>524,422</u>
Total assets	<u>\$ 3,809,815</u>	<u>\$ 3,165,933</u>

See notes to consolidated financial statements.

NVR, Inc.
Consolidated Balance Sheets (Continued)
(in thousands, except share and per share data)

	December 31, 2019	December 31, 2018
LIABILITIES AND SHAREHOLDERS' EQUITY		
Homebuilding:		
Accounts payable	\$ 262,987	\$ 244,496
Accrued expenses and other liabilities	346,035	332,871
Customer deposits	131,886	138,246
Operating lease liabilities	71,095	—
Senior notes	598,301	597,681
	<u>1,410,304</u>	<u>1,313,294</u>
Mortgage Banking:		
Accounts payable and other liabilities	43,985	44,077
Operating lease liabilities	14,282	—
	<u>58,267</u>	<u>44,077</u>
Total liabilities	<u>1,468,571</u>	<u>1,357,371</u>
Commitments and contingencies		
Shareholders' equity:		
Common stock, \$0.01 par value; 60,000,000 shares authorized; 20,555,330 shares issued as of both December 31, 2019 and December 31, 2018	206	206
Additional paid-in capital	2,055,407	1,820,223
Deferred compensation trust – 107,295 and 107,340 shares of NVR, Inc. common stock as of December 31, 2019 and December 31, 2018, respectively	(16,912)	(16,937)
Deferred compensation liability	16,912	16,937
Retained earnings	7,909,872	7,031,333
Less treasury stock at cost – 16,922,558 and 16,977,499 shares as of December 31, 2019 and December 31, 2018, respectively	(7,624,241)	(7,043,200)
Total shareholders' equity	<u>2,341,244</u>	<u>1,808,562</u>
Total liabilities and shareholders' equity	<u>\$ 3,809,815</u>	<u>\$ 3,165,933</u>

See notes to consolidated financial statements.

NVR, Inc.
Consolidated Statements of Income
(in thousands, except per share data)

	Year Ended December 31,		
	2019	2018	2017
Homebuilding:			
Revenues	\$ 7,220,844	\$ 7,004,304	\$ 6,175,521
Other income	24,779	11,839	6,536
Cost of sales	(5,849,862)	(5,692,127)	(4,990,378)
Selling, general and administrative	(447,547)	(428,874)	(392,272)
Operating income	948,214	895,142	799,407
Interest expense	(24,335)	(24,036)	(23,037)
Homebuilding income	923,879	871,106	776,370
Mortgage Banking:			
Mortgage banking fees	167,820	159,370	130,319
Interest income	12,142	11,593	7,850
Other income	2,857	2,546	2,048
General and administrative	(79,858)	(83,838)	(68,528)
Interest expense	(1,045)	(1,045)	(1,148)
Mortgage banking income	101,916	88,626	70,541
Income before taxes	1,025,795	959,732	846,911
Income tax expense	(147,256)	(162,535)	(309,390)
Net income	\$ 878,539	\$ 797,197	\$ 537,521
Basic earnings per share	\$ 241.31	\$ 219.58	\$ 144.00
Diluted earnings per share	\$ 221.13	\$ 194.80	\$ 126.77
Basic weighted average shares outstanding	3,641	3,631	3,733
Diluted weighted average shares outstanding	3,973	4,092	4,240

See notes to consolidated financial statements.

NVR, Inc.
Consolidated Statements of Shareholders' Equity
(in thousands)

	Common Stock	Additional Paid-In Capital	Retained Earnings	Treasury Stock	Deferred Compensation Trust	Deferred Compensation Liability	Total
Balance, December 31, 2016	\$ 206	\$ 1,515,828	\$ 5,695,376	\$ (5,906,969)	\$ (17,375)	\$ 17,375	\$ 1,304,441
Cumulative-effect adjustment from adoption of ASU 2016-09, net of tax	—	1,566	(957)	—	—	—	609
Net income	—	—	537,521	—	—	—	537,521
Deferred compensation activity, net	—	—	—	—	(8)	8	—
Purchase of common stock for treasury	—	—	—	(422,166)	—	—	(422,166)
Equity-based compensation	—	44,562	—	—	—	—	44,562
Proceeds from stock options exercised	—	140,525	—	—	—	—	140,525
Treasury stock issued upon option exercise and restricted share vesting	—	(58,284)	—	58,284	—	—	—
Balance, December 31, 2017	206	1,644,197	6,231,940	(6,270,851)	(17,383)	17,383	1,605,492
Cumulative-effect adjustment from adoption of ASU 2014-09, net of tax	—	—	2,196	—	—	—	2,196
Net income	—	—	797,197	—	—	—	797,197
Deferred compensation activity, net	—	—	—	—	446	(446)	—
Purchase of common stock for treasury	—	—	—	(846,134)	—	—	(846,134)
Equity-based compensation	—	75,701	—	—	—	—	75,701
Proceeds from stock options exercised	—	174,110	—	—	—	—	174,110
Treasury stock issued upon option exercise and restricted share vesting	—	(73,785)	—	73,785	—	—	—
Balance, December 31, 2018	206	1,820,223	7,031,333	(7,043,200)	(16,937)	16,937	1,808,562
Net income	—	—	878,539	—	—	—	878,539
Deferred compensation activity, net	—	—	—	—	25	(25)	—
Purchase of common stock for treasury	—	—	—	(698,417)	—	—	(698,417)
Equity-based compensation	—	78,532	—	—	—	—	78,532
Proceeds from stock options exercised	—	274,028	—	—	—	—	274,028
Treasury stock issued upon option exercise and restricted share vesting	—	(117,376)	—	117,376	—	—	—
Balance, December 31, 2019	\$ 206	\$ 2,055,407	\$ 7,909,872	\$ (7,624,241)	\$ (16,912)	\$ 16,912	\$ 2,341,244

See notes to consolidated financial statements.

NVR, Inc.
Consolidated Statements of Cash Flows
(in thousands)

	Year Ended December 31,		
	2019	2018	2017
Cash flows from operating activities:			
Net income	\$ 878,539	\$ 797,197	\$ 537,521
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	20,818	20,168	22,667
Equity-based compensation expense	78,532	75,701	44,562
Contract land deposit (recoveries) impairments, net	(680)	11,760	1,238
Gain on sale of loans, net	(128,642)	(122,755)	(99,132)
Deferred tax (benefit) expense	(4,070)	914	61,290
Mortgage loans closed	(5,169,422)	(4,828,615)	(4,077,372)
Mortgage loans sold and principal payments on mortgage loans held for sale	5,260,600	4,845,999	4,182,220
Distribution of earnings from unconsolidated joint ventures	3,476	4,596	4,788
Net change in assets and liabilities:			
Increase in inventory	(94,178)	(6,911)	(154,099)
(Increase) decrease in contract land deposits	(16,994)	(30,863)	8,177
Decrease (increase) in receivables	2,754	(1,008)	(348)
Increase (decrease) in accounts payable and accrued expenses	33,926	(30,713)	10,789
(Decrease) increase in customer deposits	(6,360)	(11,787)	27,797
Other, net	8,236	(557)	256
Net cash provided by operating activities	<u>866,535</u>	<u>723,126</u>	<u>570,354</u>
Cash flows from investing activities:			
Investments in and advances to unconsolidated joint ventures	(702)	(284)	(3,800)
Distribution of capital from unconsolidated joint ventures	8,247	10,515	8,029
Purchase of property, plant and equipment	(22,699)	(19,665)	(20,269)
Proceeds from the sale of property, plant and equipment	1,870	1,257	847
Net cash used in investing activities	<u>(13,284)</u>	<u>(8,177)</u>	<u>(15,193)</u>
Cash flows from financing activities:			
Purchase of treasury stock	(698,417)	(846,134)	(422,166)
Principal payments on finance lease liabilities	(306)	—	—
Distributions to partner in consolidated variable interest entity	—	(234)	—
Proceeds from the exercise of stock options	274,028	174,110	140,525
Net cash used in financing activities	<u>(424,695)</u>	<u>(672,258)</u>	<u>(281,641)</u>
Net increase in cash, restricted cash, and cash equivalents	428,556	42,691	273,520
Cash, restricted cash, and cash equivalents, beginning of the year	732,248	689,557	416,037
Cash, restricted cash, and cash equivalents, end of the year	<u>\$ 1,160,804</u>	<u>\$ 732,248</u>	<u>\$ 689,557</u>
Supplemental disclosures of cash flow information:			
Interest paid during the year, net of interest capitalized	<u>\$ 24,453</u>	<u>\$ 24,178</u>	<u>\$ 23,251</u>
Income taxes paid during the year, net of refunds	<u>\$ 153,915</u>	<u>\$ 181,166</u>	<u>\$ 260,232</u>

See notes to consolidated financial statements.

1. Summary of Significant Accounting Policies

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of NVR, Inc. and its subsidiaries (“NVR”, the “Company”, “we”, “us”, or “our”) and certain other entities in which the Company is deemed to be the primary beneficiary (see Notes 3 and 4 herein for additional information). All significant intercompany transactions have been eliminated in consolidation.

Use of Estimates in the Preparation of Financial Statements

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America (“GAAP”) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting periods. Management continually evaluates the estimates used to prepare the consolidated financial statements and updates those estimates as necessary. In general, our estimates are based on historical experience, on information from third party professionals, and other various assumptions that are believed to be reasonable under the facts and circumstances. Actual results could differ materially from those estimates made by management.

Cash and Cash Equivalents

Cash and cash equivalents include short-term investments with original maturities of three months or less.

Restricted Cash

Homebuilding restricted cash was attributable to customer deposits for certain home sales. Mortgage banking restricted cash includes amounts collected from customers for loans in process and closed mortgage loans held for sale.

At December 31, 2019 and 2018, \$281 and \$320, respectively, of cash related to a consolidated variable interest entity is included in homebuilding “Other assets” on the accompanying consolidated balance sheet.

Homebuilding Inventory

The carrying value of inventory is stated at the lower of cost or market value. Cost of lots and completed and uncompleted housing units represent the accumulated actual cost of the units. Field construction supervisors’ salaries and related direct overhead expenses are included in inventory costs. Interest costs are not capitalized into inventory, with the exception of land under development and joint venture investments, as applicable (see below). Upon settlement, the cost of the unit is expensed on a specific identification basis. Cost of building materials is determined on a first-in, first-out basis.

Sold inventory is evaluated for impairment based on the contractual sales price compared to the total estimated cost to construct. Unsold inventory is evaluated for impairment by analyzing recent comparable sales prices within the applicable community compared to the costs incurred to date plus the expected costs to complete. Any calculated impairments are recorded immediately.

Contract Land Deposits

We purchase finished lots under fixed price lot purchase agreements (“Lot Purchase Agreements”) that require deposits that may be forfeited if we fail to perform under the contract. The deposits are in the form of cash or letters of credit in varying amounts and represent a percentage of the aggregate purchase price of the finished lots.

