

Section 1: 10-Q (10-Q)

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

FORM 10-Q

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

For quarterly period ended September 30, 2018

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 No

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

Indicate by check mark 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

Accelerated Filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

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

Indicate by check mark whether the Registrant is a shell company (as defined by Rule 12b-2 of the Securities Exchange Act of 1934). Yes No

Indicate the number of shares outstanding of each of the classes of Registrant's common stock as of the latest practicable date: As of November 2, 2018, the Registrant had outstanding 34,473,352 shares of common stock, \$1.00 par value per share.

HEARTLAND FINANCIAL USA, INC.
Form 10-Q Quarterly Report
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[32.2 Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.](#)

101 Financial statements formatted in Extensible Business Reporting Language: (i) the Consolidated Balance Sheets, (ii) the Consolidated Statements of Income, (iii) the Consolidated Statements of Comprehensive Income, (iv) the Consolidated Statements of Cash Flows, (v) the Consolidated Statements of Changes in Equity, and (vi) the Notes to Consolidated Financial Statements.

PART I

ITEM 1. FINANCIAL STATEMENTS

HEARTLAND FINANCIAL USA, INC.

CONSOLIDATED BALANCE SHEETS

(Dollars in thousands, except per share data)

	September 30, 2018 (Unaudited)	December 31, 2017
ASSETS		
Cash and due from banks	\$ 196,847	\$ 168,723
Interest bearing deposits with the Federal Reserve Bank and other banks and other short-term investments	240,528	27,280
Cash and cash equivalents	437,375	196,003
Time deposits in other financial institutions	5,836	9,820
Securities:		
Carried at fair value (cost of \$2,342,977 at September 30, 2018, and \$2,248,181 at December 31, 2017)	2,274,215	2,216,753
Held to maturity, at cost (fair value of \$247,394 at September 30, 2018, and \$265,494 at December 31, 2017)	239,908	253,550
Other investments, at cost	26,656	22,563
Loans held for sale	77,727	44,560
Loans receivable:		
Held to maturity	7,365,493	6,391,464
Allowance for loan and lease losses	(61,221)	(55,686)
Loans receivable, net	7,304,272	6,335,778
Premises, furniture and equipment, net	193,802	172,324
Premises, furniture and equipment held for sale	4,422	1,977
Other real estate, net	11,908	10,777
Goodwill	391,668	236,615
Core deposit intangibles and customer relationship intangibles, net	50,071	35,203
Servicing rights, net	32,039	25,857
Cash surrender value on life insurance	162,216	142,818
Other assets	123,017	106,141
TOTAL ASSETS	\$ 11,335,132	\$ 9,810,739
LIABILITIES AND EQUITY		
LIABILITIES:		
Deposits:		
Demand	\$ 3,427,819	\$ 2,983,128
Savings	4,958,430	4,240,328
Time	1,125,914	923,453
Total deposits	9,512,163	8,146,909
Deposits held for sale	50,312	—
Short-term borrowings	131,139	324,691
Other borrowings	277,563	285,011
Accrued expenses and other liabilities	83,562	62,671
TOTAL LIABILITIES	10,054,739	8,819,282
STOCKHOLDERS' EQUITY:		
Preferred stock (par value \$1 per share; authorized 17,604 shares; none issued or outstanding at both September 30, 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 September 30, 2018, and December 31, 2017)	—	—
Series C Senior Non-Cumulative Perpetual Preferred Stock (par value \$1 per share; 81,698 shares authorized at both September 30, 2018, and December 31, 2017, none issued or outstanding at both September 30, 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 September 30, 2018, and December 31, 2017; none issued or outstanding at September 30, 2018, and 745 shares issued and outstanding at December 31, 2017)	—	938
Common stock (par value \$1 per share; 40,000,000 shares authorized at both September 30, 2018, and December 31, 2017; issued 34,473,029 shares at September 30, 2018, and 29,953,356 shares at December 31, 2017)	34,473	29,953

Capital surplus	742,080	503,709
Retained earnings	553,662	481,331
Accumulated other comprehensive loss	(49,822)	(24,474)
Treasury stock at cost (0 shares at both September 30, 2018, and December 31, 2017)	—	—
TOTAL STOCKHOLDERS' EQUITY	1,280,393	991,457
TOTAL LIABILITIES AND EQUITY	\$ 11,335,132	\$ 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 September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
INTEREST INCOME:				
Interest and fees on loans	\$ 105,733	\$ 82,906	\$ 288,171	\$ 217,898
Interest on securities:				
Taxable	14,433	10,394	38,280	27,246
Nontaxable	3,490	5,086	10,653	15,297
Interest on federal funds sold	—	34	—	37
Interest on interest bearing deposits in other financial institutions	1,238	558	2,413	1,112
TOTAL INTEREST INCOME	124,894	98,978	339,517	261,590
INTEREST EXPENSE:				
Interest on deposits	10,092	5,073	23,841	12,966
Interest on short-term borrowings	464	271	1,279	498
Interest on other borrowings (includes \$242 and \$308 of interest expense related to derivatives reclassified from accumulated other comprehensive income for the three months ended September 30, 2018 and 2017, respectively, and \$469 and \$1,005 of interest expense related to derivatives reclassified from accumulated other comprehensive income for the nine months ended September 30, 2018 and 2017, respectively)	3,660	3,790	10,726	10,674
TOTAL INTEREST EXPENSE	14,216	9,134	35,846	24,138
NET INTEREST INCOME	110,678	89,844	303,671	237,452
Provision for loan losses	5,238	5,705	14,332	10,235
NET INTEREST INCOME AFTER PROVISION FOR LOAN LOSSES	105,440	84,139	289,339	227,217
NONINTEREST INCOME:				
Service charges and fees	12,895	10,138	35,046	29,291
Loan servicing income	1,670	1,161	5,231	4,236
Trust fees	4,499	3,872	13,794	11,482
Brokerage and insurance commissions	1,111	950	2,895	2,962
Securities gains/(losses), net (includes \$145 of net security losses and \$1,679 of net security gains reclassified from accumulated other comprehensive income for the three months ended September 30, 2018 and 2017, respectively, and \$1,037 and \$5,553 of net security gains reclassified from accumulated other comprehensive income for the nine months ended September 30, 2018 and 2017, respectively)	(145)	1,679	1,037	5,553
Unrealized gain on equity securities, net	54	—	97	—
Net gains on sale of loans held for sale	7,410	4,997	18,261	17,961
Valuation allowance on servicing rights	230	5	12	29
Income on bank owned life insurance	892	766	2,206	2,039
Other noninterest income	1,149	1,409	3,536	2,941
TOTAL NONINTEREST INCOME	29,765	24,977	82,115	76,494
NONINTEREST EXPENSES:				
Salaries and employee benefits	49,921	45,225	149,389	128,118
Occupancy	6,348	6,223	18,706	16,352
Furniture and equipment	3,470	2,826	9,403	7,913
Professional fees	11,681	8,450	30,088	24,342
FDIC insurance assessments	1,119	894	2,792	2,610
Advertising	2,754	1,358	6,839	5,141
Core deposit intangibles and customer relationship intangibles amortization	2,626	1,863	6,763	4,252
Other real estate and loan collection expenses	784	581	2,464	1,774
Loss on sales/valuations of assets, net	912	1,342	2,243	1,642
Restructuring expenses	—	—	2,564	—
Other noninterest expenses	12,924	9,997	33,816	27,653
TOTAL NONINTEREST EXPENSES	92,539	78,759	265,067	219,797
INCOME BEFORE INCOME TAXES	42,666	30,357	106,387	83,914

Income taxes (includes \$(26) and \$511 of income tax expense/(benefit) reclassified from accumulated other comprehensive income for the three months ended September 30, 2018 and 2017, respectively, and \$174

and \$1,696 of income tax expense/(benefit) reclassified from accumulated other comprehensive income for the nine months ended September 30, 2018 and 2017, respectively)

	8,956	8,725	21,530	22,314
NET INCOME	33,710	21,632	84,857	61,600
Preferred dividends	(13)	(13)	(39)	(45)
Interest expense on convertible preferred debt	—	3	—	12
NET INCOME AVAILABLE TO COMMON STOCKHOLDERS	\$ 33,697	\$ 21,622	\$ 84,818	\$ 61,567
EARNINGS PER COMMON SHARE - BASIC	\$ 0.98	\$ 0.73	\$ 2.61	\$ 2.23
EARNINGS PER COMMON SHARE - DILUTED	\$ 0.97	\$ 0.72	\$ 2.59	\$ 2.21
CASH DIVIDENDS DECLARED PER COMMON SHARE	\$ 0.14	\$ 0.11	\$ 0.40	\$ 0.33

See accompanying notes to consolidated financial statements.

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
NET INCOME	\$ 33,710	\$ 21,632	\$ 84,857	\$ 61,600
OTHER COMPREHENSIVE INCOME (LOSS)				
Securities:				
Net change in unrealized gain (loss) on securities	(8,060)	6,940	(36,395)	22,002
Reclassification adjustment for net (gains)/losses realized in net income	145	(1,679)	(1,037)	(5,553)
Income taxes	2,078	(2,084)	9,586	(6,433)
Other comprehensive income (loss) on securities	(5,837)	3,177	(27,846)	10,016
Derivatives used in cash flow hedging relationships:				
Net change in unrealized gain (loss) on derivatives	395	17	2,991	(656)
Reclassification adjustment for net losses on derivatives realized in net income	242	308	469	1,005
Income taxes	(79)	(123)	(682)	(337)
Other comprehensive income on cash flow hedges	558	202	2,778	12
Other comprehensive income (loss)	(5,279)	3,379	(25,068)	10,028
TOTAL COMPREHENSIVE INCOME	\$ 28,431	\$ 25,011	\$ 59,789	\$ 71,628

See accompanying notes to consolidated financial statements.

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

	Nine Months Ended September 30,	
	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net income	\$ 84,857	\$ 61,600
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	22,647	22,738
Provision for loan losses	14,332	10,235
Net amortization of premium on securities	18,958	20,186
Securities gains, net	(1,037)	(5,553)
Unrealized gain on equity securities, net	(97)	—
Stock based compensation	3,689	3,588
Loans originated for sale	(551,328)	(548,768)
Proceeds on sales of loans held for sale	594,529	586,202
Net gains on sale of loans held for sale	(13,939)	(11,968)
Increase in accrued interest receivable	(5,422)	(1,449)
Decrease in prepaid expenses	2,243	838
Decrease in accrued interest payable	1,121	1,104
Capitalization of servicing rights	(4,404)	(5,993)
Valuation allowance on servicing rights	(12)	(29)
Loss on sales/valuations of assets, net	2,243	1,642
Net excess tax benefit from stock based compensation	672	1,121
Other, net	(1,979)	(5,637)
NET CASH PROVIDED BY OPERATING ACTIVITIES	167,073	129,857
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchase of time deposits in other financial institutions	(1,000)	—
Proceeds from the sale of securities available for sale	694,872	1,127,091
Proceeds from the redemption of time deposits in other financial institutions	8,767	12,171
Proceeds from the maturity of and principal paydowns on securities available for sale	172,702	161,827
Proceeds from the maturity of and principal paydowns on securities held to maturity	13,169	6,645
Proceeds from the maturity of and principal paydowns on time deposits in other financial institutions	5,829	24,931
Proceeds from the maturity of and principal paydowns on other investments	2,038	2,574
Purchase of securities available for sale	(940,607)	(1,299,492)
Purchase of other investments	(2,411)	(1,012)
Net (increase) decrease in loans	(13,737)	45,139
Purchase of bank owned life insurance policies	(2,000)	(2,000)
Proceeds from sale of mortgage servicing rights	—	5,137
Capital expenditures	(11,793)	(6,876)
Net cash and cash equivalents received in acquisitions	212,197	71,089
Proceeds from the sale of equipment	998	1,845
Proceeds on sale of OREO and other repossessed assets	3,128	7,578
NET CASH PROVIDED BY INVESTING ACTIVITIES	\$ 142,152	\$ 156,647

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

	Nine Months Ended September 30,	
	2018	2017
CASH FLOWS FROM FINANCING ACTIVITIES:		
Net increase in demand deposits	\$ 156,497	\$ 181,206
Net increase (decrease) in savings deposits	130,704	(179,721)
Net decrease in time deposit accounts	(122,795)	(8,582)
Proceeds on short-term revolving credit line	25,000	20,000
Repayments on short-term revolving credit line	(25,000)	(15,000)
Net decrease in short-term borrowings	(183,552)	(168,667)
Proceeds from short term FHLB advances	355,602	186,039
Repayments of short term FHLB advances	(365,602)	(191,405)
Proceeds from other borrowings	30,131	—
Repayments of other borrowings	(56,221)	(8,573)
Purchase of treasury stock	(97)	(440)
Proceeds from issuance of common stock	286	804
Dividends paid	(12,806)	(9,153)
NET CASH USED BY FINANCING ACTIVITIES	(67,853)	(193,492)
Net increase in cash and cash equivalents	241,372	93,012
Cash and cash equivalents at beginning of year	196,003	158,724
CASH AND CASH EQUIVALENTS AT END OF PERIOD	\$ 437,375	\$ 251,736
Supplemental disclosures:		
Cash paid for income/franchise taxes	\$ 14,754	\$ 10,775
Cash paid for interest	\$ 34,725	\$ 23,034
Loans transferred to OREO	\$ 5,016	\$ 4,955
Transfer of premises from premises, furniture and equipment, net, to premises, furniture and equipment held for sale	\$ 3,415	\$ —
Deposits transferred to held for sale	\$ 50,312	\$ —
Loans transferred to held for sale	\$ 31,379	\$ —
Purchases of securities available for sale, accrued, not settled	\$ 3,481	\$ 2,063
Sales of securities available for sale, accrued, not settled	\$ —	\$ 125
Conversion of convertible debt to common stock	\$ —	\$ 558
Conversion of Series D preferred stock to common stock	\$ 938	\$ 419
Stock consideration granted for acquisitions	\$ 238,075	\$ 175,196

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				61,600	10,028		71,628
Cash dividends declared:							
Series D Preferred, \$52.50 per share				(45)			(45)
Common, \$0.33 per share				(9,108)			(9,108)
Conversion of Series D Preferred Stock	(419)						(419)
Purchase of 9,392 shares of common stock						(440)	(440)
Issuance of 3,835,532 shares of common stock		3,826	171,298			440	175,564
Stock based compensation			3,588				3,588
Balance at September 30, 2017	\$ 938	\$ 29,946	\$ 503,262	\$ 468,556	\$ (21,018)	\$ —	\$ 981,684
Balance at January 1, 2018	\$ 938	\$ 29,953	\$ 503,709	\$ 481,331	\$ (24,474)	\$ —	\$ 991,457
Comprehensive income				84,857	(25,068)		59,789
Reclassification of unrealized net gain on equity securities				280	(280)		—
Cash dividends declared:							
Series D Preferred, \$52.50 per share				(39)			(39)
Common, \$0.40 per share				(12,767)			(12,767)
Conversion of Series D preferred stock	(938)						(938)
Purchase of 1,761 shares of common stock						(97)	(97)
Issuance of 4,521,434 shares of common stock		4,520	234,682			97	239,299
Stock based compensation			3,689				3,689
Balance at September 30, 2018	\$ —	\$ 34,473	\$ 742,080	\$ 553,662	\$ (49,822)	\$ —	\$1,280,393

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 September 30, 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- and nine-month periods ended September 30, 2018, and 2017, are shown in the table below:

	Three Months Ended September 30,	
	2018	2017
(Dollars and number of shares in thousands, except per share data)		
Net income	\$ 33,710	\$ 21,632
Preferred dividends	(13)	(13)
Interest expense on convertible preferred debt	—	3
Net income available to common stockholders	\$ 33,697	\$ 21,622
Weighted average common shares outstanding for basic earnings per share	34,452	29,648
Assumed incremental common shares issued upon vesting of outstanding restricted stock units	192	262
Weighted average common shares for diluted earnings per share	34,644	29,910
Earnings per common share — basic	\$ 0.98	\$ 0.73
Earnings per common share — diluted	\$ 0.97	\$ 0.72
Number of antidilutive common stock equivalents excluded from diluted earnings per share computation	—	—

	Nine Months Ended September 30,	
	2018	2017
(Dollars and number of shares in thousands, except per share data)		
Net income	\$ 84,857	\$ 61,600
Preferred dividends	(39)	(45)
Interest expense on convertible preferred debt	—	12
Net income available to common stockholders	\$ 84,818	\$ 61,567
Weighted average common shares outstanding for basic earnings per share	32,520	27,569
Assumed incremental common shares issued upon vesting of outstanding restricted stock units	187	265
Weighted average common shares for diluted earnings per share	32,707	27,834
Earnings per common share — basic	\$ 2.61	\$ 2.23
Earnings per common share — diluted	\$ 2.59	\$ 2.21
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 September 30, 2018, 442,320 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 \$672,000 and \$1.1 million during the nine months ended September 30, 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 nine months ended September 30, 2018, and September 30, 2017, 29,048 and 16,804 time-based RSUs, respectively, were granted to directors and new employees.

