HEARTLAND FINANCIAL USA INC
Form 10-Q
May 08, 2018

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

FORM 10-Q
x QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For quarterly period ended March 31, 2018

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

Commission File Number: 001-15393

HEARTLAND FINANCIAL USA, INC.
(Exact name of Registrant as specified in its charter)

Delaware
(State or other jurisdiction of incorporation or organization)

42-1405748
(I.R.S. employer identification number)

1398 Central Avenue, Dubuque, Iowa 52001
(Address of principal executive offices)(Zip Code)

(563) 589-2100
(Registrant's telephone number, including area code)

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

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

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of “accelerated filer,” “large accelerated filer”, “smaller reporting company” and "emerging growth company" in Rule 12b-2 of the Exchange Act.
Large accelerated filer x Accelerated Filer ¨

Non-accelerated filer ¨	(Do not check if a smaller reporting company)
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 by Rule 12b-2 of the Securities Exchange Act of 1934). Yes o No x

Indicate the number of shares outstanding of each of the classes of Registrant's common stock as of the latest practicable date: As of May 7, 2018, the Registrant had outstanding 31,068,676 shares of common stock, $1.00 par value per share.

HEARTLAND FINANCIAL USA, INC.
Form 10-Q Quarterly Report
Table of Contents

PART I

ITEM 1. FINANCIAL STATEMENTS
HEARTLAND FINANCIAL USA, INC.
CONSOLIDATED BALANCE SHEETS
(Dollars in thousands, except per share data)

	March 31, 2018 (Unaudited)	December 31, 2017
ASSETS		
Cash and due from banks	$143,071	$168,723
Interest bearing deposits with the Federal Reserve Bank and other banks and other short-term investments	123,275	27,280
Cash and cash equivalents	266,346	196,003
Time deposits in other financial institutions	6,297	9,820
Securities:		
Available for sale, at fair value (cost of $2,080,514 at March 31, 2018, and $2,248,181 at December 31, 2017)	2,027,665	2,216,753
Held to maturity, at cost (fair value of $258,638 at March 31, 2018, and $265,494 at December 31, 2017)	249,766	253,550
Other investments, at cost	22,982	22,563
Loans held for sale	24,376	44,560
Loans receivable:		
Held to maturity	6,746,015	6,391,464
Allowance for loan and lease losses	(58,656)	(55,686)
Loans receivable, net	6,687,359	6,335,778
Premises, furniture and equipment, net	171,385	172,324
Premises, furniture and equipment held for sale	1,477	1,977
Other real estate, net	11,801	10,777
Goodwill	270,305	236,615
Core deposit intangibles and customer relationship intangibles, net	41,063	35,203
Servicing rights, net	25,471	25,857
Cash surrender value on life insurance	143,444	142,818
Other assets	106,126	106,141
TOTAL ASSETS	$10,055,863	$9,810,739
LIABILITIES AND EQUITY		
LIABILITIES:		
Deposits:		
Demand	$3,094,457	$2,983,128
Savings	4,536,106	4,240,328
Time	910,977	923,453
Total deposits	8,541,540	8,146,909
Short-term borrowings	131,240	324,691
Other borrowings	276,118	285,011
Accrued expenses and other liabilities	55,460	62,671
TOTAL LIABILITIES	9,004,358	8,819,282
STOCKHOLDERS' EQUITY:		
Preferred stock (par value $1 per share; authorized 17,604 shares; none issued or outstanding at both March 31, 2018, and December 31, 2017)	—	—

Series A Junior Participating preferred stock (par value $1 per share; authorized 16,000 shares; none issued or outstanding at both March 31, 2018, and December 31, 2017)	—	—
Series C Senior Non-Cumulative Perpetual Preferred Stock (par value $1 per share; 81,698 shares authorized at both March 31, 2018, and December 31, 2017, none issued or outstanding at both March 31, 2018, and December 31, 2017)	—	—
Series D Senior Non-Cumulative Perpetual Convertible Preferred Stock (par value $1 per share; 3,000 shares authorized at both March 31, 2018, and December 31, 2017; 745 shares issued and outstanding at both March 31, 2018, and December 31, 2017)	938	938
Common stock (par value $1 per share; 40,000,000 shares authorized at both March 31, 2018, and December 31, 2017; issued 31,068,239 shares at March 31, 2018, and 29,953,356 shares at December 31, 2017)	31,068	29,953
Capital surplus	557,990	503,709
Retained earnings	500,959	481,331
Accumulated other comprehensive loss	(39,450)	(24,474)
Treasury stock at cost (0 shares at both March 31, 2018, and December 31, 2017)	—	—
TOTAL STOCKHOLDERS' EQUITY	1,051,505	991,457
TOTAL LIABILITIES AND EQUITY	$10,055,863	$9,810,739

See accompanying notes to consolidated financial statements.

HEARTLAND FINANCIAL USA, INC.
CONSOLIDATED STATEMENTS OF INCOME (Unaudited)
(Dollars in thousands, except per share data)

	Three Months Ended March 31,	
	2018	2017
INTEREST INCOME:		
Interest and fees on loans	$85,651	$66,898
Interest on securities:		
Taxable	11,577	8,253
Nontaxable	3,579	5,191
Interest on federal funds sold	—	—
Interest on interest bearing deposits in other financial institutions	407	209
TOTAL INTEREST INCOME	101,214	80,551
INTEREST EXPENSE:		
Interest on deposits	5,766	3,730
Interest on short-term borrowings	268	137
Interest on other borrowings (includes $197 and $397 of interest expense related to derivatives reclassified from accumulated other comprehensive income for the three months ended March 31, 2018 and 2017, respectively)	3,596	3,656
TOTAL INTEREST EXPENSE	9,630	7,523
NET INTEREST INCOME	91,584	73,028
Provision for loan losses	4,263	3,641
NET INTEREST INCOME AFTER PROVISION FOR LOAN LOSSES	87,321	69,387
NONINTEREST INCOME:		
Service charges and fees	10,079	9,457
Loan servicing income	1,754	1,724
Trust fees	4,680	3,631
Brokerage and insurance commissions	907	1,036
Securities gains, net (includes $1,441 and $2,482 of net security gains reclassified from accumulated other comprehensive income for the three months ended March 31, 2018 and 2017, respectively)	1,441	2,482
Unrealized loss on equity securities, net	(28)	—
Net gains on sale of loans held for sale	4,051	6,147
Valuation allowance on commercial servicing rights	(2)	5
Income on bank owned life insurance	614	617
Other noninterest income	1,220	794
TOTAL NONINTEREST INCOME	24,716	25,893
NONINTEREST EXPENSES:		
Salaries and employee benefits	48,710	41,767
Occupancy	6,043	5,073
Furniture and equipment	2,749	2,501
Professional fees	8,459	8,309
FDIC insurance assessments	989	807
Advertising	1,940	2,424
Core deposit intangibles and customer relationship intangibles amortization	1,863	1,171
Other real estate and loan collection expenses	732	828
(Gain)/loss on sales/valuations of assets, net	(197)	412

Restructuring expenses	2,564	—
Other noninterest expenses	9,794	8,448
TOTAL NONINTEREST EXPENSES	83,646	71,740
INCOME BEFORE INCOME TAXES	28,391	23,540
Income taxes (includes $261 and $778 of income tax expense reclassified from accumulated other comprehensive income for the three months ended March 31, 2018 and 2017, respectively)	5,123	5,530
NET INCOME	23,268	18,010
Preferred dividends	(13)	(19)
Interest expense on convertible preferred debt	—	5
NET INCOME AVAILABLE TO COMMON STOCKHOLDERS	$23,255	$17,996
EARNINGS PER COMMON SHARE - BASIC	$0.76	$0.68
EARNINGS PER COMMON SHARE - DILUTED	$0.76	$0.68
CASH DIVIDENDS DECLARED PER COMMON SHARE	$0.13	$0.11

See accompanying notes to consolidated financial statements.

HEARTLAND FINANCIAL USA, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (Unaudited)
(Dollars in thousands)

	Three Months Ended March 31,	
	2018	2017
NET INCOME	$23,268	$18,010
OTHER COMPREHENSIVE INCOME		
Securities:		
Net change in unrealized gain (loss) on securities	(19,834)	5,379
Reclassification adjustment for net gains realized in net income	(1,441)	(2,482)
Income taxes	5,391	(1,111)
Other comprehensive income (loss) on securities	(15,884)	1,786
Derivatives used in cash flow hedging relationships:		
Net change in unrealized gain on derivatives	1,699	136
Reclassification adjustment for net losses on derivatives realized in net income	197	397
Income taxes	(708)	(215)
Other comprehensive income on cash flow hedges	1,188	318
Other comprehensive income (loss)	(14,696)	2,104
TOTAL COMPREHENSIVE INCOME	$8,572	$20,114

See accompanying notes to consolidated financial statements.

HEARTLAND FINANCIAL USA, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited)
(Dollars in thousands)

	Three Months Ended March 31,	
	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net income	$23,268	$18,010
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	6,802	7,023
Provision for loan losses	4,263	3,641
Net amortization of premium on securities	5,823	7,226
Securities gains, net	(1,441)	(2,482)
Unrealized loss on equity securities, net	28	—
Stock based compensation	1,858	1,782
Loans originated for sale	(112,433)	(164,324)
Proceeds on sales of loans held for sale	135,506	180,404
Net gains on sale of loans held for sale	(2,889)	(3,828)
Decrease in accrued interest receivable	3,239	93
Decrease in prepaid expenses	194	84
Increase in accrued interest payable	1,029	825
Capitalization of servicing rights	(1,183)	(2,226)
Valuation allowance on commercial servicing rights	2	(5)
(Gain)/loss on sales/valuations of assets, net	(197)	412
Net excess tax benefit from stock based compensation	611	888
Other, net	(5,441)	(13,767)
NET CASH PROVIDED BY OPERATING ACTIVITIES	59,039	33,756
CASH FLOWS FROM INVESTING ACTIVITIES:		
Proceeds from the sale of securities available for sale	392,246	221,637
Proceeds from the redemption of time deposits in other financial institutions	8,767	5,867
Proceeds from the maturity of and principal paydowns on securities available for sale	49,603	47,515
Proceeds from the maturity of and principal paydowns on securities held to maturity	3,570	2,823
Proceeds from the maturity of and principal paydowns on time deposits in other financial institutions	4,368	3,185
Proceeds from the maturity of and principal paydowns on other investments	677	1,521
Purchase of securities available for sale	(244,289)	(312,769)
Purchase of other investments	(644)	(968)
Net (increase) decrease in loans	(32,314)	80,916
Capital expenditures	(2,356)	(3,588)
Net cash and cash equivalents received in acquisitions	5,543	33,698
Proceeds from the sale of equipment	615	3
Proceeds on sale of OREO and other repossessed assets	668	585
NET CASH PROVIDED BY INVESTING ACTIVITIES	$186,454	$80,425

HEARTLAND FINANCIAL USA, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS, CONTINUED (Unaudited)
(Dollars in thousands)

	Three Months Ended March 31,	
	2018	2017
CASH FLOWS FROM FINANCING ACTIVITIES:		
Net increase in demand deposits	$5,834	$22,799
Net increase in savings deposits	100,608	88,767
Net decrease in time deposit accounts	(69,143)	(50,612)
Proceeds on short-term revolving credit line	15,000	—
Net decrease in short-term borrowings	(168,451)	(131,068)
Proceeds from short term FHLB advances	220,000	60,939
Repayments of short term FHLB advances	(260,000)	(81,305)
Repayments of other borrowings	(14,995)	(6,432)
Purchase of treasury stock	(97)	(160)
Proceeds from issuance of common stock	14	218
Dividends paid	(3,920)	(2,900)
NET CASH USED BY FINANCING ACTIVITIES	(175,150)	(99,754)
Net increase in cash and cash equivalents	70,343	14,427
Cash and cash equivalents at beginning of year	196,003	158,724
CASH AND CASH EQUIVALENTS AT END OF PERIOD	$266,346	$173,151
Supplemental disclosures:		
Cash paid for income/franchise taxes	$2	$5
Cash paid for interest	$8,601	$6,698
Loans transferred to OREO	$939	$2,680
Purchases of securities available for sale, accrued, not settled	$—	$3,654
Conversion of convertible debt to common stock	$—	$167
Conversion of Series D preferred stock to common stock	$—	$419
Stock consideration granted for acquisitions	$53,621	$22,589

See accompanying notes to consolidated financial statements.

HEARTLAND FINANCIAL USA, INC.
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY (Unaudited)
(Dollars in thousands, except per share data)

	Heartland Financial USA, Inc. Stockholders' Equity						
	Preferred Stock	Common Stock	Capital Surplus	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Treasury Stock	Total Equity
Balance at January 1, 2017	$1,357	$26,120	$328,376	$416,109	$ (31,046)	$ —	$740,916
Comprehensive income				18,010	2,104		20,114
Cash dividends declared:							
Series D Preferred, $17.50 per share				(19)			(19)
Common, $0.11 per share				(2,881)			(2,881)
Conversion of Series D Preferred Stock	(419)						(419)
Purchase of 3,338 shares of common stock						(160)	(160)
Issuance of 557,530 shares of common stock		554	21,265			160	21,979
Stock based compensation			1,782				1,782
Balance at March 31, 2017	$938	$26,674	$351,423	$431,219	$ (28,942)	$ —	$781,312
Balance at January 1, 2018	$938	$29,953	$503,709	$481,331	$ (24,474)	$ —	$991,457
Comprehensive income				23,268	(14,696)		8,572
Reclassification of unrealized net gain on equity securities				280	(280)		—
Cash dividends declared:							—
Series D Preferred, $17.50 per share				(13)			(13)
Common, $0.13 per share				(3,907)			(3,907)
Purchase of 1,761 shares of common stock						(97)	(97)
Issuance of 1,116,644 shares of common stock		1,115	52,423			97	53,635
Stock based compensation			1,858				1,858
Balance at March 31, 2018	$938	$31,068	$557,990	$500,959	$ (39,450)	$ —	$1,051,505

See accompanying notes to consolidated financial statements.

HEARTLAND FINANCIAL USA, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1: BASIS OF PRESENTATION

The interim unaudited consolidated financial statements contained herein should be read in conjunction with the audited consolidated financial statements and accompanying notes to the consolidated financial statements for the fiscal year ended December 31, 2017, included in the Form 10-K of Heartland Financial USA, Inc. ("Heartland") filed with the Securities and Exchange Commission ("SEC") on February 28, 2018. Footnote disclosures to the interim unaudited consolidated financial statements which would substantially duplicate the disclosure contained in the footnotes to the audited consolidated financial statements have been omitted.

The financial information of Heartland included herein has been prepared in accordance with U.S. generally accepted accounting principles for interim financial reporting and has been prepared pursuant to the rules and regulations for reporting on Form 10-Q and Rule 10-01 of Regulation S-X. Such information reflects all adjustments (consisting of normal recurring adjustments), that are, in the opinion of management, necessary for a fair presentation of the financial position and results of operations for the periods presented. The results of the interim period ended March 31, 2018, are not necessarily indicative of the results expected for the year ending December 31, 2018.

In the Annual Report on Form 10-K for the year ended December 31, 2017, Heartland reported the results of operations through two business segments: Community and Other Banking and Mortgage Banking. Effective January 1, 2018, the recently restructured mortgage banking segment is no longer a reportable segment due to the significant reduction in infrastructure and the reporting structure of the mortgage sales staff, who currently report directly to the bank president in each market. Accordingly, Heartland is no longer reporting results of operations by segment.

Earnings Per Share

Basic earnings per share is determined using net income available to common stockholders and weighted average common shares outstanding. Diluted earnings per share is computed by dividing net income available to common stockholders by the weighted average common shares and assumed incremental common shares issued. Amounts used in the determination of basic and diluted earnings per share for the three-month periods ended March 31, 2018, and 2017, are shown in the table below:

	Three Months Ended March 31,	
(Dollars and number of shares in thousands, except per share data)	2018	2017
Net income	$23,268	$18,010
Preferred dividends	(13)	(19)
Interest expense on convertible preferred debt	—	5
Net income available to common stockholders	$23,255	$17,996
Weighted average common shares outstanding for basic earnings per share	30,442	26,335
Assumed incremental common shares issued upon non-vested restricted stock units	203	293
Weighted average common shares for diluted earnings per share	30,645	26,628
Earnings per common share — basic	$0.76	$0.68
Earnings per common share — diluted	$0.76	$0.68
Number of antidilutive common stock equivalents excluded from diluted earnings per share computation	—	—

Stock-Based Compensation

Heartland may grant, through its Nominating and Compensation Committee (the "Compensation Committee"), non-qualified and incentive stock options, stock appreciation rights, stock awards, restricted stock, restricted stock units and cash incentive awards, under its 2012 Long-Term Incentive Plan (the "Plan"). The Plan was originally approved by stockholders in May 2012 and was amended effective March 8, 2016, to increase the number of shares of common stock authorized for issuance and make certain other changes to the Plan. As of March 31, 2018, 459,893 shares of common stock were available for issuance under future awards that may be granted under the Plan to employees and directors of, and service providers to, Heartland or its subsidiaries.

Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 718, "Compensation-Stock Compensation" requires the measurement of the cost of employee services received in exchange for an award of equity instruments based upon the fair value of the award on the grant date. The cost of the award is based upon its fair value estimated on the date of grant and recognized in the consolidated statements of income over the vesting period of the award. The fair market value of restricted stock and restricted stock units is based on the fair value of the underlying shares of common stock on the date of grant. The fair value of stock options is estimated on the date of grant using the Black-Scholes model. Forfeitures are accounted for as they occur.

The amount of tax benefit related to the exercise, vesting and forfeiture of equity-based awards reflected as a tax benefit in Heartland's income tax expense was $611,000 and $888,000 during the three months ended March 31, 2018 and 2017, respectively.

Restricted Stock Units
The Plan permits the Compensation Committee to grant restricted stock units ("RSUs"). In the first quarter of 2018, the Compensation Committee granted time-based RSUs with respect to 52,153 shares of common stock, and in the first quarter of 2017, the Compensation Committee granted time-based RSUs with respect to 55,665 shares of common stock to selected officers and employees. The time-based RSUs represent the right, without payment, to receive shares of Heartland common stock on a specified date in the future. The time-based RSUs granted in 2018 vest over three years in equal installments on March 6 of each of the three years following the year of the grant, while the 2017 time-based RSUs vest in equal installments on January 19 of each of the three years following the year of the grant. The time-based RSUs may also vest upon death or disability, upon a change in control or upon a "qualified retirement" (as defined in the RSU agreement). The retiree is required to sign a non-solicitation agreement as a condition to vesting.

In addition to the time-based RSUs referenced in the preceding paragraph, the Compensation Committee granted one-year performance-based RSUs with respect to 18,988 shares of common stock in the first quarter of 2018, and 27,570 shares of common stock in the first quarter of 2017. These performance-based RSUs are earned based on satisfaction of performance targets for the fiscal years ended December 31, 2018, and December 31, 2017, respectively, and then fully vest on a specified date in the third calendar year following the year of the initial grant.

The Compensation Committee also granted three-year performance-based RSUs with respect to 16,108 shares and 9,032 shares of common stock in the first quarter of 2018 and 2017, respectively. These performance-based RSUs will be earned based on satisfaction of performance targets for the three-year performance period ended December 31, 2020, and December 31, 2019, respectively. These performance-based RSUs or a portion thereof may vest in 2021 and 2020, respectively, after measurement of performance in relation to the performance targets.

The one-year and three-year performance-based RSUs vest to the extent that they are earned upon death or disability or upon a "qualified retirement." Upon a change in control, performance-based RSUs shall become vested at 100% of target if the RSU obligations are not assumed by the successor company. If the successor company does assume the RSU obligations, the 2017 and 2018 performance-based RSUs will vest at 100% of target upon a "Termination of Service" within the period beginning six months prior to a change in control and ending twenty-four months after a change in control.

All of Heartland's RSUs will be settled in common stock upon vesting and are not entitled to dividends until vested.

The Compensation Committee may grant RSUs under the Plan to directors as part of their compensation, to new management level employees at commencement of employment, and to other employees and service providers as incentives. During the three months ended March 31, 2018, and March 31, 2017, no time-based RSUs were granted to directors and new employees.

A summary of the RSUs outstanding as of March 31, 2018 and 2017, and changes during the three months ended March 31, 2018 and 2017, follows:

	2018		2017	
	Shares	Weighted-Average Grant Date Fair Value	Shares	Weighted-Average Grant Date Fair Value
Outstanding at January 1	301,578	$ 34.74	346,817	$ 27.61
Granted	87,249	55.25	92,267	47.50
Vested	(107,553)	30.79	(103,897)	24.74
Forfeited	(19,113)	43.62	(7,765)	31.03
Outstanding at March 31	262,161	$ 42.60	327,422	$ 34.04

Total compensation costs recorded for RSUs were $1.9 million and $1.7 million for the three-month periods ended March 31, 2018 and 2017. As of March 31, 2018, there were $6.1 million of total unrecognized compensation costs related to the Plan for RSUs that are expected to be recognized through 2021.

Options

Although the Plan provides authority to the Compensation Committee to grant stock options, no options were granted during the first three months of 2018 and 2017. Prior to 2009, options were typically granted annually with an expiration date ten years after the date of grant. Vesting was generally over a five-year service period with equal portions of a grant becoming exercisable at three years, four years, and five years after the date of grant. A summary of the stock options outstanding as of March 31, 2018 and 2017, and changes during the three months ended March 31, 2018 and 2017, follows:

	2018		2017	
	Shares	Weighted-Average Exercise Price	Shares	Weighted-Average Exercise Price
Outstanding at January 1	6,500	$ 18.60	26,400	$ 18.60
Granted	—	—	—	—
Exercised	(6,500)	18.60	(5,500)	18.60
Forfeited	—	—	—	—
Outstanding at March 31	—	$ —	20,900	$ 18.60
Options exercisable at March 31	—	$ —	20,900	$ 18.60

The intrinsic value for the total of all options exercised during the three months ended March 31, 2018, was $231,000. Cash received from options exercised was $121,000 for the three months ended March 31, 2018, and $102,000 for the three months ended March 31, 2017.

No compensation costs were recorded for options during the three month periods ended March 31, 2018 and 2017. There are no unrecorded compensation costs related to options at March 31, 2018. No stock options vested during the three-month periods ended March 31, 2018 and 2017.

Subsequent Events - Heartland has evaluated subsequent events that may require recognition or disclosure through the filing date of this Quarterly Report on Form 10-Q with the SEC.

Effect of New Financial Accounting Standards

In May 2014, the FASB issued Accounting Standards Update ("ASU") 2014-09, "Revenue from Contracts with Customers." The amendment clarifies the principles for recognizing revenue and develops a common revenue standard. The amendment outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance, including industry-specific guidance. The core principle of the revenue model is that "an entity recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services." In applying the revenue model to contracts within its scope, an entity should apply the following steps: (i) identify the contract(s) with a customer, (ii) identify the performance obligations in the contract, (iii) determine the transaction price, (iv) allocate the transaction price to the performance obligations in the contract, and (v) recognize revenue when (or as) the entity satisfies a performance obligation. The new guidance does not apply to certain contracts within the scope of other ASC Topics, such as lease contracts, insurance contracts, financing arrangements, financial instruments, guarantees other than product or service warranties and nonmonetary exchanges between entities in the same line of business to facilitate sales to customers. Heartland evaluates noninterest income contracts affected by the new guidance by analyzing contracts and current accounting practices to determine if a change is appropriate. The amendment is largely consistent with existing guidance and current practices; however Heartland had to change the recognition of certain recurring revenue streams within trust and investment management fees. Heartland adopted the accounting standard effective January 1, 2018, as required, using a modified retrospective approach. However, the adoption of these amendments did not have a significant effect on Heartland's results of operations, financial position and liquidity other than expanded disclosure requirements. See Note 9, "Revenue," for further details regarding Heartland's revenue.

In January 2016, the FASB issued guidance ASU 2016-01, "Recognition and Measurement of Financial Assets and Financial Liabilities." The amendments in ASU 2016-01 to Subtopic 825-10, Financial Instruments, contain the following elements: (1) require equity investments to be measured at fair value with changes in fair value recognized in net income; (2) simplify the impairment assessment of equity investments without readily determinable fair values by requiring a qualitative assessment to identify impairment; (3) eliminates the requirement for public entities to disclose the methods and significant assumptions used to estimate the fair value that is required to be disclosed for financial instruments measured at amortized cost on the balance sheet; (4) requires public business entities to use the exit price notion when measuring the fair value of financial instruments for disclosure purposes; (5) requires an entity to present separately in other comprehensive income the portion of the total change in the fair value of a liability resulting from a change in the instrument-specific credit risk when the entity has elected to measure the liability at fair value in accordance with the fair value option for financial instruments; (6) requires separate presentation of financial assets and financial liabilities by measurement category and form of financial asset on the balance sheet or accompanying notes to the financial statements; and (7) clarifies that the entity should evaluate the need for a valuation allowance on a deferred tax asset related to available for sale securities in combination with the entity's other deferred tax assets. The amendments are effective for fiscal years beginning after December 15, 2017, and for interim periods within those fiscal years. Except for the early application of the amendment noted in item (5) above, early adoption of the amendments in this update is not permitted. Entities are required to and Heartland applied the amendment by means of a cumulative-effect adjustment as of the beginning of the fiscal year of adoption, with the exception of the amendment related to equity securities without readily determinable fair values, which are to be applied prospectively to equity investments that exist as of the adoption date. Heartland adopted the accounting standard on January 1, 2018, as required, and the adoption of these amendments did not have a material impact on its results of operations, financial position and liquidity. Heartland reclassified $280,000 from accumulated other comprehensive income to retained earnings on January 1, 2018, related to the fair value of its equity investments.

In February 2016, the FASB issued ASU 2016-02, "Leases (Topic 842)." Topic 842 requires a lessee to recognize leases on-balance sheet and disclose key information about leasing arrangements. The new standard establishes a right-of-use model (ROU) that requires a lessee to recognize a ROU asset and lease liability on the balance sheet for all leases with a term longer than 12 months. Leases will be classified as financing or operating, with classification affecting the pattern and classification of expense recognition in the income statement. The amendment is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years, and will be applied on a modified retrospective basis. Heartland leases certain properties and equipment under operating leases that will result in recognition of lease assets and lease liabilities on the consolidated balance sheets under the ASU; however the majority of Heartland's properties and equipment are owned, not leased. The modified retrospective approach includes a number of optional practical expedients that entities may elect to apply. These practical expedients relate to the identification and classification of leases that commenced before the effective date, initial direct costs for leases that commenced before the effective date, and the ability to use hindsight in evaluating lessee options to extend or terminate a lease or to purchase the underlying asset. Early adoption is permitted. In January 2018, the FASB issued an amendment to provide entities with the optional practical expedient to not evaluate existing or expired land easements that were previously not accounted for as leases under Topic 840. Heartland intends to adopt the accounting standard in 2019, as required, and does not expect the adoption of this standard to have a significant impact on its results of operations, financial position and liquidity. Heartland has signed an agreement with a cloud-based lease software provider, and implementation of the software started in the first quarter of 2018.

In June 2016, the FASB issued ASU 2016-13, "Financial Instruments - Credit Losses (Topic 326)." The amendments in this ASU require a financial asset (or a group of financial assets) measured at amortized cost basis to be presented at the net amount expected to be collected. The allowance for credit losses is a valuation account that is deducted from the amortized cost basis of the financial asset(s) to present the net carrying value at the amount expected to be collected on the financial asset. The amendments in this ASU indicate that an entity should not use the length of time a security has been in an unrealized loss position to avoid recording a credit loss. In addition, in determining whether a credit loss exists, the amendments in this ASU also remove the requirements to consider the historical and implied volatility of the fair value of a security and recoveries or declines in fair value after the balance sheet date. The amendment is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. An entity may adopt the amendments earlier as of the fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Heartland intends to adopt the accounting standard in 2020, as required, and is currently evaluating the potential impact of this guidance on its results of operations, financial position and liquidity. Upon adoption of ASU 2016-13, a cumulative-effect adjustment to retained earnings will be recorded as of the beginning of the first reporting period in which the guidance is effective. Heartland has formed an internal committee to assess and implement the standard, and Heartland has entered into an agreement with a third party vendor to evaluate potential methodologies and data.

In August 2016, the FASB issued ASU 2016-15, "Statement of Cash Flows (Topic 230) - Classification of Certain Cash Receipts and Cash Payments." The amendments in this update address eight specific cash flow issues with the objective of reducing the existing diversity in practice. The amendment is effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. Early adoption is permitted, including adoption in an interim period. If an entity early adopts the amendments in an interim period, any adjustments should be reflected as of the beginning of the fiscal year that includes the interim period. An entity that elects early adoption must adopt all of the amendments in the same period. The amendments in this update should be applied using a retrospective transition method to each period presented. Heartland adopted this ASU on January

1, 2018, as required, and the adoption of these amendments did not have a material impact on Heartland's results of operations, financial position and liquidity.

In October 2016, the FASB issued ASU 2016-16, "Income Taxes (Topic 740) - Intra-Entity Transfer of Assets Other Than Inventory." The amendment requires an entity to recognize income tax consequences on an intra-entity transfer of an asset other than inventory at the time the transaction occurs. The amendment is effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. The amendments must be applied and Heartland applied these amendments using a modified retrospective basis. Heartland adopted this ASU on January 1, 2018, as required, and the adoption of this amendment did not have a material impact on Heartland's results of operations, financial position and liquidity.

In January 2017, the FASB issued ASU No. 2017-01, "Business Combinations (Topic 805): Clarifying the Definition of a Business," which narrows the definition of a business and provides a framework that gives entities a basis for making reasonable judgments about whether a transaction involves an asset or a business. ASU 2017-01 is effective for public business entities in annual periods beginning after December 15, 2017, including interim periods therein. Heartland adopted ASU 2017-01 on January 1, 2018, as required, and the adoption did not have a material impact on Heartland's results of operations, financial position, and liquidity.

In January 2017, the FASB issued ASU 2017-04, "Intangibles - Goodwill and Other (Topic 350)." This amendment is to simplify the subsequent measurement of goodwill by eliminating step two from the goodwill impairment test. Instead, an entity will perform only step one of its quantitative goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount, and then recognizing the impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value; however, the loss recognized cannot exceed the total amount of goodwill allocated to that reporting unit. An entity will still have the option to perform a qualitative assessment for a reporting unit to determine if the quantitative step one impairment test is necessary. This amendment is effective for annual or interim goodwill impairment tests in fiscal years beginning after December 15, 2019, and should be applied prospectively. Early adoption is permitted, including in an interim period for impairment tests performed after January 1, 2017. Heartland intends to adopt this ASU in the third quarter of 2020, consistent with the annual impairment test as of September 30, 2020, and is currently evaluating the potential impact of this guidance on its results of operations, financial position and liquidity.

In March 2017, the FASB issued ASU 2017-08, "Receivables - Nonrefundable Fee and Other Costs (Subtopic 310-20)." These amendments shorten the amortization period for certain callable debt securities held at a premium. Specifically, the amendments require the premium to be amortized to the earliest call date. The amendments do not require an accounting change for securities held at a discount. Discounts continue to be amortized to maturity. These amendments are effective for public business entities for fiscal years and interim periods within those fiscal years, beginning after December 15, 2018. Early adoption is permitted, including adoption in an interim period. If any entity early adopts the amendments in an interim period, any adjustments must be reflected as of the beginning of the fiscal year that includes the interim period. The amendments must be applied and Heartland intends to apply these amendments on a modified retrospective basis, with a cumulative-effect adjustment directly to retained earnings as of the beginning of the period of adoption. Heartland intends to adopt this ASU in 2019, as required, and is currently evaluating the potential impact on its results of operations, financial position and liquidity.

In May 2017, the FASB issued ASU 2017-09, "Compensation - Stock Compensation (Topic 718)." The amendments provide guidance about which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting in Topic 718. An entity should account for the effects of a modification unless all the following are met: (1) the fair value (or calculated value or intrinsic value, if such an alternative measurement method is used) of the modified award is the same as the fair value (or calculated value or intrinsic value, if such an alternative measurement method is used) of the original award immediately before the original award is modified. If the modification does not affect any of the inputs to the valuation technique that the entity uses to value the award, the entity is not required to estimate the value immediately before and after the modification; (2) the vesting conditions of the modified award are the same as the vesting conditions of the original award immediately before the original award is modified; and (3) the classification of the modified award as an equity instrument or a liability instrument is the same as the classification of the original award immediately before the original award is modified. The amendments are effective for annual periods and interim periods within those annual periods, beginning after December 15, 2017. Early adoption is permitted, including adoption in any interim periods for public business entities for reporting periods for which financial statements have not yet been issued. The amendments should be applied and Heartland applied these amendments prospectively to an award modified on or after the adoption date. Heartland adopted this ASU on January 1, 2018, as required, the adoption did not have a material impact to its results of operations, financial position and liquidity because Heartland has not typically modified share-based payment awards after the original award has been granted.