We maintain an allowance for losses on contract land deposits that reflects our judgment of the present loss exposure in the existing contract land deposit portfolio at the end of the reporting period. To analyze contract land deposit impairments, we conduct a loss contingency analysis each quarter. In addition to considering market and economic conditions, we assess contract land deposit impairments on a community-by-community basis pursuant to the purchase contract terms, analyzing, as applicable, current sales absorption levels, recent sales’ direct profit, the dollar differential between the contractual purchase price and the current market price for lots, a developer’s performance, a developer’s financial ability or willingness to reduce lot prices to current market prices, if necessary, and the contract’s default status by either us or the developer along with an analysis of the expected outcome of any such default.

Our analysis is focused on whether we can sell houses at an acceptable margin and sales pace in a particular community in the current market with which we are faced. Because we do not own the finished lots on which we have placed a contract land deposit, if the above analysis leads to a determination that we cannot sell homes at an acceptable margin and sales pace at the current contractual lot price, we then determine whether we will elect to default under the contract, forfeit the deposit and terminate the contract, or whether we will attempt to restructure the Lot Purchase Agreement, which may require us to forfeit the deposit to obtain contract concessions from a developer. We also assess whether impairment is present due to collectibility issues resulting from a developer’s non-performance because of financial or other conditions.

NVR, Inc.Notes to Consolidated Financial Statements
(dollars and shares in thousands, except per share data)

For the year ended December 31, 2019 we recognized a net pre-tax recovery of \$680 of contract land deposits previously determined to be unrecoverable. For the years ended December 31, 2018 and 2017, we incurred net pre-tax charges of \$5,115 and \$1,238, respectively, related to impairment of contract land deposits. The contract land deposit assets on the accompanying consolidated balance sheets are shown net of the allowance for losses of \$27,572 and \$29,216 at December 31, 2019 and 2018, respectively.

Land Under Development

On a limited basis, we directly acquire raw parcels of land already zoned for its intended use to develop into finished lots. Land under development includes the land acquisition costs, direct improvement costs, capitalized interest, where applicable, and real estate taxes.

Land under development, including the land under development held by our unconsolidated joint ventures and the related joint venture investments, is reviewed for potential write-downs when impairment indicators are present. In addition to considering market and economic conditions, we assess land under development impairments on a community-by-community basis, analyzing, as applicable, current sales absorption levels, recent sales' direct profit, and the dollar differential between the projected fully-developed cost of the lots and the current market price for lots. If indicators of impairment are present for a community, we perform an analysis to determine if the undiscounted cash flows estimated to be generated by those assets are less than their carrying amounts, and if so, impairment charges are required to be recorded in an amount by which the carrying amount of the assets exceeds the fair value of such assets. Our determination of fair value is primarily based on discounting the estimated future cash flows at a rate commensurate with the inherent risks associated with the assets and related estimated cash flow streams. See Notes 4 and 5 for further discussion of joint venture investments and land under development, respectively.

Property, Plant, and Equipment

Property, plant, and equipment are carried at cost less accumulated depreciation and amortization. Depreciation is based on the estimated useful lives of the assets using the straight-line method. Model home furniture and fixtures are generally depreciated over a 2-year period, office facilities and other equipment are depreciated over a period of 3 to 10 years and production facilities are depreciated over periods of 5 to 40 years.

Intangible Assets

On December 31, 2012, we acquired substantially all of the assets of Heartland Homes, Inc., which resulted in us recording finite-lived intangible assets and goodwill. We completed our annual assessment for impairment of goodwill and management determined that there was no impairment. As of December 31, 2019 and 2018, finite-lived intangible assets, net of accumulated amortization, totaled \$466 and \$621, respectively. The remaining finite-lived intangible assets will be amortized on a straight-line basis over 3 years. As of both December 31, 2019 and 2018, the goodwill value was \$441. Finite-lived intangible assets and goodwill are included in homebuilding "Other assets" in the accompanying consolidated balance sheets.

Warranty/Product Liability Reserves

We establish warranty and product liability reserves ("Warranty Reserve") to provide for estimated future expenses as a result of construction and product defects, product recalls and litigation incidental to our homebuilding business. Liability estimates are determined based on management's judgment considering such factors as historical experience, the likely current cost of corrective action, manufacturers' and subcontractors' participation in sharing the cost of corrective action, consultations with third party experts such as engineers, and discussions with our general counsel and outside counsel retained to handle specific product liability cases.

Mortgage Repurchase Reserve, Mortgage Loans Held for Sale and Derivatives and Hedging Activities

We originate several different loan products to our customers to finance the purchase of a home through our wholly-owned mortgage subsidiary, NVR Mortgage Finance, Inc. ("NVRM"). NVRM sells all of the loans it originates into the secondary market on a servicing released basis, typically within 30 days from closing. All of the loans that NVRM originates are underwritten to the standards and specifications of the ultimate investor. Those underwriting standards are typically equal to or more stringent than the underwriting standards required by Fannie Mae ("FNMA"), Ginnie Mae ("GNMA"), Freddie Mac ("FHLMC"), the Department of Veterans Affairs ("VA") and the Federal Housing Administration ("FHA"). Insofar as NVRM underwrites its originated loans to those standards, NVRM bears no increased concentration of credit risk from the issuance of loans, except in certain limited instances where repurchases or early payment default occur. NVRM employs a quality control department to ensure that its underwriting controls are effectively operating, and further assesses the underwriting function as part of its assessment of internal controls over financial reporting. NVRM maintains a reserve for losses on mortgage loans originated that reflects our judgment of the present loss exposure in the loans that NVRM has originated and sold. The reserve is calculated based on an analysis of historical experience and exposure (see Note 16 herein for further information).

NVR, Inc.
Notes to Consolidated Financial Statements
(dollars and shares in thousands, except per share data)

Mortgage loans held for sale are recorded at fair value when closed, and thereafter are carried at the lower of cost or fair value, net of deferred origination costs, until sold.

In the normal course of business, NVRM enters into contractual commitments to extend credit to buyers of single-family homes with fixed expiration dates. The commitments become effective when the borrowers “lock-in” a specified interest rate within time frames established by NVRM. All borrowers are evaluated for credit worthiness prior to the extension of the commitment. Market risk arises if interest rates move adversely between the time of the “lock-in” of rates by the borrower and the sale date of the loan to a broker/dealer. To mitigate the effect of the interest rate risk inherent in providing rate lock commitments to borrowers, NVRM enters into optional or mandatory delivery forward sale contracts to sell whole loans and mortgage-backed securities to broker/dealers. The forward sale contracts lock-in an interest rate and price for the sale of loans similar to the specific rate lock commitments. NVRM does not engage in speculative or trading derivative activities. Both the rate lock commitments to borrowers and the forward sale contracts to broker/dealers are undesignated derivatives, and, accordingly, are marked to fair value through earnings. At December 31, 2019, there were contractual commitments to extend credit to borrowers aggregating \$581,065, and open forward delivery sale contracts aggregating \$986,041, which hedge both the rate lock loan commitments and closed loans held for sale (see Note 15 herein for a description of the Company’s fair value accounting).

Earnings per Share

The following weighted average shares and share equivalents were used to calculate basic and diluted earnings per share for the years ended December 31, 2019, 2018 and 2017:

	Year Ended December 31,		
	2019	2018	2017
Weighted average number of shares outstanding used to calculate basic EPS	3,641	3,631	3,733
<i>Dilutive securities:</i>			
Stock options and restricted share units	332	461	507
Weighted average number of shares and share equivalents outstanding used to calculate diluted EPS	3,973	4,092	4,240

The assumed proceeds used in the treasury method for calculating our diluted earnings per share includes the amount the employee must pay upon exercise and the amount of compensation cost attributed to future services not yet recognized.

The following stock options issued under equity incentive plans were outstanding during the years ended December 31, 2019, 2018 and 2017, but were not included in the computation of diluted earnings per share because the effect would have been anti-dilutive.

	Year Ended December 31,		
	2019	2018	2017
Anti-dilutive securities	319	370	15

Revenues – Homebuilding Operations

We build single-family detached homes, townhomes and condominium buildings, which generally are constructed on a pre-sold basis. Revenue is recognized on the settlement date at the contract sales price, when control is transferred to our customers. Our contract liabilities, consisting of deposits received from customers (“Handmoney”) on homes not settled, were \$131,886 and \$138,246 as of December 31, 2019 and 2018, respectively. Substantially all Handmoney is recognized in revenue within twelve months of being received from customers. Our contract assets, consisting of prepaid sales compensation, totaled approximately \$14,600 and \$17,000, as of December 31, 2019 and 2018, respectively. These amounts are included in homebuilding “Other assets” on the accompanying consolidated balance sheets.

Mortgage Banking Fees

Mortgage banking fees include income earned by NVRM for originating mortgage loans, servicing mortgage loans held on an interim basis, title fees, gains and losses on the sale of mortgage loans and mortgage servicing and other activities incidental to mortgage banking. Mortgage banking fees are generally recognized after the loan has been sold to an unaffiliated, third party investor.

Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on the deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. See Note 11 herein for discussion of the impact on the Company's deferred tax asset resulting from the enactment of the Tax Cuts and Jobs Act in December 2017.

ASC 740-10, *Income Taxes*, provides that a tax benefit from an uncertain tax position may be recognized when it is more-likely-than-not (defined as a likelihood of more than 50%) that the position will be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits. If a tax position does not meet the more-likely-than-not recognition threshold, despite our belief that its filing position is supportable, the benefit of that tax position is not recognized in the statements of income. We recognize interest related to unrecognized tax benefits as a component of income tax expense. Based on our historical experience in dealing with various taxing authorities, we have found that it is the administrative practice of the taxing authorities to not seek penalties from us for the tax positions we have taken on our returns related to our unrecognized tax benefits. Therefore, we do not accrue penalties for the positions in which we have an unrecognized tax benefit. We recognize unrecognized tax benefits in the period that the uncertainty is eliminated by either affirmative agreement of the uncertain tax position by the applicable taxing authority, by expiration of the applicable statute of limitation, or by determination in accordance with certain states' administrative practices that the uncertain tax position has been effectively settled (see Note 11 herein for further information).

Financial Instruments

Except as otherwise noted herein, we believe that the carrying value approximates the fair value of our financial instruments (see Note 15 herein for further information).

Equity-Based Compensation

We recognize equity-based compensation expense within its income statement for all share-based payment arrangements, which includes non-qualified stock options to purchase shares of NVR common stock ("Options") and restricted share units ("RSUs"). Compensation expense is based on the grant-date fair value of the Options and RSUs granted, and is recognized on a straight-line basis over the requisite service period for the entire award (from the date of grant through the period of the last separately vesting portion of the grant). Options and RSUs which are subject to a performance condition are treated as a separate award from the "service-only" Options and RSUs, and compensation expense is recognized when it becomes probable that the stated performance target will be achieved. We calculate the fair value of our Options, which are non-publicly traded, using the Black-Scholes option-pricing model. The grant date fair value of the RSUs is the closing price of our common stock on the day immediately preceding the date of grant. The reversal of compensation expense previously recognized for grants forfeited is recorded in the period in which the forfeiture occurs. Our equity-based compensation plans are accounted for as equity-classified awards (see Note 12 herein for further discussion of equity-based compensation plans).