A summary of the RSUs outstanding as of September 30, 2018, and 2017, and changes during the nine months ended September 30, 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	116,297	55.26	109,071	47.21
Vested	(127,429)	32.70	(136,428)	26.66
Forfeited	(27,678)	45.58	(12,923)	31.57
Outstanding at September 30	262,768	\$ 43.65	306,537	\$ 34.72

Total compensation costs recorded for RSUs were \$3.7 million and \$3.6 million for the nine-month periods ended September 30, 2018 and 2017. As of September 30, 2018, there were \$5.3 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 nine 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 September 30, 2018 and 2017, and changes during the nine months ended September 30, 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	(13,650)	18.60
Forfeited	—	—	(500)	18.60
Outstanding at September 30	—	\$ —	12,250	\$ 18.60
Options exercisable at September 30	—	\$ —	12,250	\$ 18.60

The intrinsic value for the total of all options exercised during the nine months ended September 30, 2018, was \$231,000. Cash received from options exercised was \$121,000 for the nine months ended September 30, 2018, and \$254,000 for the nine months ended September 30, 2017.

No compensation costs were recorded for options during the nine month periods ended September 30, 2018 and 2017. There are no unrecorded compensation costs related to options at September 30, 2018. No stock options vested during the nine-month periods ended September 30, 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. 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 streams subject to the accounting standard.

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) eliminate 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) require public business entities to use the exit price notion when measuring the fair value of financial instruments for disclosure purposes; (5) require 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) require 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) clarify 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 is 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. In July 2018, the FASB issued ASU 2018-11, "*Leases - Targeted Improvements*" to provide entities with relief from the costs of implementing certain aspects of the new leasing standard. Specifically, under the amendments in ASU 2018-11, entities may elect not to recast the comparative periods presented when transitioning to the new leasing standard, and lessors may elect not to separate lease and non-lease components when certain conditions are met. The amendments have the same effective date as ASU 2016-02. Heartland intends to adopt the accounting standard on January 1, 2019, as required, and will not restate comparative periods. Heartland also expects to adopt certain optional practical expedients. Heartland signed an agreement with a cloud-based lease software provider, and the software implementation is nearly complete. Based on Heartland's current lease portfolio, management anticipates recognizing a right-of-use asset and lease liability on the consolidated balance sheet, with an immaterial impact to the consolidated statement of income. However, the ultimate impact of the standard will depend on the lease portfolio on January 1, 2019.

In June 2016, the FASB issued ASU 2016-13, "*Financial Instruments - Credit Losses (Topic 326)*." The amendments in this ASU, also referred to as "CECL," 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 expects to recognize a one-time cumulative effect adjustment to the allowance for loan losses as of the beginning of the first reporting period in which the new standard is effective, but cannot yet determine the magnitude of any such one-time adjustment or the overall impact of the new guidance on the results of operations, financial position and liquidity. Heartland has formed a cross-functional internal committee to assess and implement the standard, and the project plan calls for running a parallel CECL model during 2019 prior to adoption in 2020. Heartland has entered into an agreement with a third party software vendor, selected CECL-compliant methodologies, and started implementation of the software.

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, and 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.

In August 2018, the FASB issued ASU 2018-13, "*Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement.*" This ASU eliminates, adds and modifies certain disclosure requirements for fair value measurements. Among the changes, entities will no longer be required to disclose the amount of and reasons for transfers between Level 1 and Level 2 of the fair value hierarchy but will be required to disclose the range and weighted average used to develop significant unobservable inputs for Level 3 fair value measurements. ASU 2018-13 is effective for interim and annual reporting periods beginning after December 15, 2019, and early adoption is permitted. Heartland intends to adopt this ASU in 2020, as required, and because the ASU only revises disclosure requirements, the adoption of this ASU will not have a material impact on results of operations, financial position and liquidity.

NOTE 2: ACQUISITIONS

First Bank Lubbock Bancshares, Inc.

On May 18, 2018, Heartland completed the acquisition of Lubbock, Texas based First Bank Lubbock Bancshares, Inc. ("FBLB"), parent company of First Bank & Trust, and PrimeWest Mortgage Corporation, which is a wholly-owned subsidiary of First Bank & Trust. Under the terms of the definitive merger agreement, Heartland acquired FBLB in a transaction valued at approximately \$189.9 million, of which \$5.5 million was cash, and the remainder was settled by delivery of 3,350,664 shares of Heartland common stock. On the closing date, in addition to this merger consideration, Heartland provided FBLB the funds necessary to repay outstanding debt of \$3.9 million, and Heartland assumed \$8.2 million of trust preferred securities at fair value. Immediately after the close of the transaction, Heartland paid \$13.3 million to the holders of FBLB's stock appreciation rights. The transaction included, at fair value, total assets of \$1.12 billion, including \$681.1 million of gross loans held to maturity, and deposits of \$893.8 million. Upon closing of the transaction, First Bank & Trust became a wholly-owned subsidiary of Heartland and continues to operate under its current name and management team as Heartland's eleventh state-chartered bank. The transaction was a tax-free reorganization with respect to the stock consideration received by the stockholders of FBLB.

The assets and liabilities of FBLB were recorded on the consolidated balance sheet at the estimated fair value on the acquisition date. The following table represents, in thousands, the amounts recorded on the consolidated balance sheet as of May 18, 2018:

	<u>As of May 18, 2018</u>	
Fair value of consideration paid:		
Common stock (3,350,664 shares)	\$	184,454
Cash		5,451
Total consideration paid		<u>189,905</u>
Fair value of assets acquired		
Cash and cash equivalents		212,105
Securities:		
Carried at fair value		1,788
Other securities		3,268
Loans held for sale		31,050
Loans held to maturity		681,080
Premises, furniture and equipment, net		23,271
Other real estate, net		379
Mortgage servicing rights		6,995
Core deposit intangibles and customer relationships, net		13,908
Cash surrender value on life insurance		14,997
Other assets		7,185
Total assets		<u>996,026</u>
Fair value of liabilities assumed		
Deposits		893,827
Other borrowings		12,077
Other liabilities		21,580
Total liabilities assumed		<u>927,484</u>
Fair value of net assets acquired		68,542
Goodwill resulting from acquisition	\$	<u>121,363</u>

Heartland recognized \$121.4 million of goodwill in conjunction with the acquisition of FBLB, which is calculated as the excess of both the consideration exchanged and the liabilities assumed as compared to the fair value of identifiable assets acquired. Goodwill resulted from the expected operational synergies, enhanced market area, cross-selling opportunities and expanded business lines. See Note 6 for further information on goodwill.

Pro Forma Information (unaudited): The following pro forma information represents the results of operations for the nine-month periods ended September 30, 2018, and 2017, as if the FBLB acquisition occurred on January 1, 2018, and January 1, 2017, respectively:

	For the Nine Months Ended	
	September 30, 2018	September 30, 2017
Net interest income	\$ 317,846	\$ 262,367
Net income available to common stockholders	\$ 69,075	\$ 76,698
Basic earnings per share	\$ 2.02	\$ 2.48
Diluted earnings per share	\$ 2.01	\$ 2.46

The above pro forma results are presented for illustrative purposes and are not intended to represent or be indicative of the actual results of operations of the merged companies that would have been achieved had the acquisition occurred on January 1, 2018, and January 1, 2017, respectively, nor are they intended to represent or be indicative of future results of operations. The pro forma results do not include expected operating cost savings as a result of the acquisition or adjustments for \$6.0 million of transaction costs or \$13.3 million of stock appreciation rights expense recorded by FBLB in 2018 prior to the acquisition. The pro forma

results also do not include adjustment for income taxes. These pro forma results require significant estimates and judgments particularly with respect to valuation and accretion of income associated with the acquired loans.

Heartland incurred \$1.1 million of pre-tax merger related expenses in the nine months ended September 30, 2018, associated with the FBLB acquisition. The merger expenses are reflected on the consolidated statements of income for the applicable period and are reported primarily in the categories of professional fees and other noninterest expenses.

Acquired loans were preliminarily recorded at fair value based on a discounted cash flow valuation methodology that considers, among other things, projected default rates, loss given defaults and recovery rates. No allowance for credit losses was carried over from the acquisition. The balance of nonaccrual loans on the acquisition date was \$7.6 million.

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. On the closing date, Heartland provided Signature Bancshares, Inc. the funds necessary to repay outstanding subordinated debt of \$5.9 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 debt securities available for sale and equity securities with a readily determinable that are carried at fair value as of September 30, 2018, and December 31, 2017, are summarized in the table below, in thousands:

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
September 30, 2018				
U.S. government corporations and agencies	\$ 27,112	\$ —	\$ (115)	\$ 26,997
Mortgage and asset-backed securities	1,926,803	1,341	(56,325)	1,871,819
Obligations of states and political subdivisions	372,146	239	(13,902)	358,483
Total debt securities	2,326,061	1,580	(70,342)	2,257,299
Equity securities with a readily determinable fair value	16,916	—	—	16,916
Total	<u>\$ 2,342,977</u>	<u>\$ 1,580</u>	<u>\$ (70,342)</u>	<u>\$ 2,274,215</u>
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	<u>\$ 2,248,181</u>	<u>\$ 10,911</u>	<u>\$ (42,339)</u>	<u>\$ 2,216,753</u>

Investment securities as shown in this report reflect categories as required by Heartland's adoption of ASU 2016-01, "Recognition and Measurement of Financial Assets and Financial Liabilities", on January 1, 2018. That new guidance refined the definition of equity securities and required their segregation from available for sale debt securities.

While changes in the fair value of available for sale debt securities continue to be recorded in the equity category of accumulated other comprehensive income, the new guidance requires changes in the fair value of equity securities to be recorded in current earnings. As required by the new guidance, the unrealized gain in fair value on equity securities (recorded in accumulated other comprehensive income at December 31, 2017) was reclassified to retained earnings on January 1, 2018. The amount of the reclassification was \$280,000, net of tax.

Equity securities include money market accounts that totaled \$16.9 million at cost and \$16.9 million at fair value at September 30, 2018. The portion of unrealized net gains on equity securities recognized in current earnings during the first nine months of 2018, which related to securities still held at September 30, 2018, totaled \$97,000.

The amortized cost, gross unrealized gains and losses and estimated fair values of held to maturity securities as of September 30, 2018, and December 31, 2017, are summarized in the table below, in thousands:

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
September 30, 2018				
Obligations of states and political subdivisions	\$ 239,908	\$ 8,422	\$ (936)	\$ 247,394
Total	<u>\$ 239,908</u>	<u>\$ 8,422</u>	<u>\$ (936)</u>	<u>\$ 247,394</u>
December 31, 2017				
Obligations of states and political subdivisions	\$ 253,550	\$ 12,460	\$ (516)	\$ 265,494
Total	<u>\$ 253,550</u>	<u>\$ 12,460</u>	<u>\$ (516)</u>	<u>\$ 265,494</u>

At September 30, 2018, approximately 70% of Heartland's mortgage and asset-backed securities were issued by government-sponsored enterprises.

The amortized cost and estimated fair value of investment securities carried at fair value at September 30, 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.

	September 30, 2018	
	Amortized Cost	Estimated Fair Value
Due in 1 year or less	\$ 23,216	\$ 23,161
Due in 1 to 5 years	50,520	49,592
Due in 5 to 10 years	131,431	125,824
Due after 10 years	194,091	186,903
Total debt securities	399,258	385,480
Mortgage and asset-backed securities	1,926,803	1,871,819
Equity securities with a readily determinable fair value	16,916	16,916
Total investment securities	\$ 2,342,977	\$ 2,274,215

The amortized cost and estimated fair value of debt securities held to maturity at September 30, 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.

	September 30, 2018	
	Amortized Cost	Estimated Fair Value
Due in 1 year or less	\$ 1,274	\$ 1,281
Due in 1 to 5 years	31,121	31,495
Due in 5 to 10 years	105,183	107,052
Due after 10 years	102,330	107,566
Total investment securities	\$ 239,908	\$ 247,394

As of September 30, 2018, and December 31, 2017, securities with a fair value of \$551.3 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 carried at fair value for the three- and nine-month periods ended September 30, 2018 and 2017, are summarized as follows, in thousands:

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2018	2017	2018	2017
Proceeds from sales	\$ 59,137	\$ 503,083	\$ 694,872	\$ 1,127,091
Gross security gains	67	2,088	3,537	8,585
Gross security losses	212	409	2,500	3,023

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 September 30, 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 September 30, 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.

Debt 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
September 30, 2018						
U.S. government corporations and agencies	\$ 22,392	\$ (39)	\$ 4,605	\$ (76)	\$ 26,997	\$ (115)
Mortgage and asset-backed securities	1,007,078	(18,299)	668,623	(38,026)	1,675,701	(56,325)
Obligations of states and political subdivisions	203,363	(5,552)	139,394	(8,350)	342,757	(13,902)
Total temporarily impaired securities	\$ 1,232,833	\$ (23,890)	\$ 812,622	\$ (46,452)	\$ 2,045,455	\$ (70,342)
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 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
September 30, 2018						
Obligations of states and political subdivisions	\$ 29,174	\$ (209)	\$ 13,160	\$ (727)	\$ 42,334	\$ (936)
Total temporarily impaired securities	\$ 29,174	\$ (209)	\$ 13,160	\$ (727)	\$ 42,334	\$ (936)
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 securities carried at fair value or held to maturity securities with OTTI write-downs for the nine-month periods ended September 30, 2018, and September 30, 2017, respectively.

Other investments, at cost, include equity securities without a readily determinable fair value. Equity securities without a readily determinable fair value totaled \$22.4 million and \$18.6 million at September 30, 2018, and December 31, 2017, respectively. At September 30, 2018, and December 31, 2017, other investments at cost included 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 \$15.1 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 September 30, 2018, did not consider the investments to be other than temporarily impaired.

NOTE 4: LOANS

Loans as of September 30, 2018, and December 31, 2017, were as follows, in thousands:

	September 30, 2018	December 31, 2017
Loans receivable held to maturity:		
Commercial	\$ 1,962,222	\$ 1,646,606
Commercial real estate	3,648,731	3,163,269
Agricultural and agricultural real estate	574,048	511,588
Residential real estate	676,941	624,279
Consumer	506,181	447,484
Gross loans receivable held to maturity	7,368,123	6,393,226
Unearned discount	(1,340)	(556)
Deferred loan fees	(1,290)	(1,206)
Total net loans receivable held to maturity	7,365,493	6,391,464
Allowance for loan losses	(61,221)	(55,686)
Loans receivable, net	\$ 7,304,272	\$ 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 14% 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 September 30, 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
September 30, 2018						
Commercial	\$ 4,165	\$ 17,904	\$ 22,069	\$ 23,414	\$ 1,938,808	\$ 1,962,222
Commercial real estate	214	23,476	23,690	14,415	3,634,316	3,648,731
Agricultural and agricultural real estate	260	4,306	4,566	17,522	556,526	574,048
Residential real estate	279	1,571	1,850	23,647	653,294	676,941
Consumer	1,085	7,961	9,046	8,671	497,510	506,181
Total	\$ 6,003	\$ 55,218	\$ 61,221	\$ 87,669	\$ 7,280,454	\$ 7,368,123
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 September 30, 2018, and December 31, 2017, in thousands:

	September 30, 2018	December 31, 2017
Nonaccrual loans	\$ 68,528	\$ 58,272
Nonaccrual troubled debt restructured loans	4,532	4,309
Total nonaccrual loans	\$ 73,060	\$ 62,581
Accruing loans past due 90 days or more	\$ 154	\$ 830
Performing troubled debt restructured loans	\$ 4,180	\$ 6,617

The following tables provide information on troubled debt restructured loans that were modified during the three- and nine-month periods ended September 30, 2018, and September 30, 2017, dollars in thousands:

	Three Months Ended September 30,					
	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	1	92	94	8	1,174	1,174
Consumer	—	—	—	—	—	—
Total	1	\$ 92	\$ 94	8	\$ 1,174	\$ 1,174

	Nine Months Ended September 30,					
	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	—	\$ —	\$ —	3	\$ 131	\$ 131
Commercial real estate	—	—	—	—	—	—
Total commercial and commercial real estate	—	—	—	3	131	131
Agricultural and agricultural real estate	—	—	—	—	—	—
Residential real estate	11	2,098	1,808	22	2,977	2,977
Consumer	—	—	—	—	—	—
Total	11	\$ 2,098	\$ 1,808	25	\$ 3,108	\$ 3,108