In August 2017, the FASB issued ASU 2017-12, "Derivatives and Hedging: Targeted Improvements to Accounting for Hedging Activities." The purpose of this updated guidance is to better align a company's financial reporting for hedging activities with the economic objectives of those activities. ASU 2017-12 is effective for public business entities for fiscal years beginning after December 15, 2018, with early adoption, including adoption in an interim period, permitted. ASU 2017-12 requires a modified retrospective transition method in which Heartland will recognize the cumulative effect of the change on the opening balance of each affected component of equity in the consolidated balance sheet as of the date of adoption. Heartland intends to adopt this ASU in 2019, as required, and does not believe there will be a material impact to its results of operations, financial position and liquidity.

In February 2018, the FASB issued ASU 2018-02, "Income Statement-Reporting Comprehensive Income (Topic 220)." This ASU allows for the option to reclassify from accumulated other comprehensive income ("AOCI") to retained earnings for stranded tax effects resulting from the newly enacted federal corporate income tax rate in the Tax Cuts and Jobs Act of 2017, which was enacted on December 22, 2017. The legislation included a reduction to the corporate income tax rate from 35 percent to 21 percent effective January 1, 2018. The amount of the reclassification would be the difference between the historical corporate income tax rate and the newly enacted 21 percent corporate income tax rate. The amendments in this ASU are effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Early adoption is permitted for public businesses for reporting periods for which financial statements have not yet been issued. Heartland adopted the guidance as of December 31, 2017. The adoption of this ASU was accounted for as a cumulative-effect adjustment to the balance sheet resulting in a $4.5 million increase to retained earnings and a corresponding decrease to AOCI on December 31, 2017.

NOTE 2: ACQUISITIONS

First Bank Lubbock Bancshares, Inc.
On December 12, 2017, Heartland entered into a definitive merger agreement with First Bank Lubbock Bancshares, Inc., parent company of FirstBank & Trust Company, headquartered in Lubbock, Texas. Under the terms of the definitive merger agreement, Heartland will acquire First Bank Lubbock Bancshares, Inc. in a transaction valued at approximately $185.6 million as of the announcement date, subject to certain adjustments. Shareholders of First Bank Lubbock Bancshares, Inc. will receive a combination of Heartland common stock and cash. As of March 31, 2018, FirstBank & Trust Company had total assets of $971.5 million, including $704.9 million of gross loans held to maturity, and deposits of $869.3 million. Upon closing of the transaction, FirstBank & Trust Company will become a wholly-owned subsidiary of Heartland and will continue to operate under its current name and management team as Heartland's eleventh state-chartered bank. Heartland has received approval by the bank regulatory authorities related to this acquisition. The transaction is expected to close in the second quarter of 2018.
Signature Bancshares, Inc.
On February 23, 2018, Heartland completed the acquisition of Signature Bancshares, Inc., parent company of Signature Bank, headquartered in Minnetonka, Minnesota. Under the terms of the definitive merger agreement, Heartland acquired Signature Bancshares, Inc. in a transaction valued at approximately $61.4 million, of which $7.8 million was cash, and the remainder was settled by delivery of 1,000,843 shares of Heartland common stock. Simultaneous with the close, Signature Bank merged into Heartland's wholly-owned Minnesota Bank & Trust subsidiary, and the combined entity operates under the Minnesota Bank & Trust brand name. The transaction included, at fair value, total assets of $427.1 million, including $324.5 million of gross loans held to maturity, and deposits of $357.3 million. The transaction was a tax-free reorganization with respect to the stock consideration received by the stockholders of Signature Bancshares, Inc.

Citywide Banks of Colorado, Inc.
On July 7, 2017, Heartland acquired Citywide Banks of Colorado, Inc., parent company of Citywide Banks, headquartered in Aurora, Colorado. The transaction consideration was approximately $211.2 million, of which $58.6 million was cash, and the remainder was settled by delivery of 3,216,161 shares of Heartland common stock. Simultaneous with the close, Citywide Banks merged into Heartland's Centennial Bank and Trust subsidiary, and the combined entity operates as Citywide Banks. The transaction included, at fair value, total assets of $1.49 billion,

including $985.4 million of net loans outstanding, and $1.21 billion of deposits on the acquisition date. Included in this transaction was one bank building with a fair value of $1.4 million that Heartland intends to sell and is classified as premises, furniture and equipment held for sale on the consolidated balance sheets. The transaction was a tax-free reorganization with respect to the stock consideration received by the stockholders of Citywide Banks of Colorado, Inc.

Founders Bancorp

On February 28, 2017, Heartland acquired Founders Bancorp, parent company of Founders Community Bank, based in San Luis Obispo, California. The purchase price was approximately $31.0 million, which was paid by delivery of 455,877 shares of Heartland common stock and cash of $8.4 million. The transaction included, at fair value, total assets of $213.9 million, loans of $96.4 million, and deposits of $181.5 million on the acquisition date. The transaction also included one bank building with a fair value of $576,000 that Heartland sold during the second quarter of 2017. Simultaneous with the closing of the transaction, Founders

Community Bank merged into Heartland's Premier Valley Bank subsidiary. The transaction was a tax-free reorganization with respect to the stock consideration received by the stockholders of Founders Bancorp.

NOTE 3: SECURITIES

The amortized cost, gross unrealized gains and losses, and estimated fair values of securities available for sale as of March 31, 2018, and December 31, 2017, are summarized in the table below, in thousands:

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
March 31, 2018				
U.S. government corporations and agencies	$11,254	$ 3	$(69)	$11,188
Mortgage and asset-backed securities	1,691,092	3,968	(47,456)	1,647,604
Obligations of states and political subdivisions	361,475	1,132	(10,427)	352,180
Total debt securities	2,063,821	5,103	(57,952)	2,010,972
Equity securities	16,693	—	—	16,693
Total	$2,080,514	$ 5,103	$(57,952)	$2,027,665
December 31, 2017				
U.S. government corporations and agencies	$5,358	$ 8	$(38)	$5,328
Mortgage and asset-backed securities	1,785,467	5,856	(37,587)	1,753,736
Obligations of states and political subdivisions	441,060	4,669	(4,714)	441,015
Total debt securities	2,231,885	10,533	(42,339)	2,200,079
Equity securities	16,296	378	—	16,674
Total	$2,248,181	$ 10,911	$(42,339)	$2,216,753

The amortized cost, gross unrealized gains and losses and estimated fair values of held to maturity securities as of March 31, 2018, and December 31, 2017, are summarized in the table below, in thousands:

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
March 31, 2018				
Obligations of states and political subdivisions	$249,766	$ 9,699	$ (827)	$258,638
Total	$249,766	$ 9,699	$ (827)	$258,638
December 31, 2017				
Obligations of states and political subdivisions	$253,550	$ 12,460	$ (516)	$265,494
Total	$253,550	$ 12,460	$ (516)	$265,494

At March 31, 2018, approximately 77% of Heartland's mortgage and asset-backed securities were issued by government-sponsored enterprises.

The amortized cost and estimated fair value of debt securities available for sale at March 31, 2018, by contractual maturity, are as follows, in thousands. Expected maturities will differ from contractual maturities because issuers may have the right to call or prepay obligations with or without penalties.

	March 31, 2018	
	Amortized Cost	Estimated Fair Value
Due in 1 year or less	$5,397	$5,392
Due in 1 to 5 years	56,369	56,209
Due in 5 to 10 years	116,517	112,484
Due after 10 years	194,446	189,283
Total debt securities	372,729	363,368
Mortgage and asset-backed securities	1,691,092	1,647,604
Equity securities	16,693	16,693
Total investment securities	$2,080,514	$2,027,665

The amortized cost and estimated fair value of debt securities held to maturity at March 31, 2018, by contractual maturity, are as follows, in thousands. Expected maturities will differ from contractual maturities because issuers may have the right to call or prepay obligations with or without penalties.

	March 31, 2018	
	Amortized Cost	Estimated Fair Value
Due in 1 year or less	$2,486	$2,523
Due in 1 to 5 years	27,627	28,231
Due in 5 to 10 years	104,170	106,538
Due after 10 years	115,483	121,346
Total investment securities	$249,766	$258,638

As of March 31, 2018, and December 31, 2017, securities with a fair value of $594.3 million and $670.3 million, respectively, were pledged to secure public and trust deposits, short-term borrowings and for other purposes as required or permitted by law.

Gross gains and losses realized related to the sales of securities available for sale for the three-month periods ended March 31, 2018 and 2017, are summarized as follows, in thousands:

	Three Months Ended March 31,	
	2018	2017
Proceeds from sales	$392,246	$221,637
Gross security gains	3,013	3,830
Gross security losses	1,572	1,339

The following tables summarize, in thousands, the amount of unrealized losses, defined as the amount by which cost or amortized cost exceeds fair value, and the related fair value of investments with unrealized losses in Heartland's securities portfolio as of March 31, 2018, and December 31, 2017. The investments were segregated into two categories: those that have been in a continuous unrealized loss position for less than 12 months and those that have been in a continuous unrealized loss position for 12 months or more. The reference point for determining how long an investment was in an unrealized loss position was March 31, 2017, and December 31, 2016, respectively. Securities for which Heartland has taken credit-related other-than-temporary impairment ("OTTI") write-downs are categorized as being "less than 12 months" or "12 months or longer" in a continuous loss position based on the point in time that the fair value declined to below the cost basis and not the period of time since the credit-related OTTI write-down.

Securities available for sale	Less than 12 months		12 months or longer		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
March 31, 2018						
U.S. government corporations and agencies	$10,685	$(69)	$—	$—	$10,685	$(69)
Mortgage and asset-backed securities	923,293	(18,459)	379,672	(28,997)	1,302,965	(47,456)
Obligations of states and political subdivisions	177,100	(3,456)	131,574	(6,971)	308,674	(10,427)
Total debt securities	1,111,078	(21,984)	511,246	(35,968)	1,622,324	(57,952)
Total temporarily impaired securities	$1,111,078	$(21,984)	$511,246	$(35,968)	$1,622,324	$(57,952)
December 31, 2017						
U.S. government corporations and agencies	$4,819	$(38)	$—	$—	$4,819	$(38)
Mortgage and asset-backed securities	851,070	(11,533)	399,978	(26,054)	1,251,048	(37,587)
Obligations of states and political subdivisions	93,040	(667)	159,180	(4,047)	252,220	(4,714)
Total debt securities	948,929	(12,238)	559,158	(30,101)	1,508,087	(42,339)
Total temporarily impaired securities	$948,929	$(12,238)	$559,158	$(30,101)	$1,508,087	$(42,339)

Securities held to maturity	Less than 12 months		12 months or longer		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
March 31, 2018						
Obligations of states and political subdivisions	$30,496	$ (272)	$7,907	$ (555)	$38,403	$ (827)
Total temporarily impaired securities	$30,496	$ (272)	$7,907	$ (555)	$38,403	$ (827)
December 31, 2017						
Obligations of states and political subdivisions	$8,512	$ (49)	$8,989	$ (467)	$17,501	$ (516)
Total temporarily impaired securities	$8,512	$ (49)	$8,989	$ (467)	$17,501	$ (516)

Heartland reviews the investment securities portfolio on a quarterly basis to monitor its exposure to OTTI. A determination as to whether a security's decline in fair value is other-than-temporary takes into consideration numerous factors and the relative significance of any single factor can vary by security. Some factors Heartland may consider in the OTTI analysis include the length of time the security has been in an unrealized loss position, changes in security ratings, financial condition of the issuer, as well as security and industry specific economic conditions. In addition, with regard to debt securities, Heartland may also evaluate payment structure, whether there are defaulted payments or expected defaults, prepayment speeds and the value of any underlying collateral. For certain debt securities in unrealized loss positions, Heartland prepares cash flow analyses to compare the present value of cash flows expected to be collected from the security with the amortized cost basis of the security.

The remaining unrealized losses on Heartland's mortgage and asset-backed securities are the result of changes in market interest rates or widening of market spreads subsequent to the initial purchase of the securities. The losses are not related to concerns regarding the underlying credit of the issuers or the underlying collateral. It is expected that the securities will not be settled at a price less than the amortized cost of the investment. Because the decline in fair value is attributable to changes in interest rates or widening market spreads and not credit quality, and because Heartland has the intent and ability to hold these investments until a market price recovery or to maturity and does not believe it will be required to sell the securities before maturity, these investments are not considered other-than-temporarily impaired.

The remaining unrealized losses on Heartland's obligations of states and political subdivisions are the result of changes in market interest rates or widening of market spreads subsequent to the initial purchase of the securities. Management monitors the published credit ratings of these securities and the stability of the underlying municipalities.

Because the decline in fair value is attributable to changes in interest rates or widening market spreads due to insurance company downgrades and not underlying credit quality, and because Heartland has the intent and ability to hold these investments until a market price recovery or to maturity and does not believe it will be required to sell the securities before maturity, these investments are not considered other-than-temporarily impaired.

There were no gross realized gains or losses on the sale of available for sale or held to maturity securities with OTTI write-downs for the three-month periods ended March 31, 2018, and March 31, 2017, respectively.

Included in other securities at March 31, 2018, and December 31, 2017, were shares of stock in the Federal Home Loan Banks (the "FHLBs") of Des Moines, Chicago, Dallas, San Francisco and Topeka at an amortized cost of $14.3 million and $14.0 million, respectively.

The Heartland banks are required by federal law to maintain FHLB stock as members of the various FHLBs. These equity securities are "restricted" in that they can only be sold back to the respective institutions from which they were acquired or another member institution at par. Therefore, the FHLB stock is less liquid than other marketable equity securities, and the fair value approximates amortized cost. Heartland considers its FHLB stock as a long-term investment that provides access to competitive products and liquidity. Heartland evaluates impairment in these investments based on the ultimate recoverability of the par value and, at March 31, 2018, did not consider the investments to be other than temporarily impaired.

NOTE 4: LOANS

Loans as of March 31, 2018, and December 31, 2017, were as follows, in thousands:

	March 31, 2018	December 31, 2017
Loans receivable held to maturity:		
Commercial	$1,806,683	$1,646,606
Commercial real estate	3,323,094	3,163,269
Agricultural and agricultural real estate	518,386	511,588
Residential real estate	624,725	624,279
Consumer	474,929	447,484
Gross loans receivable held to maturity	6,747,817	6,393,226
Unearned discount	(1,620)	(556)
Deferred loan fees	(182)	(1,206)
Total net loans receivable held to maturity	6,746,015	6,391,464
Allowance for loan losses	(58,656)	(55,686)
Loans receivable, net	$6,687,359	$6,335,778

Heartland has certain lending policies and procedures in place that are designed to provide for an acceptable level of credit risk. The board of directors reviews and approves these policies and procedures on a regular basis. A reporting system supplements the review process by providing management and the board with frequent reports related to loan production, loan quality, concentrations of credit, loan delinquencies and nonperforming loans and potential problem loans.

Diversification in the loan portfolio is also a means of managing risk associated with fluctuations in economic conditions. Heartland originates commercial and commercial real estate loans for a wide variety of business purposes, including lines of credit for capital and operating purposes and term loans for real estate and equipment purchases. Agricultural loans provide financing for capital improvements and farm operations, as well as livestock and machinery purchases. Residential mortgage loans are originated for the construction, purchase or refinancing of single family residential properties. Consumer loans include loans for motor vehicles, home improvement, home equity and personal lines of credit. Heartland's consumer finance subsidiaries, Citizens Finance Co. and Citizens Finance of Illinois Co., typically lend to borrowers with past credit problems or limited credit histories, which comprises approximately 15% of Heartland's total consumer loan portfolio.

Under Heartland’s credit practices, a loan is impaired when, based on current information and events, it is probable that Heartland will be unable to collect all amounts due according to the contractual terms of the loan agreement. Loan impairment is measured based on the present value of expected future cash flows discounted at the loan’s effective interest rate, except where more practical, impairment is measured at the observable market price of the loan or the fair value of the collateral if the loan is collateral dependent.

The following table shows the balance in the allowance for loan losses at March 31, 2018, and December 31, 2017, and the related loan balances, disaggregated on the basis of impairment methodology, in thousands. Loans evaluated under ASC 310-10-35 include loans on nonaccrual status and troubled debt restructurings, which are individually evaluated for impairment, and other impaired loans deemed to have similar risk characteristics. All other loans are collectively evaluated for impairment under ASC 450-20. Heartland has made no significant changes to the accounting for the allowance for loan losses during 2018.