Comprehensive Income

For the years ended December 31, 2019, 2018 and 2017, comprehensive income equaled net income; therefore, a separate statement of comprehensive income is not included in the accompanying consolidated financial statements.

Recent Accounting Pronouncements**Recently Adopted Accounting Pronouncements**Leases

On January 1, 2019, we adopted ASU 2016-02, *Leases (Topic 842)*, which requires the recognition of our leases on the balance sheet as right-of-use ("ROU") assets and lease liabilities. We elected to adopt Topic 842 using the effective date transition method, which permits us to apply the new standard prospectively and present comparative years under legacy GAAP.

In adoption of the standard, we also elected the following:

- to apply the package of practical expedients during transition, under which we were not required to reassess as of the date of adoption (i) whether any of our contracts are or contain leases, (ii) the classifications of our leases, and (iii) any initial direct costs related to those leases.
- to exclude leases with an initial lease term of 12 months or less from the recognition requirements under Topic 842.

NVR, Inc.Notes to Consolidated Financial Statements
(dollars and shares in thousands, except per share data)

- to utilize the portfolio approach for certain office equipment leases, grouping leases by asset type which have similar lease terms and payment schedules.

Upon adoption, on January 1, 2019 we recorded a lease liability of \$85,516 and a ROU asset of \$79,345, which was recorded net of previously recognized straight-line operating lease adjustments on existing leases. The adoption of Topic 842 did not have an impact on our recognition of lease expense. See additional lease disclosures in Note 13.

Recently Issued Accounting Pronouncements

In June 2016, FASB issued ASU 2016-13, *Financial Instruments – Credit Losses (Topic 326)*, which significantly changes the way impairment of financial assets is recognized. The standard will require immediate recognition of estimated credit losses expected to occur over the remaining life of many financial assets, which will generally result in earlier recognition of allowances for credit losses on loans and other financial instruments. The standard's provisions will be applied as a cumulative-effect adjustment to beginning retained earnings as of the effective date. The standard is effective for us as of January 1, 2020. We do not believe that the adoption of this standard will have a material effect on our consolidated financial statements and related disclosures.

In January 2017, FASB issued ASU 2017-04, *Intangibles – Goodwill and Other (Topic 350), Simplifying the Test for Goodwill Impairment*. The standard's objective is to simplify the subsequent measurement of goodwill by eliminating the second step from the goodwill impairment test. Under the amendments in the standard, an entity would perform its annual, or interim, goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. If the carrying amount of a reporting unit exceeds its fair value, an impairment charge would then be recognized, not to exceed the amount of goodwill allocated to that reporting unit. The standard is effective for us on January 1, 2020. We do not believe that the adoption of this standard will have a material effect on our consolidated financial statements and related disclosures.

2. Segment Information, Nature of Operations, and Certain Concentrations

Our homebuilding operations primarily construct and sell single-family detached homes, townhomes and condominium buildings under three trade names: Ryan Homes, NVHomes and Heartland Homes. The Ryan Homes product is marketed primarily to first-time and first-time move-up buyers. Ryan Homes operates in thirty-two metropolitan areas located in Maryland, Virginia, Washington, D.C., West Virginia, Pennsylvania, New York, North Carolina, South Carolina, Florida, Ohio, New Jersey, Delaware, Indiana, Illinois and Tennessee. The NVHomes and Heartland Homes products are marketed primarily to move-up and luxury buyers. NVHomes operates in Delaware and the Washington, D.C., Baltimore, MD and Philadelphia, PA metropolitan areas. Heartland Homes operates in the Pittsburgh, PA metropolitan area. We derived approximately 27% and 11% of our 2019 homebuilding revenues from the Washington, D.C. and Baltimore, MD metropolitan areas, respectively.

Our mortgage banking segment is a regional mortgage banking operation. Substantially all of the mortgage banking segment's loan closing activity is for our homebuilding customers. Our mortgage banking business generates revenues primarily from origination fees, gains on sales of loans, and title fees. A substantial portion of our mortgage operations is conducted in the Washington, D.C. and Baltimore, MD metropolitan areas.

The following disclosure includes four homebuilding reportable segments that aggregate geographically our homebuilding operating segments, and the mortgage banking operations presented as a single reportable segment. The homebuilding reportable segments are comprised of operating divisions in the following geographic areas:

<i>Mid Atlantic:</i>	Maryland, Virginia, West Virginia, Delaware and Washington, D.C.
<i>North East:</i>	New Jersey and Eastern Pennsylvania
<i>Mid East:</i>	New York, Ohio, Western Pennsylvania, Indiana and Illinois
<i>South East:</i>	North Carolina, South Carolina, Florida and Tennessee

Homebuilding profit before tax includes all revenues and income generated from the sale of homes, less the cost of homes sold, selling, general and administrative expenses, and a corporate capital allocation charge. The corporate capital allocation charge is eliminated in consolidation and is based on the segment's average net assets employed. The corporate capital allocation charged to the operating segment allows the Chief Operating Decision Maker ("CODM") to determine whether the operating segment's results are providing the desired rate of return after covering our cost of capital. In addition, certain assets including goodwill and intangible assets, and consolidation adjustments as discussed further below, are not allocated to the operating segments as those assets are neither included in the operating segment's corporate capital allocation charge, nor in the CODM's evaluation of the operating segment's performance. We record charges on contract land deposits when it is determined that it is probable that recovery of the deposit is impaired. For segment reporting purposes, impairments on contract land deposits are charged to the operating segment upon the termination of a Lot Purchase Agreement with the developer, or the restructuring of a Lot Purchase Agreement resulting in the

NVR, Inc.
Notes to Consolidated Financial Statements
(dollars and shares in thousands, except per share data)

forfeiture of the deposit. Mortgage banking profit before tax consists of revenues generated from mortgage financing, title insurance and closing services, less the costs of such services and general and administrative costs. Mortgage banking operations are not charged a corporate capital allocation charge.

In addition to the corporate capital allocation and contract land deposit impairments discussed above, the other reconciling items between segment profit and consolidated profit before tax include unallocated corporate overhead (including all management incentive compensation), equity-based compensation expense, consolidation adjustments and external corporate interest expense. Our overhead functions, such as accounting, treasury and human resources are centrally performed and the costs are not allocated to our operating segments. Consolidation adjustments consist of such items necessary to convert the reportable segments' results, which are predominantly maintained on a cash basis, to a full accrual basis for external financial statement presentation purposes, and are not allocated to our operating segments. External corporate interest expense primarily consists of interest charges on our 3.95% Senior Notes due 2022 (the "Senior Notes") and is not charged to the operating segments because the charges are included in the corporate capital allocation discussed above.

Following are tables presenting segment revenues, profit before taxes, assets, interest income, interest expense, depreciation and amortization and expenditures for property and equipment, with reconciliations to the amounts reported for the consolidated enterprise, where applicable:

	Year Ended December 31,		
	2019	2018	2017
Revenues:			
Homebuilding Mid Atlantic	\$ 3,901,573	\$ 3,893,358	\$ 3,543,687
Homebuilding North East	514,804	580,726	517,141
Homebuilding Mid East	1,501,139	1,455,834	1,250,165
Homebuilding South East	1,303,328	1,074,386	864,528
Mortgage Banking	167,820	159,370	130,319
Consolidated revenues	<u>\$ 7,388,664</u>	<u>\$ 7,163,674</u>	<u>\$ 6,305,840</u>

	Year Ended December 31,		
	2019	2018	2017
Profit before taxes:			
Homebuilding Mid Atlantic	\$ 478,537	\$ 462,178	\$ 398,494
Homebuilding North East	51,728	69,789	60,218
Homebuilding Mid East	173,374	175,134	149,639
Homebuilding South East	155,144	118,296	95,826
Mortgage Banking	105,292	93,462	73,959
Total segment profit	<u>964,075</u>	<u>918,859</u>	<u>778,136</u>
Reconciling items:			
Equity-based compensation expense (1)	(78,532)	(75,701)	(44,562)
Corporate capital allocation (2)	224,468	213,903	198,384
Unallocated corporate overhead	(105,125)	(89,973)	(89,514)
Consolidation adjustments and other	45,130	16,612	27,450
Corporate interest expense	(24,221)	(23,968)	(22,983)
Reconciling items sub-total	<u>61,720</u>	<u>40,873</u>	<u>68,775</u>
Consolidated profit before taxes	<u>\$ 1,025,795</u>	<u>\$ 959,732</u>	<u>\$ 846,911</u>

- (1) The increase in equity-based compensation expense for the year ended December 31, 2018 was primarily attributable to the issuance of Options and RSUs in the second quarter of 2018. See Note 12 for additional discussion of equity-based compensation.

NVR, Inc.
Notes to Consolidated Financial Statements
(dollars and shares in thousands, except per share data)

- (2) This item represents the elimination of the corporate capital allocation charge included in the respective homebuilding reportable segments. The corporate capital allocation charge is based on the segment's monthly average asset balance, and was as follows for the years presented:

	Year Ended December 31,		
	2019	2018	2017
Corporate capital allocation charge:			
Homebuilding Mid Atlantic	\$ 123,130	\$ 123,855	\$ 123,028
Homebuilding North East	19,755	17,893	16,115
Homebuilding Mid East	37,263	35,803	29,663
Homebuilding South East	44,320	36,352	29,578
Total corporate capital allocation charge	<u>\$ 224,468</u>	<u>\$ 213,903</u>	<u>\$ 198,384</u>

	As of December 31,	
	2019	2018
Assets:		
Homebuilding Mid Atlantic	\$ 1,024,996	\$ 1,018,953
Homebuilding North East	166,860	144,412
Homebuilding Mid East	293,773	290,815
Homebuilding South East	400,979	332,468
Mortgage Banking	560,407	517,075
Total segment assets	<u>2,447,015</u>	<u>2,303,723</u>
Reconciling items:		
Cash and cash equivalents	1,110,892	688,783
Deferred taxes	115,731	112,333
Intangible assets and goodwill	49,834	49,989
Operating lease right-of-use assets	63,825	—
Contract land deposit reserve	(27,572)	(29,216)
Consolidation adjustments and other	50,090	40,321
Reconciling items sub-total	<u>1,362,800</u>	<u>862,210</u>
Consolidated assets	<u>\$ 3,809,815</u>	<u>\$ 3,165,933</u>

	Year Ended December 31,		
	2019	2018	2017
Interest income:			
Mortgage Banking	\$ 12,142	\$ 11,593	\$ 7,850
Total segment interest income	12,142	11,593	7,850
Other unallocated interest income	20,635	8,588	4,554
Consolidated interest income	<u>\$ 32,777</u>	<u>\$ 20,181</u>	<u>\$ 12,404</u>

NVR, Inc.
Notes to Consolidated Financial Statements
(dollars and shares in thousands, except per share data)