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 troubled debt restructured loans for the nine-months ended September 30, 2018, is due to \$356,000 of principal deferment collected from government guarantees and \$66,000 of capitalized interest and escrow. At September 30, 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- and nine- month periods ended September 30, 2018, and September 30, 2017, that had been modified during the twelve-month period prior to default, in thousands:

	With Payment Defaults During the Three Months Ended September 30,			
	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	4	418	5	1,221
Consumer	—	—	—	—
Total	4	\$ 418	5	\$ 1,221

	With Payment Defaults During the Nine Months Ended September 30,			
	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	10	1,598	8	1,480
Consumer	—	—	—	—
Total	10	\$ 1,598	8	\$ 1,480

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 September 30, 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 September 30, 2018, and December 31, 2017, in thousands:

	Pass	Nonpass	Total
September 30, 2018			
Commercial	\$ 1,825,692	\$ 136,530	\$ 1,962,222
Commercial real estate	3,467,522	181,209	3,648,731
Total commercial and commercial real estate	5,293,214	317,739	5,610,953
Agricultural and agricultural real estate	476,261	97,787	574,048
Residential real estate	644,592	32,349	676,941
Consumer	491,092	15,089	506,181
Total gross loans receivable held to maturity	\$ 6,905,159	\$ 462,964	\$ 7,368,123
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 53% special mention loans and 47% substandard loans as of September 30, 2018. The percent of nonpass loans on nonaccrual status as of September 30, 2018, was 16%. 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 0.62% at September 30, 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 September 30, 2018, Heartland had \$3.1 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 September 30, 2018, and December 31, 2017, in thousands:

	Accruing Loans							Total Loans
	30-59 Days Past Due	60-89 Days Past Due	90 Days or More Past Due	Total Past Due	Current	Nonaccrual		
September 30, 2018								
Commercial	\$ 10,558	\$ 3,521	\$ 61	\$ 14,140	\$ 1,924,173	\$ 23,909	\$ 1,962,222	
Commercial real estate	11,495	9,036	58	20,589	3,616,737	11,405	3,648,731	
Total commercial and commercial real estate	22,053	12,557	119	34,729	5,540,910	35,314	5,610,953	
Agricultural and agricultural real estate	1,294	1,146	35	2,475	554,055	17,518	574,048	
Residential real estate	2,893	192	—	3,085	659,662	14,194	676,941	
Consumer	4,493	811	—	5,304	494,843	6,034	506,181	
Total gross loans receivable held to maturity	\$ 30,733	\$ 14,706	\$ 154	\$ 45,593	\$ 7,249,470	\$ 73,060	\$ 7,368,123	
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 September 30, 2018, and December 31, 2017; the outstanding loan balances recorded on the consolidated balance sheets at September 30, 2018, and December 31, 2017; any related allowance recorded for those loans as of September 30, 2018, and December 31, 2017; the average outstanding loan balances recorded on the consolidated balance sheets during the three- and nine-months ended September 30, 2018, and year ended December 31, 2017; and the interest income recognized on the impaired loans during the three- and nine-month periods ended September 30, 2018, and year ended December 31, 2017, in thousands:

	Unpaid Contractual Balance	Loan Balance	Related Allowance Recorded	Quarter- to- Date Avg. Loan Balance	Quarter- to- Date Interest Income Recognized	Year- to- Date Avg. Loan Balance	Year- to- Date Interest Income Recognized
September 30, 2018							
Impaired loans with a related allowance:							
Commercial	\$ 6,768	\$ 6,768	\$ 4,165	\$ 5,173	\$ 16	\$ 3,593	\$ 52
Commercial real estate	748	748	214	889	4	5,635	20
Total commercial and commercial real estate	7,516	7,516	4,379	6,062	20	9,228	72
Agricultural and agricultural real estate	2,043	2,043	260	3,000	2	2,369	2
Residential real estate	869	869	279	1,006	4	1,278	10
Consumer	3,028	3,028	1,085	3,146	9	3,069	29
Total impaired loans with a related allowance	<u>\$ 13,456</u>	<u>\$ 13,456</u>	<u>\$ 6,003</u>	<u>\$ 13,214</u>	<u>\$ 35</u>	<u>\$ 15,944</u>	<u>\$ 113</u>
Impaired loans without a related allowance:							
Commercial	\$ 18,003	\$ 16,646	\$ —	\$ 13,113	\$ 182	\$ 9,307	\$ 277
Commercial real estate	13,765	13,667	—	11,850	80	12,847	201
Total commercial and commercial real estate	31,768	30,313	—	24,963	262	22,154	478
Agricultural and agricultural real estate	18,002	15,479	—	15,837	1	14,726	4
Residential real estate	22,778	22,778	—	22,779	121	24,780	320
Consumer	5,643	5,643	—	5,522	22	4,930	78
Total impaired loans without a related allowance	<u>\$ 78,191</u>	<u>\$ 74,213</u>	<u>\$ —</u>	<u>\$ 69,101</u>	<u>\$ 406</u>	<u>\$ 66,590</u>	<u>\$ 880</u>
Total impaired loans held to maturity:							
Commercial	\$ 24,771	\$ 23,414	\$ 4,165	\$ 18,286	\$ 198	\$ 12,900	\$ 329
Commercial real estate	14,513	14,415	214	12,739	84	18,482	221
Total commercial and commercial real estate	39,284	37,829	4,379	31,025	282	31,382	550
Agricultural and agricultural real estate	20,045	17,522	260	18,837	3	17,095	6
Residential real estate	23,647	23,647	279	23,785	125	26,058	330
Consumer	8,671	8,671	1,085	8,668	31	7,999	107
Total impaired loans held to maturity	<u>\$ 91,647</u>	<u>\$ 87,669</u>	<u>\$ 6,003</u>	<u>\$ 82,315</u>	<u>\$ 441</u>	<u>\$ 82,534</u>	<u>\$ 993</u>

	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	<u>\$ 19,958</u>	<u>\$ 18,101</u>	<u>\$ 4,755</u>	<u>\$ 22,949</u>	<u>\$ 129</u>
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	<u>\$ 64,121</u>	<u>\$ 60,367</u>	<u>\$ —</u>	<u>\$ 62,296</u>	<u>\$ 1,029</u>
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	<u>\$ 84,079</u>	<u>\$ 78,468</u>	<u>\$ 4,755</u>	<u>\$ 85,245</u>	<u>\$ 1,158</u>

On May 18, 2018, Heartland completed the acquisition of First Bank Lubbock Bancshares, Inc., parent company of First Bank & Trust, headquartered in Lubbock, Texas. As of May 18, 2018, First Bank Lubbock Bancshares, Inc. had gross loans of \$696.9 million, and the estimated fair value of the loans acquired was \$681.1 million.

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 was a lease portfolio with a fair value of \$16.0 million on the acquisition date. The lease portfolio is included with the commercial loan category for disclosure purposes.

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 September 30, 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:

	September 30, 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	\$ 9,078	\$ 300,261	\$ 309,339	\$ 952	\$ 187,375	\$ 188,327
Commercial real estate	302	1,202,537	1,202,839	2,572	1,052,469	1,055,041
Agricultural and agricultural real estate	—	32,357	32,357	—	1,242	1,242
Residential real estate	220	204,414	204,634	214	173,909	174,123
Consumer loans	—	89,061	89,061	—	51,292	51,292
Total loans	\$ 9,600	\$ 1,828,630	\$ 1,838,230	\$ 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- and nine-month periods ended September 30, 2018, and September 30, 2017, were as follows, in thousands:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Balance at beginning of period	\$ 463	\$ 101	\$ 57	\$ 182
Original yield discount, net, at date of acquisition	—	—	508	—
Accretion	(93)	(700)	(943)	(1,074)
Reclassification from nonaccretable difference ⁽¹⁾	186	654	934	947
Balance at period end	\$ 556	\$ 55	\$ 556	\$ 55

(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 \$36.9 million, and the estimated fair value of these loans was \$21.8 million. At September 30, 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 September 30, 2018, there was \$675,000 of allowance recorded and \$139,000 of allowance recorded at December 31, 2017, related to these ASC 310-30 loans. Provision expense of \$675,000 and \$5,000 was recorded for the nine-month periods ended September 30, 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 \$3.67 billion, and the estimated fair value of the loans was \$3.59 billion.

NOTE 5: ALLOWANCE FOR LOAN LOSSES

Changes in the allowance for loan losses for the three- and nine-month periods ended September 30, 2018, and September 30, 2017, were as follows, in thousands:

	Commercial		Agricultural and Agricultural Real Estate	Residential Real Estate	Consumer	Total
	Commercial	Commercial Real Estate	Agricultural and Agricultural Real Estate	Residential Real Estate	Consumer	Total
Balance at June 30, 2018	\$ 20,709	\$ 23,727	\$ 5,709	\$ 1,857	\$ 9,322	\$ 61,324
Charge-offs	(2,945)	(199)	(1,145)	—	(1,831)	(6,120)
Recoveries	158	242	—	1	378	779
Provision	4,147	(80)	2	(8)	1,177	5,238
Balance at September 30, 2018	\$ 22,069	\$ 23,690	\$ 4,566	\$ 1,850	\$ 9,046	\$ 61,221

	Commercial		Agricultural and Agricultural Real Estate	Residential Real Estate	Consumer	Total
	Commercial	Commercial Real Estate	Agricultural and Agricultural Real Estate	Residential Real Estate	Consumer	Total
Balance at December 31, 2017	\$ 18,098	\$ 21,950	\$ 4,258	\$ 2,224	\$ 9,156	\$ 55,686
Charge-offs	(4,717)	(761)	(1,357)	(211)	(4,462)	(11,508)
Recoveries	562	1,013	14	77	1,045	2,711

Provision	8,126	1,488	1,651	(240)	3,307	14,332
Balance at September 30, 2018	\$ 22,069	\$ 23,690	\$ 4,566	\$ 1,850	\$ 9,046	\$ 61,221

	Commercial	Commercial Real Estate	Agricultural and Agricultural Real Estate	Residential Real Estate	Consumer	Total
Balance at June 30, 2017	\$ 17,168	\$ 21,861	\$ 3,832	\$ 2,263	\$ 8,927	\$ 54,051
Charge-offs	(1,954)	(1,913)	—	(142)	(1,750)	(5,759)
Recoveries	347	46	14	63	418	888
Provision	1,409	546	2,281	82	1,387	5,705
Balance at September 30, 2017	\$ 16,970	\$ 20,540	\$ 6,127	\$ 2,266	\$ 8,982	\$ 54,885

	Commercial	Commercial Real Estate	Agricultural and Agricultural Real Estate	Residential Real Estate	Consumer	Total
Balance at December 31, 2016	\$ 14,765	\$ 24,319	\$ 4,210	\$ 2,263	\$ 8,767	\$ 54,324
Charge-offs	(3,310)	(2,522)	(888)	(541)	(4,982)	(12,243)
Recoveries	635	860	17	70	987	2,569
Provision	4,880	(2,117)	2,788	474	4,210	10,235
Balance at September 30, 2017	\$ 16,970	\$ 20,540	\$ 6,127	\$ 2,266	\$ 8,982	\$ 54,885

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 \$391.7 million at September 30, 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 \$121.4 million of goodwill and \$13.9 million of core deposit intangibles in connection with the acquisition of First Bank Lubbock Bancshares, Inc., parent company of First Bank & Trust Company, headquartered in Lubbock, Texas on May 18, 2018.

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 First Bank Lubbock Bancshares, Inc., 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 First Bank Lubbock Bancshares, Inc., 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 September 30, 2018, and December 31, 2017, are presented in the table below, in thousands:

	September 30, 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	\$ 83,639	\$ 33,820	\$ 49,819	\$ 62,008	\$ 27,086	\$ 34,922
Customer relationship intangibles	1,177	925	252	1,177	896	281
Mortgage servicing rights	42,616	12,445	30,171	42,139	18,891	23,248
Commercial servicing rights	6,800	4,932	1,868	6,719	4,110	2,609
Total	\$ 134,232	\$ 52,122	\$ 82,110	\$ 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
Three months ending December 31, 2018	\$ 2,583	\$ 10	\$ 1,642	\$ 139	\$ 4,374
Year ending December 31,					
2019	9,452	38	7,132	485	17,107
2020	8,230	37	6,113	379	14,759
2021	7,036	35	5,094	331	12,496
2022	5,634	34	4,076	270	10,014
2023	4,933	34	3,057	154	8,178
Thereafter	11,951	64	3,057	110	15,182
Total	\$ 49,819	\$ 252	\$ 30,171	\$ 1,868	\$ 82,110

Projections of amortization expense for mortgage servicing rights are based on existing asset balances and the existing interest rate environment as of September 30, 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 \$4.16 billion and \$3.56 billion as of September 30, 2018, and December 31, 2017, respectively. Custodial escrow balances maintained in connection with the mortgage loan servicing portfolio were approximately \$43.2 million and \$17.3 million as of September 30, 2018, and December 31, 2017, respectively. The fair value of Heartland's mortgage servicing rights was estimated at \$47.6 million at September 30, 2018, and \$37.1 million at December 31, 2017.

Heartland acquired the right to service mortgage loans totaling \$640.7 million and a fair value of \$7.0 million with the First Bank Lubbock Bancshares, Inc. transaction that closed on May 18, 2018. 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 two 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 8.46% and 9.73% for the September 30, 2018, and December 31, 2017, valuations, respectively. The discount rate was 9.19% and 9.06% for the September 30, 2018, and December 31, 2017, valuations, respectively. The average capitalization rate for the first nine months of 2018 ranged from 89 to 125 basis points compared to the range of 94 to 150 basis points for 2017. Fees collected for the servicing of mortgage loans for others were \$2.6 million and \$2.9 million for the quarters ended September 30, 2018, and September 30, 2017, respectively, and \$7.3 million and \$9.3 million for the nine-months ended September 30, 2018, and September 30, 2017, respectively.

The following table summarizes, in thousands, the changes in capitalized mortgage servicing rights for the nine months ended September 30, 2018, and September 30, 2017:

	2018	2017
Balance at January 1,	\$ 23,248	\$ 32,088
Originations	4,322	5,778
Amortization	(4,394)	(7,184)
Valuation allowance on mortgage servicing rights	—	—
Sale of mortgage servicing rights	—	(6,940)
Acquired mortgage servicing rights	6,995	—
Balance at period end	<u>\$ 30,171</u>	<u>\$ 23,742</u>
Fair value of mortgage servicing rights	\$ 47,581	\$ 35,002
Mortgage servicing rights, net to servicing portfolio	0.73%	0.67%

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 \$114.5 million at September 30, 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 \$401,000 and \$394,000 for the quarter ended September 30, 2018, and September 30, 2017, respectively, and \$1.2 million for both the nine-months ended September 30, 2018, and September 30, 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 9.64% to 11.94% as of September 30, 2018, compared to 7.27% to 8.88% as of December 31, 2017. The discount rate range was 13.28% to 16.55% for the September 30, 2018, valuations compared to 13.04% to 15.49% for the December 31, 2017, valuations. The capitalization rate for both 2018 and 2017 ranged from 310 to 445 basis points. The total fair value of Heartland's commercial servicing rights was estimated at \$2.5 million as of September 30, 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 nine-months ended September 30, 2018, and September 30, 2017:

	2018	2017
Balance at January 1,	\$ 2,609	\$ 3,690
Originations	82	215
Amortization	(835)	(1,077)
Valuation allowance on commercial servicing rights	12	29
Balance at period end	<u>\$ 1,868</u>	<u>\$ 2,857</u>
Fair value of commercial servicing rights	\$ 2,529	\$ 3,458
Commercial servicing rights, net to servicing portfolio	1.63%	1.98%

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 both September 30, 2018 and December 31, 2017, no valuation allowance was required on mortgage servicing rights. At September 30, 2018, no valuation allowance was required on commercial servicing rights with a term less than 20 years and no 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 mortgage servicing rights and any recorded valuation allowance at each respective subsidiary at September 30, 2018, and December 31, 2017:

September 30, 2018	Book Value 15- Year Tranche	Fair Value 15- Year Tranche	Impairment 15- Year Tranche	Book Value 30- Year Tranche	Fair Value 30- Year Tranche	Impairment 30- Year Tranche
Dubuque Bank and Trust Company	\$ 2,371	\$ 4,747	\$ —	\$ 20,632	\$ 35,610	\$ —
First Bank & Trust	1,685	1,741	—	5,483	5,483	—
Total	<u>\$ 4,056</u>	<u>\$ 6,488</u>	<u>\$ —</u>	<u>\$ 26,115</u>	<u>\$ 41,093</u>	<u>\$ —</u>
December 31, 2017						
Dubuque Bank and Trust Company	\$ 2,858	\$ 4,988	\$ —	\$ 20,390	\$ 32,093	\$ —
Total	<u>\$ 2,858</u>	<u>\$ 4,988</u>	<u>\$ —</u>	<u>\$ 20,390</u>	<u>\$ 32,093</u>	<u>\$ —</u>

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 September 30, 2018, and December 31, 2017:

	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
September 30, 2018						
Citywide Banks	\$ 2	\$ 6	\$ —	\$ 30	\$ 33	\$ —
Premier Valley Bank	53	82	—	188	203	—
Wisconsin Bank & Trust	260	519	—	1,335	1,686	—
Total	\$ 315	\$ 607	\$ —	\$ 1,553	\$ 1,922	\$ —
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 September 30, 2018, and \$1.2 million at December 31, 2017. At September 30, 2018, \$2.0 million 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 nine months ended September 30, 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 \$207,000. For the next twelve months, Heartland estimates that cash receipts and reclassification from accumulated other comprehensive income to reduce interest expense will total \$83,000.