	Allowance For Loan Losses			Gross Loans Receivable Held to Maturity		
	Ending Balance Under ASC 310-10-35	Ending Balance Under ASC 450-20	Total	Ending Balance Evaluated for Impairment Under ASC 310-10-35	Ending Balance Evaluated for Impairment Under ASC 450-20	Total
March 31, 2018						
Commercial	$2,425	$16,970	$19,395	$9,005	$1,797,678	$1,806,683
Commercial real estate	736	22,733	23,469	22,920	3,300,174	3,323,094
Agricultural and agricultural real estate	787	3,929	4,716	16,896	501,490	518,386
Residential real estate	386	1,755	2,141	28,324	596,401	624,725
Consumer	1,137	7,798	8,935	6,427	468,502	474,929
Total	$5,471	$53,185	$58,656	$83,572	$6,664,245	$6,747,817
December 31, 2017						
Commercial	$1,613	$16,485	$18,098	$7,415	$1,639,191	$1,646,606
Commercial real estate	766	21,184	21,950	23,705	3,139,564	3,163,269
Agricultural and agricultural real estate	546	3,712	4,258	13,304	498,284	511,588
Residential real estate	430	1,794	2,224	27,141	597,138	624,279
Consumer	1,400	7,756	9,156	6,903	440,581	447,484
Total	$4,755	$50,931	$55,686	$78,468	$6,314,758	$6,393,226

The following table presents nonaccrual loans, accruing loans past due 90 days or more and performing troubled debt restructured loans at March 31, 2018, and December 31, 2017, in thousands:

	March 31, 2018	December 31, 2017
Nonaccrual loans	$ 60,644	$ 58,272
Nonaccrual troubled debt restructured loans	4,162	4,309
Total nonaccrual loans	$ 64,806	$ 62,581
Accruing loans past due 90 days or more	$ 22	$ 830
Performing troubled debt restructured loans	$ 3,206	$ 6,617

The following tables provide information on troubled debt restructured loans that were modified during the three-month periods ended March 31, 2018, and March 31, 2017, dollars in thousands:

	Three Months Ended March 31, 2018			2017		
	Number of Loans	Pre-Modification Recorded Investment	Post-Modification Recorded Investment	Number of Loans	Pre-Modification Recorded Investment	Post-Modification Recorded Investment
Commercial	—	$ —	$ —	—	$ —	$ —
Commercial real estate	—	—	—	—	—	—
Total commercial and commercial real estate	—	—	—	—	—	—
Agricultural and agricultural real estate	—	—	—	—	—	—
Residential real estate	5	877	752	3	348	348
Consumer	—	—	—	—	—	—
Total	5	$ 877	$ 752	3	$ 348	$ 348

The pre-modification and post-modification recorded investment represents amounts as of the date of loan modification. The change related to the pre-modification investment and post-modification investment amounts on Heartland's residential real estate trouble debt restructured loans is due to $142,000 of principal deferment collected from government guarantees and $17,000 of capitalized interest and escrow. At March 31, 2018, there were no commitments to extend credit to any of the borrowers with an existing troubled debt restructured loan.

The following table shows troubled debt restructured loans for which there was a payment default during the three month periods ended March 31, 2018, and March 31, 2017, that had been modified during the twelve-month period prior to default, in thousands:

	With Payment Defaults During the Following Periods Three Months Ended March 31, 2018		2017	
	Number of Loans	Recorded Investment	Number of Loans	Recorded Investment
Commercial	—	$ —	—	$ —
Commercial real estate	—	—	—	—
Total commercial and commercial real estate	—	—	—	—
Agricultural and agricultural real estate	—	—	—	—
Residential real estate	3	519	—	—
Consumer	—	—	—	—
Total	3	$ 519	—	$ —

Heartland's internal rating system is a series of grades reflecting management's risk assessment, based on its analysis of the borrower's financial condition. The "pass" category consists of all loans that are not in the "nonpass" category, categorized into a range of loan grades that reflect increasing, though still acceptable, risk. Movement of risk through the various grade levels in the pass category is monitored for early identification of credit deterioration. The "nonpass" category consists of special mention, substandard, doubtful and loss loans. The "special mention" rating is attached to loans where the borrower exhibits negative trends in financial circumstances due to borrower specific or systemic conditions that, if left uncorrected, threaten the borrower's capacity to meet its debt obligations. The borrower is believed to have sufficient financial flexibility to react to and resolve its negative financial situation. These credits are closely monitored for improvement or deterioration. The "substandard" rating is assigned to loans that are inadequately protected by the current net worth and paying capacity of the borrower and that may be further at risk due to deterioration in the value of collateral pledged. Well-defined weaknesses jeopardize liquidation of the debt. These loans are still considered collectible; however, a distinct possibility exists that Heartland will sustain some loss if deficiencies are not corrected. Substandard loans may exhibit some or all of the following weaknesses: deteriorating financial trends, lack of earnings, inadequate debt service capacity, excessive debt and/or lack of liquidity. The "doubtful" rating is assigned to loans where identified weaknesses in the borrowers' ability to repay the loan make collection or liquidation in full, on the basis of existing facts, conditions and values, highly questionable and improbable. These borrowers are usually in default, lack liquidity and capital, as well as resources necessary to remain as an operating entity. Specific pending events, such as capital injections, liquidations or perfection of liens on additional collateral, may strengthen the credit, thus deferring the rating of the loan as "loss" until the exact status of the loan can be determined. The loss rating is assigned to loans considered uncollectible. Heartland had no loans classified as loss or doubtful as of March 31, 2018. Loans are placed on "nonaccrual" when management does not expect to collect payments of principal and interest in full or when principal or interest has been in default for a period of 90 days or more, unless the loan is both well secured and in the process of collection.

The following table presents loans by credit quality indicator at March 31, 2018, and December 31, 2017, in thousands:

	Pass	Nonpass	Total
March 31, 2018			
Commercial	$1,677,338	$129,345	$1,806,683
Commercial real estate	3,146,622	176,472	3,323,094
Total commercial and commercial real estate	4,823,960	305,817	5,129,777
Agricultural and agricultural real estate	442,484	75,902	518,386
Residential real estate	585,886	38,839	624,725
Consumer	461,786	13,143	474,929
Total gross loans receivable held to maturity	$6,314,116	$433,701	$6,747,817
December 31, 2017			
Commercial	$1,552,783	$93,823	$1,646,606
Commercial real estate	2,985,501	177,768	3,163,269
Total commercial and commercial real estate	4,538,284	271,591	4,809,875
Agricultural and agricultural real estate	451,539	60,049	511,588
Residential real estate	586,623	37,656	624,279
Consumer	432,936	14,548	447,484
Total gross loans receivable held to maturity	$6,009,382	$383,844	$6,393,226

The nonpass category in the table above is comprised of approximately 55% special mention loans and 45% substandard loans as of March 31, 2018. The percent of nonpass loans on nonaccrual status as of March 31, 2018, was 15%. As of December 31, 2017, the nonpass category in the table above was comprised of approximately 52% special mention loans and 48% substandard loans. The percent of nonpass loans on nonaccrual status as of December 31, 2017, was 16%. Loans delinquent 30 to 89 days as a percent of total loans were 0.21% at March 31, 2018, compared to 0.27% at December 31, 2017. Changes in credit risk are monitored on a regular basis and changes in risk ratings are made when identified. All impaired loans are reviewed at least annually.

As of March 31, 2018, Heartland had $2.8 million of loans secured by residential real estate property that were in the process of foreclosure.

The following table sets forth information regarding Heartland's accruing and nonaccrual loans at March 31, 2018, and December 31, 2017, in thousands:

	Accruing Loans						
	30-59 Days Past Due	60-89 Days Past Due	90 Days or More Past Due	Total Past Due	Current	Nonaccrual	Total Loans
March 31, 2018							
Commercial	$2,906	$1,883	$—	$4,789	$1,793,565	$ 8,329	$1,806,683
Commercial real estate	403	740	—	1,143	3,305,043	16,908	3,323,094
Total commercial and commercial real estate	3,309	2,623	—	5,932	5,098,608	25,237	5,129,777
Agricultural and agricultural real estate	1,147	69	22	1,238	500,320	16,828	518,386
Residential real estate	2,891	66	—	2,957	602,927	18,841	624,725
Consumer	2,618	1,477	—	4,095	466,934	3,900	474,929
Total gross loans receivable held to maturity	$9,965	$4,235	$22	$14,222	$6,668,789	$ 64,806	$6,747,817
December 31, 2017							
Commercial	$1,246	$259	$100	$1,605	$1,637,773	$ 7,228	$1,646,606
Commercial real estate	4,769	2,326	—	7,095	3,139,576	16,598	3,163,269
Total commercial and commercial real estate	6,015	2,585	100	8,700	4,777,349	23,826	4,809,875
Agricultural and agricultural real estate	604	134	—	738	497,546	13,304	511,588
Residential real estate	2,022	270	—	2,292	601,120	20,867	624,279
Consumer	4,734	943	730	6,407	436,493	4,584	447,484
Total gross loans receivable held to maturity	$13,375	$3,932	$830	$18,137	$6,312,508	$ 62,581	$6,393,226

The majority of Heartland's impaired loans are on nonaccrual or have had their terms restructured in a troubled debt restructuring. The following tables present, by category of loan, impaired loans, the unpaid contractual loan balances at March 31, 2018, and December 31, 2017; the outstanding loan balances recorded on the consolidated balance sheets at March 31, 2018, and December 31, 2017; any related allowance recorded for those loans as of March 31, 2018, and December 31, 2017; the average outstanding loan balances recorded on the consolidated balance sheets during the three-months ended March 31, 2018, and year ended December 31, 2017; and the interest income recognized on the impaired loans during the three-month period ended March 31, 2018, and year ended December 31, 2017, in thousands:

	Unpaid Contractual Balance	Loan Balance	Related Allowance Recorded	Year-to-Date Avg. Loan Balance	Year-to-Date Interest Income Recognized
March 31, 2018					
Impaired loans with a related allowance:					
Commercial	$ 2,816	$2,816	$ 2,425	$2,472	$ —
Commercial real estate	11,180	9,324	736	9,520	8
Total commercial and commercial real estate	13,996	12,140	3,161	11,992	8
Agricultural and agricultural real estate	1,536	1,536	787	1,537	—
Residential real estate	1,693	1,693	386	1,608	3
Consumer	2,859	2,859	1,137	3,069	9
Total impaired loans with a related allowance	$ 20,084	$18,228	$ 5,471	$18,206	$ 20
Impaired loans without a related allowance:					
Commercial	$ 7,308	$6,189	$ —	$5,449	$ 49
Commercial real estate	14,202	13,596	—	13,879	97
Total commercial and commercial real estate	21,510	19,785	—	19,328	146
Agricultural and agricultural real estate	17,388	15,360	—	12,954	1
Residential real estate	26,635	26,631	—	26,878	109
Consumer	3,757	3,568	—	3,912	22
Total impaired loans without a related allowance	$ 69,290	$65,344	$ —	$63,072	$ 278
Total impaired loans held to maturity:					
Commercial	$ 10,124	$9,005	$ 2,425	$7,921	$ 49
Commercial real estate	25,382	22,920	736	23,399	105
Total commercial and commercial real estate	35,506	31,925	3,161	31,320	154
Agricultural and agricultural real estate	18,924	16,896	787	14,491	1
Residential real estate	28,328	28,324	386	28,486	112
Consumer	6,616	6,427	1,137	6,981	31
Total impaired loans held to maturity	$ 89,374	$83,572	$ 5,471	$81,278	$ 298

	Unpaid Contractual Balance	Loan Balance	Related Allowance Recorded	Year-to-Date Avg. Loan Balance	Year-to-Date Interest Income Recognized
December 31, 2017					
Impaired loans with a related allowance:					
Commercial	$ 2,292	$2,292	$ 1,613	$3,607	$ 39
Commercial real estate	11,925	10,068	766	11,479	34
Total commercial and commercial real estate	14,217	12,360	2,379	15,086	73
Agricultural and agricultural real estate	1,539	1,539	546	3,437	—
Residential real estate	1,568	1,568	430	2,056	15
Consumer	2,634	2,634	1,400	2,370	41
Total impaired loans with a related allowance	$ 19,958	$18,101	$ 4,755	$22,949	$ 129
Impaired loans without a related allowance:					
Commercial	$ 6,243	$5,123	$ —	$2,586	$ 165
Commercial real estate	14,243	13,637	—	20,148	514
Total commercial and commercial real estate	20,486	18,760	—	22,734	679
Agricultural and agricultural real estate	13,793	11,765	—	9,654	—
Residential real estate	25,573	25,573	—	26,024	277
Consumer	4,269	4,269	—	3,884	73
Total impaired loans without a related allowance	$ 64,121	$60,367	$ —	$62,296	$ 1,029
Total impaired loans held to maturity:					
Commercial	$ 8,535	$7,415	$ 1,613	$6,193	$ 204
Commercial real estate	26,168	23,705	766	31,627	548
Total commercial and commercial real estate	34,703	31,120	2,379	37,820	752
Agricultural and agricultural real estate	15,332	13,304	546	13,091	—
Residential real estate	27,141	27,141	430	28,080	292
Consumer	6,903	6,903	1,400	6,254	114
Total impaired loans held to maturity	$ 84,079	$78,468	$ 4,755	$85,245	$ 1,158

On February 23, 2018, Heartland acquired Signature Bancshares, Inc., parent company of Signature Bank, based in Minnetonka, Minnesota. As of February 23, 2018, Signature Bancshares, Inc. had gross loans of $335.1 million and the estimated fair value of the loans acquired was $324.5 million. Included in loans acquired from Signature Bank is a lease portfolio with a fair value of $16.0 million. The lease portfolio is include with the commercial loan category for disclosure purposes.

On July 7, 2017, Heartland acquired Citywide Banks of Colorado, Inc., parent company of Citywide Banks, based in Denver, Colorado. As of July 7, 2017, Citywide Banks had gross loans of $1.00 billion, and the estimated fair value of the loans acquired was $985.4 million.

On February 28, 2017, Heartland acquired Founders Bancorp, parent company of Founders Community Bank, based in San Luis Obispo, California. As of February 28, 2017, Founders Community Bank had gross loans of $98.9 million, and the estimated fair value of the loans acquired was $96.4 million.

Heartland uses the acquisition method of accounting for purchased loans in accordance with ASC 805, "Business Combinations." Purchased loans acquired in a business combination are recorded at estimated fair value on their purchase date, but the purchaser cannot carry over the related allowance for loan losses. Purchased loans are accounted for under ASC 310-30, "Loans and Debt Securities with Deteriorated Credit Quality," when the loans have evidence of credit deterioration since origination, and when at the date of the acquisition, it is probable that Heartland will not collect all contractually required principal and interest payments. Evidence of credit quality deterioration at the purchase date includes statistics such as past due and nonaccrual status. Generally, acquired loans that meet Heartland’s definition for nonaccrual status fall within the scope of ASC 310-30. The difference between contractually required payments at acquisition and the cash flows expected to be collected at acquisition is referred to as the nonaccretable difference, which is included in the carrying value of the loans. Subsequent decreases to the expected cash flows of the loan will generally result in a provision for loan losses. Subsequent increases in cash flows result in a reversal of the provision for loan losses to the extent of prior charges, or a reclassification of the difference from nonaccretable to accretable with a positive impact on future interest income. Further, any excess of cash flows expected at acquisition over the estimated fair value is referred to as the accretable yield and is recognized into interest income over the remaining life of the loan when there is a reasonable expectation about the amount and timing of such cash flows.

At March 31, 2018, and December 31, 2017, the carrying amount of loans acquired since 2015 consist of purchased impaired and nonimpaired loans as summarized in the following table, in thousands:

	March 31, 2018			December 31, 2017		
	Impaired Purchased Loans	Non Impaired Purchased Loans	Total Purchased Loans	Impaired Purchased Loans	Non Impaired Purchased Loans	Total Purchased Loans
Commercial	$3,142	$262,107	$265,249	$952	$187,375	$188,327
Commercial real estate	2,474	1,078,724	1,081,198	2,572	1,052,469	1,055,041
Agricultural and agricultural real estate	—	26	26	—	1,242	1,242
Residential real estate	199	181,020	181,219	214	173,909	174,123
Consumer loans	—	78,613	78,613	—	51,292	51,292
Total loans	$5,815	$1,600,490	$1,606,305	$3,738	$1,466,287	$1,470,025

Changes in accretable yield on acquired loans with evidence of credit deterioration at the date of acquisition for the three-month periods ended March 31, 2018, and March 31, 2017, were as follows, in thousands:

	Three Months Ended March 31,	
	2018	2017
Balance at beginning of period	$57	$182
Original yield premium, net, at date of acquisition	(56)	—
Accretion	(199)	(173)
Reclassification from nonaccretable difference(1)	198	127
Balance at period end	$—	$136

(1) Represents increases in estimated cash flows expected to be received, primarily due to lower estimated credit losses.

For loans acquired since January 2015, on the acquisition dates the preliminary estimate of the contractually required payments receivable for all loans with evidence of credit deterioration since origination was $26.0 million, and the estimated fair value of these loans was $15.0 million. At March 31, 2018, a majority of these loans were valued based upon the liquidation value of the underlying collateral, because the expected cash flows are primarily based on the liquidation of such collateral, and the timing and amount of the cash flows could not be reasonably estimated. At March 31, 2018, there was no allowance recorded and $139,000 of allowance recorded at December 31, 2017, related to these ASC 310-30 loans. Provision expense of $0 and $1,000 was recorded for the three-month periods ended March 31, 2018, and 2017, respectively.