	Year Ended December 31,		
	2019	2018	2017
Interest expense:			
Homebuilding Mid Atlantic	\$ 123,178	\$ 123,908	\$ 123,075
Homebuilding North East	19,804	17,897	16,117
Homebuilding Mid East	37,266	35,804	29,663
Homebuilding South East	44,334	36,362	29,583
Mortgage Banking	1,045	1,045	1,148
Total segment interest expense	225,627	215,016	199,586
Corporate capital allocation (2)	(224,468)	(213,903)	(198,384)
Senior Notes and other interest	24,221	23,968	22,983
Consolidated interest expense	<u>\$ 25,380</u>	<u>\$ 25,081</u>	<u>\$ 24,185</u>

	Year Ended December 31,		
	2019	2018	2017
Depreciation and amortization:			
Homebuilding Mid Atlantic	\$ 7,069	\$ 7,753	\$ 8,095
Homebuilding North East	1,411	1,600	2,034
Homebuilding Mid East	4,348	3,481	3,590
Homebuilding South East	3,086	2,523	2,531
Mortgage Banking	1,581	1,489	1,297
Total segment depreciation and amortization	17,495	16,846	17,547
Unallocated corporate	3,323	3,322	5,120
Consolidated depreciation and amortization	<u>\$ 20,818</u>	<u>\$ 20,168</u>	<u>\$ 22,667</u>

	Year Ended December 31,		
	2019	2018	2017
Expenditures for property and equipment:			
Homebuilding Mid Atlantic	\$ 9,218	\$ 6,657	\$ 9,257
Homebuilding North East	2,000	1,074	1,299
Homebuilding Mid East	5,221	4,302	3,117
Homebuilding South East	3,944	2,732	3,313
Mortgage Banking	899	1,677	2,723
Total segment expenditures for property and equipment	21,282	16,442	19,709
Unallocated corporate	1,417	3,223	560
Consolidated expenditures for property and equipment	<u>\$ 22,699</u>	<u>\$ 19,665</u>	<u>\$ 20,269</u>

3. Variable Interest Entities

Lot Purchase Agreements

We generally do not engage in the land development business. Instead, we typically acquire finished building lots at market prices from various development entities under Lot Purchase Agreements. The Lot Purchase Agreements require deposits that may be forfeited if we fail to perform under the Lot Purchase Agreements. The deposits required under the Lot Purchase Agreements are in the form of cash or letters of credit in varying amounts, and typically range up to 10% of the aggregate purchase price of the finished lots.

We believe this lot acquisition strategy reduces the financial requirements and risks associated with direct land ownership and land development. We may, at our option, choose for any reason and at any time not to perform under these Lot Purchase Agreements by delivering notice of our intent not to acquire the finished lots under contract. Our sole legal obligation and economic loss for failure to perform under these Lot Purchase Agreements is limited to the amount of the deposit pursuant to the liquidated damage provisions contained within the Lot Purchase Agreements. None of the creditors of any of the development entities with which we enter Lot Purchase Agreements have recourse to our general credit. We generally do not have any specific performance obligations to purchase a

NVR, Inc.
Notes to Consolidated Financial Statements
(dollars and shares in thousands, except per share data)

certain number or any of the lots, nor do we guarantee completion of the development by the developer or guarantee any of the developers' financial or other liabilities.

We are not involved in the design or creation of the development entities from which we purchase lots under Lot Purchase Agreements. The developer's equity holders have the power to direct 100% of the operating activities of the development entity. We have no voting rights in any of the development entities. The sole purpose of the development entity's activities is to generate positive cash flow returns for the equity holders. Further, we do not share in any of the profit or loss generated by the project's development. The profits and losses are passed directly to the developer's equity holders.

The deposit placed by us pursuant to the Lot Purchase Agreement is deemed to be a variable interest in the respective development entities. Those development entities are deemed to be variable interest entities ("VIE"). Therefore, the development entities with which we enter into Lot Purchase Agreements, including the joint venture limited liability corporations, discussed below, are evaluated for possible consolidation by us. An enterprise must consolidate a VIE when that enterprise has a controlling financial interest in the VIE. An enterprise is deemed to have a controlling financial interest if it has i) the power to direct the activities of a VIE that most significantly impact the entity's economic performance, and ii) the obligation to absorb losses of the VIE that could be significant to the VIE or the rights to receive benefits from the VIE that could be significant to the VIE.

We believe the activities that most significantly impact a development entity's economic performance are the operating activities of the entity. Unless and until a development entity completes finished building lots through the development process to be able to sell, the process of which the development entity's equity investors bear the full risk, the entity does not earn any revenues. The operating development activities are managed solely by the development entity's equity investors.

The development entities with which we contract to buy finished lots typically select the respective projects, obtain the necessary zoning approvals, obtain the financing required with no support or guarantees from us, select who will purchase the finished lots and at what price, and manage the completion of the infrastructure improvements, all for the purpose of generating a cash flow return to the development entity's equity holders and all independent of us. We possess no more than limited protective legal rights through the Lot Purchase Agreement in the specific finished lots that we are purchasing, and we possess no participative rights in the development entities. Accordingly, we do not have the power to direct the activities of a developer that most significantly impact the developer's economic performance. For this reason, we concluded that we are not the primary beneficiary of the development entities with which we enter into Lot Purchase Agreements, and therefore we do not consolidate any of these VIEs.

As of December 31, 2019, we controlled approximately 101,300 lots under Lot Purchase Agreements with third parties through deposits in cash and letters of credit totaling approximately \$439,500 and \$5,500, respectively. As noted above, our sole legal obligation and economic loss for failure to perform under these Lot Purchase Agreements is limited to the amount of the deposit pursuant to the liquidated damage provisions contained in the Lot Purchase Agreements and, in very limited circumstances, specific performance obligations.

In addition, we have certain properties under contract with land owners that are expected to yield approximately 7,000 lots, which are not included in the number of total lots controlled. Some of these properties may require rezoning or other approvals to achieve the expected yield. These properties are controlled with deposits in cash and letters of credit totaling approximately \$1,900 and \$100, respectively, as of December 31, 2019, of which approximately \$900 is refundable if we do not perform under the contract. We generally expect to assign the raw land contracts to a land developer and simultaneously enter into a Lot Purchase Agreement with the assignee if the project is determined to be feasible.

Our total risk of loss related to contract land deposits as of December 31, 2019 and 2018 was as follows:

	December 31,	
	2019	2018
Contract land deposits	\$ 441,423	\$ 425,393
Loss reserve on contract land deposits	(27,572)	(29,216)
Contract land deposits, net	413,851	396,177
Contingent obligations in the form of letters of credit	5,606	3,923
Contingent specific performance obligations (1)	—	1,505
Total risk of loss	\$ 419,457	\$ 401,605

- (1) As of December 31, 2019, we had no specific performance obligations related to purchase of finished lots. As of December 31, 2018, we were committed to purchase 10 finished lots under specific performance obligations.

NVR, Inc.Notes to Consolidated Financial Statements
(dollars and shares in thousands, except per share data)**4. Joint Ventures**

On a limited basis, we obtain finished lots using joint venture limited liability corporations ("JVs"). The JVs are typically structured such that we are a non-controlling member and at risk only for the amount we have invested, or committed to invest, in addition to any deposits placed under Lot Purchase Agreements with the joint venture. We are not a borrower, guarantor or obligor on any debt of the JVs, as applicable. We enter into a standard Lot Purchase Agreement to purchase lots from these JVs, and as a result have a variable interest in these JVs.

At December 31, 2019, we had an aggregate investment totaling approximately \$26,700 in five JVs that are expected to produce approximately 6,300 finished lots, of which approximately 2,950 lots were controlled by us and the remaining approximately 3,350 lots were either under contract with unrelated parties or not currently under contract. In addition, we had additional funding commitments in the aggregate totaling \$4,300 to two of the JVs at December 31, 2019. We determined that we are not the primary beneficiary of four of the JVs because we and the other JV partner either share power or the other JV partner has the controlling financial interest. The aggregate investment in unconsolidated JVs was approximately \$26,700 and \$29,400 at December 31, 2019 and 2018, respectively, and is reported in the "Other assets" line item on the accompanying consolidated balance sheets. For the remaining JV, we concluded that we are the primary beneficiary because we have the controlling financial interest in the JV. As of December 31, 2018, all activities under the consolidated JV had been completed. As of December 31, 2019, we had no remaining investment in the JV and the JV had remaining balances of \$281 in cash and \$251 in accrued expenses, which are included in homebuilding "Other assets" and "Accrued expenses and other liabilities," respectively, in the accompanying consolidated balance sheets.

At December 31, 2018, we had an aggregate investment totaling approximately \$29,400 in six JVs that were expected to produce approximately 6,800 finished lots, of which approximately 3,450 lots were controlled by us and the remaining approximately 3,350 lots were either under contract with unrelated parties or not currently under contract. In addition, at December 31, 2018, we had additional funding commitments in the aggregate totaling \$5,000 to three of the JVs. During 2018, we recognized an impairment of approximately \$7,400, including approximately \$760 of capitalized interest, related to one of the JVs. The charge was recorded to homebuilding "Cost of sales" on the accompanying consolidated statements of income.

With our adoption of ASU 2016-15 effective January 1, 2018, we made the election to classify distributions received from unconsolidated JVs using the cumulative earnings approach. As a result, distributions received up to the amount of cumulative earnings recognized by us are reported as distributions of earnings and those in excess of that amount are reported as a distribution of capital. These distributions are classified within the accompanying consolidated statements of cash flows as cash flows from operating activities and investing activities, respectively.

5. Land Under Development

As of December 31, 2019, we directly owned five separate raw parcels of land with a carrying value of \$69,196 that we intend to develop into approximately 650 finished lots primarily for use in our homebuilding operations. We also have additional funding commitments of approximately \$6,100 under a joint development agreement related to one parcel, a portion of which we expect will be offset by development credits of approximately \$2,800. None of the raw parcels had any indicators of impairment as of December 31, 2019.

As of December 31, 2018, we directly owned three separate raw parcels of land with a carrying value of \$38,857, which were expected to produce approximately 500 finished lots.

6. Capitalized Interest

We capitalize interest costs to land under development during the active development of finished lots. In addition, we capitalize interest costs to our joint venture investments while the investments are considered qualified assets pursuant to ASC 835-20, *Interest*. Capitalized interest is transferred to sold or unsold inventory as the development of finished lots is completed, then charged to cost of sales upon our settlement of homes and the respective lots. Interest incurred in excess of the interest capitalizable based on the level of qualified assets is expensed in the period incurred.

NVR, Inc.
Notes to Consolidated Financial Statements
(dollars and shares in thousands, except per share data)

Our interest costs incurred, capitalized, expensed and charged to cost of sales during the years ended December 31, 2019, 2018 and 2017 was as follows:

	December 31,		
	2019	2018	2017
Interest capitalized, beginning of year	\$ 4,154	\$ 5,583	\$ 5,106
Interest incurred	26,463	26,277	26,384
Interest charged to interest expense	(25,380)	(25,081)	(24,185)
Interest charged to cost of sales	(1,738)	(2,625)	(1,722)
Interest capitalized, end of year	<u>\$ 3,499</u>	<u>\$ 4,154</u>	<u>\$ 5,583</u>

7. Related Party Transactions

During the year ended December 31, 2019, we entered into Lot Purchase Agreements to purchase finished building lots for a total purchase price of approximately \$100,600 with Elm Street Development, Inc. (“Elm Street”), which is controlled by one of our directors, William Moran. The independent members of our Board of Directors approved these transactions. During 2019, 2018 and 2017, we purchased developed lots at market prices from Elm Street for approximately \$44,600, \$36,100 and \$37,100, respectively.