Heartland entered into six forward starting interest rate swap transactions to effectively convert Heartland Financial Statutory Trust IV, V, VI, and VII, which total \$85.0 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 six 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 \$105.0 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.

On May 18, 2018, Heartland acquired cash flow hedges related to OCGI Statutory Trust III and OCGI Capital Trust IV with notional amounts of \$3.0 million and \$6.0 million, respectively, in the First Bank Lubbock Bancshares, Inc. transaction. The cash flow hedges effectively convert OCGI Statutory Trust III and OCGI Capital Trust IV from variable rate subordinated debentures to fixed rate debt. These swaps are designated as cash flow hedges of the changes in LIBOR, the benchmark interest rate being hedged, associated with the interest payments made on \$9.0 million of Heartland's subordinated debentures that reset quarterly on a specified reset date.

The table below identifies the balance sheet category and fair values of Heartland's derivative instruments designated as cash flow hedges at September 30, 2018, and December 31, 2017, in thousands:

	<u>Notional Amount</u>	<u>Fair Value</u>	<u>Balance Sheet Category</u>	<u>Receive Rate</u>	<u>Weighted Average Pay Rate</u>	<u>Maturity</u>
September 30, 2018						
Interest rate swap	\$ 25,000	\$ 424	Other assets	2.334%	2.255%	03/17/2021
Interest rate swap	20,000	(186)	Other liabilities	2.339	3.355	01/07/2020
Interest rate swap	10,000	42	Other assets	2.374	1.674	03/26/2019
Interest rate swap	10,000	42	Other assets	2.334	1.658	03/18/2019
Interest rate swap	30,667	1,089	Other assets	4.633	3.674	05/10/2021
Interest rate swap	29,500	(33)	Other liabilities	4.712	5.425	07/24/2028
Interest rate swap	20,000	652	Other assets	2.334	2.390	06/15/2024
Interest rate swap	20,000	666	Other assets	2.321	2.352	03/01/2024
Interest rate swap	6,000	175	Other assets	2.334	1.866	06/15/2021
Interest rate swap	3,000	92	Other assets	2.436	1.878	06/30/2021
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	20,000	(177)	Other liabilities	1.588	2.390	06/15/2024
Interest rate swap	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- and nine-month periods ended September 30, 2018, and September 30, 2017, in thousands:

	<u>Effective Portion</u>			<u>Ineffective Portion</u>	
	<u>Recognized in OCI</u>	<u>Reclassified from AOCI into Income</u>		<u>Recognized in Income on Derivatives</u>	
	<u>Amount of Gain (Loss)</u>	<u>Category</u>	<u>Amount of Gain (Loss)</u>	<u>Category</u>	<u>Amount of Gain (Loss)</u>
Three Months Ended September 30, 2018					
Interest rate swaps	\$ 375	Interest expense	\$ 21	Other income	\$ —
Nine Months Ended September 30, 2018					
Interest rate swaps	\$ 3,198	Interest expense	\$ (207)	Other income	\$ —
Three Months Ended September 30, 2017					
Interest rate swaps	\$ 325	Interest expense	\$ (308)	Other income	\$ —
Nine Months Ended September 30, 2017					
Interest rate swaps	\$ 349	Interest expense	\$ (1,005)	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 September 30, 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 September 30, 2018, and December 31, 2017, in thousands:

	<u>Notional Amount</u>	<u>Fair Value</u>	<u>Balance Sheet Category</u>
September 30, 2018			
Fair value hedges	\$ 30,954	\$ 625	Other assets
Fair value hedges	4,133	(201)	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- and nine- month periods ended September 30, 2018, and September 30, 2017, in thousands:

	<u>Amount of Gain (Loss)</u>	<u>Income Statement Category</u>
Three Months Ended September 30, 2018		
Fair value hedges	\$ 179	Interest income
Nine Months Ended September 30, 2018		
Fair value hedges	\$ 1,423	Interest income
Three Months Ended September 30, 2017		
Fair value hedges	\$ (63)	Interest income
Nine Months Ended September 30, 2017		
Fair value hedges	\$ 89	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 September 30, 2018, and December 31, 2017, in thousands:

	<u>Notional Amount</u>	<u>Fair Value</u>	<u>Balance Sheet Category</u>
September 30, 2018			
Embedded derivatives	\$ 13,643	\$ 215	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- and nine-month periods ended September 30, 2018, and September 30, 2017, in thousands:

	Amount of Gain (Loss)	Income Statement Category
Three Months Ended September 30, 2018		
Embedded derivatives	\$ 108	Other noninterest income
Nine Months Ended September 30, 2018		
Embedded derivatives	\$ 523	Other noninterest income
Three Months Ended September 30, 2017		
Embedded derivatives	\$ (296)	Other noninterest income
Nine Months Ended September 30, 2017		
Embedded derivatives	\$ (181)	Other noninterest income

In conjunction with the CIC Bancshares, Inc. transaction on February 5, 2016, Heartland assumed convertible subordinated debt. The subordinated debt had a face value of \$2.0 million, and the embedded conversion option allowed the holder to convert the debt to Heartland common equity in any increment and at the discretion of the holder. The conversion option was 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 September 30, 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 notional amount of the embedded conversion option was \$0 at both September 30, 2018, and December 31, 2017.

For the three- and nine-month periods ended September 30, 2018, no other noninterest income was recorded for the embedded conversion option. For the three- and nine-month periods ended September 30, 2017, \$285,000 and \$422,000, respectively, was recorded in other noninterest income for the embedded conversion option.

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 \$815,000 and \$1.6 million as of September 30, 2018, and December 31, 2017, respectively, as collateral related to these back-to-back swaps. Heartland's counterparties were required to pledge \$2.5 million at September 30, 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 nine months ended September 30, 2018 and September 30, 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 September 30, 2018, and December 31, 2017, in thousands:

	Notional Amount	Fair Value	Balance Sheet Category	Weighted Average Receive Rate	Weighted Average Pay Rate
September 30, 2018					
Customer interest rate swaps	\$ 200,241	\$ 5,305	Other assets	5.07%	4.68%
Customer interest rate swaps	200,241	(5,305)	Other liabilities	4.68	5.07
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 \$35,000 at September 30, 2018, and \$20,000 at December 31, 2017. Heartland's counterparties were required to pledge \$29,000 at both September 30, 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 September 30, 2018, and December 31, 2017, in thousands:

	Balance Sheet Category	Notional Amount	Fair Value
September 30, 2018			
Interest rate lock commitments (mortgage)	Other assets	\$ 52,649	\$ 1,539
Forward commitments	Other assets	82,500	353
Forward commitments	Other liabilities	33,500	(69)
Undesignated interest rate swaps	Other liabilities	13,643	(215)
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- and nine-month periods ended September 30, 2018, and September 30, 2017, in thousands:

	Income Statement Category	Gain (Loss) Recognized
Three Months Ended September 30, 2018		
Interest rate lock commitments (mortgage)	Net gains on sale of loans held for sale	\$ (4,470)
Forward commitments	Net gains on sale of loans held for sale	644
Undesignated interest rate swaps	Other noninterest income	108
Nine Months Ended September 30, 2018		
Interest rate lock commitments (mortgage)	Net gains on sale of loans held for sale	\$ (1,849)
Forward commitments	Net gains on sale of loans held for sale	352
Undesignated interest rate swaps	Other noninterest income	523
Three Months Ended September 30, 2017		
Interest rate lock commitments (mortgage)	Net gains on sale of loans held for sale	\$ (1,245)
Forward commitments	Net gains on sale of loans held for sale	72
Undesignated interest rate swaps	Other noninterest income	88
Nine Months Ended September 30, 2017		
Interest rate lock commitments (mortgage)	Net gains on sale of loans held for sale	\$ (587)
Forward commitments	Net gains on sale of loans held for sale	(2,304)
Undesignated interest rate swaps	Other noninterest income	203

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 carried at fair value, which include available for sale, trading securities and equity securities with a readily determinable fair value, 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 September 30, 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 September 30, 2018, and December 31, 2017, in thousands, aggregated by the level in the fair value hierarchy within which those measurements fall:

	<u>Total Fair Value</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>
September 30, 2018				
Assets				
Securities available for sale				
U.S. government corporations and agencies	\$ 26,997	\$ 25,367	\$ 1,630	\$ —
Mortgage and asset-backed securities	1,871,819	—	1,871,819	—
Obligations of states and political subdivisions	358,483	—	358,483	—
Equity securities with a readily determinable fair value	16,916	—	16,916	—
Derivative financial instruments ⁽¹⁾	9,327	—	9,327	—
Interest rate lock commitments	1,539	—	—	1,539
Forward commitments	353	—	353	—
Total assets at fair value	\$ 2,285,434	\$ 25,367	\$ 2,258,528	\$ 1,539
Liabilities				
Derivative financial instruments ⁽²⁾	\$ 5,940	\$ —	\$ 5,940	\$ —
Forward commitments	69	—	69	—
Total liabilities at fair value	\$ 6,009	\$ —	\$ 6,009	\$ —
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 September 30, 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	\$ 6,772	\$ —	\$ —	\$ 6,772	\$ 237
Commercial real estate	420	—	—	420	72
Agricultural and agricultural real estate	11,821	—	—	11,821	495
Residential real estate	590	—	—	590	—
Consumer	1,942	—	—	1,942	—
Total collateral dependent impaired loans	<u>\$ 21,545</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 21,545</u>	<u>\$ 804</u>
Loans held for sale	\$ 77,727	\$ —	\$ 77,727	\$ —	\$ (835)
Other real estate owned	\$ 11,908	\$ —	\$ —	\$ 11,908	\$ 1,847
Premises, furniture and equipment held for sale	\$ 4,422	\$ —	\$ —	\$ 4,422	\$ (74)

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	<u>\$ 23,469</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 23,469</u>	<u>\$ 3,469</u>
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 9/30/2018	Valuation Technique	Unobservable Input	Range (Weighted Average)
Interest rate lock commitments	\$ 1,539	Discounted cash flows	Closing ratio	0-99% ⁽¹⁾
Other real estate owned	11,908	Modified appraised value	Third party appraisal	⁽²⁾
			Appraisal discount	0-10% ⁽³⁾
Premises, furniture and equipment held for sale	4,422	Modified appraised value	Third party appraisal	⁽²⁾
			Appraisal discount	0-10% ⁽³⁾
Collateral dependent impaired loans:				
Commercial	6,772	Modified appraised value	Third party appraisal	⁽²⁾
			Appraisal discount	0-13% ⁽³⁾
Commercial real estate	420	Modified appraised value	Third party appraisal	⁽²⁾
			Appraisal discount	0-12% ⁽³⁾
Agricultural and agricultural real estate	11,821	Modified appraised value	Third party appraisal	⁽²⁾
			Appraisal discount	0-15% ⁽³⁾
Residential real estate	590	Modified appraised value	Third party appraisal	⁽²⁾
			Appraisal discount	0-24% ⁽³⁾
Consumer	1,942	Modified appraised value	Third party valuation	⁽²⁾
			Valuation discount	0-14% ⁽³⁾

(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. The weighted average closing ratio for Heartland's legacy mortgage operations is 86%. The weighted average closing ratio for PrimeWest Mortgage Corporation is 95%.

(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) 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⁾
Other real estate owned	10,777	Modified appraised value	Third party appraisal Appraisal discount	⁽²⁾ 0-10% ⁽³⁾
Commercial servicing rights	291	Discounted cash flows	Third party valuation	⁽³⁾
Premises, furniture and equipment held for sale	1,977	Modified appraised value	Third party appraisal Appraisal discount	⁽²⁾ 0-10% ⁽³⁾
Other real estate owned	10,777	Modified appraised value	Third party appraisal Appraisal discount	⁽²⁾ 0-10% ⁽³⁾
Collateral dependent impaired loans:				
Commercial	3,212	Modified appraised value	Third party appraisal Appraisal discount	⁽²⁾ 0-15% ⁽³⁾
Commercial real estate	9,480	Modified appraised value	Third party appraisal Appraisal discount	⁽²⁾ 0-12% ⁽³⁾
Agricultural and agricultural real estate	8,406	Modified appraised value	Third party appraisal Appraisal discount	⁽²⁾ 0-10% ⁽³⁾
Residential real estate	1,137	Modified appraised value	Third party appraisal Appraisal discount	⁽²⁾ 0-12% ⁽³⁾
Consumer	1,234	Modified appraised value	Third party valuation Valuation discount	⁽²⁾ 0-12% ⁽³⁾

(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) 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 Nine Months Ended September 30, 2018		For the Year Ended December 31, 2017	
Balance at January 1,	\$	1,738	\$	2,790
Acquired interest rate lock commitments		1,383		—
Total gains (losses) included in earnings		(1,849)		(1,479)
Issuances		1,661		1,875
Settlements		(1,394)		(1,448)
Balance at period end	\$	1,539	\$	1,738

Gains included in gains (losses) on sale of loans held for sale attributable to interest rate lock commitments held at September 30, 2018, and December 31, 2017, were \$1.5 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 September 30, 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 September 30, 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	\$ 437,375	\$ 437,375	\$ 437,375	\$ —	\$ —
Time deposits in other financial institutions	5,836	5,836	5,836	—	—
Securities:					
Carried at fair value	2,274,215	2,274,215	25,367	2,248,848	—
Held to maturity	239,908	247,394	—	247,394	—
Other investments	26,656	26,656	—	26,656	—
Loans held for sale	77,727	77,727	—	77,727	—
Loans, net:					
Commercial	1,939,469	1,906,941	—	1,900,169	6,772
Commercial real estate	3,623,768	3,611,265	—	3,610,845	420
Agricultural and agricultural real estate	570,320	563,262	—	551,441	11,821
Residential real estate	673,628	663,234	—	662,644	590
Consumer	497,151	494,379	—	492,437	1,942
Total Loans, net	7,304,336	7,239,081	—	7,217,536	21,545
Cash surrender value on life insurance	162,216	162,216	—	162,216	—
Derivative financial instruments ⁽¹⁾	9,126	9,126	—	9,126	—
Interest rate lock commitments	1,539	1,539	—	—	1,539
Forward commitments	353	353	—	353	—
Financial liabilities:					
Deposits					
Demand deposits	3,427,819	3,427,819	—	3,427,819	—
Savings deposits	4,958,430	4,958,430	—	4,958,430	—
Time deposits	1,125,914	1,125,914	—	1,125,914	—
Short term borrowings	131,139	131,139	—	131,139	—
Other borrowings	277,563	279,087	—	279,087	—
Derivative financial instruments ⁽²⁾	5,739	5,940	—	5,940	—
Forward commitments	69	69	—	69	—

(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

	Fair Value Measurements at December 31, 2017				
	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	\$ 196,003	\$ 196,003	\$ 196,003	\$ —	\$ —
Time deposits in other financial institutions	9,820	9,820	9,820	—	—
Securities:					
Carried at fair value	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 equity securities with a readily determinable fair value and debt 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 September 30, 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 counterparty.