For loans acquired since January 2015, the preliminary estimate on the acquisition dates of the contractually required payments receivable for all nonimpaired loans acquired was $2.99 billion, and the estimated fair value of the loans was $2.91 billion.

NOTE 5: ALLOWANCE FOR LOAN LOSSES

Changes in the allowance for loan losses for the three-month periods ended March 31, 2018, and March 31, 2017, were as follows, in thousands:

	Commercial	Commercial Real Estate	Agricultural	Residential Real Estate	Consumer	Total
Balance at December 31, 2017	$ 18,098	$ 21,950	$ 4,258	$ 2,224	$ 9,156	$ 55,686
Charge-offs	(794)	(125)	—	(16)	(1,289)	(2,224)
Recoveries	104	448	14	75	290	931
Provision	1,987	1,196	444	(142)	778	4,263
Balance at March 31, 2018	$ 19,395	$ 23,469	$ 4,716	$ 2,141	$ 8,935	$ 58,656

	Commercial	Commercial Real Estate	Agricultural	Residential Real Estate	Consumer	Total
Balance at December 31, 2016	$ 14,765	$ 24,319	$ 4,210	$ 2,263	$ 8,767	$54,324
Charge-offs	(230)	(608)	(871)	(265)	(1,744)	(3,718)
Recoveries	234	212	1	2	303	752
Provision	1,411	(126)	643	183	1,530	3,641
Balance at March 31, 2017	$ 16,180	$ 23,797	$ 3,983	$ 2,183	$ 8,856	$54,999

Management allocates the allowance for loan losses by pools of risk within each loan portfolio. The allocation of the allowance for loan losses by loan portfolio is made for analytical purposes and is not necessarily indicative of the trend of future loan losses in any particular category. The total allowance for loan losses is available to absorb losses from any segment of the loan portfolio.

NOTE 6: GOODWILL, CORE DEPOSIT PREMIUM AND OTHER INTANGIBLE ASSETS

Heartland had goodwill of $270.3 million at March 31, 2018, and $236.6 million at December 31, 2017. Heartland conducts its annual internal assessment of the goodwill both at the consolidated level and at its subsidiaries as of September 30. There was no goodwill impairment as of the most recent assessment.

Heartland recorded $33.7 million of goodwill and $7.7 million of core deposit intangibles in connection with the acquisition of Signature Bancshares, Inc., parent company of Signature Bank, headquartered in Minnetonka, Minnesota on February 23, 2018.

Heartland recorded $95.2 million of goodwill and $16.0 million of core deposit intangibles in connection with the acquisition of Citywide Banks of Colorado, Inc., parent company of Citywide Banks, headquartered in Aurora, Colorado on July 7, 2017.

Heartland recorded $13.8 million of goodwill and $2.5 million of core deposit intangibles in connection with the acquisition of Founders Bancorp, parent company of Founders Community Bank, based in San Luis Obispo, California on February 28, 2017.

The core deposit intangibles recorded with the Signature Bancshares, Inc., Citywide Banks of Colorado, Inc., and Founders Bancorp acquisitions are not deductible for tax purposes and are expected to be amortized over a period of 10 years on an accelerated basis.

Goodwill related to the Signature Bancshares, Inc., Citywide Banks of Colorado, Inc., and Founders Bancorp acquisitions resulted from expected operational synergies, increased market presence, cross-selling opportunities, and expanded business lines and is not deductible for tax purposes.

Heartland's intangible assets consist of core deposit intangibles, mortgage servicing rights, customer relationship intangibles, and commercial servicing rights. The gross carrying amount of these intangible assets and the associated accumulated amortization at March 31, 2018, and December 31, 2017, are presented in the table below, in thousands:

	March 31, 2018			December 31, 2017		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Amortizing intangible assets:						
Core deposit intangibles	$69,731	$ 28,939	$40,792	$62,008	$ 27,086	$34,922
Customer relationship intangibles	1,177	906	271	1,177	896	281

Mortgage servicing rights	42,249	19,084	23,165	42,139	18,891	23,248
Commercial servicing rights	6,740	4,434	2,306	6,719	4,110	2,609
Total	$119,897	$ 53,363	$66,534	$112,043	$ 50,983	$61,060

The following table shows the estimated future amortization expense for amortizable intangible assets, in thousands:

	Core Deposit Intangibles	Customer Relationship Intangibles	Mortgage Servicing Rights	Commercial Servicing Rights	Total
Nine months ending December 31, 2018	$ 5,957	$ 29	$ 6,776	$ 471	$ 13,233
Year ending December 31,					
2019	7,092	38	4,097	522	11,749
2020	6,220	37	3,512	411	10,180
2021	5,323	36	2,927	354	8,640
2022	4,175	34	2,341	290	6,840
2023	3,691	33	1,756	163	5,643
Thereafter	8,334	64	1,756	95	10,249
Total	$ 40,792	$ 271	$ 23,165	$ 2,306	$ 66,534

Projections of amortization expense for mortgage servicing rights are based on existing asset balances and the existing interest rate environment as of March 31, 2018. Heartland's actual experience may be significantly different depending upon changes in mortgage interest rates and market conditions. Mortgage loans serviced for others were approximately $3.54 billion and $3.56 billion as of March 31, 2018, and December 31, 2017, respectively. Custodial escrow balances maintained in connection with the mortgage loan servicing portfolio were approximately $23.2 million and $17.3 million as of March 31, 2018, and December 31, 2017, respectively. The fair value of Heartland's mortgage servicing rights was estimated at $40.4 million at March 31, 2018, and $37.1 million at December 31, 2017.

Heartland's mortgage servicing rights portfolio is comprised of loans serviced for the Federal National Mortgage Association ("FNMA") and the Federal Home Loan Mortgage Corporation ("FHLMC"). Prior to the third quarter of 2017, Heartland also serviced loans for the Government National Mortgage Association ("GNMA"). The servicing rights portfolio is separated into 15- and 30-year tranches, and the servicing rights portfolio is an asset of one of Heartland's subsidiaries.

During the third quarter of 2017, Heartland entered into an agreement to sell substantially all of its GNMA servicing portfolio, which contained loans with an unpaid principal balance of approximately $773.9 million. The transaction qualified as a sale, and $6.9 million of mortgage servicing rights were de-recognized on the consolidated balance sheet as of December 31, 2017.

The fair value of mortgage servicing rights is calculated based upon a discounted cash flow analysis. Cash flow assumptions, including prepayment speeds, servicing costs and escrow earnings are considered in the calculation. The average constant prepayment rate was 8.23% and 9.73% for the March 31, 2018, and December 31, 2017, valuations, respectively. The discount rate was 9.04% and 9.06% for the March 31, 2018, and December 31, 2017, valuations, respectively. The average capitalization rate for the first three months of 2018 ranged from 96 to 125 basis points compared to the range of 91 to 150 basis points for 2017. Fees collected for the servicing of mortgage loans for others were $2.2 million and $3.2 million for the three months ended March 31, 2018, and March 31, 2017.

The following table summarizes, in thousands, the changes in capitalized mortgage servicing rights for the three months ended March 31, 2018, and March 31, 2017:

	2018	2017
Balance at January 1,	$ 23,248	$ 32,088
Originations	1,162	2,132
Amortization	(1,245)	(2,261)
Balance at period end	$ 23,165	$ 31,959
Fair value of mortgage servicing rights	$ 40,434	$ 47,564

Mortgage servicing rights, net to servicing portfolio	0.66 %	0.74 %

Heartland's commercial servicing portfolio is comprised of loans guaranteed by the Small Business Administration and United States Department of Agriculture that have been sold with servicing retained by Heartland, which totaled $125.5 million at March 31, 2018 and $139.9 million at December 31, 2017. The commercial servicing rights portfolio is separated into two tranches at the respective Heartland subsidiary, loans with a term of less than 20 years and loans with a term of more than 20 years. Fees collected for the servicing of commercial loans for others were $420,000 and $415,000 for the three months ended March 31, 2018, and March 31, 2017, respectively.

The fair value of each commercial servicing rights portfolio is calculated based upon a discounted cash flow analysis. Cash flow assumptions, including prepayment speeds and servicing costs, are considered in the calculation. The range of average constant prepayment rates for the valuations was 8.27% to 9.89% as of March 31, 2018, compared to 7.27% to 8.88% as of December 31, 2017. The discount rate range was 13.09% to 16.71% for the March 31, 2018, valuations compared to 13.04% to 15.49% for the December 31, 2017, valuations. The capitalization rate for 2018 ranged from 310 to 445 basis points compared to 310 to 445 basis points for 2017. The total fair value of Heartland's commercial servicing rights was estimated at $2.8 million as of March 31, 2018, and $3.2 million as of December 31, 2017.

The following table summarizes, in thousands, the changes in capitalized commercial servicing rights for the three months ended March 31, 2018, and March 31, 2017:

	2018	2017
Balance at January 1,	$2,609	$3,690
Originations	21	93
Amortization	(322)	(306)
Valuation allowance on commercial servicing rights	(2)	5
Balance at period end	$2,306	$3,482
Fair value of commercial servicing rights	$2,781	$4,040
Commercial servicing rights, net to servicing portfolio	1.84 %	2.17 %

Mortgage and commercial servicing rights are initially recorded at fair value in net gains on sale of loans held for sale when they are acquired through loan sales. Fair value is based on market prices for comparable servicing contracts, when available, or based on a valuation model that calculates the present value of estimated future net servicing income.

Mortgage and commercial servicing rights are subsequently measured using the amortization method, which requires the asset to be amortized into noninterest income in proportion to, and over the period of, the estimated future net servicing income of the underlying loans. Servicing rights are evaluated for impairment at each Heartland subsidiary based upon the fair value of the assets as compared to the carrying amount. Impairment is recognized through a valuation allowance for specific tranches to the extent that fair value is less than carrying amount at each Heartland subsidiary. At March 31, 2018, no valuation allowance was required on commercial servicing rights with a term less than 20 years and a $14,000 valuation allowance was required on commercial servicing rights with a term greater than 20 years. At December 31, 2017, no valuation allowance was required on commercial servicing rights with a term less than 20 years and a $12,000 valuation allowance was required on commercial servicing rights with a term greater than 20 years.

The following table summarizes, in thousands, the book value, the fair value of each tranche of the commercial servicing rights and any recorded valuation allowance at each respective subsidiary at March 31, 2018, and December 31, 2017:

March 31, 2018	Book Value-Less than 20 Years	Fair Value-Less than 20 Years	Impairment-Less than 20 Years	Book Value-More than 20 Years	Fair Value-More than 20 Years	Impairment-More than 20 Years
Citywide Banks	$ 6	$ 10	$ —	$ 33	$ 36	$ —

Premier Valley Bank	72	104	—	286	272	14
Wisconsin Bank & Trust	368	534	—	1,554	1,825	—
Total	$ 446	$ 648	$ —	$ 1,873	$ 2,133	$ 14
December 31, 2017						
Citywide Banks	$ 8	$ 11	$ —	$ 34	$ 37	$ —
Premier Valley Bank	83	110	—	303	291	12
Wisconsin Bank & Trust	446	619	—	1,747	2,153	—
Total	$ 537	$ 740	$ —	$ 2,084	$ 2,481	$ 12

NOTE 7: DERIVATIVE FINANCIAL INSTRUMENTS

Heartland uses derivative financial instruments as part of its interest rate risk management strategy. As part of the strategy, Heartland considers the use of interest rate swaps, caps, floors, collars, and certain interest rate lock commitments and forward sales of securities related to mortgage banking activities. Heartland's current strategy includes the use of interest rate swaps, interest rate lock commitments and forward sales of mortgage securities. In addition, Heartland is facilitating back-to-back loan swaps to assist customers in managing interest rate risk. Heartland's objectives are to add stability to its net interest margin and to manage its exposure to movements in interest rates. The contract or notional amount of a derivative is used to determine, along with the other terms of the derivative, the amounts to be exchanged between the counterparties. Heartland is exposed to credit risk in the event of nonperformance by counterparties to financial instruments. Heartland minimizes this risk by entering into derivative contracts with counterparties that meet Heartland’s credit standards, and the contracts contain collateral provisions protecting the at-risk party. Heartland has not experienced any losses from nonperformance by these counterparties. Heartland monitors counterparty risk in accordance with the provisions of ASC 815.

In addition, interest rate-related derivative instruments generally contain language outlining collateral pledging requirements for each counterparty. Collateral must be posted when the market value exceeds certain threshold limits which are determined by credit ratings of each counterparty. Heartland was required to pledge no cash as collateral at March 31, 2018, and $1.2 million at December 31, 2017. At March 31, 2018, $860,000 of collateral was required to be pledged by Heartland's counterparties, compared to no collateral at December 31, 2017.

Heartland's derivative and hedging instruments are recorded at fair value on the consolidated balance sheets. See Note 8, “Fair Value,” for additional fair value information and disclosures.

Cash Flow Hedges
Heartland has variable rate funding which creates exposure to variability in interest payments due to changes in interest rates. To manage the interest rate risk related to the variability of interest payments, Heartland has entered into various interest rate swap agreements. Amounts reported in accumulated other comprehensive income related to derivatives will be reclassified to interest expense as interest payments are received or made on Heartland's variable-rate liabilities. For the three months ended March 31, 2018, the change in net unrealized losses on cash flow hedges reflects changes in the fair value of the swaps and reclassification from accumulated other comprehensive income to interest expense totaling $197,000. For the next twelve months, Heartland estimates that cash payments and reclassification from accumulated other comprehensive income to interest expense will total $789,000.

Heartland entered into five forward starting interest rate swap transactions to effectively convert Heartland Financial Statutory Trust IV, V, and VII, which total $65.0 million, as well as Morrill Statutory Trust I and II, which total $20.0 million, from variable rate subordinated debentures to fixed rate debt. For accounting purposes, these five swap transactions are designated as cash flow hedges of the changes in LIBOR, the benchmark interest rate being hedged, associated with the interest payments made on $85.0 million of Heartland's subordinated debentures that reset quarterly on a specified reset date. At inception, Heartland asserted that the underlying principal balance would remain outstanding throughout the hedge transaction, making it probable that sufficient LIBOR-based interest payments would exist through the maturity date of the swaps.

The table below identifies the balance sheet category and fair values of Heartland's derivative instruments designated as cash flow hedges at March 31, 2018, and December 31, 2017, in thousands:

	Notional Amount	Fair Value	Balance Sheet Category	Receive Rate	Weighted Average Pay Rate	Maturity
March 31, 2018						
Interest rate swap	$25,000	$239	Other assets	2.178 %	2.255 %	03/17/2021
Interest rate swap	20,000	(380)	Other liabilities	1.704	3.355	01/07/2020
Interest rate swap	10,000	69	Other assets	2.286	1.674	03/26/2019
Interest rate swap	10,000	68	Other assets	2.178	1.658	03/18/2019
Interest rate swap	32,667	1,010	Other assets	4.240	3.674	05/10/2021
Interest rate swap	20,000	316	Other assets	2.125	2.390	06/15/2024
Interest rate swap	20,000	339	Other assets	2.006	2.352	03/01/2024
December 31, 2017						
Interest rate swap	$25,000	$(106)	Other liabilities	1.600 %	2.255 %	03/17/2021
Interest rate swap	20,000	(621)	Other liabilities	1.350	3.355	01/07/2020
Interest rate swap	10,000	30	Other assets	1.329	1.674	03/26/2019
Interest rate swap	10,000	29	Other assets	1.600	1.658	03/18/2019
Interest rate swap	33,667	759	Other assets	3.932	3.674	05/10/2021
Interest rate swap(1)	20,000	(177)	Other liabilities	1.588	2.390	06/15/2024
Interest rate swap(2)	20,000	(149)	Other Liabilities	1.481	2.352	03/01/2024

The table below identifies the gains and losses recognized on Heartland's derivative instruments designated as cash flow hedges for the three-month periods ended March 31, 2018, and March 31, 2017, in thousands:

	Effective Portion Recognized in OCI	Reclassified from AOCI into Income		Ineffective Portion Recognized in Income on Derivatives	
	Amount of Gain (Loss)	Category	Amount of Gain (Loss)	Category	Amount of Gain (Loss)
Three Months Ended March 31, 2018					
Interest rate swaps	$1,896	Interest expense	$(197)	Other income	$ —
Three Months Ended March 31, 2017					
Interest rate swaps	$533	Interest expense	$(397)	Other income	$ —

Fair Value Hedges

Heartland uses interest rate swaps to convert certain long term fixed rate loans to floating rates to hedge interest rate risk exposure. Heartland uses hedge accounting in accordance with ASC 815, with the unrealized gains and losses, representing the change in fair value of the derivative and the change in fair value of the risk being hedged on the related loan, being recorded in the consolidated statements of income. The ineffective portions of the unrealized gains or losses, if any, are recorded in interest income and interest expense in the consolidated statements of income. Heartland uses statistical regression to assess hedge effectiveness, both at the inception of the hedge as well as on a continual basis. The regression analysis involves regressing the periodic change in the fair value of the hedging instrument against the periodic changes in the fair value of the asset being hedged due to changes in the hedge risk.