We also continue to control a parcel of raw land expected to yield approximately 2,200 finished lots through a JV entered into with Elm Street during 2009. We did not make any investments in the JV in 2019 or 2018. During 2017, we and Elm Street each made an additional investment of \$2,900 in the JV.

8. Property, Plant and Equipment (“PP&E”)

	December 31,	
	2019	2018
Homebuilding:		
Office facilities and other	\$ 39,218	\$ 37,789
Model home furniture and fixtures	31,352	31,593
Production facilities	71,295	64,667
Finance lease right-of-use assets	7,051	—
Gross Homebuilding PP&E	148,916	134,049
Less: accumulated depreciation	(96,656)	(91,815)
Net Homebuilding PP&E	<u>\$ 52,260</u>	<u>\$ 42,234</u>
Mortgage Banking:		
Office facilities and other	\$ 14,617	\$ 13,724
Less: accumulated depreciation	(8,789)	(7,214)
Net Mortgage Banking PP&E	<u>\$ 5,828</u>	<u>\$ 6,510</u>

9. Debt

Senior Notes

On September 10, 2012, we completed an offering for \$600,000 of Senior Notes under a shelf registration statement filed on September 5, 2012 with the Securities and Exchange Commission. The Senior Notes were issued at a discount to yield 3.97% and have been reflected net of the unamortized discount in the accompanying consolidated balance sheet. The offering of the Senior Notes resulted in aggregate net proceeds of approximately \$593,900, after deducting underwriting discounts and other offering expenses. The Senior Notes mature on September 15, 2022 and bear interest at 3.95%, payable semi-annually in arrears on March 15 and September 15. The Senior Notes have been reflected net of unamortized debt issuance costs of \$1,377 and \$1,886 as of December 31, 2019 and 2018, respectively.

The Senior Notes are senior unsecured obligations and rank equally in right of payment with any of our existing and future unsecured senior indebtedness, will rank senior in right of payment to any of our future indebtedness that is by its terms expressly

NVR, Inc.Notes to Consolidated Financial Statements
(dollars and shares in thousands, except per share data)

subordinated to the Senior Notes and will be effectively subordinated to any of our existing and future secured indebtedness to the extent of the value of the collateral securing such indebtedness. The indenture governing the Senior Notes has, among other items, and subject to certain exceptions, covenants that restrict our ability to create, incur, assume or guarantee secured debt, enter into sale and leaseback transactions and conditions related to mergers and/or the sale of assets. We were in compliance with all covenants under the Senior Notes at December 31, 2019.

Credit Agreement

On July 15, 2016, we entered into an unsecured Credit Agreement (the "Credit Agreement") with Bank of America, N.A., as Administrative Agent, Swing Line Lender and L/C Issuer, Merrill Lynch, Pierce, Fenner & Smith Incorporated as Sole Lead Arranger and Sole Book Runner, and the other lenders party thereto, which provides for aggregate revolving loan commitments of \$200,000 (the "Facility"). Proceeds of the borrowings under the Facility will be used for working capital and general corporate purposes. Under the Credit Agreement, we may request increases of up to \$300,000 to the Facility in the form of revolving loan commitments or term loans to the extent that new or existing lenders agree to provide additional revolving loan or term loan commitments. The Credit Agreement provides for a \$100,000 sublimit for the issuance of letters of credit of which approximately \$9,700 was outstanding at December 31, 2019, and a \$25,000 sublimit for a swing line commitment. Borrowings under the Credit Agreement generally bear interest for Base Rate Loans at a Base Rate equal to the highest of (i) a Federal Funds Rate plus one-half of one percent, (ii) Bank of America's publicly announced "prime rate," and (iii) the Eurodollar Rate plus one percent, plus the Applicable Rate which is based on the Company's debt rating, or for Eurodollar Rate Loans, at the Eurodollar Rate equal to LIBOR plus the Applicable Rate.

The Credit Agreement contains various representations and affirmative and negative covenants that are generally customary for credit facilities of this type. Such covenants include, among others, the following financial maintenance covenants: (i) minimum consolidated tangible net worth, (ii) minimum interest coverage ratio or minimum liquidity and (iii) a maximum leverage ratio. The negative covenants include, among others, certain limitations on liens, investments and fundamental changes. The Credit Agreement termination date is July 15, 2021. We were in compliance with all covenants under the Credit Agreement at December 31, 2019. There was no debt outstanding under the Facility at December 31, 2019.

Repurchase Agreement

On July 24, 2019, NVRM entered into the Eleventh Amendment (the "Amendment") to its Amended and Restated Master Repurchase Agreement dated August 2, 2011 with U.S. Bank National Association (as amended by the Amendment and ten earlier amendments, the "Repurchase Agreement"). The purpose of the Repurchase Agreement is to finance the origination of mortgage loans by NVRM. The Repurchase Agreement provides for loan purchases up to \$150,000, subject to certain sub limits.

Advances under the Repurchase Agreement carry a Pricing Rate based on the LIBOR Rate plus the LIBOR Margin, as determined under the Repurchase Agreement, provided that the Pricing Rate shall not be less than 1.85%. The Pricing Rate at December 31, 2019 was 3.663%. There are several restrictions on purchased loans, including that they cannot be sold to others, they cannot be pledged to anyone other than the agent, and they cannot support any other borrowing or repurchase agreement. Amounts outstanding under the Repurchase Agreement are collateralized by our mortgage loans held for sale. At December 31, 2019, there were no borrowing base limitations reducing the amount available under the Repurchase Agreement. As of both December 31, 2019 and 2018, there was no debt outstanding under the Repurchase Agreement. The Repurchase Agreement expires on July 22, 2020.

The Repurchase Agreement contains various affirmative and negative covenants. The negative covenants include, among others, certain limitations on transactions involving acquisitions, mergers, the incurrence of debt, sale of assets and creation of liens upon any of its Mortgage Notes. Additional covenants include (i) a tangible net worth requirement, (ii) a minimum liquidity requirement, (iii) a minimum net income requirement, and (iv) a maximum leverage ratio requirement. NVRM was in compliance with all covenants under the Repurchase Agreement at December 31, 2019.

NVR, Inc.
Notes to Consolidated Financial Statements
(dollars and shares in thousands, except per share data)

10. Common Stock

There were approximately 3,633 and 3,578 common shares outstanding at December 31, 2019 and 2018, respectively. We made the following share repurchases during the years indicated:

	Year Ended December 31,		
	2019	2018	2017
Aggregate purchase price	\$ 698,417	\$ 846,134	\$ 422,166
Number of shares repurchased	221	301	167

We issue shares from the treasury account for all equity plan activity. We issued 276, 188 and 165 such shares during 2019, 2018 and 2017, respectively.

11. Income Taxes

The provision for income taxes consists of the following:

	Year Ended December 31,		
	2019	2018	2017
Current:			
Federal	\$ 115,610	\$ 126,358	\$ 211,641
State	34,586	37,038	37,006
Deferred:			
Federal	(2,195)	138	60,785
State	(745)	(999)	(42)
Income tax expense	<u>\$ 147,256</u>	<u>\$ 162,535</u>	<u>\$ 309,390</u>

Deferred income taxes on our consolidated balance sheets were comprised of the following:

	December 31,	
	2019	2018
Deferred tax assets:		
Other accrued expenses and contract land deposit reserve	\$ 52,726	\$ 51,316
Deferred compensation	4,635	4,693
Equity-based compensation expense	42,043	40,744
Inventory	10,530	9,242
Unrecognized tax benefit	12,355	13,587
Other	8,289	5,113
Total deferred tax assets	130,578	124,695
Less: Deferred tax liabilities	7,902	6,091
Net deferred tax asset	<u>\$ 122,676</u>	<u>\$ 118,604</u>

Deferred tax assets arise principally as a result of various accruals required for financial reporting purposes and equity-based compensation expense, which are not currently deductible for tax return purposes.

Management believes that we will have sufficient future taxable income to make it more likely than not that the net deferred tax assets will be realized. Federal taxable income is estimated to be approximately \$638,723 for the year ended December 31, 2019, and was \$640,195 for the year ended December 31, 2018.

NVR, Inc.
Notes to Consolidated Financial Statements
(dollars and shares in thousands, except per share data)

A reconciliation of income taxes computed at the federal statutory rate (21% in 2019 and 2018, 35% in 2017) to income tax expense is as follows:

	Year Ended December 31,		
	2019	2018	2017
Income taxes computed at the federal statutory rate	\$ 215,417	\$ 201,544	\$ 296,419
State income taxes, net of federal income tax benefit (1)	45,770	42,944	30,046
Excess tax benefits from equity-based compensation	(101,466)	(77,478)	(58,681)
Remeasurement of net deferred tax assets due to enactment of Tax Cut and Jobs Act	—	(497)	62,702
Other, net (2)	(12,465)	(3,978)	(21,096)
Income tax expense	<u>\$ 147,256</u>	<u>\$ 162,535</u>	<u>\$ 309,390</u>

- (1) Excludes state excess tax benefits from equity-based compensation included in the line below.
- (2) Primarily attributable to tax benefits from certain energy tax credits for the years ended December 31, 2019 and 2018. In 2019, the energy credit recorded related to homes we settled in both 2018 and 2019 due to the retroactive reinstatement of certain expired energy tax credits under the The Further Consolidated Appropriations Act. In 2018, the energy tax credits resulted from credit adjustments related to 2017 home settlement activity. For the year ended December 31, 2017, the tax benefit resulted primarily from the domestic production activities deduction, which was eliminated effective January 1, 2018, following the enactment of the Tax Cuts and Jobs Act in December 2017.

Our effective tax rate in 2019, 2018 and 2017 was 14.36%, 16.94% and 36.53%, respectively.

We file a consolidated U.S. federal income tax return, as well as state and local tax returns in all jurisdictions where we maintain operations. With few exceptions, we are no longer subject to income tax examinations by tax authorities for years prior to 2016.

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

	Year Ended December 31,	
	2019	2018
Balance at beginning of year	\$ 43,418	\$ 45,337
Additions based on tax positions related to the current year	2,941	4,340
Reductions for tax positions of prior years	(7,003)	(6,259)
Settlements	—	—
Balance at end of year	<u>\$ 39,356</u>	<u>\$ 43,418</u>

If recognized, the total amount of unrecognized tax benefits that would affect the effective tax rate (net of the federal tax benefit) is \$31,090 as of December 31, 2019.

We recognize interest related to unrecognized tax benefits as a component of income tax expense. For the years ended December 31, 2019, 2018, and 2017, we recognized a net reversal of accrued interest on unrecognized tax benefits in the amount of \$1,467, \$1,384 and \$1,065, respectively. As of December 31, 2019 and 2018, we had a total of \$15,724 and \$17,191, respectively, of accrued interest on unrecognized tax benefits which are included in "Accrued expenses and other liabilities" on the accompanying consolidated balance sheets.