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- and nine-months ended September 30, 2018, and 2017, in thousands:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
In-scope of Topic 606				
Service charges and fees				
Service charges and fees on deposit accounts	\$ 2,858	\$ 2,577	\$ 8,270	\$ 7,002
Overdraft fees	2,990	2,479	7,716	6,950
Customer service fees	101	102	266	217
Credit card fee income	3,062	1,994	8,443	6,212
Debit card income	3,883	2,985	10,349	8,908
Other service charges	1	1	2	2
Total service charges and fees	\$ 12,895	\$ 10,138	\$ 35,046	\$ 29,291
Trust fees	4,499	3,872	13,794	11,482
Brokerage and insurance commissions	1,111	950	2,895	2,962
Total noninterest income in-scope of Topic 606	\$ 18,505	\$ 14,960	\$ 51,735	\$ 43,735
Out-of-scope of Topic 606				
Loan servicing income	\$ 1,670	\$ 1,161	\$ 5,231	\$ 4,236
Securities gains/(losses), net	(145)	1,679	1,037	5,553
Unrealized gain on equity securities, net	54	—	97	—
Net gains on sale of loans held for sale	7,410	4,997	18,261	17,961
Valuation adjustment on commercial servicing rights	230	5	12	29
Income on bank owned life insurance	892	766	2,206	2,039
Other noninterest income	1,149	1,409	3,536	2,941
Total noninterest income out-of-scope of Topic 606	11,260	10,017	30,380	32,759
Total noninterest income	\$ 29,765	\$ 24,977	\$ 82,115	\$ 76,494

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 September 30, 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 eleven banking subsidiaries with 122 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 (the "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 September 30, 2018, was \$33.7 million, or \$0.97 per diluted common share, compared to \$21.6 million, or \$0.72 per diluted common share, for the quarter ended September 30, 2017. Return on average common equity was 10.58% and return on average assets was 1.18% for the third quarter of 2018, compared to 8.99% and 0.89%, respectively, for the same quarter in 2017.

Net income available to common stockholders for the nine months ended September 30, 2018, was \$84.8 million or \$2.59 per diluted common share, compared to \$61.6 million or \$2.21 per diluted common share for the nine months ended September 30, 2017. Return on average common equity was 9.95% and return on average assets was 1.07% for the first nine months of 2018, compared to 9.88% and 0.94% for the same period in 2017.

For the third quarter of 2018, Heartland's net interest margin was 4.32% (4.38% on a fully tax-equivalent basis) compared to 4.08% (4.26% on a fully tax-equivalent basis) for the same quarter in 2017, and the efficiency ratio was 62.40% and 64.54% for the third quarter of 2018 and 2017, respectively. For the nine-month period ended September 30, 2018, Heartland's net interest margin was 4.25% (4.32% on a fully tax-equivalent basis) compared to 4.00% (4.19% on a fully tax-equivalent basis) for the same period in 2017. The efficiency ratio for the first nine months of 2018 was 65.03% compared to 66.58% for the same period in 2017.

The financial impact of the following transactions are included in the results of operations for the nine-month period ended September 30, 2018, but not in the results of operations for the same period ended September 30, 2017:

- 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 Bancshares, Inc. had, at fair value, total assets of \$427.1 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.

- On May 18, 2018, Heartland completed the acquisition of Lubbock, Texas based First Bank Lubbock Bancshares, Inc. ("FBLB"), parent company of First Bank & Trust, and PrimeWest Mortgage Corporation, which is a wholly-owned subsidiary of First Bank & Trust. Based on Heartland's closing common stock price of \$55.05 per share on May 18, 2018, the aggregate consideration paid to FBLB common shareholders was \$189.9 million, with approximately 3% of the consideration paid in cash and 97% paid by delivery of Heartland common stock. As a result of the transaction, First

Bank & Trust became a wholly-owned subsidiary of Heartland and its 11th state-chartered bank. First Bank & Trust and PrimeWest Mortgage Corporation continue to operate under their present brands and management teams. As of the closing date, FBLB had, at fair value, total assets of \$1.12 billion, total loans held to maturity of \$681.1 million and total deposits of \$893.8 million. Heartland also assumed, at fair value, \$8.2 million of trust preferred debt. The systems conversion for this transaction occurred on August 17, 2018.

In the first quarter of 2018, Heartland recorded \$2.6 million of restructuring expenses related to its legacy retail mortgage lending operation. The restructuring projects were primarily related to outsourcing of the loan application processing, underwriting and loan closing functions and included a workforce reduction of approximately 100 employees and the discontinuation of several current systems. 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 was no longer considered a separate business segment as of January 1, 2018.

During the third quarter of 2018, Heartland closed three branch locations, consisting of one branch at Dubuque Bank and Trust Company, Arizona Bank & Trust and Rocky Mountain Bank. Additionally, Wisconsin Bank & Trust announced the sale of two branches. The sales transaction is expected to close in the first quarter of 2019, pending regulatory approval. At September 30, 2018, \$31.4 million of loans and \$50.3 million of deposits were classified as held for sale in conjunction with this transaction.

Subsequent to September 30, 2018, Heartland announced the pending closure of one branch of Morrill & Janes Bank and Trust. Pending regulatory approval, the loans and deposits of this branch will be transferred and serviced by First Bank & Trust. Heartland expects the transaction to occur early in the first quarter of 2019.

Total assets of Heartland were \$11.34 billion at September 30, 2018, an increase of \$1.52 billion or 16% since year-end 2017. Excluding \$427.1 million of assets acquired at fair value in the Signature Bancshares, Inc. transaction and \$1.12 billion of assets acquired at fair value in the FBLB transaction, total assets decreased \$20.1 million or less than 1% since December 31, 2017. Securities represented 22% of total assets at September 30, 2018, and 25% of total assets at December 31, 2017.

Heartland's total assets exceeded \$10.0 billion as of September 30, 2018. Various federal banking laws and regulations, including rules adopted by the Federal Reserve Board pursuant to the requirements of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"), impose heightened requirements on certain large banks and bank holding companies. Under the Dodd-Frank Act as originally adopted, most of these rules applied primarily to bank holding companies with at least \$50 billion in total consolidated assets, but certain rules also applied to banks and bank holding companies with at least \$10 billion in total consolidated assets. The Economic Growth, Regulatory Relief and Consumer Protection Act (the "Economic Growth Act"), which was signed into law on May 24, 2018, resulted in a roll-back of regulations applicable to the financial services industry primarily through certain amendments of the Dodd-Frank Act. Among other things, the Economic Growth Act reduced the dollar thresholds at which certain regulatory requirements apply. The Economic Growth Act increased the threshold for required stress testing under the Dodd-Frank Act from \$10 billion in total consolidated assets to \$100 billion in total consolidated assets. In addition, the threshold for requiring a dedicated board risk committee under the Dodd-Frank Act increased from \$10 billion in total consolidated assets to \$50 billion in total consolidated assets. The Economic Growth Act included additional regulatory relief, much of which benefited banks with less than \$10 billion in consolidated assets. Certain of the provisions of the Dodd-Frank Act amended by the Economic Growth Act took effect immediately, while others require that federal bank regulatory agencies jointly amend their rules. The banking authorities indicated through interagency guidance that the capital planning and risk management practices of banking institutions with total assets of less than \$100 billion would continue to be reviewed through the regular supervisory process, which may negate to some extent the impact of the changes regarding stress testing and risk management contained in the Economic Growth Act.

Other provisions of the Dodd-Frank Act, such as the Durbin Amendment, which restricts interchange fees, remain in place. The Durbin Amendment, which will be effective for Heartland on July 1, 2019, restricts interchange fees to those which are "reasonable and proportionate" for certain debit card issuers and limits the ability of networks and issuers to restrict debit card transaction routing. In the final rules, interchange fees for debit card transactions were capped at \$0.21 plus five basis points in order to be eligible for a safe harbor such that the fee is conclusively determined to be reasonable and proportionate. Based on calculations using 2017 debit card volume, the negative impact of the Durbin Amendment would be approximately \$6.0 million annually to Heartland's noninterest income.

Management has been in the process of preparing for the requirements under the Dodd-Frank Act over the past several quarters, and has added staff, enhanced risk management processes and invested in upgraded information systems and technology. The potential impact of the Economic Growth Act on the Dodd-Frank Act are still under evaluation by management.

Total loans held to maturity were \$7.37 billion at September 30, 2018, compared to \$6.39 billion at year-end 2017, an increase of \$974.0 million or 15%. This change includes \$324.5 million of total loans held to maturity acquired at fair value in the Signature Bancshares, Inc. transaction and \$681.1 million of total loans held to maturity acquired at fair value in the FBLB transaction. Exclusive of these transactions, total loans held to maturity decreased \$31.5 million or less than 1% since year-end 2017.

Total deposits were \$9.51 billion as of September 30, 2018, compared to \$8.15 billion at year-end 2017, an increase of \$1.37 billion or 17%. This increase includes \$357.3 million of deposits, at fair value, acquired in the Signature Bancshares, Inc. transaction and \$893.8 million of deposits, at fair value, acquired in the FBLB transaction. Exclusive of these transactions, total deposits increased \$114.1 million or 1% since December 31, 2017.

Common stockholders' equity was \$1.28 billion at September 30, 2018, compared to \$990.5 million at year-end 2017. Book value per common share was \$37.14 at September 30, 2018, compared to \$33.07 at year-end 2017. Heartland's unrealized loss on securities available for sale, net of applicable taxes, was \$52.4 million at September 30, 2018, compared to an unrealized loss of \$24.3 million, net of applicable taxes, at December 31, 2017. The increase in the unrealized loss on securities available for sale was primarily due to increases in short-term interest rates.

FINANCIAL HIGHLIGHTS

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
STATEMENT OF INCOME DATA				
Interest income	\$ 124,894	\$ 98,978	\$ 339,517	\$ 261,590
Interest expense	14,216	9,134	35,846	24,138
Net interest income	110,678	89,844	303,671	237,452
Provision for loan losses	5,238	5,705	14,332	10,235
Net interest income after provision for loan losses	105,440	84,139	289,339	227,217
Noninterest income	29,765	24,977	82,115	76,494
Noninterest expenses	92,539	78,759	265,067	219,797
Income taxes	8,956	8,725	21,530	22,314
Net income	33,710	21,632	84,857	61,600
Preferred dividends	(13)	(13)	(39)	(45)
Interest expense on convertible preferred debt	—	3	—	12
Net income available to common stockholders	\$ 33,697	\$ 21,622	\$ 84,818	\$ 61,567
Key Performance Ratios				
Annualized return on average assets	1.18%	0.89%	1.07%	0.94%
Annualized return on average common equity (GAAP)	10.58%	8.99%	9.95%	9.88%
Annualized return on average tangible common equity (non-GAAP) ⁽¹⁾	16.30%	12.41%	14.71%	12.90%
Annualized ratio of net charge-offs to average loans	0.28%	0.31%	0.17%	0.23%
Annualized net interest margin (GAAP)	4.32%	4.08%	4.25%	4.00%
Annualized net interest margin, fully tax-equivalent (non-GAAP) ⁽²⁾	4.38%	4.26%	4.32%	4.19%
Efficiency ratio, fully tax-equivalent ⁽³⁾	62.40%	64.54%	65.03%	66.58%
Reconciliation of Annualized Return on Average Tangible Common Equity (non-GAAP)⁽⁴⁾				
Net income available to common shareholders (GAAP)	\$ 33,697	\$ 21,622	\$ 84,818	\$ 61,567
Average common stockholders' equity (GAAP)	\$ 1,263,226	\$ 954,511	\$ 1,139,149	\$ 833,150
Less average goodwill	391,668	226,097	323,058	167,009
Less average other intangibles, net	51,592	36,950	45,207	27,992
Average tangible common equity (non-GAAP)	\$ 819,966	\$ 691,464	\$ 770,884	\$ 638,149
Annualized return on average common equity (GAAP)	10.58%	8.99%	9.95%	9.88%
Annualized return on average tangible common equity (non-GAAP)	16.30%	12.41%	14.71%	12.90%
Reconciliation of Annualized Net Interest Margin, Fully Tax-Equivalent (non-GAAP)⁽⁵⁾				
Net Interest Income (GAAP)	\$ 110,678	\$ 89,844	\$ 303,671	\$ 237,452
Plus tax-equivalent adjustment ⁽⁶⁾	1,544	3,925	4,663	11,581
Net interest income - tax-equivalent (non-GAAP)	\$ 112,222	\$ 93,769	\$ 308,334	\$ 249,033
Average earning assets	\$ 10,154,591	\$ 8,726,228	\$ 9,547,147	\$ 7,942,810
Net interest margin (GAAP)	4.32%	4.08%	4.25%	4.00%
Net interest margin, fully tax-equivalent (non-GAAP)	4.38%	4.26%	4.32%	4.19%

(Dollars in thousands, except per share data)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Reconciliation of Non-GAAP Measure-Efficiency Ratio⁽⁷⁾				
Net Interest Income (GAAP)	\$ 110,678	\$ 89,844	\$ 303,671	\$ 237,452
Plus tax-equivalent adjustment ⁽⁶⁾	1,544	3,925	4,663	11,581
Net interest income - tax-equivalent (non-GAAP)	112,222	93,769	308,334	249,033
Noninterest income	29,765	24,977	82,115	76,494
Securities (gains)/losses, net	145	(1,679)	(1,037)	(5,553)
Unrealized gain on equity securities, net	(54)	—	(97)	—
Adjusted income	\$ 142,078	\$ 117,067	\$ 389,315	\$ 319,974
Total noninterest expenses	\$ 92,539	\$ 78,759	\$ 265,067	\$ 219,797
Less:				
Core deposit intangibles and customer relationship intangibles amortization	2,626	1,863	6,763	4,252
Partnership investment in tax credit projects	338	—	338	876
(Gain)/loss on sales/valuations of assets, net	912	1,342	2,243	1,642
Restructuring expenses	—	—	2,564	—
Adjusted noninterest expenses	\$ 88,663	\$ 75,554	\$ 253,159	\$ 213,027
Efficiency ratio, fully tax-equivalent (non-GAAP)	62.40%	64.54%	65.03%	66.58%

(1) Refer to the "Reconciliation of Annualized Return on Average Tangible Common Equity (non-GAAP)" table.

(2) Refer to the "Reconciliation of Annualized Net Interest Margin, Fully Tax-Equivalent (non-GAAP)" table.

(3) Refer to the "Reconciliation of Non-GAAP Measure-Efficiency Ratio" (non-GAAP)" table.

(4) Annualized return on average tangible common equity is net income available to common stockholders divided by average common stockholders' equity less goodwill and core deposit intangibles and customer relationship intangibles, net. This financial measure is included as it is considered to be a critical metric to analyze and evaluate the financial condition and capital strength of Heartland. This measure should not be considered a substitute for operating results determined in accordance with GAAP.

(5) Annualized net interest margin, fully tax-equivalent is a non-GAAP measure, which adjusts net interest income for the tax-favored status of certain loans and securities. Management believes this measure enhances the comparability of net interest income arising from taxable and tax-exempt sources. This measure should not be considered a substitute for operating results determined in accordance with GAAP.

(6) Computed on a tax-equivalent basis using an effective tax rate of 21% beginning January 1, 2018, and 35% for all prior periods.

(7) Efficiency ratio, fully tax-equivalent, expresses noninterest expenses as a percentage of fully tax-equivalent net interest income and noninterest income. This efficiency ratio is presented on a tax-equivalent basis, which adjusts net interest income and noninterest expenses for the tax favored status of certain loans, securities and tax credit projects. Management believes the presentation of this non-GAAP measure provides supplemental useful information for proper understanding of the financial results of Heartland as it enhances the comparability of income and expenses arising from taxable and nontaxable sources and excludes specific items, as noted in the table. This measure should not be considered a substitute for operating results determined in accordance with GAAP.