Heartland was required to pledge $3.2 million and $3.9 million of cash as collateral for these fair value hedges at March 31, 2018, and December 31, 2017, respectively.

The table below identifies the notional amount, fair value and balance sheet category of Heartland's fair value hedges at March 31, 2018, and December 31, 2017, in thousands:

	Notional Amount	Fair Value	Balance Sheet Category
March 31, 2018			
Fair value hedges	$35,436	$(105)	Other liabilities
December 31, 2017			
Fair value hedges	$35,635	$(999)	Other liabilities

The table below identifies the gains and losses recognized on Heartland's fair value hedges for the three month periods ended March 31, 2018, and March 31, 2017, in thousands:

	Amount of Gain (Loss)	Income Statement Category
Three Months Ended March 31, 2018		
Fair value hedges	$ 894	Interest income
Three Months Ended March 31, 2017		
Fair value hedges	$ 194	Interest income

Embedded Derivatives

Heartland has fixed rate loans with embedded derivatives. The loans contain terms that affect the cash flows or value of the loan similar to a derivative instrument, and therefore are considered to contain an embedded derivative. The embedded derivatives are bifurcated from the loans because the terms of the derivative instrument are not clearly and closely related to the loans. The embedded derivatives are recorded at fair value on the consolidated balance sheets as a part of other assets, and changes in the fair value are a component of noninterest income. The table below identifies the notional amount, fair value and balance sheet category of Heartland's embedded derivatives at March 31, 2018, and December 31, 2017, in thousands:

	Notional Amount	Fair Value	Balance Sheet Category
March 31, 2018			
Embedded derivatives	$13,907	$ 461	Other assets
December 31, 2017			
Embedded derivatives	$14,045	$ 738	Other assets

The table below identifies the gains and losses recognized on Heartland's embedded derivatives for the three month periods ended March 31, 2018, and March 31, 2017, in thousands:

	Amount of Gain (Loss)	Income Statement Category
Three Months Ended March 31, 2018		
Embedded derivatives	$ 277	Other noninterest income
Three Months Ended March 31, 2017		
Embedded derivatives	$ 117	Other noninterest income

In conjunction with the CIC Bancshares, Inc. transaction on February 5, 2016, Heartland assumed convertible subordinated debt. The subordinated debt has a face value of $2.0 million, and the embedded conversion option allows the holder to convert the debt to Heartland common equity in any increment and at the discretion of the holder. The conversion option is bifurcated from the debt because the terms of the conversion option are not clearly and closely related to the terms of the debt. On February 5, 2016, the total number of shares to be issued upon conversion was

73,394.

At March 31, 2018, and December 31, 2017, the remaining shares to be issued upon conversion totaled zero. During 2017, all of the remaining convertible subordinated debt was converted to common stock, resulting in the issuance of 20,481 shares of common stock. The embedded conversion option was reported at fair value on the consolidated balance sheets using the Black-Scholes model. The following table identifies, in thousands, the notional amount, fair value, balance sheet category and income statement category for the change in fair value of the embedded conversion option as of March 31, 2018, and December 31, 2017:

	Notional Amount	Fair Value	Balance Sheet Category
March 31, 2018			
Embedded conversion option	$ —	$ —	Other liabilities
December 31, 2017			
Embedded conversion option	$ —	$ —	Other liabilities

The table below identifies the gains and losses recognized on Heartland's embedded conversion options for the three-month periods ended March 31, 2018, and March 31, 2017, in thousands:

	Amount of Gain (Loss)	Income Statement Category
Three Months Ended March 31, 2018		
Embedded conversion option	$ —	Other noninterest income
Three Months Ended March 31, 2017		
Embedded conversion option	$ 97	Other noninterest income

Back-to-Back Loan Swaps

Heartland has interest rate swap loan relationships with customers to meet their financing needs. Upon entering into these loan swaps, Heartland enters into offsetting positions with counterparties in order to minimize interest rate risk. These back-to-back loan swaps qualify as free standing financial derivatives with the fair values reported in other assets and other liabilities on the consolidated balance sheets. Heartland was required to post $495,000 and $1.6 million as of March 31, 2018, and December 31, 2017, respectively, as collateral related to these back-to-back swaps. Heartland's counterparties were required to pledge $1.6 million at March 31, 2018, and $190,000 at December 31, 2017. Any gains and losses on these back-to-back swaps are recorded in noninterest income on the consolidated statements of income, and for the three months ended March 31, 2018 and March 31, 2017, no gain or loss was recognized. The table below identifies the balance sheet category and fair values of Heartland's derivative instruments designated as loan swaps at March 31, 2018, and December 31, 2017, in thousands:

	Notional Amount	Fair Value	Balance Sheet Category	Weighted Average Receive Rate	Weighted Average Pay Rate
March 31, 2018					
Customer interest rate swaps	$162,882	$3,763	Other assets	4.82 %	4.73 %
Customer interest rate swaps	162,882	(3,763)	Other liabilities	4.73	4.82
December 31, 2017					
Customer interest rate swaps	$126,766	$2,377	Other assets	4.70 %	4.03 %
Customer interest rate swaps	126,766	(2,377)	Other liabilities	4.03	4.70

Other Free Standing Derivatives

Heartland has entered into interest rate lock commitments to originate residential mortgage loans held for sale and forward commitments to sell residential mortgage loans and mortgage backed securities that are considered derivative instruments. Heartland enters into forward commitments for the future delivery of residential mortgage loans when interest rate lock commitments are entered into in order to economically hedge the effect of future changes in interest rates on the commitments to fund the loans as well as on residential mortgage loans available for sale. The fair value of these commitments is recorded on the consolidated balance sheets, with the changes in fair value recorded in the consolidated statements of income as a component of gains on sale of loans held for sale. These derivative contracts are designated as free standing derivative contracts and are not designated against specific assets and liabilities on the consolidated balance sheets or forecasted transactions and therefore do not qualify for hedge accounting treatment. Heartland was required to pledge collateral of $203,000 at March 31, 2018, and $20,000 at December 31, 2017. Heartland's counterparties were required to pledge $0 and $29,000 at March 31, 2018, and December 31, 2017, respectively, as collateral for these forward commitments.

Heartland acquired undesignated interest rate swaps in 2015. These swaps were entered into primarily for the benefit of customers seeking to manage their interest rate risk and are not designated against specific assets or liabilities on the consolidated balance sheet or forecasted transactions and therefore do not qualify for hedge accounting in accordance with ASC 815. These swaps are carried at fair value on the consolidated balance sheets as a component of other liabilities, with changes in the fair value recorded as a component of other noninterest income.

The table below identifies the balance sheet category and fair values of Heartland's other free standing derivative instruments not designated as hedging instruments at March 31, 2018, and December 31, 2017, in thousands:

	Balance Sheet Category	Notional Amount	Fair Value
March 31, 2018			
Interest rate lock commitments (mortgage)	Other assets	$65,591	$1,959
Forward commitments	Other assets	55,118	283
Forward commitments	Other liabilities	91,625	(320)
Undesignated interest rate swaps	Other liabilities	13,907	(461)
December 31, 2017			
Interest rate lock commitments (mortgage)	Other assets	$53,588	$1,738
Forward commitments	Other assets	37,286	80
Forward commitments	Other liabilities	118,632	(232)
Undesignated interest rate swaps	Other liabilities	14,045	(738)

The table below identifies the income statement category of the gains and losses recognized in income on Heartland's other free standing derivative instruments not designated as hedging instruments for the three-month periods ended March 31, 2018, and March 31, 2017, in thousands:

	Income Statement Category	Gain (Loss) Recognized
Three Months Ended March 31, 2018		
Interest rate lock commitments (mortgage)	Net gains on sale of loans held for sale	$ 17
Forward commitments	Net gains on sale of loans held for sale	115
Undesignated interest rate swaps	Other noninterest income	277
Three Months Ended March 31, 2017		
Interest rate lock commitments (mortgage)	Net gains on sale of loans held for sale	$ 1,062
Forward commitments	Net gains on sale of loans held for sale	(2,739)
Undesignated interest rate swaps	Other noninterest income	117

NOTE 8: FAIR VALUE

Heartland utilizes fair value measurements to record fair value adjustments to certain assets and liabilities and to determine fair value disclosures. Securities available for sale, trading securities and derivatives are recorded in the consolidated balance sheets at fair value on a recurring basis. Additionally, from time to time, Heartland may be required to record at fair value other assets on a nonrecurring basis such as loans held for sale, loans held to maturity and certain other assets including, but not limited to, mortgage servicing rights, commercial servicing rights and other real estate owned. These nonrecurring fair value adjustments typically involve application of the lower of cost or fair value accounting or write-downs of individual assets.

Fair Value Hierarchy

Under ASC 820, assets and liabilities are grouped at fair value in three levels, based on the markets in which the assets and liabilities are traded and the reliability of the assumptions used to determine fair value. These levels are:

Level 1 — Valuation is based upon quoted prices for identical instruments in active markets.

Level 2 — Valuation is based upon quoted prices for similar instruments in active markets, or similar instruments in markets that are not active, and model-based valuation techniques for all significant assumptions are observable in the market.

Level 3 — Valuation is generated from model-based techniques that use at least one significant assumption not observable in the market. These unobservable assumptions reflect estimates of assumptions that market participants would use in pricing the asset or liability. Valuation techniques include use of option pricing models, discounted cash flow models and similar techniques.

The following is a description of valuation methodologies used for assets and liabilities recorded at fair value on a recurring or non-recurring basis.

Assets

Securities Available for Sale and Held to Maturity
Securities available for sale are recorded at fair value on a recurring basis. Securities held to maturity are generally recorded at cost and are recorded at fair value only to the extent a decline in fair value is determined to be other-than-temporary. Fair value measurement is based upon quoted prices, if available. If quoted prices are not available, fair values are measured using independent pricing models or other model-based valuation techniques such as the present value of future cash flows, adjusted for the security's credit rating, prepayment assumptions and other factors such as credit loss assumptions. Level 1 securities include those traded on an active exchange, such as the New York Stock Exchange, as well as U.S. Treasury securities. Level 2 securities include U.S. government and agency securities, mortgage and asset-backed securities and private collateralized mortgage obligations, municipal bonds and corporate debt securities. On a quarterly basis, a secondary independent pricing service is used for the securities portfolio to validate the pricing from Heartland's primary pricing service.

Loans Held for Sale
Loans held for sale are carried at the lower of cost or fair value on an aggregate basis. The fair value of loans held for sale is based on what secondary markets are currently offering for portfolios with similar characteristics. As such, Heartland classifies loans held for sale subjected to nonrecurring fair value adjustments as Level 2.

Loans Held to Maturity
Heartland does not record loans held to maturity at fair value on a recurring basis. However, from time to time, a loan is considered impaired and an allowance for loan losses is established. Loans for which it is probable that payment of interest and principal will not be made in accordance with the contractual terms of the loan agreement are considered impaired. Once a loan is identified as individually impaired, management measures impairment in accordance with ASC 310. The fair value of impaired loans is measured using one of the following impairment methods: 1) the present value of expected future cash flows discounted at the loan's effective interest rate or 2) the observable market price of the loan or 3) the fair value of the collateral if the loan is collateral dependent. In accordance with ASC 820, impaired loans measured at fair value are classified as nonrecurring Level 3 in the fair value hierarchy.

Premises, Furniture and Equipment Held for Sale
Heartland values premises, furniture and equipment held for sale based on third-party appraisals less estimated disposal costs. Heartland considers third party appraisals, as well as independent fair value assessments from Realtors or persons involved in selling bank premises, furniture and equipment, in determining the fair value of particular properties. Accordingly, the valuation of premises, furniture and equipment held for sale is subject to significant external and internal judgment. Heartland periodically reviews premises, furniture and equipment held for sale to determine if the fair value of the property, less disposal costs, has declined below its recorded book value and records any adjustments accordingly. Premises, furniture and equipment held for sale are classified as nonrecurring Level 3 in the fair value hierarchy.

Mortgage Servicing Rights

Mortgage servicing rights assets represent the value associated with servicing residential real estate loans that have been sold to outside investors with servicing retained. Heartland uses the amortization method (i.e., the lower of amortized cost or estimated fair value measured on a nonrecurring basis), not fair value measurement accounting, to determine the carrying value of its mortgage servicing rights. The fair value for servicing assets is determined through discounted cash flow analysis and utilizes discount rates, prepayment speeds and delinquency rate assumptions as inputs. All of the assumptions in the discounted cash flow analysis require a significant degree of management estimation and judgment. Mortgage servicing rights are subject to impairment testing. The carrying values of these rights are reviewed quarterly for impairment based upon the calculation of fair value as performed by an outside third party. For purposes of measuring impairment, the rights are stratified into certain risk characteristics including note type and note term. If the valuation model reflects a fair value less than the carrying value, mortgage servicing rights are adjusted to fair value through a valuation allowance. Heartland classifies mortgage servicing rights as nonrecurring with Level 3 measurement inputs.

Commercial Servicing Rights
Commercial servicing rights assets represent the value associated with servicing commercial loans guaranteed by the Small Business Administration and the United States Department of Agriculture that have been sold with servicing retained by Heartland. Heartland uses the amortization method (i.e., the lower of amortized cost or estimated fair value measured on a nonrecurring basis), not fair value measurement accounting, to determine the carrying value of its commercial servicing rights. The fair value for servicing assets is determined through market prices for comparable servicing contracts, when available, or through a valuation model that calculates the present value of estimated future net servicing income. Inputs utilized include discount rates, prepayment speeds and delinquency rate assumptions as inputs. All of these assumptions require a significant degree of management estimation and judgment. Commercial servicing rights are subject to impairment testing, and the carrying values of these rights are reviewed quarterly for impairment based upon the calculation of fair value as performed by an outside third party. If the valuation model reflects a fair value less than the carrying value, commercial servicing rights are adjusted to fair value through a valuation allowance. Heartland classifies commercial servicing rights as nonrecurring with Level 3 measurement inputs.

Derivative Financial Instruments
Heartland's current interest rate risk strategy includes interest rate swaps. The valuation of these instruments is determined using widely accepted valuation techniques including discounted cash flow analysis on the expected cash flows of each derivative. This analysis reflects the contractual terms of the derivatives, including the period to maturity, and uses observable market-based inputs, including interest rate curves and implied volatilities. To comply with the provisions of ASC 820, Heartland incorporates credit valuation adjustments to appropriately reflect both its own nonperformance risk and the respective counterparty's nonperformance risk in the fair value measurements. In adjusting the fair value of its derivative contracts for the effect of nonperformance risk, Heartland has considered the impact of netting any applicable credit enhancements, such as collateral postings, thresholds, mutual puts, and guarantees.

Although Heartland has determined that the majority of the inputs used to value its derivatives fall within Level 2 of the fair value hierarchy, the credit valuation adjustments associated with its derivatives utilize Level 3 inputs, such as estimates of current credit spreads to evaluate the likelihood of default by itself and its counterparties. However, as of March 31, 2018, and December 31, 2017, Heartland has assessed the significance of the impact of the credit valuation adjustments on the overall valuation of its derivative positions and has determined that the credit valuation adjustments are not significant to the overall valuation of its derivatives. As a result, Heartland has determined that its derivative valuations in their entirety are classified in Level 2 of the fair value hierarchy.

Interest rate lock commitments
Heartland uses an internal valuation model that relies on internally developed inputs to estimate the fair value of its interest rate lock commitments which is based on unobservable inputs that reflect management's assumptions and specific information about each borrower. Interest rate lock commitments are classified in Level 3 of the fair value hierarchy.

Forward commitments
The fair value of forward commitments are estimated using an internal valuation model, which includes current trade pricing for similar financial instruments in active markets that Heartland has the ability to access and are classified in Level 2 of the fair value hierarchy.

Other Real Estate Owned
Other real estate owned ("OREO") represents property acquired through foreclosures and settlements of loans. Property acquired is carried at the fair value of the property at the time of acquisition (representing the property's cost basis), plus any acquisition costs, or the estimated fair value of the property, less disposal costs. Heartland considers

third party appraisals, as well as independent fair value assessments from realtors or persons involved in selling OREO, in determining the fair value of particular properties. Accordingly, the valuation of OREO is subject to significant external and internal judgment. Heartland periodically reviews OREO to determine if the fair value of the property, less disposal costs, has declined below its recorded book value and records any adjustments accordingly. OREO is classified as nonrecurring Level 3 of the fair value hierarchy.