We believe that within the next 12 months, it is reasonably possible that the unrecognized tax benefits as of December 31, 2019 will be reduced by approximately \$6,951 due to statute expiration and effectively settled positions in various state jurisdictions.

NVR, Inc.
Notes to Consolidated Financial Statements
(dollars and shares in thousands, except per share data)

12. Equity-Based Compensation, Profit Sharing and Deferred Compensation Plans

Equity-Based Compensation Plans

Our equity-based compensation plans provide for the granting of Options and RSUs to key management employees, including executive officers and members of our Board of Directors ("Directors"). The exercise price of Options granted is equal to the closing price of our common stock on the New York Stock Exchange (the "NYSE") on the day prior to the date of grant. Options are granted for a 10-year term and typically vest in separate tranches over periods of 3 to 6 years. RSUs generally vest in separate tranches over periods of 2 to 6 years. Grants are generally divided such that vesting for 50% of the grant is contingent solely on continued employment or service as a Director, while vesting for the remaining 50% of the grant is contingent upon both continued employment or service as a Director and the achievement of a performance metric based on our return on capital performance relative to a peer group during a 3-year period specified on the date of grant.

The following table provides a summary of each of our equity-based compensation plans with grants outstanding at December 31, 2019:

Equity-Based Compensation Plans	Shares Authorized	Options/RSUs Outstanding	Shares Available to Issue
2000 Broadly-Based Stock Option Plan	2,000	11	—
2010 Equity Incentive Plan (1)	700	109	6
2014 Equity Incentive Plan (2)	950	514	137
2018 Equity Incentive Plan (3)	275	131	144

- (1) During 2010, our shareholders approved the 2010 Equity Incentive Plan (the "2010 Plan"). The 2010 Plan authorizes us to issue Options and RSUs to key management employees, including executive officers and Directors. Of the 700 aggregate shares authorized to issue, up to 218 were available to grant in the form of RSUs. There were 94 Options and 15 RSUs outstanding as of December 31, 2019. None of the remaining shares available to be issued under the 2010 Plan may be granted as RSUs.
- (2) During 2014, our shareholders approved the 2014 Equity Incentive Plan (the "2014 Plan"). The 2014 Plan authorizes us to issue Options to key management employees, including executive officers and Directors.
- (3) During 2018, our shareholders approved the 2018 Equity Incentive Plan (the "2018 Plan"). The 2018 Plan authorizes us to issue Options and RSUs to key management employees, including executive officers and Directors. Of the 275 aggregate shares authorized to issue, all may be granted in the form of Options and up to 40 may be granted in the form of RSUs. None of the grants outstanding as of December 31, 2019 have been granted in the form of RSUs.

During 2019, we issued 26 Options and 1 RSUs under the following equity-based compensation plans:

	2010 Plan	2014 Plan
Options Granted		
Options (4)	13	—
Performance-based Options (5)	12	1
Total Options Granted	25	1
RSUs Granted		
RSUs (6)	1	—
Performance-based RSUs	—	—
Total RSUs Granted	1	—

- (4) Options granted vest over four years in 25% increments on beginning on either December 31, 2021 or December 31, 2022, based on the date of grant. Vesting for the Options is contingent solely upon continued employment or continued service as a Director.
- (5) Options granted vest over four years in 25% increments beginning on either December 31, 2021 or December 31, 2022, based on the date of grant. Vesting for the performance-based Options is contingent upon both continued employment or

NVR, Inc.
Notes to Consolidated Financial Statements
(dollars and shares in thousands, except per share data)

continued service as a Director and our return on capital performance during the three year periods beginning 2019 or 2020, based on the grant's vesting period.

- (6) Service-only RSUs granted vest over two years in 50% increments on January 28, 2020 and 2021. Vesting for the RSUs is contingent solely upon continued employment.

The following table provides additional information relative to our equity-based compensation plans for the year ended December 31, 2019:

	Shares	Weighted Avg. Per Share Exercise Price	Weighted Avg. Remaining Contract Life (years)	Aggregate Intrinsic Value
Stock Options				
Outstanding at December 31, 2018	1,049	\$ 1,766.87		
Granted	26	2,778.19		
Exercised	(271)	1,010.52		
Forfeited	(55)	2,377.25		
Outstanding at December 31, 2019	<u>749</u>	\$ 2,030.42	6.3	\$ 1,331,593
Exercisable at December 31, 2019	<u>353</u>	\$ 1,122.70	4.3	\$ 946,842
RSUs				
Outstanding at December 31, 2018	21			
Granted	1			
Vested	(5)			
Forfeited	(2)			
Outstanding at December 31, 2019	<u>15</u>			\$ 58,528
Vested, but not issued at December 31, 2019	<u>—</u>			\$ —

To estimate the grant-date fair value of our Options, we use the Black-Scholes option-pricing model (the "Pricing Model"). The Pricing Model estimates the per share fair value of an option on its date of grant based on the following factors: the option's exercise price; the price of the underlying stock on the date of grant; the estimated dividend yield; a risk-free interest rate; the estimated option term; and the expected volatility. For the risk-free interest rate, we use U.S. Treasury STRIPS which mature at approximately the same time as the option's expected holding term. For expected volatility, we have concluded that our historical volatility over the option's expected holding term provides the most reasonable basis for this estimate.

The fair value of the Options granted during 2019, 2018 and 2017 was estimated on the grant date using the Pricing Model, based on the following assumptions:

	2019	2018	2017
Estimated option life (years)	5.55	5.06	5.26
Risk free interest rate (range)	1.51%-2.73%	2.19%-3.13%	1.53%-2.38%
Expected volatility (range)	19.17%-22.01%	16.57%-20.05%	15.09%-17.95%
Expected dividend rate	—%	—%	—%
Weighted average grant-date fair value per share of options granted	\$ 661.01	\$ 687.81	\$ 494.17

The grant date fair value per share of \$2,517.06 for the RSUs was the closing price of our common stock on the day immediately preceding the date of grant.

Compensation cost for Options and RSUs is recognized on a straight-line basis over the requisite service period for the entire award (from the date of grant through the period of the last separately vesting portion of the grant). For the recognition of equity-based compensation, the Options and RSUs which are subject to a performance condition are treated as a separate award from the "service-only" Options and RSUs, and compensation expense is recognized when it becomes probable that the stated performance target will be achieved. We currently believe that it is probable that the stated performance condition will be satisfied at the target level and are recognizing compensation expense related to such Options and RSUs accordingly. Compensation cost is recognized within the income statement in the same expense line as the cash compensation paid to the respective employees.

NVR, Inc.Notes to Consolidated Financial Statements
(dollars and shares in thousands, except per share data)

We recognize forfeitures of equity-based awards as a reduction to compensation costs in the period in which they occur. In 2019, 2018 and 2017, we recognized \$78,532, \$75,701, and \$44,562 in equity-based compensation costs, respectively, and approximately \$16,800, \$17,200, and \$17,100 in tax benefit related to equity-based compensation costs, respectively.

As of December 31, 2019, the total unrecognized compensation cost for all outstanding Options and RSUs equaled approximately \$209,000. The unrecognized compensation cost will be recognized over each grant's applicable vesting period with the latest vesting date being December 31, 2025. The weighted-average period over which the unrecognized compensation will be recorded is equal to approximately 2.4 years.

We settle Option exercises and vesting of RSUs by issuing shares of treasury stock. Shares are relieved from the treasury account based on the weighted average cost of treasury shares acquired. During the years ended December 31, 2019, 2018 and 2017, we issued 276, 188 and 165 shares, respectively, from the treasury account for Option exercises and vesting of RSUs. Information with respect to the vested RSUs and exercised Options is as follows:

	Year Ended December 31,		
	2019	2018	2017
Aggregate exercise proceeds	\$ 274,028	\$ 174,110	\$ 140,525
Aggregate intrinsic value on exercise dates	\$ 593,162	\$ 355,318	\$ 206,890

Profit Sharing Plans

We have a trustee-administered, profit sharing retirement plan (the "Profit Sharing Plan") and an Employee Stock Ownership Plan ("ESOP") covering substantially all employees. The Profit Sharing Plan and the ESOP provide for annual discretionary contributions in amounts as determined by our Directors. The combined plan contribution for the years ended December 31, 2019, 2018 and 2017 was approximately \$20,300, \$19,500 and \$16,700, respectively. The ESOP purchased approximately 5 and 7 shares of our common stock in the open market for the 2019 and 2018 plan year contributions, respectively, using cash contributions provided by the Company. As of December 31, 2019, all shares held by the ESOP had been allocated to participants' accounts. The 2019 plan year contribution was funded and fully allocated to participants in February 2020.

Deferred Compensation Plans

We have two deferred compensation plans ("Deferred Comp Plans"). The specific purpose of the Deferred Comp Plans is to i) establish a vehicle whereby named executive officers may defer the receipt of salary and bonus that otherwise would be nondeductible for Company tax purposes into a period where we would realize a tax deduction for the amounts paid, and ii) to enable certain employees who are subject to our stock holding requirements to acquire shares of our common stock on a pre-tax basis in order to more quickly meet, and maintain compliance with those stock holding requirements. Amounts deferred into the Deferred Comp Plans are invested in our common stock, held in a rabbi trust account, and are paid out in a fixed number of shares upon expiration of the deferral period.

The rabbi trust account held 107 shares of NVR common stock as of both December 31, 2019 and 2018. Shares held by the Deferred Comp Plans are treated as outstanding shares in our earnings per share calculation for each of the years ended December 31, 2019, 2018 and 2017.

13. Leases

We have operating leases for our corporate and division offices, production facilities, model homes, and certain office and production equipment. Additionally, we have finance leases for production equipment which are recorded in homebuilding "Property, plant and equipment, net" and "Accrued expenses and other liabilities" on the accompanying consolidated balance sheets. Our leases have remaining lease terms of up to 20 years, some of which include options to extend the leases for up to 10 years, and some of which include options to terminate the lease.

On January 1, 2019, we adopted ASU 2016-02, Leases (Topic 842), which requires lessees to recognize most leases on the balance sheet as ROU assets with corresponding lease liabilities. See Note 1 for additional discussion regarding the adoption of Topic 842. The ROU assets and lease liabilities are recognized based on the present value of lease payments over the lease term, discounted using our incremental borrowing rate at the commencement date of the lease. We estimate our incremental borrowing rate based on available published borrowing rates commensurate with our debt rating and the lease term, adjusted to infer collateralization. We recognize operating lease expense on a straight-line basis over the lease term.

We have elected to use the portfolio approach for certain equipment leases which have similar lease terms and payment schedules. Additionally, for certain equipment we account for the lease and non-lease components as a single lease component. Our sublease income is de minimis.