FINANCIAL HIGHLIGHTS, continued

(Dollars in thousands, except per share data)

	As Of and For the Quarter Ended				
	9/30/2018	6/30/2018	3/31/2018	12/31/2017	9/30/2017
BALANCE SHEET DATA					
Investments	\$ 2,540,779	\$ 2,468,113	\$ 2,300,413	\$ 2,492,866	\$ 2,372,916
Loans held for sale	77,727	55,684	24,376	44,560	35,795
Total loans receivable ⁽¹⁾	7,365,493	7,477,697	6,746,015	6,391,464	6,373,415
Allowance for loan losses	61,221	61,324	58,656	55,686	54,885
Total assets	11,335,132	11,301,920	10,055,863	9,810,739	9,755,627
Total deposits ⁽²⁾	9,512,163	9,489,144	8,541,540	8,146,909	8,231,884
Long-term obligations	277,563	258,708	276,118	285,011	301,473
Preferred equity	—	938	938	938	938
Common stockholders' equity	1,280,393	1,254,809	1,050,567	990,519	980,746

Common Share Data

Book value per common share (GAAP)	\$ 37.14	\$ 36.44	\$ 33.81	\$ 33.07	\$ 32.75
Tangible book value per common share (non-GAAP) ⁽³⁾	\$ 24.33	\$ 23.53	\$ 23.79	\$ 23.99	\$ 23.61
Common shares outstanding, net of treasury stock	34,473,029	34,438,445	31,068,239	29,953,356	29,946,069
Tangible common equity ratio (non-GAAP) ⁽⁴⁾	7.70%	7.46%	7.59%	7.53%	7.46%

Reconciliation of Tangible Book Value Per Common Share (non-GAAP)⁽⁵⁾

Common stockholders' equity (GAAP)	\$ 1,280,393	\$ 1,254,809	\$ 1,050,567	\$ 990,518	\$ 980,746
Less goodwill	391,668	391,668	270,305	236,615	236,615
Less core deposit intangibles and customer relationship intangibles, net	50,071	52,698	41,063	35,203	37,028
Tangible common stockholders' equity (non-GAAP)	\$ 838,654	\$ 810,443	\$ 739,199	\$ 718,700	\$ 707,103

Common shares outstanding, net of treasury stock	34,473,029	34,438,445	31,068,239	29,953,356	29,946,069
Common stockholders' equity (book value) per share (GAAP)	\$ 37.14	\$ 36.44	\$ 33.81	\$ 33.07	\$ 32.75
Tangible book value per common share (non-GAAP)	\$ 24.33	\$ 23.53	\$ 23.79	\$ 23.99	\$ 23.61

Reconciliation of Tangible Common Equity Ratio (non-GAAP)⁽⁶⁾

Total assets (GAAP)	\$ 11,335,132	\$ 11,301,920	\$ 10,055,863	\$ 9,810,739	\$ 9,755,627
Less goodwill	391,668	391,668	270,305	236,615	236,615
Less core deposit intangibles and customer relationship intangibles, net	50,071	52,698	41,063	35,203	37,028
Total tangible assets (non-GAAP)	\$ 10,893,393	\$ 10,857,554	\$ 9,744,495	\$ 9,538,921	\$ 9,481,984
Tangible common equity ratio (non-GAAP)	7.70%	7.46%	7.59%	7.53%	7.46%

(1) Excludes loans held for sale.

(2) Excludes deposits held for sale.

(3) Refer to the "Reconciliation of Tangible Book Value Per Common Share (non-GAAP)" table.

(4) Refer to the "Reconciliation of Tangible Common Equity Ratio (non-GAAP)" table.

(5) Tangible book value per common share is total common stockholders' equity less goodwill and core deposit and customer relationship intangibles, net, divided by common shares outstanding, net of treasury. This amount is a non-GAAP financial measure but has been included as it is considered to be a critical metric with which to analyze and evaluate the financial condition and capital strength of Heartland. This measure should not be considered a substitute for operating results determined in accordance with GAAP.

(6) The tangible common equity ratio is total common stockholders' equity less goodwill and core deposit intangibles, net divided by total assets less goodwill and core deposit intangibles, net. This ratio is a non-GAAP financial measure but has been included as it is considered to be a critical metric with which to analyze and evaluate the financial condition and capital strength of Heartland. This measure should not be considered a substitute for operating results determined in accordance with GAAP.

RESULTS OF OPERATIONS

Net Interest Income

Net interest margin, expressed as a percentage of average earning assets, was 4.32% (4.38% on a fully tax-equivalent basis) during the third quarter of 2018, compared to 4.08% (4.26% on a fully tax-equivalent basis) during the third quarter of 2017. Heartland's success in maintaining its net interest margin has been the result of an increase in average earning assets and a favorable deposit mix. Also contributing to Heartland's ability to maintain its net interest margin has been the amortization of purchase accounting discounts associated with acquisitions completed by Heartland. For the third quarter of 2018, Heartland's net interest margin included 25 basis points of purchase accounting discount amortization compared to 16 basis points in the same quarter of 2017. For the nine months ended September 30, 2018, purchase accounting discount amortization added 21 basis points to net interest margin compared to 14 basis points for the nine months ended September 30, 2017. See "Analysis of Average Balances, Tax-Equivalent Yields and Rates" for information relating to Heartland's net interest income on a fully tax-equivalent basis, which is not defined by GAAP, and a reconciliation of annualized net interest margin on a fully tax-equivalent basis to GAAP.

Total interest income for the third quarter of 2018 was \$124.9 million, an increase of \$25.9 million or 26%, compared to \$99.0 million recorded in the third quarter of 2017. The tax-equivalent adjustments for income taxes saved on the interest earned on nontaxable securities and loans were \$1.5 million for the third quarter of 2018 and \$3.9 million for the third quarter of 2017. With these adjustments, total interest income on a tax-equivalent basis was \$126.4 million for the third quarter of 2018, an increase of \$23.5 million or 23%, compared to \$102.9 million for the third quarter of 2017. For the first nine months of 2018, total interest income increased \$77.9 million or 30% to \$339.5 million compared to \$261.6 million for the first nine months of 2017. The tax-equivalent adjustments for income taxes saved on the interest earned on nontaxable securities and loans were \$4.7 million and \$11.6 million for the first nine months of 2018 and 2017, respectively. With these adjustments, total interest income on a tax-equivalent basis was \$344.2 million during the first nine months of 2018 compared to \$273.2 million during the first nine months of 2017, an increase of \$71.0 million or 26%.

Average earning assets increased \$1.43 billion or 16% to \$10.15 billion for the third quarter of 2018 compared to \$8.73 billion for the same quarter in 2017. For the first nine months of 2018, average earning assets were \$9.55 billion compared to \$7.94 billion for the first nine months of 2017, which was an increase of \$1.60 billion or 20%. The average rate on earning assets increased 26 basis points to 4.94% for the third quarter of 2018 compared to 4.68% for the third quarter of 2017. The average rate on earning assets for the first nine months of 2018 was 4.82%, an increase of 22 basis points compared to 4.60% for the same period in 2017. The increase in total interest income and average earning assets for the quarterly and nine-month periods ended September 30, 2018, was primarily attributable to the acquisitions completed in 2017 and the first half of 2018 and recent increases in market interest rates.

Total interest expense for the third quarter of 2018 was \$14.2 million, an increase of \$5.1 million or 56% from \$9.1 million in the third quarter of 2017. Total interest expense for the first nine months of 2018 totaled \$35.8 million compared to \$24.1 million for the first nine months of 2017, which was an increase of \$11.7 million or 49%. For the quarter ended September 30, 2018, average interest bearing liabilities were \$6.54 billion, an increase of \$847.2 million or 15%, from \$5.70 billion for the quarter ended September 30, 2017. In addition, the average interest rate paid on Heartland's interest bearing deposits and borrowings increased 22 basis points to 0.86% in the third quarter of 2018 from 0.64% in the third quarter of 2017. Average interest bearing liabilities increased \$804.4 million or 15% to \$6.15 billion for the first nine months of 2018 compared to \$5.35 billion for the first nine months in 2017, while the average interest rate paid on Heartland's interest bearing deposits and borrowings increased 18 basis points to 0.78% in the first nine months of 2018 from 0.60% in the first nine months of 2017. The average interest rate paid on savings deposits was 0.56% during the third quarter of 2018 compared to 0.30% for the third quarter of 2017, and the average interest rate paid on time deposits was 1.03% for the third quarter of 2018 compared to 0.77% for the third quarter of 2017. For the first nine months of 2018, the average interest rate paid on savings deposits was 0.47% compared to 0.26% for the first nine months of 2017, and the average interest rate paid on time deposits was 0.96% and 0.79% for the nine-month periods ending September 30, 2018, and 2017, respectively. The increase in Heartland's average interest bearing liabilities for both the quarterly and year-to-date comparisons is primarily attributable to the acquisitions completed in 2017 and the first half of 2018. The increase in the average interest rate paid on Heartland's interest bearing liabilities is primarily due to recent increases in market interest rates.

Net interest income increased \$20.8 million or 23% to \$110.7 million in the third quarter of 2018 from \$89.8 million in the third quarter of 2017. After the tax-equivalent adjustment discussed above, net interest income on a tax-equivalent basis totaled \$112.2 million during the third quarter of 2018, an increase of \$18.5 million or 20% from \$93.8 million during the third quarter of 2017. For the first nine months of 2018, net interest income increased \$66.2 million or 28% to \$303.7 million from \$237.5 million recorded in the first nine months of 2017. After the tax-equivalent adjustment discussed above, net interest income on a tax-

equivalent basis totaled \$308.3 million during the first nine months of 2018, an increase of \$59.3 million or 24% from \$249.0 million recorded during the first nine months of 2017.

Heartland attempts to manage its balance sheet to minimize the effect that a change in interest rates has on its net interest margin. Heartland plans to continue to work toward improving both its earning assets and funding mix through targeted organic growth strategies, which management believes will result in additional net interest income. Heartland produces and reviews simulations of various interest rate scenarios to assist in monitoring its exposure to interest rate risk. Based on these simulations, it is management's opinion that Heartland maintains a well-balanced and manageable interest rate posture. Item 3 of Part I of this Quarterly Report on Form 10-Q contains additional information about the results of Heartland's most recent net interest income simulations. Note 7 to the consolidated financial statements included in this Quarterly Report on Form 10-Q contains a detailed discussion of the derivative instruments Heartland has utilized to manage its interest rate risk.

The following table sets forth certain information relating to Heartland's average consolidated balance sheets and reflects the yield on average earning assets and the cost of average interest bearing liabilities for the periods indicated, in thousands. Such yields and costs are calculated by dividing income or expense by the average balance of assets or liabilities. Average balances are derived from daily balances, and nonaccrual loans and loans held for sale are included in each respective loan category. Assets that receive favorable tax treatment are evaluated on a tax-equivalent basis assuming a federal income tax rate of 21% for the third quarter and first nine months of 2018 and 35% for the third quarter and first nine months of 2017. Tax-favored assets generally have lower contractual pre-tax yields than fully taxable assets. A tax-equivalent yield is calculated by adding the tax savings to the interest earned on tax favored assets and dividing this amount by the average balance of the tax favorable assets.

ANALYSIS OF AVERAGE BALANCES, TAX-EQUIVALENT YIELDS AND RATES⁽¹⁾
(Dollars in thousands)

	For the Quarter Ended					
	September 30, 2018			September 30, 2017		
	Average Balance	Interest	Rate	Average Balance	Interest	Rate
Earning Assets						
Securities:						
Taxable	\$ 2,066,071	\$ 14,433	2.77%	\$ 1,667,076	\$ 10,394	2.47%
Nontaxable ⁽¹⁾	435,045	4,418	4.03	643,925	7,825	4.82
Total securities	2,501,116	18,851	2.99	2,311,001	18,219	3.13
Interest bearing deposits with the Federal Reserve Bank and other banks and other short-term investments	252,535	1,238	1.94	164,809	558	1.34
Federal funds sold	—	—	—	18,874	34	0.71
Loans: ⁽²⁾						
Commercial and commercial real estate ⁽¹⁾	5,637,360	77,443	5.45	4,647,414	59,121	5.05
Residential mortgage	736,875	8,952	4.82	683,186	7,300	4.24
Agricultural and agricultural real estate ⁽¹⁾	571,599	7,725	5.36	504,970	6,175	4.85
Consumer	516,342	10,043	7.72	450,694	9,032	7.95
Fees on loans		2,186	—		2,464	—
Less: allowance for loan losses	(61,236)	—	—	(54,720)	—	—
Net loans	7,400,940	106,349	5.70	6,231,544	84,092	5.35
Total earning assets	10,154,591	126,438	4.94%	8,726,228	102,903	4.68%
Nonearning Assets	1,136,698			913,616		
Total Assets	\$ 11,291,289			\$ 9,639,844		
Interest Bearing Liabilities⁽³⁾						
Savings	\$ 4,932,013	\$ 6,980	0.56%	\$ 4,205,946	\$ 3,162	0.30%
Time, \$100,000 and over	575,810	1,379	0.95	408,560	787	0.76
Other time deposits	618,161	1,733	1.11	573,178	1,124	0.78
Short-term borrowings	148,041	464	1.24	209,795	271	0.51
Other borrowings	270,924	3,660	5.36	300,234	3,790	5.01
Total interest bearing liabilities	6,544,949	14,216	0.86%	5,697,713	9,134	0.64%
Noninterest Bearing Liabilities⁽³⁾						
Noninterest bearing deposits	3,404,759			2,912,344		
Accrued interest and other liabilities	77,786			74,338		
Total noninterest bearing liabilities	3,482,545			2,986,682		
Stockholders' Equity	1,263,795			955,449		
Total Liabilities and Stockholders' Equity	\$ 11,291,289			\$ 9,639,844		
Net interest income, fully tax-equivalent (non-GAAP)⁽⁴⁾		\$ 112,222			\$ 93,769	
Net interest spread⁽¹⁾			4.08%			4.04%
Net interest income, fully tax-equivalent (non-GAAP) to total earning assets⁽⁴⁾			4.38%			4.26%
Interest bearing liabilities to earning assets	64.45%			65.29%		
Reconciliation of annualized net interest margin, fully tax-equivalent (non-GAAP)⁽⁴⁾						
Net interest income, fully tax-equivalent (non-GAAP)		\$ 112,222			\$ 93,769	
Adjustments for tax-equivalent interest ⁽¹⁾		(1,544)			(3,925)	
Net interest income (GAAP)		\$ 110,678			\$ 89,844	
Average earning assets	\$ 10,154,591			\$ 8,726,228		
Annualized net interest margin (GAAP)			4.32%			4.08%
Annualized net interest margin, fully tax-equivalent (non-GAAP)			4.38%			4.26%

(1) Computed on a tax-equivalent basis using an effective tax rate of 21% beginning January 1, 2018, and 35% for all prior periods.

(2) Nonaccrual loans and loans held for sale are included in the average loans outstanding.

(3) Includes deposits held for sale.

(4) Annualized net interest margin, fully tax-equivalent is a non-GAAP measure, which adjusts net interest income for the tax-favored status of certain loans and securities. Management believes this measure enhances the comparability of net interest income arising from taxable and tax exempt sources. This measure should not be considered a substitute for operating results determined in accordance with GAAP.

ANALYSIS OF AVERAGE BALANCES, TAX-EQUIVALENT YIELDS AND RATES⁽¹⁾
(Dollars in thousands)

	For the Nine Months Ended					
	September 30, 2018			September 30, 2017		
	Average Balance	Interest	Rate	Average Balance	Interest	Rate
Earning Assets						
Securities:						
Taxable	\$ 1,937,053	\$ 38,280	2.64%	\$ 1,545,091	\$ 27,246	2.36%
Nontaxable ⁽¹⁾	444,127	13,485	4.06	638,119	23,534	4.93
Total securities	2,381,180	51,765	2.91	2,183,210	50,780	3.11
Interest bearing deposits with the Federal Reserve Bank and other banks and other short-term investments						
Federal funds sold	183,905	2,413	1.75	127,870	1,112	1.16
	471	—	—	6,885	37	0.72
Loans: ⁽²⁾						
Commercial and commercial real estate ⁽¹⁾	5,319,862	211,557	5.32	4,097,967	151,946	4.96
Residential mortgage	688,367	23,365	4.54	654,488	20,492	4.19
Agricultural and agricultural real estate ⁽¹⁾	542,755	20,579	5.07	492,170	17,536	4.76
Consumer	489,417	27,895	7.62	434,995	25,374	7.80
Fees on loans		6,606	—		5,894	—
Less: allowance for loan losses	(58,810)	—	—	(54,775)	—	—
Net loans	6,981,591	290,002	5.55	5,624,845	221,242	5.26
Total earning assets	9,547,147	344,180	4.82%	7,942,810	273,171	4.60%
Nonearning Assets	1,023,306			797,893		
Total Assets	\$ 10,570,453			\$ 8,740,703		
Interest Bearing Liabilities⁽³⁾						
Savings	\$ 4,681,710	\$ 16,306	0.47%	\$ 3,976,403	\$ 7,772	0.26%
Time, \$100,000 and over	479,342	3,221	0.90	369,595	2,239	0.81
Other time deposits	569,536	4,314	1.01	512,551	2,955	0.77
Short-term borrowings	149,453	1,279	1.14	199,503	498	0.33
Other borrowings	271,234	10,726	5.29	288,774	10,674	4.94
Total interest bearing liabilities	6,151,275	35,846	0.78%	5,346,826	24,138	0.60%
Noninterest Bearing Liabilities⁽³⁾						
Noninterest bearing deposits	3,207,709			2,494,850		
Accrued interest and other liabilities	71,506			64,824		
Total noninterest bearing liabilities	3,279,215			2,559,674		
Stockholders' Equity	1,139,963			834,203		
Total Liabilities and Stockholders' Equity	\$ 10,570,453			\$ 8,740,703		
Net interest income, fully tax-equivalent (non-GAAP)⁽¹⁾		\$ 308,334			\$ 249,033	
Net interest spread⁽¹⁾			4.04%			4.00%
Net interest income, fully tax-equivalent (non-GAAP) to total earning assets⁽⁴⁾			4.32%			4.19%
Interest bearing liabilities to earning assets	64.43%			67.32%		
Reconciliation of Annualized Net Interest Margin, Fully Tax-Equivalent (non-GAAP)⁽⁴⁾						
Net interest income, fully tax-equivalent (non-GAAP)		\$ 308,334			\$ 249,033	
Adjustments for tax-equivalent interest ⁽¹⁾		(4,663)			(11,581)	
Net interest income (GAAP)		\$ 303,671			\$ 237,452	
Average Earning Assets	\$ 9,547,147			\$ 7,942,810		
Annualized net interest margin (GAAP)			4.25%			4.00%
Annualized net interest margin, fully tax-equivalent (non-GAAP)			4.32%			4.19%

(1) Computed on a tax-equivalent basis using an effective tax rate of 21% beginning January 1, 2018, and 35% for all prior periods.