The table below presents Heartland's assets and liabilities that are measured at fair value on a recurring basis as of March 31, 2018, and December 31, 2017, in thousands, aggregated by the level in the fair value hierarchy within which those measurements fall:

	Total Fair Value	Level 1	Level 2	Level 3
March 31, 2018				
Assets				
Securities available for sale				
U.S. government corporations and agencies	$11,188	$9,421	$1,767	$—
Mortgage and asset-backed securities	1,647,604	—	1,647,604	—
Obligations of states and political subdivisions	352,180	—	352,180	—
Corporate debt securities	—	—	—	—
Equity securities	16,693	—	16,693	—
Derivative financial instruments(1)	6,265	—	6,265	—
Interest rate lock commitments	1,959	—	—	1,959
Forward commitments	283	—	283	—
Total assets at fair value	$2,036,172	$9,421	$2,024,792	$1,959
Liabilities				
Derivative financial instruments(2)	$4,709	$—	$4,709	$—
Forward commitments	320	—	320	—
Total liabilities at fair value	$5,029	$—	$5,029	$—
December 31, 2017				
Assets				
Securities available for sale				
U.S. government corporations and agencies	$5,328	$3,484	$1,844	$—
Mortgage and asset-backed securities	1,753,736	—	1,753,736	—
Obligations of states and political subdivisions	441,015	—	441,015	—
Equity securities	16,674	—	16,674	—
Derivative financial instruments(1)	3,933	—	3,933	—
Interest rate lock commitments	1,738	—	—	1,738
Forward commitments	80	—	80	—
Total assets at fair value	$2,222,504	$3,484	$2,217,282	$1,738
Liabilities				
Derivative financial instruments(2)	$5,167	$—	$5,167	$—
Forward commitments	232	—	232	—
Total liabilities at fair value	$5,399	$—	$5,399	$—

(1) Includes cash flow hedges, embedded derivatives and back-to-back loan swaps
(2) Includes cash flow hedges, fair value hedges, back-to-back loan swaps, embedded conversion options and free standing derivative instruments

The tables below present Heartland's assets that are measured at fair value on a nonrecurring basis, in thousands:

	Fair Value Measurements at March 31, 2018				
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Year-to-Date (Gains) Losses
Collateral dependent impaired loans:					
Commercial	$2,923	$ —	$ —	$ 2,923	$ —
Commercial real estate	8,316	—	—	8,316	—
Agricultural and agricultural real estate	8,041	—	—	8,041	—
Residential real estate	1,421	—	—	1,421	4
Consumer	1,721	—	—	1,721	—
Total collateral dependent impaired loans	$22,422	$ —	$ —	$ 22,422	$ 4
Loans held for sale	$24,376	$ —	$ 24,376	$ —	$ 288
Other real estate owned	$11,801	$ —	$ —	$ 11,801	$ 16
Premises, furniture and equipment held for sale	$1,477	$ —	$ —	$ 1,477	$ (115)
Commercial servicing rights	$272	$ —	$ —	$ 272	$ 2

	Fair Value Measurements at December 31, 2017				
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Year-to-Date (Gains) Losses
Collateral dependent impaired loans:					
Commercial	$3,212	$ —	$ —	$ 3,212	$ 1,119
Commercial real estate	9,480	—	—	9,480	322
Agricultural and agricultural real estate	8,406	—	—	8,406	2,028
Residential real estate	1,137	—	—	1,137	—
Consumer	1,234	—	—	1,234	—
Total collateral dependent impaired loans	$23,469	$ —	$ —	$ 23,469	$ 3,469
Loans held for sale	$44,560	$ —	$ 44,560	$ —	$ 190
Other real estate owned	$10,777	$ —	$ —	$ 10,777	$ 737
Premises, furniture and equipment held for sale	$1,977	$ —	$ —	$ 1,977	$ 192
Commercial servicing rights	$291	$ —	$ —	$ 291	$ (21)

The following tables present additional quantitative information about assets measured at fair value and for which Heartland has utilized Level 3 inputs to determine fair value, in thousands:

	Fair Value at 3/31/2018	Valuation Technique	Unobservable Input	Range (Weighted Average)
Interest rate lock commitments	$ 1,959	Discounted cash flows	Closing ratio	0-99% (89%)[(1)]
Premises, furniture and equipment held for sale	1,477	Modified appraised value	Third party appraisal	[(2)]
			Appraisal discount	0-10%[(4)]
Commercial servicing rights	272	Discounted cash flows	Third party valuation	[(3)]
Other real estate owned	11,801	Modified appraised value	Third party appraisal	[(2)]
			Appraisal discount	0-10%
Collateral dependent impaired loans:				
Commercial	2,923	Modified appraised value	Third party appraisal	[(2)]
			Appraisal discount	0-10%[(4)]
Commercial real estate	8,316	Modified appraised value	Third party appraisal	[(2)]
			Appraisal discount	0-10%[(4)]
Agricultural and agricultural real estate	8,041	Modified appraised value	Third party appraisal	[(2)]
			Appraisal discount	0-10%[(4)]
Residential real estate	1,421	Modified appraised value	Third party appraisal	[(2)]
			Appraisal discount	0-12%[(4)]
Consumer	1,721	Modified appraised value	Third party valuation	[(2)]
			Valuation discount	0-14%[(4)]

(1) The significant unobservable input used in the fair value measurement is the closing ratio, which represents the percentage of loans currently in a lock position which management estimates will ultimately close. The closing ratio calculation takes into consideration historical data and loan-level data.
(2) Third party appraisals are obtained and updated at least annually to establish the value of the underlying asset, but the disclosure of the unobservable inputs used by the appraisers would not be meaningful because the range will vary widely from appraisal to appraisal.
(3) The significant unobservable input used in the fair value measurement are the value indices, which are weighted-average spreads to LIBOR based on maturity groups.
(4) Discounts applied to the appraised values primarily include estimated sales costs, but also consider the age of the appraisal, changes in local market conditions and changes in the current condition of the collateral.

	Fair Value at 12/31/2017	Valuation Technique	Unobservable Input	Range (Weighted Average)
Interest rate lock commitments	$ 1,738	Discounted cash flows	Closing ratio	0-99% (89%)(1)
Premises, furniture and equipment held for sale	1,977	Modified appraised value	Third party appraisal	(2) 0-10%(4)
Commercial servicing rights	291	Discounted cash flows	Third party valuation	(3)
Other real estate owned	10,777	Modified appraised value	Third party appraisal	(2)
			Appraisal discount	0-10%
Collateral dependent impaired loans:				
Commercial	3,212	Modified appraised value	Third party appraisal	(2)
			Appraisal discount	0-15%(4)
Commercial real estate	9,480	Modified appraised value	Third party appraisal	(2)
			Appraisal discount	0-12%(4)
Agricultural and agricultural real estate	8,406	Modified appraised value	Third party appraisal	(2)
			Appraisal discount	0-10%(4)
Residential real estate	1,137	Modified appraised value	Third party appraisal	(2)
			Appraisal discount	0-12%(4)
Consumer	1,234	Modified appraised value	Third party valuation	(2)
			Valuation discount	0-12%(4)

(1) The significant unobservable input used in the fair value measurement is the closing ratio, which represents the percentage of loans currently in a lock position which management estimates will ultimately close. The closing ratio calculation takes into consideration historical data and loan-level data.
(2) Third party appraisals are obtained and updated at least annually to establish the value of the underlying asset, but the disclosure of the unobservable inputs used by the appraisers would not be meaningful because the range will vary widely from appraisal to appraisal.
(3) The significant unobservable input used in the fair value measurement are the value indices, which are weighted-average spreads to LIBOR based on maturity groups.
(4) Discounts applied to the appraised values primarily include estimated sales costs, but also consider the age of the appraisal, changes in local market conditions and changes in the current condition of the collateral.

The changes in fair value of the interest rate lock commitments, which are Level 3 financial instruments measured on a recurring basis, are summarized in the following table, in thousands:

	For the Three Months Ended March 31, 2018	For the Year Ended December 31, 2017

Balance at January 1,	$1,738	$ 2,790
Total gains (losses) included in earnings	17	(1,479)
Issuances	492	1,875
Settlements	(288)	(1,448)
Balance at period end	$1,959	$ 1,738

Gains included in gains (losses) on sale of loans held for sale attributable to interest rate lock commitments held at March 31, 2018, and December 31, 2017, were $2.0 million and $1.7 million, respectively.

The tables below summarize the estimated fair value of Heartland's financial instruments as defined by ASC 825 as of March 31, 2018, and December 31, 2017, in thousands. The carrying amounts in the following tables are recorded in the consolidated balance sheets under the indicated captions. In accordance with ASC 825, the assets and liabilities that are not financial instruments are not included in the disclosure, such as the value of the commercial and mortgage servicing rights, premises, furniture and equipment, premises, furniture and equipment held for sale, OREO, goodwill, and other intangibles and other liabilities.

Heartland does not believe that the estimated information presented herein is representative of the earnings power or value of Heartland. The following analysis, which is inherently limited in depicting fair value, also does not consider any value associated with either existing customer relationships or the ability of Heartland to create value through loan origination, deposit gathering or fee generating activities. Many of the estimates presented herein are based upon the use of highly subjective information and assumptions and, accordingly, the results may not be precise. Management believes that fair value estimates may not be comparable between financial institutions due to the wide range of permitted valuation techniques and numerous estimates which must be made. Furthermore, because the disclosed fair value amounts were estimated as of the balance sheet date, the amounts actually realized or paid upon maturity or settlement of the various financial instruments could be significantly different.

			Fair Value Measurements at March 31, 2018		
	Carrying Amount	Estimated Fair Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Financial assets:					
Cash and cash equivalents	$266,346	$266,346	$266,346	$ —	$ —
Time deposits in other financial institutions	6,297	6,297	6,297	—	—
Securities:					
Available for sale	2,027,665	2,027,665	9,421	2,018,244	—
Held to maturity	249,766	258,638	—	258,638	—
Other investments	22,982	22,982	—	22,982	—
Loans held for sale	24,376	24,376	—	24,376	—
Loans, net:					
Commercial	1,786,838	1,766,760	—	1,763,837	2,923
Commercial real estate	3,298,798	3,280,785	—	3,272,469	8,316
Agricultural and agricultural real estate	514,471	508,582	—	500,541	8,041
Residential real estate	621,295	614,234	—	612,813	1,421
Consumer	465,957	464,793	—	463,072	1,721
Total Loans, net	6,687,359	6,635,154	—	6,612,732	22,422
Cash surrender value on life insurance	143,444	143,444	—	143,444	—
Derivative financial instruments(1)	6,265	6,265	—	6,265	—
Interest rate lock commitments	1,959	1,959	—	—	1,959
Forward commitments	283	283	—	283	—
Financial liabilities:					
Deposits					
Demand deposits	3,094,457	3,094,457	—	3,094,457	—
Savings deposits	4,536,106	4,536,106	—	4,536,106	—
Time deposits	910,977	910,977	—	910,977	—
Short term borrowings	131,240	131,240	—	131,240	—
Other borrowings	276,118	276,193	—	276,193	—
Derivative financial instruments(2)	4,709	4,709	—	4,709	—
Forward commitments	320	320	—	320	—

(1) Includes cash flow hedges, embedded derivatives and back-to-back loan swaps
(2) Includes cash flow hedges, fair value hedges, back-to-back loan swaps, embedded conversion options and free standing derivative instruments

	Carrying Amount	Estimated Fair Value	Fair Value Measurements at December 31, 2017 Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Financial assets:					
Cash and cash equivalents	$ 196,003	$ 196,003	$ 196,003	$ —	$ —
Time deposits in other financial institutions	9,820	9,820	9,820	—	—
Securities:					
Available for sale	2,216,753	2,216,753	3,484	2,213,269	—
Held to maturity	253,550	265,494	—	265,494	—
Other investments	22,563	22,563	—	22,563	—
Loans held for sale	44,560	44,560	—	44,560	—
Loans, net:					
Commercial	1,628,043	1,617,956	—	1,614,744	3,212
Commercial real estate	3,140,427	3,132,542	—	3,123,062	9,480
Agricultural and agricultural real estate	508,075	508,987	—	500,581	8,406
Residential real estate	620,939	614,667	—	613,530	1,137
Consumer	438,294	440,820	—	439,586	1,234
Total Loans, net	6,335,778	6,314,972	—	6,291,503	23,469
Cash surrender value on life insurance	142,818	142,818	—	142,818	—
Derivative financial instruments(1)	3,933	3,933	—	3,933	—
Interest rate lock commitments	1,738	1,738	—	—	1,738
Forward commitments	80	80	—	80	—
Financial liabilities:					
Deposits					
Demand deposits	2,983,128	2,983,128	—	2,983,128	—
Savings deposits	4,240,328	4,240,328	—	4,240,328	—
Time deposits	923,453	923,453	—	923,453	—
Short term borrowings	324,691	324,691	—	324,691	—
Other borrowings	285,011	285,609	—	285,609	—
Derivative financial instruments(2)	5,167	5,167	—	5,167	—
Forward commitments	232	232	—	232	—

(1) Includes cash flow hedges, embedded derivatives and back-to-back loan swaps
(2) Includes cash flow hedges, fair value hedges, back-to-back loan swaps, embedded conversion options and free standing derivative instruments

Cash and Cash Equivalents — The carrying amount is a reasonable estimate of fair value due to the short-term nature of these instruments.

Time Deposits in Other Financial Institutions — The carrying amount is a reasonable estimate of fair value due to the short-term nature of these instruments.

Securities — For securities either held to maturity, available for sale or trading, fair value equals quoted market price if available. If a quoted market price is not available, fair value is estimated using quoted market prices for similar securities. For Level 3 securities, Heartland utilizes independent pricing provided by third party vendors or brokers.

Other Investments — Fair value measurement of other investments, which consists primarily of FHLB stock, are based on their redeemable value, which is at cost due to the restrictions placed on their transferability. The market for these securities is restricted to the issuer of the stock and subject to impairment evaluation.

Loans — Beginning in the first quarter of 2018, the fair value of loans were determined using an exit price methodology as prescribed by ASU 2016-01, which was effective on January 1, 2018. The exit price estimation of fair value is based on the present value of the expected cash flows. The projected cash flows are based on the contractual terms of the loans, adjusted for prepayments and a discount rate based on the relative risk of the cash flows. Other considerations include the loan type, remaining life of the loan and credit risk. In comparison, loan fair values as of December 31, 2017, were estimated based on an entrance price methodology, which discounts future cash flows using the current rates at which a similar loan would be made to borrowers with similar credit ratings and for the same remaining maturities. The fair value of non-impaired loans as of March 31, 2018, and December 31, 2017, are not comparable.

The fair value of impaired loans is measured using the fair value of the underlying collateral. The fair value of loans held for sale is estimated using quoted market prices.

Interest Rate Lock Commitments — The fair value of interest rate lock commitments is estimated using an internal valuation model, which includes grouping the interest rate lock commitments by interest rate and terms, applying an estimated closing ratio based on historical experience, and then multiplying by quoted investor prices determined to be reasonably applicable to the loan commitment groups based on interest rate, terms, and rate lock expiration dates of the loan commitment group.

Forward Commitments — The fair value of these instruments is estimated using an internal valuation model, which includes current trade pricing for similar financial instruments.

Derivative Financial Instruments — The fair value of all derivatives is estimated based on the amount that Heartland would pay or would be paid to terminate the contract or agreement, using current rates and prices, and, when appropriate, the current creditworthiness of the counter-party.

Deposits — The fair value of demand deposits, savings accounts and certain money market deposits is the amount payable on demand at the reporting date. The fair value of fixed maturity certificates of deposit is estimated using the rates currently offered for deposits of similar remaining maturities. If the fair value of the fixed maturity certificates of deposit is calculated at less than the carrying amount, the carrying value of these deposits is reported as the fair value.

Short-term and Other Borrowings — Rates currently available to Heartland for debt with similar terms and remaining maturities are used to estimate fair value of existing debt.

Commitments to Extend Credit, Unused Lines of Credit and Standby Letters of Credit — Based upon management's analysis of the off balance sheet financial instruments, there are no significant unrealized gains or losses associated with these financial instruments based upon review of the fees currently charged to enter into similar agreements, taking into account the remaining terms of the agreements and the present creditworthiness of the counterparties.