NVR, Inc.
Notes to Consolidated Financial Statements
(dollars and shares in thousands, except per share data)

We have certain leases, primarily the leases of model homes, which have initial lease terms of twelve months or less ("Short-term leases"). We elected to exclude these leases from the recognition requirements under Topic 842, and these leases have not been included in our recognized ROU assets and lease liabilities.

The components of lease expense were as follows:

	Year Ended December 31, 2019
Lease expense	
Operating lease expense	\$ 30,991
Finance lease expense:	
Amortization of ROU assets	382
Interest on lease liabilities	76
Short-term lease expense	26,843
Total lease expense	\$ 58,292

For the years ended December 31, 2018 and 2017, total rent expense incurred under operating leases was approximately \$52,900 and \$49,400, respectively.

Other information related to leases was as follows:

	Year Ended December 31, 2019
Supplemental Cash Flows Information:	
Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash flows from operating leases	\$ 25,272
Operating cash flows from finance leases	76
Financing cash flows from finance leases	306
ROU assets obtained in exchange for lease obligations:	
Operating leases	\$ 17,078
Finance leases	\$ 7,434
Weighted-average remaining lease term (in years):	
Operating leases	5.1
Finance leases	6.7
Weighted-average discount rate:	
Operating leases	3.6%
Finance leases	2.8%

NVR, Inc.
Notes to Consolidated Financial Statements
(dollars and shares in thousands, except per share data)

We are committed under multiple non-cancelable operating leases involving office space, model homes, production facilities, automobiles and equipment. Future minimum lease payments under these operating leases as of December 31, 2019 are as follows:

Year Ending December 31,	Operating Leases	Finance Leases
2020	\$ 30,670	\$ 996
2021	20,865	997
2022	16,640	996
2023	13,082	997
2024	8,016	997
Thereafter	9,911	2,936
Total minimum lease payments	99,184	7,919
Less:		
Imputed interest	(7,857)	(791)
Short-term lease payments	(5,950)	—
Total lease liability	\$ 85,377	\$ 7,128

As reported under prior GAAP, future minimum lease payments under operating leases as of December 31, 2018 were as follows:

Year Ending December 31,	
2019	\$ 31,564
2020	22,210
2021	17,331
2022	13,667
2023	10,324
Thereafter	12,607
	107,703
Sublease income	(25)
	\$ 107,678

14. Commitments and Contingent Liabilities

Litigation

We are involved in various litigation arising in the ordinary course of business. In the opinion of management, and based on advice of legal counsel, this litigation is not expected to have a material adverse effect on our financial position, results of operations or cash flows. Legal costs incurred in connection with outstanding litigation are expensed as incurred.

Contract Land Deposits

We generally do not engage in the land development business. Instead, we typically acquire finished building lots at market prices from various development entities under Lot Purchase Agreements. The Lot Purchase Agreements require deposits that may be forfeited if we fail to perform under the agreement. The deposits required under the Lot Purchase Agreements are in the form of cash or letters of credit in varying amounts, and typically range up to 10% of the aggregate purchase price of the finished lots. At December 31, 2019, assuming that contractual development milestones are met and we exercise our option, we expect to place additional forfeitable deposits with land developers under existing Lot Purchase Agreements of approximately \$211,500. Additionally, as of December 31, 2019, we had funding commitments totaling approximately \$6,100 under a joint development agreement related to our land under development, a portion of which we expect will be offset by development credits of approximately \$2,800.

Bonds and Letters of Credit

NVR, Inc.Notes to Consolidated Financial Statements
(dollars and shares in thousands, except per share data)

During the ordinary course of operating the homebuilding and mortgage banking businesses, we are required to enter into bond or letter of credit arrangements with local municipalities, government agencies, or land developers to collateralize our obligations under various contracts. We had approximately \$40,600 of contingent obligations under such agreements, including approximately \$9,700 for letters of credit issued under the Credit Agreement as of December 31, 2019. We believe we will fulfill our obligations under the related contracts and does not anticipate any material losses under these bonds or letters of credit.

Warranty Reserve

The following table reflects the changes in our Warranty Reserve (see Note 1 herein for further discussion of warranty/product liability reserves):

	Year Ended December 31,		
	2019	2018	2017
Warranty reserve, beginning of year	\$ 103,700	\$ 94,513	\$ 93,895
Provision	69,065	62,553	44,652
Payments	(64,712)	(53,366)	(44,034)
Warranty reserve, end of year	<u>\$ 108,053</u>	<u>\$ 103,700</u>	<u>\$ 94,513</u>

15. Fair Value

GAAP assigns a fair value hierarchy to the inputs used to measure fair value. Level 1 inputs are quoted prices in active markets for identical assets and liabilities. Level 2 inputs are inputs other than quoted market prices that are observable for the asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs.

Financial Instruments

The estimated fair values of our Senior Notes as of December 31, 2019 and 2018 were \$626,520 and \$594,000, respectively. The estimated fair value is based on recent market prices of similar transactions, which is classified as Level 2 within the fair value hierarchy. The carrying values at December 31, 2019 and 2018 were \$598,301 and \$597,681, respectively. Except as otherwise noted below, we believe that insignificant differences exist between the carrying value and the fair value of our financial instruments, which consists primarily of cash equivalents, due to their short term nature.

Derivative Instruments and Mortgage Loans Held for Sale

In the normal course of business, NVRM enters into contractual commitments to extend credit to buyers of single-family homes with fixed expiration dates. The commitments become effective when the borrowers "lock-in" a specified interest rate within time frames established by NVRM. All borrowers are evaluated for credit worthiness prior to the extension of the commitment. Market risk arises if interest rates move adversely between the time of the "lock-in" of rates by the borrower and the sale date of the loan to a broker/dealer. To mitigate the effect of the interest rate risk inherent in providing rate lock commitments to borrowers, NVRM enters into optional or mandatory delivery forward sales contracts to sell whole loans and mortgage-backed securities to broker/dealers. The forward sales contracts lock-in an interest rate and price for the sale of loans similar to the specific rate lock commitments. NVRM does not engage in speculative or trading derivative activities. Both the rate lock commitments to borrowers and the forward sale contracts to broker/dealers are undesignated derivatives and, accordingly, are marked to fair value through earnings. At December 31, 2019, there were contractual commitments to extend credit to borrowers aggregating \$581,065 and open forward delivery contracts aggregating \$986,041, which hedge both the rate lock loan commitments and closed loans held for sale.

The fair value of our rate lock commitments to borrowers and the related input levels includes, as applicable:

- i) the assumed gain/loss of the expected resultant loan sale (Level 2);
- ii) the effects of interest rate movements between the date of the rate lock and the balance sheet date (Level 2); and
- iii) the value of the servicing rights associated with the loan (Level 2).

The assumed gain/loss considers the excess servicing to be received or buydown fees to be paid upon securitization of the loan. The excess servicing and buydown fees are calculated pursuant to contractual terms with investors. To calculate the effects of interest rate movements, NVRM utilizes applicable published mortgage-backed security prices, and multiplies the price movement between the rate lock date and the balance sheet date by the notional loan commitment amount. NVRM sells all of its loans on a servicing released basis, and receives a servicing released premium upon sale. Thus, the value of the servicing rights is included in the fair value measurement and is based upon contractual terms with investors and varies depending on the loan type. NVRM assumes a fallout rate

NVR, Inc.

 Notes to Consolidated Financial Statements
 (dollars and shares in thousands, except per share data)

when measuring the fair value of rate lock commitments. Fallout is defined as locked loan commitments for which NVRM does not close a mortgage loan and is based on historical experience.

The fair value of NVRM's forward sales contracts to broker/dealers solely considers the market price movement of the same type of security between the trade date and the balance sheet date (Level 2). The market price changes are multiplied by the notional amount of the forward sales contracts to measure the fair value.

Mortgage loans held for sale are recorded at fair value when closed, and thereafter are carried at the lower of cost or fair value, net of deferred origination costs, until sold. Fair value is measured using Level 2 inputs. As of December 31, 2019, the fair value of loans held for sale of \$492,125 included on the accompanying consolidated balance sheet has been increased by \$7,019 from the aggregate principal balance of \$485,106. As of December 31, 2018, the fair value of loans held for sale of \$458,324 were increased by \$10,880 from the aggregate principal balance of \$447,444.

The fair value measurement of NVRM's undesignated derivative instruments was as follows:

	As of December 31,	
	2019	2018
Rate lock commitments:		
Gross assets	\$ 8,132	\$ 13,831
Gross liabilities	497	345
Net rate lock commitments	<u>\$ 7,635</u>	<u>\$ 13,486</u>
Forward sales contracts:		
Gross assets	\$ 377	\$ 64
Gross liabilities	920	10,121
Net forward sales contracts	<u>\$ (543)</u>	<u>\$ (10,057)</u>

As of December 31, 2019 and 2018, the net rate lock commitments are reported in mortgage banking "Other assets" and the net forward sales contracts are reported in mortgage banking "Accrued expenses and other liabilities" on the accompanying consolidated balance sheets.

The fair value measurement as of December 31, 2019 was as follows:

	Notional or Principal Amount	Assumed Gain/(Loss) From Loan Sale	Interest Rate Movement Effect	Servicing Rights Value	Security Price Change	Total Fair Value Measurement Gain/(Loss)
Rate lock commitments	\$ 581,065	\$ 1,832	\$ 405	\$ 5,398	\$ —	\$ 7,635
Forward sales contracts	\$ 986,041	—	—	—	(543)	(543)
Mortgages held for sale	\$ 485,106	1,976	(285)	5,328	—	7,019
Total fair value measurement		<u>\$ 3,808</u>	<u>\$ 120</u>	<u>\$ 10,726</u>	<u>\$ (543)</u>	<u>\$ 14,111</u>

The total fair value measurement as of December 31, 2018 was \$14,309. NVRM recorded a fair value adjustment to expense of \$198 for the year ended December 31, 2019, and fair value adjustments to income of \$8,485 and \$1,638 for the years ended December 31, 2018 and 2017, respectively. Unrealized gains/losses from the change in the fair value measurements are included in earnings as a component of mortgage banking fees in the accompanying consolidated statements of income. The fair value measurement will be impacted in the future by the change in the value of the servicing rights, interest rate movements, security price fluctuations, and the volume and product mix of NVRM's closed loans and locked loan commitments.

16. Mortgage Repurchase Reserve

During the years ended December 31, 2019, 2018 and 2017, we recognized pre-tax charges for loan losses related to mortgage loans sold of approximately \$4,200, \$3,200 and \$2,900, respectively. Included in the Mortgage Banking segment's "Accounts payable and other liabilities" line item on the accompanying consolidated balance sheets is a mortgage repurchase reserve equal to approximately \$18,500 and \$15,600 at December 31, 2019 and 2018, respectively.

NVR, Inc.
Notes to Consolidated Financial Statements
(dollars and shares in thousands, except per share data)

17. Quarterly Results (unaudited)

The following table sets forth unaudited selected financial data and operating information on a quarterly basis for the years ended December 31, 2019 and 2018.