(2) Nonaccrual loans and loans held for sale are included in the average loans outstanding.

(3) Includes deposits held for sale.

(4) Annualized net interest margin, fully tax-equivalent is a non-GAAP measure, which adjusts net interest income for the tax-favored status of certain loans and securities. Management believes this measure enhances the comparability of net interest income arising from taxable and tax-exempt sources. This measure should not be considered a substitute for operating results determined in accordance with GAAP.

Provision For Loan Losses

The allowance for loan losses is established through provision expense to provide, in Heartland management's opinion, an appropriate allowance for loan losses. The provision for loan losses decreased \$467,000 to \$5.2 million for the third quarter of 2018 compared to \$5.7 million for the third quarter of 2017. For the first nine months of 2018, provision expense totaled \$14.3 million compared to \$10.2 million for the same period in 2017, which was an increase of \$4.1 million. The increase is attributable to a combination of factors, including acquired loans moving out of the purchase accounting pools and general changes in credit quality.

Given the size of Heartland's loan portfolio, the level of organic loan growth, acquired loans that move out of the purchase accounting pool, changes in credit quality and the variability that can occur in the factors considered when determining the appropriateness of the allowance for loan losses, Heartland's provision for loan losses will vary from quarter to quarter. For additional details on the specific factors considered in establishing the allowance for loan losses, refer to the discussion of critical accounting policies set forth in Management's Discussion and Analysis of Financial Condition and Results of Operations contained in Heartland's Annual Report on Form 10-K for the year ended December 31, 2017, and the information under the caption "Allowance For Loan Losses" in Item 2 of this Quarterly Report on Form 10-Q and Note 5 to the consolidated financial statements included herein.

Heartland believes the allowance for loan losses as of September 30, 2018, was at a level commensurate with the overall risk exposure of the loan portfolio. However, if economic conditions should deteriorate, certain borrowers may experience difficulty and the level of nonperforming loans, charge-offs and delinquencies could rise and require further increases in the provision for loan losses.

Noninterest Income

The tables below show Heartland's noninterest income for the three- and nine-month periods ended September 30, 2018, and 2017, in thousands:

	Three Months Ended September 30,		Change	% Change
	2018	2017		
Service charges and fees	\$ 12,895	\$ 10,138	\$ 2,757	27 %
Loan servicing income	1,670	1,161	509	44
Trust fees	4,499	3,872	627	16
Brokerage and insurance commissions	1,111	950	161	17
Securities gains/(losses), net	(145)	1,679	(1,824)	(109)
Unrealized gain on equity securities, net	54	—	54	100
Net gains on sale of loans held for sale	7,410	4,997	2,413	48
Valuation adjustment on servicing rights	230	5	225	4,500
Income on bank owned life insurance	892	766	126	16
Other noninterest income	1,149	1,409	(260)	(18)
Total noninterest income	\$ 29,765	\$ 24,977	\$ 4,788	19 %

	Nine Months Ended September 30,		Change	% Change
	2018	2017		
Service charges and fees	\$ 35,046	\$ 29,291	\$ 5,755	20 %
Loan servicing income	5,231	4,236	995	23
Trust fees	13,794	11,482	2,312	20
Brokerage and insurance commissions	2,895	2,962	(67)	(2)
Securities gains/(losses), net	1,037	5,553	(4,516)	(81)
Unrealized gain on equity securities, net	97	—	97	100
Net gains on sale of loans held for sale	18,261	17,961	300	2
Valuation adjustment on servicing rights	12	29	(17)	(59)
Income on bank owned life insurance	2,206	2,039	167	8
Other noninterest income	3,536	2,941	595	20
Total noninterest income	\$ 82,115	\$ 76,494	\$ 5,621	7 %

Noninterest income totaled \$29.8 million during the third quarter of 2018 compared to \$25.0 million during the third quarter of 2017, an increase of \$4.8 million or 19%. This increase reflected higher service charges and fees, loan servicing income, trust fees and net gains on sale of loans held for sale, which were partially offset by decreased net securities gains. Noninterest income totaled \$82.1 million during the nine-month period ended September 30, 2018 compared to \$76.5 million during the comparable period in 2017, an increase of \$5.6 million or 7%. For the nine-month period ended September 30, 2018, increases in service charges and fees, loan servicing income and trust fees were partially offset by decreases in net securities gains.

Service Charges and Fees

The following tables summarize the changes in service charges and fees for the three- and nine-month periods ended September 30, 2018, and 2017, in thousands:

	Three Months Ended September 30,		Change	% Change
	2018	2017		
Service charges and fees on deposit accounts	\$ 2,858	\$ 2,577	\$ 281	11 %
Overdraft fees	2,990	2,479	511	21
Customer service fees	101	102	(1)	(1)
Credit card fee income	3,062	1,994	1,068	54
Debit card income	3,883	2,985	898	30
Other service charges	1	1	—	—
Total service charges and fees	\$ 12,895	\$ 10,138	\$ 2,757	27 %

	Nine Months Ended September 30,		Change	% Change
	2018	2017		
Service charges and fees on deposit accounts	\$ 8,270	\$ 7,002	\$ 1,268	18 %
Overdraft fees	7,716	6,950	766	11
Customer service fees	266	217	49	23
Credit card fee income	8,443	6,212	2,231	36
Debit card income	10,349	8,908	1,441	16
Other service charges	2	2	—	—
Total service charges and fees	\$ 35,046	\$ 29,291	\$ 5,755	20 %

Service charges and fees increased \$2.8 million or 27% to \$12.9 million during the third quarter of 2018 compared to \$10.1 million during the third quarter of 2017 and \$5.8 million or 20% to \$35.0 million during the first nine months of 2018 compared to \$29.3 million for the first nine months of 2017. Service charges and fees on deposit accounts and overdraft fees increased \$792,000 or 16% to \$5.8 million for the third quarter of 2018 compared to \$5.1 million for the third quarter of 2017, and for the nine months ended September 30, 2018, service charges and fees on deposit accounts and overdraft fees increased \$2.0 million or 15% to \$16.0 million from \$14.0 million recorded in the same period in 2017. These increases were primarily attributable to a larger demand deposit customer base, a portion of which is attributable to the acquisitions completed in 2017 and the first half of 2018. Fees associated with credit card services were \$3.1 million during the third quarter of 2018 compared to \$2.0 million during the third quarter of 2017, an increase of \$1.1 million or 54%. For the nine months ended September 30, 2018, credit card fee income increased \$2.2 million or 36% to \$8.4 million from \$6.2 million recorded in the first nine months of 2017. These increases resulted primarily from efforts to increase the level of commercial credit card services provided at Heartland's subsidiary banks, including at the recently acquired banks. Heartland has focused on expanding its card payment solutions for businesses. In particular, Heartland has introduced an expense management service that provides business customers the ability to more efficiently manage their card-based spending. Debit card income increased \$898,000 or 30% to \$3.9 million for the third quarter of 2018 compared to \$3.0 million for the third quarter of 2017. For the nine-month periods ended September 30, 2018, and 2017, debit card income totaled \$10.3 million and \$8.9 million, respectively, which was an increase of \$1.4 million or 16%. The increases in debit card income were primarily attributable to Heartland's larger customer base, including customers from recent acquisitions.

Loan Servicing Income

The following tables show the changes in loan servicing income for the three- and nine-month periods ended September 30, 2018, and 2017, in thousands:

	Three Months Ended September 30,		Change	% Change
	2018	2017		
Commercial and agricultural loan servicing fees ⁽¹⁾	\$ 702	\$ 684	\$ 18	3 %
Residential mortgage servicing fees	2,610	2,932	(322)	(11)
Mortgage servicing rights amortization	(1,642)	(2,455)	813	33
Total loan servicing income	<u>\$ 1,670</u>	<u>\$ 1,161</u>	<u>\$ 509</u>	<u>44 %</u>

	Nine Months Ended September 30,		Change	% Change
	2018	2017		
Commercial and agricultural loan servicing fees ⁽¹⁾	\$ 2,375	\$ 2,101	\$ 274	13 %
Residential mortgage servicing fees	7,250	9,319	(2,069)	(22)
Mortgage servicing rights amortization	(4,394)	(7,184)	2,790	39
Total loan servicing income	<u>\$ 5,231</u>	<u>\$ 4,236</u>	<u>\$ 995</u>	<u>23 %</u>

(1) Includes servicing fees for commercial, commercial real estate, agricultural and agricultural real estate loans.

Loan servicing income includes the fees collected for the servicing of commercial, agricultural, and mortgage loans, which are dependent upon the aggregate outstanding balances of these loans, rather than quarterly production and sale of these loans. Loan servicing income totaled \$1.7 million during the third quarter of 2018 compared to \$1.2 million during the third quarter of 2017, an increase of \$509,000 or 44%. On a nine-month comparative basis, loan servicing income totaled \$5.2 million during 2018 compared to \$4.2 million during 2017, an increase of \$995,000 or 23%. Heartland's residential mortgage loan servicing portfolio totaled \$4.16 billion at September 30, 2018, compared to \$3.56 billion at September 30, 2017, which was an increase of \$599.1 million or 17%. Heartland acquired the right to service mortgage loans with the FBLB transaction that closed on May 18, 2018, and at September 30, 2018, the FBLB servicing portfolio totaled \$652.7 million.

Trust Fees

Trust fees for the three months ended September 30, 2018 and 2017 totaled \$4.5 million and \$3.9 million, respectively, which was an increase of \$627,000 or 16%. For the nine months ended September 30, 2018 and 2017, trust fees totaled \$13.8 million and \$11.5 million, respectively, which was an increase of \$2.3 million or 20%. The increase for both the quarterly and year-to-date comparison is primarily attributable to increases in the market value of the assets under management.

Net Gains on Sale of Loans Held for Sale

The following table shows the activity related to the net gains on sales of loans held for sale during the three- and nine-month periods ended September 30, 2018, and 2017, in thousands:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Total residential mortgage loan applications	\$ 298,602	\$ 271,476	\$ 875,405	\$ 828,203
Residential mortgage loans originated	\$ 262,821	\$ 198,911	\$ 638,152	\$ 577,399
Residential mortgage loans sold	\$ 238,684	\$ 188,501	\$ 568,465	\$ 541,318
Net gains on sale of residential mortgage loans	\$ 7,188	\$ 4,821	\$ 17,888	\$ 17,396
Net gain/(loss) on sale of other commercial, agricultural and consumer loans ⁽¹⁾	\$ 222	\$ 176	\$ 373	\$ 565
Percentage of residential mortgage loans originated for refinancing	19%	31%	24%	30%

(1) Includes net gains on sale of commercial loans and leases, commercial real estate loans, agricultural and agricultural real estate loans and consumer loans

During the third quarter of 2018, net gains on sale of loans held for sale totaled \$7.4 million compared to \$5.0 million during the same period in 2017, an increase of \$2.4 million or 48%. These gains result primarily from the gain or loss on sales of mortgage loans into the secondary market, related fees and fair value marks on the associated derivatives. The percentage of residential mortgage loans that represented refinancings was 19% during the third quarter of 2018 compared to 31% in the third quarter of 2017. For the nine months ended September 30, 2018, mortgage loan refinancings were 24% of the originations compared to 30% during the first nine months of 2017.

Securities Gains/Losses, Net

Securities losses, net, totaled \$145,000 for the third quarter of 2018 compared to net securities gains of \$1.7 million for the third quarter of 2017, which was a decrease of \$1.8 million or 109%. For the first nine months of 2018, securities gains, net, totaled \$1.0 million compared to \$5.6 million during the first nine months of 2017, a decrease of \$4.5 million or 81%. Heartland's net unrealized loss on securities available for sale totaled \$68.8 million at September 30, 2018, compared to \$30.8 million at September 30, 2017. The increase in the unrealized loss on securities available for sale was primarily due to increases in short-term interest rates, which have caused a decline in the fair value of Heartland's available for sale securities.

Noninterest Expense

The tables below show Heartland's noninterest expenses for the three- and nine-month periods ended September 30, 2018 and 2017, in thousands:

	Three Months Ended September 30,		Change	% Change
	2018	2017		
Salaries and employee benefits	\$ 49,921	\$ 45,225	\$ 4,696	10 %
Occupancy	6,348	6,223	125	2
Furniture and equipment	3,470	2,826	644	23
Professional fees	11,681	8,450	3,231	38
FDIC insurance assessments	1,119	894	225	25
Advertising	2,754	1,358	1,396	103
Core deposit intangibles and customer relationship intangibles amortization	2,626	1,863	763	41
Other real estate and loan collection expenses	784	581	203	35
(Gain)/loss on sales/valuations of assets, net	912	1,342	(430)	(32)
Restructuring expenses	—	—	—	—
Other noninterest expenses	12,924	9,997	2,927	29
Total noninterest expenses	\$ 92,539	\$ 78,759	\$ 13,780	17 %

	Nine Months Ended September 30,			
	2018	2017	Change	% Change
Salaries and employee benefits	\$ 149,389	\$ 128,118	\$ 21,271	17%
Occupancy	18,706	16,352	2,354	14
Furniture and equipment	9,403	7,913	1,490	19
Professional fees	30,088	24,342	5,746	24
FDIC insurance assessments	2,792	2,610	182	7
Advertising	6,839	5,141	1,698	33
Core deposit intangibles and customer relationship intangibles amortization	6,763	4,252	2,511	59
Other real estate and loan collection expenses	2,464	1,774	690	39
(Gain)/loss on sales/valuations of assets, net	2,243	1,642	601	37
Restructuring expenses	2,564	—	2,564	100
Other noninterest expenses	33,816	27,653	6,163	22
Total noninterest expenses	<u>\$ 265,067</u>	<u>\$ 219,797</u>	<u>\$ 45,270</u>	21%

For the third quarter of 2018, noninterest expenses totaled \$92.5 million compared to \$78.8 million during the third quarter of 2017, an increase of \$13.8 million or 17%. For the first nine months of 2018, noninterest expenses totaled \$265.1 million compared to \$219.8 million during the first nine months of 2017, an increase of \$45.3 million or 21%. The most significant increases for the quarterly and nine month periods were related to salaries and employee benefits, professional fees, and advertising. The increases in occupancy, furniture and equipment, FDIC insurance assessments, advertising, core deposit intangibles and customer relationship intangibles amortization, other real estate and loan collection expenses, gain/loss on sales/valuation of assets, net and other noninterest expenses were primarily related to the recent acquisitions.

Salaries and Employee Benefits

The largest component of noninterest expenses, salaries and employee benefits, increased \$4.7 million or 10% during the third quarter of 2018 as compared to the same quarter in 2017. The increase is primarily attributable to the additional salaries and employee benefits for employees of banks acquired in 2018 and 2017. When comparing the first nine months of 2018 to the same period in 2017, salaries and employee benefits increased \$21.3 million or 17%. Heartland had total full-time equivalent employees of 2,211 on September 30, 2018, compared to 2,024 on September 30, 2017.

Professional Fees

Professional fees for the third quarter of 2018 totaled \$11.7 million compared to \$8.5 million for the same quarter of 2017, which was an increase of \$3.2 million or 38%. For the nine months ended September 30, 2018, professional fees totaled \$30.1 million compared to \$24.3 million, which was an increase of \$5.7 million or 24%. The increase for quarterly and nine-month periods is primarily attributable to professional fees incurred at the entities acquired in 2018, model validation expenses, third-party mortgage processing expenses and higher advisory services associated with the higher level of regulation resulting from Heartland having assets over \$10 billion.

Restructuring Expenses

In the first quarter 2018, Heartland recorded \$2.6 million of restructuring expenses related to its mortgage lending operation. The restructuring projects were primarily related to outsourcing the loan application processing, underwriting and loan closing functions. The restructuring expenses consisted of severance and retention costs related to the workforce reduction and contract buyouts associated with the discontinued use of several current systems.