NOTE 9: REVENUE

On January 1, 2018, Heartland adopted ASU 2014-09, "Revenue from Contracts with Customers" (Topic 606), and all subsequent ASUs that modified Topic 606. As stated in Note 1, the implementation of the new standard did not have a material impact on the measurement or recognition of revenue; as such, a cumulative effect adjustment to opening retained earnings was not deemed necessary. Results for reporting periods beginning after January 1, 2018 are presented under Topic 606, while prior period amounts were not adjusted and continue to be reported in accordance

with Topic 605.
Topic 606 does not apply to revenue associated with financial instruments, including revenue from loans and securities. In addition, certain noninterest income streams such as fees associated with loan servicing income, bank owned life insurance, derivatives and certain credit card fees are also not in scope of the new guidance. Topic 606 is applicable to noninterest revenue streams such as service charges and fees, trust fees, and brokerage and insurance commissions. However, the recognition of these revenue streams did not change significantly upon adoption of Topic 606. Substantially all of Heartland's revenue is generated from contracts with customers. Noninterest revenue streams in-scope of Topic 606 are discussed below.
Service Charges and Fees
Service charges and fees consist of revenue generated from deposit account related service charges and fees, overdraft fees, customer service fees, credit card fee income, debit card income and other service charges and fees.

Service charges on deposit accounts consist of account analysis fees (i.e., net fees earned on analyzed business and public checking accounts), monthly service fees, check orders and other deposit account related fees. Heartland's performance obligation for account analysis fees and monthly service fees is generally satisfied, and the related revenue recognized, over the period in which the service is provided. Check orders and other deposit account related fees, including overdraft fees, are largely transactional based, and therefore, the performance obligation is satisfied, and related revenue recognized, at a point in time. Payment for service charges on deposit accounts is primarily received immediately or in the following month through a direct charge to customers' accounts.

Customer service fees and other service charges include revenue from processing wire transfers, bill pay service, cashier's checks, and other services. Heartland's performance obligation for fees, exchange, and other service charges are largely satisfied, and related revenue recognized, when the services are rendered or upon completion. Payment is typically received immediately or in the following month.

Credit card fee income and debit card income are comprised of interchange fees, ATM fees, and merchant services income. Credit card fee income and debit card income are earned whenever the banks' debit and credit cards are processed through card payment networks such as Visa. ATM fees are primarily generated when a bank cardholder uses an ATM that is not owned by one of Heartland's banks or a non-bank cardholder uses Heartland-owned ATM. Merchant services income mainly represents fees charged to merchants to process their debit and credit card transactions, in addition to account management fees.

Trust Fees

Trust fees are primarily comprised of fees earned from the management and administration of trusts and other customer assets. Heartland's performance obligation is generally satisfied over time and the resulting fees are recognized monthly, based upon the average daily market value or month-end market value of the assets under management and the applicable fee rate. Payment is generally received a few days before or after month end through a direct charge to customers' accounts. Heartland does not earn performance-based incentives. Optional services such as real estate sales and tax return preparation services are also available to existing trust and asset management customers. Heartland's performance obligation for these transactional-based services is generally satisfied, and related revenue recognized, at a point in time (i.e., as incurred). Payment is received shortly after services are rendered.

Brokerage and Insurance Commissions

Brokerage commission primarily consist of commissions related to broker-dealer contracts. The contracts are between the customer and the broker-dealer, and Heartland satisfies its performance obligation and earns commission when the transactions are completed. The recognition of revenue is based on a defined fee schedule and does not require significant judgment. Payment is received shortly after services are rendered. Insurance commissions are related to commissions received directly from the insurance carrier. Heartland acts as an insurance agent between the customer and the insurance carrier. Heartland's performance obligations and associated fee and commission income are defined with each insurance product with the insurance company. When insurance payments are received from customers, a portion of the payment is recognized as commission revenue.

The following presents noninterest income, segregated by revenue streams in-scope and out-of-scope of Topic 606, for the three months ended March 31, 2018, and 2017, in thousands:

	Three Months Ended March 31,	
	2018	2017
In-scope of Topic 606		
Service charges and fees		
Service charges and fees on deposit accounts	$2,618	$2,160
Overdraft fees	2,208	2,193
Customer service fees	77	49
Credit card fee income	2,190	2,033
Debit card income	2,985	3,021
Other service charges	1	1
Total service charges and fees	10,079	9,457
Trust fees	4,680	3,631
Brokerage and insurance commissions	907	1,036
Total noninterest income in-scope of Topic 606	15,666	14,124
Out-of-scope of Topic 606		
Loan servicing income	1,754	1,724
Securities gains, net	1,441	2,482
Unrealized loss on equity securities, net	(28)	—
Net gains on sale of loans held for sale	4,051	6,147
Valuation adjustment on commercial servicing rights	(2)	5
Income on bank owned life insurance	614	617
Other noninterest income	1,220	794
Total noninterest income out-of-scope of Topic 606	9,050	11,769
Total noninterest income	$24,716	$25,893

Contract Balances

A contract asset balance occurs when an entity performs a service for a customer before the customer pays consideration (resulting in a contract receivable) or before payment is due (resulting in a contract asset). A contract liability balance is an entity’s obligation to transfer a service to a customer for which the entity has already received payment (or payment is due) from the customer. Heartland's noninterest revenue streams are largely based on transactional activity, or standard month-end revenue accruals such as asset management fees based on month-end market values. Consideration is often received immediately or shortly after Heartland satisfies its performance obligation and revenue is recognized. Heartland does not typically enter into long-term revenue contracts with customers, and therefore, does not experience significant contract balances. As of March 31, 2018, and December 31, 2017, Heartland did not have any significant contract balances.

Contract Acquisition Costs

In connection with the adoption of Topic 606, an entity is required to capitalize, and subsequently amortize into expense, certain incremental costs of obtaining a contract with a customer if these costs are expected to be recovered. The incremental costs of obtaining a contract are those costs that an entity incurs to obtain a contract with a customer that it would not have incurred if the contract had not been obtained (for example, sales commission). Heartland utilizes the practical expedient which allows entities to immediately expense contract acquisition costs when the asset that would have resulted from capitalizing these costs would have been amortized in one year or less. Upon adoption of Topic 606, Heartland did not capitalize any contract acquisition costs.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

SAFE HARBOR STATEMENT

This Quarterly Report on Form 10-Q (including any information incorporated herein by reference) contains, and future oral and written statements of Heartland Financial USA, Inc. ("Heartland") and its management may contain, forward-looking statements within the meaning of such term in the Private Securities Litigation Reform Act of 1995, with respect to the business, financial condition, results of operations, plans, objectives and future performance of Heartland. Forward-looking statements, which may be based upon beliefs, expectations and assumptions of Heartland's management and on information currently available to management, are generally identifiable by the use of words such as "believe," "expect," "anticipate," "plan," "intend," "estimate," "may," "will," "would," "could," "should" or other similar expressions. Although Heartland has made these statements based on management's experience and best estimate of future events, there may be events or factors that management has not anticipated, and the accuracy and achievement of such forward-looking statements and estimates are subject to a number of risks, including those identified in our Annual Report on Form 10-K for the year ended December 31, 2017. Additionally, all statements in this document, including forward-looking statements, speak only as of the date they are made, and Heartland undertakes no obligation to update any statement in light of new information or future events.

CRITICAL ACCOUNTING POLICIES

The preparation of financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, income and expenses. These estimates are based upon historical experience and on various other assumptions that management believes are reasonable under the circumstances. Among other things, the estimates form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. The estimates and judgments that management believes have the most effect on Heartland's reported financial position and results of operations are described as critical accounting policies in Heartland's Annual Report on Form 10-K for the year ended December 31, 2017. There have been no significant changes in the critical accounting policies or the assumptions and judgments utilized in applying these policies since December 31, 2017.

OVERVIEW

Heartland is a multi-bank holding company providing banking, mortgage, wealth management, investments, insurance and consumer finance services to individuals and businesses. As of the date of this Quarterly Report on Form 10-Q, Heartland has ten banking subsidiaries with 117 locations in Iowa, Illinois, Wisconsin, New Mexico, Arizona, Montana, Colorado, Minnesota, Kansas, Missouri, Texas and California. Heartland's primary objectives are to increase profitability and diversify its market area and asset base by expanding through acquisitions and to grow organically by increasing its customer base in the markets it serves.

Heartland's results of operations depend primarily on net interest income, which is the difference between interest income from interest earning assets and interest expense on interest bearing liabilities. Noninterest income, which includes service charges and fees, loan servicing income, trust income, brokerage and insurance commissions, securities gains, net gains on sale of loans held for sale, and income on bank owned life insurance also affects Heartland's results of operations. Heartland's principal operating expenses, aside from interest expense, consist of the provision for loan losses, salaries and employee benefits, occupancy and equipment costs, professional fees, Federal Deposit Insurance Corporation ("FDIC") insurance premiums, advertising, core deposit intangibles and customer relationship intangibles amortization and other real estate and loan collection expenses.

Net income available to common stockholders for the quarter ended March 31, 2018, was $23.3 million, or $0.76 per diluted common share, compared to $18.0 million, or $0.68 per diluted common share, for the quarter ended March 31, 2017. Return on average common equity was 9.32% and return on average assets was 0.97% for the first quarter of 2018, compared to 9.71% and 0.89%, respectively, for the same quarter in 2017.

For the first quarter of 2018, Heartland's net interest margin was 4.19% (4.26% on a fully tax-equivalent basis) compared to 3.95% (4.16% on a fully tax-equivalent basis) for the same quarter in 2017, and the efficiency ratio was 68.21% and 69.95% for the first quarter of 2018 and 2017, respectively.

On February 23, 2018, Heartland completed the acquisition of Signature Bancshares, Inc., parent company of Signature Bank, based in Minnetonka, Minnesota. Based on Heartland's closing common stock price of $53.55 per share as of February 23, 2018, the aggregate consideration was $61.4 million, with approximately 10% of the consideration paid in cash and 90% paid by delivery of Heartland common stock. Simultaneous with the closing of the transaction, Signature Bank merged into Heartland's Minnesota Bank & Trust subsidiary. As of the close date, Signature Bank had, at fair value, total assets of $426.5 million, total loans of $324.5 million and total deposits of $357.3 million. The systems conversion for this transaction occurred on April 20, 2018.

In the first quarter of 2018, Heartland recorded $2.6 million of restructuring expenses related to its retail mortgage lending operation. The restructuring projects are primarily related to outsourcing of the loan application processing, underwriting and loan closing functions. These changes will improve the customer experience, streamline operations and reduce the volatility and cost of

originating mortgage loans. The new operating model will reduce the number of days between the customer application and the loan closing, as well as reduce and fix the cost of processing each loan. The restructuring is expected to be substantially completed by the end of the second quarter of 2018. Heartland expects to realize cost savings of more than $1.0 million per quarter, primarily related to the workforce reduction of approximately 100 employees, the discontinued use of several current systems and other overhead costs. Because of the significant reduction in infrastructure and the reporting structure of the mortgage sales staff, who currently report directly to the bank president in each market, retail mortgage lending is no longer considered a separate business segment as of January 1, 2018.
On December 12, 2017, Heartland entered into a definitive merger agreement with First Bank Lubbock Bancshares, Inc., parent company of FirstBank & Trust Company, headquartered in Lubbock, Texas. Under the terms of the definitive merger agreement, Heartland will acquire First Bank Lubbock Bancshares, Inc. in a transaction valued at approximately $185.6 million as of the announcement date, subject to certain adjustments. Shareholders of First Bank Lubbock Bancshares, Inc. will receive a combination of Heartland common stock and cash. As of March 31, 2018, FirstBank & Trust Company had total assets of $971.5 million, including $704.9 million of gross loans held to maturity, and deposits of $869.3 million. Upon closing of the transaction, FirstBank & Trust Company will become a wholly-owned subsidiary of Heartland and will continue to operate under its current name and management team as Heartland's eleventh state-chartered bank. Heartland has received approval by the bank regulatory authorities related to this acquisition. The transaction is expected to close in the second quarter of 2018, and the systems conversion is expected to occur in the third quarter of 2018.
Total assets of Heartland were $10.06 billion at March 31, 2018, an increase of $245.1 million or 2% since year-end 2017. Excluding $427.1 million of assets acquired at fair value in the Signature Bancshares, Inc. transaction, total assets decreased $181.9 million or 2% since December 31, 2017. The decrease in total assets was primarily due to a reduction in the securities portfolio, which represented 23% of total assets at March 31, 2018, and 25% of total assets at December 31, 2017.

Heartland's total assets exceeded $10.0 billion as of March 31, 2018. Under the Dodd-Frank Act and other regulatory guidance, Heartland will become subject to increased supervision and regulation, which include the establishment of a risk committee, annual stress testing and restriction on interchange revenue. Management has been in the process of preparing for these new requirements over the past several quarters, including additions to staff, enhancing risk management processes and investing to upgrade information systems and technology. The risk factors and supervision requirements that management believes have the most effect on Heartland's reported financial position and results of operations are described in Heartland's Annual Report on Form 10-K for the year ended December 31, 2017.

Total loans held to maturity were $6.75 billion at March 31, 2018, compared to $6.39 billion at year-end 2017, an increase of $354.6 million. This change includes $324.5 million of total loans held to maturity acquired at fair value in the Signature Bancshares, Inc. transaction. Exclusive of this transaction, total loans held to maturity increased $30.1 million or less than 1% since December 31, 2017.

Total deposits were $8.54 billion as of March 31, 2018, compared to $8.15 billion at year-end 2017, an increase of $394.6 million or 5%. This increase includes $357.3 million of deposits, at fair value, acquired in the Signature Bancshares, Inc. transaction. Exclusive of this transaction, total deposits increased $37.3 million or less than 1% since December 31, 2017.

Common stockholders' equity was $1.05 billion at March 31, 2018, compared to $990.5 million at year-end 2017. Book value per common share was $33.81 at March 31, 2018, compared to $33.07 at year-end 2017. Heartland's unrealized loss on securities available for sale, net of applicable taxes, was $40.5 million at March 31, 2018, compared to an unrealized loss of $24.3 million, net of applicable taxes, at December 31, 2017.

FINANCIAL HIGHLIGHTS

(Dollars in thousands, except per share data)	Three Months Ended March 31, 2018	2017
STATEMENT OF INCOME DATA		
Interest income	$101,214	$80,551
Interest expense	9,630	7,523
Net interest income	91,584	73,028
Provision for loan losses	4,263	3,641
Net interest income after provision for loan losses	87,321	69,387
Noninterest income	24,716	25,893
Noninterest expenses	83,646	71,740
Income taxes	5,123	5,530
Net income	23,268	18,010
Preferred dividends	(13)	(19)
Interest expense on convertible preferred debt	—	5
Net income available to common stockholders	$23,255	$17,996
Key Performance Ratios		
Annualized return on average assets	0.97%	0.89%
Annualized return on average common equity (GAAP)	9.32%	9.71%
Annualized return on average tangible common equity (non-GAAP)(1)	13.03%	12.25%
Annualized ratio of net charge-offs to average loans	0.08%	0.22%
Annualized net interest margin (GAAP)	4.19%	3.95%
Annualized net interest margin, fully tax-equivalent (non-GAAP)(2)	4.26%	4.16%
Efficiency ratio, fully tax-equivalent(3)	68.21%	69.95%
Reconciliation of Return on Average Tangible Common Equity (non-GAAP)(4)		
Net income available to common shareholders (GAAP)	$23,255	$17,996
Average common stockholders' equity (GAAP)	$1,011,580	$751,671
Less average goodwill	250,172	132,440
Less average other intangibles, net	37,510	23,225
Average tangible common equity (non-GAAP)	$723,898	$596,006
Annualized return on average common equity (GAAP)	9.32%	9.71%
Annualized return on average tangible common equity (non-GAAP)	13.03%	12.25%
Reconciliation of Annualized Net Interest Margin, Fully Tax-Equivalent (non-GAAP)(5)		
Net Interest Income (GAAP)	$91,584	$73,028
Plus tax-equivalent adjustment(6)	1,544	3,860
Net interest income - tax-equivalent (non-GAAP)	$93,128	$76,888
Average earning assets	$8,857,801	$7,502,496
Net interest margin (GAAP)	4.19%	3.95%
Net interest margin, fully tax-equivalent (non-GAAP)	4.26%	4.16%
Reconciliation of Non-GAAP Measure-Efficiency Ratio(7)		
Net Interest Income (GAAP)	$91,584	$73,028
Plus tax-equivalent adjustment(6)	1,544	3,860

Net interest income - tax-equivalent (non-GAAP)	93,128	76,888
Noninterest income	24,716	25,893
Securities gains, net	(1,441)	(2,482)
Unrealized loss on equity securities, net	28	—
Adjusted income	$116,431	$100,299

(Dollars in thousands, except per share data)	Three Months Ended March 31, 2018	2017
Total noninterest expenses	$83,646	$71,740
Less:		
Core deposit intangibles and customer relationship intangibles amortization	1,863	1,171
(Gain)/loss on sales/valuations of assets, net	(197)	412
Restructuring expenses		