	Year Ended December 31, 2019			
	4th Quarter	3rd Quarter	2nd Quarter	1st Quarter
Homebuilding data:				
Revenues	\$ 1,946,859	\$ 1,873,331	\$ 1,757,448	\$ 1,643,206
Gross profit	\$ 379,467	\$ 355,055	\$ 332,060	\$ 304,400
Mortgage Banking data:				
Mortgage banking fees	\$ 43,336	\$ 37,933	\$ 42,746	\$ 43,805
Loans closed	\$ 1,418,742	\$ 1,373,946	\$ 1,231,039	\$ 1,140,999
Consolidated data:				
Net income	\$ 256,137	\$ 223,787	\$ 210,209	\$ 188,406
Diluted earnings per share	\$ 64.41	\$ 56.11	\$ 53.09	\$ 47.64
Operating data:				
New orders (units)	4,392	4,766	5,239	5,139
Settlements (units)	5,331	5,124	4,720	4,493
Backlog (units)	8,233	9,172	9,530	9,011

	Year Ended December 31, 2018			
	4th Quarter	3rd Quarter	2nd Quarter	1st Quarter
Homebuilding data:				
Revenues	\$ 1,954,403	\$ 1,809,345	\$ 1,750,463	\$ 1,490,093
Gross profit	\$ 363,668	\$ 336,696	\$ 333,666	\$ 278,147
Mortgage Banking data:				
Mortgage banking fees	\$ 40,145	\$ 43,062	\$ 36,842	\$ 39,321
Loans closed	\$ 1,356,430	\$ 1,249,199	\$ 1,214,101	\$ 1,009,673
Consolidated data:				
Net income	\$ 232,158	\$ 195,816	\$ 203,174	\$ 166,049
Diluted earnings per share	\$ 58.57	\$ 48.28	\$ 49.05	\$ 39.34
Operating data:				
New orders (units)	3,841	4,302	4,964	5,174
Settlements (units)	5,186	4,754	4,611	3,896
Backlog (units)	8,365	9,710	10,162	9,809

**DESCRIPTION OF THE REGISTRANT'S SECURITIES
REGISTERED PURSUANT TO SECTION 12 OF THE
SECURITIES EXCHANGE ACT OF 1934**

As of February 19, 2020, NVR, Inc. (“NVR”, “we”, “us” or “our”) had one class of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”): Common Stock, \$0.01 par value per share (“Common Stock”).

The following description of our Capital Stock is a summary and does not purport to be complete. It is subject to and qualified in its entirety by reference to our Restated Articles of Incorporation (the “Articles of Incorporation”) and our Amended and Restated Bylaws (the “Bylaws”), each of which are incorporated by reference as an exhibit to the Annual Report on Form 10-K of which this Exhibit 4.5 is a part. We encourage you to read our Articles of Incorporation, our Bylaws and the applicable provisions of Virginia Stock Corporation Act, for additional information.

Authorized Capital Stock

We are authorized to issue 75,000,000 shares, of which 60,000,000 may be issued as shares of Common Stock and 15,000,000 shares may be issued as preferred stock, with a par value of \$0.01 per share (“Preferred Stock”). As of December 31, 2019, 3,632,772 shares of Common Stock were issued and outstanding. No shares of Preferred Stock were issued or outstanding. The outstanding shares of our Common Stock are fully paid and nonassessable.

Description of Common Stock

Listing

The Common Stock is traded on the New York Stock Exchange under the trading symbol “NVR.”

Voting Rights

Subject to exceptions that may be provided in our Articles of Incorporation or as prescribed by law, holders of Common Stock are generally entitled to one vote on each matter voted on at a shareholders’ meeting. Unless the Articles of Incorporation provide otherwise, in the election of directors, each outstanding share, regardless of class, is entitled to one vote for as many persons as there are directors to be elected at that time and for whose election the shareholder has a right to vote. Our Common Stock does not have cumulative voting rights.

Dividends

In accordance with its corporate power under Virginia law, our board of directors may determine that dividends are to be paid to the holders of the Common Stock from time to time out of legally available funds.

Liquidation

In the event of any voluntary or involuntary liquidation, dissolution or winding up of affairs, the holders of Common Stock then outstanding are entitled to share ratably in all of our assets remaining after payment of all debts and other liabilities and any liquidation preference of the holders of Preferred Shares.

Other Rights and Preferences

Holders of Capital Stock do not have any preemptive rights to purchase, subscribe for or otherwise acquire any other Capital Stock or any other of our securities, whether currently authorized or authorized in the future. Shareholders may act without a meeting and without action by our board of directors if such action is taken by all shareholders entitled to vote on the action in the manner provided in the Virginia Stock Corporation Act.

Registrar and Transfer Agent

The registrar and transfer agent for our Common Stock is Computershare Trust Company, N.A.

Description of Preferred Stock

Under our Articles of Incorporation, any Preferred Shares issued shall have the designation, preference, limitations and relative rights of each series of preferred shares so issued, as established by one or more amendments of our Articles of Incorporation adopted by our board of directors or the shareholders in accordance with the Virginia Stock Corporation Act.

Certain Provisions of Governing Documents and Virginia Law

Board of Directors

Our Articles of Incorporation and Bylaws provide that our board of directors shall have no less than seven and no more than 13 members, as established from time to time by resolution of our board of directors. Our directors serve for one-year terms and can be removed from office only for cause (as defined in our Articles of Incorporation) and only by the affirmative vote of holders of shares having a majority of the votes entitled to be cast in the election of directors. Other than to fill vacancies or otherwise required by law, our directors are each elected by a majority of votes cast by such shares entitled to vote; for these purposes, "majority" means the number of shares voted "for" a director must exceed the number of shares voted "against" that director. Vacancies on our board of directors may be filled by our shareholders or by our remaining directors.

Change In Control and Anti-Takeover Matters

We have opted not to be subject to the restrictions on acquiring control of Virginia corporations under Article 14.1 (Control Share Acquisitions) of the Virginia Stock Corporation Act.

Our Bylaws require that shareholders give advance notice of proposals to be presented at meetings of shareholders, including director nominations. Shareholder nominations for directors may not exceed twenty percent (20%) of the number of directors in office as of the last permissible day to deliver such advance notice, as set forth in our Bylaws, and such shareholders must meet the eligibility criteria set forth therein. In addition, our Bylaws provide that special meetings of our shareholders may be called only by a majority of the board of directors.

Amendment of Articles of Incorporation and Bylaws

Our Articles of Incorporation may be amended by the affirmative vote of a majority of the board of directors, to the extent permitted by the Virginia Stock Corporation Act, or by the affirmative vote of the holders of a majority of our outstanding shares.

Various provisions of our Bylaws can be amended by the shareholders or by the affirmative vote of a majority of the board of directors. Furthermore, the affirmative vote of the holders of a majority of our outstanding Capital Stock is necessary to amend certain provisions of our Bylaws, including, among other things, the provisions applicable to the composition of the board of directors, the quorum and voting requirements for certain actions, restrictions on affiliate transactions, and committees of the board of directors.

NVR, Inc.
Summary of the 2020 Executive Officer Annual Incentive Compensation Plan

The following is a description of NVR, Inc.'s ("NVR" or the "Company") 2020 annual incentive compensation plan (the "Bonus Plan"). The Bonus Plan is not set forth in a formal written document, and therefore NVR is providing this description of the plan pursuant to Item 601(b)(10)(iii) of Regulation S-K. All of NVR's executive officers; Paul C. Saville (President and Chief Executive Officer of NVR), Jeffrey D. Martchek (President of Homebuilding Operations), Paul W. Praylo, (Senior Vice President and Chief Operating Officer of NVR), Daniel D. Malzahn (Senior Vice President, Chief Financial Officer and Treasurer of NVR), Eugene J. Bredow (President of NVR Mortgage Finance, Inc.), participate in the Bonus Plan.

Under the Bonus Plan, the executive officers' bonus opportunity is limited to 100% of their base salary. The executive officers' annual bonus opportunity will be based 80% upon the Company's consolidated pre-tax profit (before consolidated annual bonus and stock-based compensation expense but after all other charges) and 20% based on the number of new orders, net of cancellations ("New Orders") compared to the consolidated pre-tax profit and New Orders within the Company's 2020 annual business plan. The executive officers begin to earn the consolidated pre-tax profit portion of their annual bonus award once the annual business plan is at least 80% attained. The full amount of the consolidated pre-tax profit portion of their annual bonus award is earned ratably from 80% up to 100% achievement of the annual business plan. The executive officers begin to earn the New Orders portion of their annual bonus award once the annual business plan is at least 85% attained. The full amount of the New Orders portion of their annual bonus award is earned ratably from 85% up to 100% achievement of the annual business plan.

NVR, Inc. Subsidiaries

<u>Name of Subsidiary</u>	<u>State of Incorporation or Organization</u>
NVR Mortgage Finance, Inc.	Virginia
NVR Settlement Services, Inc.	Pennsylvania
RVN, Inc.	Delaware
NVR Services, Inc.	Delaware
NVR Funding II, Inc.	Delaware

Consent of Independent Registered Public Accounting Firm

The Board of Directors
NVR, Inc.:

We consent to the incorporation by reference in the registration statement (No. 333-29241) on Form S-8 (for the Profit Sharing Plan of NVR, Inc. and Affiliated Companies), the registration statement (No. 333-82756) on Form S-8 (for the Profit Sharing Plan of NVR, Inc. and Affiliated Companies), the registration statement (No. 333-166512) on Form S-8 (for the NVR, Inc. 2010 Equity Incentive Plan), the registration statement (No. 333-195756) on Form S-8 (for the NVR, Inc. 2014 Equity Incentive Plan) and the registration statement (No. 333-224628) on Form S-8 (for the NVR, Inc. 2018 Equity Incentive Plan) of our reports dated February 19, 2020, with respect to the consolidated balance sheets of NVR, Inc. and subsidiaries as of December 31, 2019 and 2018, and the related consolidated statements of income, shareholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2019, and the related notes, and the effectiveness of internal control over financial reporting as of December 31, 2019, which reports appears in the December 31, 2019 annual report on Form 10-K of NVR, Inc.

Our report refers to a change in the method of accounting for leases.

KPMG LLP

McLean, Virginia

February 19, 2020

SARBANES-OXLEY ACT SECTION 302 CERTIFICATIONS

I, Paul C. Saville, certify that:

1. I have reviewed this Annual Report on Form 10-K of NVR, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 19, 2020

By: /s/ Paul C. Saville

Paul C. Saville

President and Chief Executive Officer

SARBANES-OXLEY ACT SECTION 302 CERTIFICATIONS

I, Daniel D. Malzahn, certify that:

1. I have reviewed this Annual Report on Form 10-K of NVR, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 19, 2020

By: /s/ Daniel D. Malzahn

Daniel D. Malzahn

Senior Vice President, Chief Financial Officer and Treasurer

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report on Form 10-K of NVR, Inc. for the period ended December 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned officers of NVR, Inc., hereby certifies pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of NVR, Inc.

Date: February 19, 2020

By: /s/ Paul C. Saville

Paul C. Saville

President and Chief Executive Officer

By: /s/ Daniel D. Malzahn

Daniel D. Malzahn

Senior Vice President, Chief Financial Officer and Treasurer