Efficiency Ratio

One of Heartland's top priorities is to improve its efficiency ratio, on a fully tax-equivalent basis, by reducing it to 65% or less. During the third quarter of 2018, Heartland's efficiency ratio on a fully tax-equivalent basis decreased by 214 basis points to 62.40% in comparison with 64.54% for the quarter ended September 30, 2017. For the nine-month period ended September 30, 2018, the efficiency ratio on a fully tax-equivalent basis decreased by 155 basis points to 65.03% when compared to 66.58% for the same nine-month period in 2017. Heartland's efficiency ratio will vary from quarter to quarter as a result of merger and acquisition activities and also from the seasonality and related revenue and expense timing differences that are inherent in the residential mortgage business.

Income Taxes

Heartland's effective tax rate was 20.99% for the third quarter of 2018 compared to 28.74% for the third quarter of 2017. Heartland's effective tax rate was affected by the passage of the Tax Cuts and Jobs Act in December 2017, which reduced the federal income tax rate from a maximum of 35% to 21%. Federal low-income housing tax credits totaling \$307,000 reduced Heartland's income taxes in both the third quarter of 2018 and 2017. Also included in the third quarter of 2018 tax computation was a solar energy tax credit of \$223,000.

Heartland's effective tax rate was 20.24% for the first nine months of 2018 compared to 26.59% for the first nine months of 2017. Federal low-income housing tax credits totaling \$921,000 were included in the determination of Heartland's income taxes for both nine-month periods ended September 30. Also included in the 2018 tax computation was the solar energy tax credit mentioned above. Included in the determination of Heartland's income taxes during the first nine months of 2017 were solar energy tax credits totaling \$270,000 and a state tax credit of \$830,000 related to a partnership investment in a historic rehabilitation tax credit project. The level of tax-exempt interest income, as a percentage of pre-tax income, was 16.49% during the first nine months of 2018 compared to 25.63% during the first nine months of 2017.

Heartland's income taxes included a tax benefit of \$672,000 and \$1.1 million for the nine-month periods ended September 30, 2018, and 2017, respectively, resulting from the vesting of outstanding restricted stock unit awards and options. The majority of Heartland's restricted stock unit awards vest in the first quarter of each year.

FINANCIAL CONDITION

Total assets of Heartland were \$11.34 billion at September 30, 2018, an increase of \$1.52 billion or 16% since December 31, 2017. Excluding \$427.1 million of assets acquired at fair value in the Signature Bancshares Inc. transaction and \$1.12 billion of assets acquired at fair value in the FBLB transaction, total assets decreased \$20.1 million or less than 1% since December 31, 2017. Securities represented 22% and 25% of total assets at September 30, 2018, and December 31, 2017, respectively.

Lending Activities

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, nonperforming loans and potential problem loans.

The commercial and commercial real estate loan portfolio includes a wide range of business loans, including lines of credit for working capital and operational purposes and term loans for the acquisition of equipment and real estate. Although most loans are made on a secured basis, loans may be made on an unsecured basis if warranted by the overall financial condition of the borrower. Terms of commercial business loans generally range from one to five years. Commercial loans are primarily made based on the identified cash flow of the borrower and secondarily on the underlying collateral provided by the borrower. The collateral that Heartland requires for most of these loans is based upon the discounted market value of the collateral. The primary repayment risks of commercial loans are that the cash flow of the borrowers may be unpredictable, and the collateral securing these loans may fluctuate in value. Heartland seeks to minimize these risks in a variety of ways. The underwriting analysis includes credit verification, analysis of global cash flows, appraisals and a review of the financial condition of the borrower. Personal guarantees are frequently required as a tertiary form of repayment. In addition, when underwriting loans for commercial real estate, careful consideration is given to the property's operating history, future operating projections, current and projected occupancy, location and physical condition. Heartland also utilizes government guaranteed lending through the U.S. Small Business Administration and the U.S. Department of Agriculture's Rural Development Business and Industry Program to assist customers with longer-term funding and to reduce risk.

Agricultural loans, many of which are secured by crops, machinery and real estate, are provided to finance capital improvements and farm operations as well as acquisitions of livestock and machinery. Agricultural loans present unique credit risks relating to adverse weather conditions, loss of livestock due to disease or other reasons, declines in market prices for agricultural products and the impact of government regulations. The ultimate repayment of agricultural loans is dependent upon the profitable operation or management of the agricultural entity. In underwriting agricultural loans, lending personnel work closely with their customers to review budgets and cash flow projections for crop production for the ensuing year. These budgets and cash flow projections are monitored closely during the year and reviewed with the customers at least annually. Lending personnel also work closely with governmental agencies, including the Farm Service Agency, to help agricultural customers obtain credit enhancement products such as loan guarantees or interest assistance.

Heartland originates first-lien, adjustable-rate and fixed-rate, one-to-four-family residential real estate loans for the construction, purchase or refinancing of a single family residential property. These loans are principally collateralized by owner-occupied properties and are amortized over 10 to 30 years. Heartland typically sells longer-term, low-rate, residential mortgage loans in the secondary market with servicing rights retained. This practice allows Heartland to better manage interest rate risk and liquidity risk. The Heartland bank subsidiaries participate in lending programs sponsored by U.S. government agencies such as Veterans Administration and Federal Home Administration when justified by market conditions.

Consumer lending includes motor vehicle, home improvement, home equity and small personal credit lines. Consumer loans typically have shorter terms, lower balances, higher yields and higher risks of default than one-to-four-family residential mortgage loans. Consumer loan collections are dependent on the borrower's continuing financial stability, and are therefore more likely to be affected by adverse personal circumstances. Risk is reduced through underwriting criteria, which include credit verification, appraisals, a review of the borrower's financial condition, and personal cash flows. A security interest, with title insurance when necessary, is taken in the underlying real estate.

Total loans held to maturity were \$7.37 billion at September 30, 2018, compared to \$6.39 billion at year-end 2017, an increase of \$974.0 million or 15%. This change includes \$324.5 million of total loans held to maturity acquired at fair value in the Signature Bancshares, Inc. transaction and \$681.1 million of total loans held to maturity acquired at fair value in the FBLB transaction. During the third quarter of 2018, the sale of two branches at Wisconsin Bank & Trust was announced, which included \$31.4 million of loans that were classified as held for sale at September 30, 2018. Exclusive of these transactions, total loans held to maturity decreased \$140,000 or less than 1% since year-end 2017. Price competition for quality loans remains intense, and Heartland remains committed to its pricing strategy, disciplined credit approach and emphasis on the client relationship.

The table below presents the composition of the loan portfolio as of September 30, 2018, and December 31, 2017, in thousands:

LOAN PORTFOLIO	September 30, 2018		December 31, 2017	
	Amount	Percent	Amount	Percent
Loans receivable held to maturity:				
Commercial	\$ 1,962,222	26.63%	\$ 1,646,606	25.76%
Commercial real estate	3,648,731	49.52	3,163,269	49.48
Agricultural and agricultural real estate	574,048	7.79	511,588	8.00
Residential mortgage	676,941	9.19	624,279	9.76
Consumer	506,181	6.87	447,484	7.00
Gross loans receivable held to maturity	7,368,123	100.00%	6,393,226	100.00%
Unearned discount	(1,340)		(556)	
Deferred loan fees	(1,290)		(1,206)	
Total net loans receivable held to maturity	7,365,493		6,391,464	
Allowance for loan losses	(61,221)		(55,686)	
Loans receivable, net	\$ 7,304,272		\$ 6,335,778	

Loans secured by real estate, either fully or partially, totaled \$4.77 billion or 64% of gross loans at September 30, 2018. At September 30, 2018, approximately 50% of the properties securing non-farm, nonresidential real estate loans are owner occupied. The largest categories of Heartland's loans secured by real estate at September 30, 2018, and December 31, 2017, are listed below, in thousands:

LOANS SECURED BY REAL ESTATE

	September 30, 2018	December 31, 2017
Residential real estate, excluding residential construction and residential lot loans	\$ 1,152,337	\$ 1,080,066
Industrial, manufacturing, business and commercial	815,835	935,614
Agriculture	275,028	256,452
Retail	427,970	348,749
Office	485,972	356,782
Land development and lots	212,465	162,273
Hotel, resort and hospitality	231,314	167,396
Multi-family	268,462	211,862
Food and beverage	132,017	108,977
Warehousing	183,232	125,372
Health services	172,906	155,529
Residential construction	184,057	134,848
All other	230,814	187,508
Total loans secured by real estate	<u>\$ 4,772,409</u>	<u>\$ 4,231,428</u>

Allowance For Loan Losses

The process utilized by Heartland to determine the appropriateness of the allowance for loan and losses is considered a critical accounting practice for Heartland and has remained consistent over the past several years. The allowance for loan losses represents management's estimate of identified and unidentified probable losses in the existing loan portfolio. For additional details on the specific factors considered in determining the allowance for loan losses, refer to the critical accounting policies section of Heartland's Annual Report on Form 10-K for the year ended December 31, 2017.

Nonperforming loans were \$73.2 million or 0.99% of total loans at September 30, 2018, compared to \$63.4 million or 0.99% of total loans at December 31, 2017. At September 30, 2018, approximately \$37.6 million or 51% of Heartland's nonperforming loans had individual loan balances exceeding \$1.0 million and represented loans to sixteen borrowers. At September 30, 2018, and December 31, 2017, Heartland had \$8.1 million and \$13.5 million, respectively, of nonperforming residential real estate loans that were repurchased under various GNMA or other guaranteed loan programs. The portion of Heartland's nonperforming nonresidential real estate loans covered by government guarantees totaled \$8.6 million at September 30, 2018, compared to \$3.0 million at December 31, 2017.

The allowance for loan losses was 0.83% and 0.87% of loans at September 30, 2018 and December 31, 2017, respectively, and 83.62% and 87.82% of nonperforming loans at September 30, 2018, and December 31, 2017, respectively. Excluding the acquired loans covered by the valuation reserves, the ratio of the allowance for loan losses to outstanding loans was 1.09% and 1.13% at September 30, 2018, and December 31, 2017, respectively. At September 30, 2018, valuation reserves totaled \$47.1 million and covered \$1.89 billion of acquired loans. At December 31, 2017, valuation reserves totaled \$36.4 million and covered \$1.51 billion of acquired loans. Loans delinquent 30-89 days as a percent of total loans was 0.62% at September 30, 2018, in comparison with 0.27% at December 31, 2017. The increase in loans delinquent 30-89 days was primarily attributable to recently acquired portfolios. Management believes the increase in delinquencies is related to the implementation of Heartland's underwriting and closing processes at the new entities and is not indicative of the underlying credit quality.

The table below presents the changes in the allowance for loan losses during the three- and nine- month periods ended September 30, 2018 and 2017, in thousands:

ANALYSIS OF ALLOWANCE FOR LOAN LOSSES

	Three Months Ended September 30,	
	2018	2017
Balance at beginning of period	\$ 61,324	\$ 54,051
Provision for loan losses	5,238	5,705
Recoveries on loans previously charged off	779	888
Charge-offs on loans	(6,120)	(5,759)
Balance at end of period	<u>\$ 61,221</u>	<u>\$ 54,885</u>
Annualized ratio of net charge offs to average loans	0.28%	0.31%

	Nine Months Ended September 30,	
	2018	2017
Balance at beginning of period	\$ 55,686	\$ 54,324
Provision for loan losses	14,332	10,235
Recoveries on loans previously charged off	2,711	2,569
Charge-offs on loans	(11,508)	(12,243)
Balance at end of period	<u>\$ 61,221</u>	<u>\$ 54,885</u>
Annualized ratio of net charge offs to average loans	0.17%	0.23%

The table below presents the amounts of nonperforming loans and other nonperforming assets on the dates indicated, in thousands:

NONPERFORMING ASSETS

	September 30,		December 31,	
	2018	2017	2017	2016
Nonaccrual loans	\$ 73,060	\$ 63,456	\$ 62,581	\$ 64,299
Loans contractually past due 90 days or more	154	2,348	830	86
Total nonperforming loans	73,214	65,804	63,411	64,385
Other real estate	11,908	13,226	10,777	9,744
Other repossessed assets	495	773	411	663
Total nonperforming assets	<u>\$ 85,617</u>	<u>\$ 79,803</u>	<u>\$ 74,599</u>	<u>\$ 74,792</u>
Performing troubled debt restructured loans ⁽¹⁾	\$ 4,180	\$ 10,040	\$ 6,617	\$ 10,380
Nonperforming loans to total loans	0.99%	1.03%	0.99%	1.20%
Nonperforming assets to total loans plus repossessed property	1.16%	1.25%	1.17%	1.39%
Nonperforming assets to total assets	0.76%	0.82%	0.76%	0.91%

(1) Represents accruing troubled debt restructured loans performing according to their restructured terms.

The schedules below summarize the changes in Heartland's nonperforming assets during the three- and nine-month periods of 2018, in thousands:

	Nonperforming Loans	Other Real Estate Owned	Other Repossessed Assets	Total Nonperforming Assets
June 30, 2018	\$ 69,430	\$ 11,074	\$ 499	\$ 81,003
Loan foreclosures	(2,755)	2,752	3	—
Net loan charge-offs	(5,341)	—	—	(5,341)
Acquired nonperforming assets	—	—	—	—
New nonperforming loans	16,965	—	—	16,965
Reduction of nonperforming loans ⁽¹⁾	(5,085)	—	—	(5,085)
OREO/Repossessed assets sales proceeds	—	(1,063)	(1)	(1,064)
OREO/Repossessed assets writedowns, net	—	(855)	(31)	(886)
Net activity at Citizens Finance Co.	—	—	25	25
September 30, 2018	\$ 73,214	\$ 11,908	\$ 495	\$ 85,617

	Nonperforming Loans	Other Real Estate Owned	Other Repossessed Assets	Total Nonperforming Assets
December 31, 2017	\$ 63,411	\$ 10,777	\$ 411	\$ 74,599
Loan foreclosures	(5,081)	5,016	65	—
Net loan charge-offs	(8,797)	—	—	(8,797)
Acquired nonperforming assets	9,246	1,186	—	10,432
New nonperforming loans	41,765	—	—	41,765
Reduction of nonperforming loans ⁽¹⁾	(27,330)	—	—	(27,330)
OREO/Repossessed assets sales proceeds	—	(3,225)	(37)	(3,262)
OREO/Repossessed assets writedowns, net	—	(1,846)	(49)	(1,895)
Net activity at Citizens Finance Co.	—	—	105	105
September 30, 2018	\$ 73,214	\$ 11,908	\$ 495	\$ 85,617

(1) Includes principal reductions and transfers to performing status.

Securities

The composition of Heartland's securities portfolio is managed to maximize the return on the portfolio while considering the impact it has on Heartland's asset/liability position and liquidity needs. Securities represented 22% and 25% of total assets at September 30, 2018, and December 31, 2017, respectively. Total securities carried at fair value as of September 30, 2018, were \$2.27 billion, an increase of \$57.5 million or 3% from \$2.22 billion at December 31, 2017.

The table below presents the composition of the securities portfolio, including securities carried at fair value, held to maturity securities and other, by major category, as of September 30, 2018, and December 31, 2017, in thousands:

SECURITIES PORTFOLIO COMPOSITION

	September 30, 2018		December 31, 2017	
	Amount	Percent	Amount	Percent
U.S. government corporations and agencies	\$ 26,997	1.06%	\$ 5,328	0.21%
Mortgage and asset-backed securities	1,871,819	73.67	1,753,736	70.35
Obligation of states and political subdivisions	598,391	23.55	694,565	27.86
Equity securities	16,916	0.67	16,674	0.67
Other securities	26,656	1.05	22,563	0.91
Total securities	\$ 2,540,779	100.00%	\$ 2,492,866	100.00%

The percentage of Heartland's securities portfolio comprised of mortgage and asset-backed securities was 74% at September 30, 2018, compared to 70% at December 31, 2017. Approximately 70% of Heartland's mortgage and asset-backed securities were issued by government-sponsored enterprises at September 30, 2018. Heartland's securities portfolio had an expected modified duration of 4.09 years as of September 30, 2018, compared to 4.71 years as of year-end 2017.

At September 30, 2018, Heartland had \$26.7 million of other securities, including capital stock in each Federal Home Loan Bank ("FHLB") of which each of its bank subsidiaries is a member. All of these securities were classified as other securities held at cost.

Deposits

Total deposits were \$9.51 billion as of September 30, 2018, compared to \$8.15 billion at December 31, 2017, an increase of \$1.37 billion or 17%. This increase included \$357.3 million of deposits, at fair value, acquired in the Signature Bancshares, Inc. transaction and \$893.8 million of deposits acquired, at fair value, in the FBLB transaction. The deposits held for sale in conjunction with the pending branch sale at Wisconsin Bank & Trust totaled \$50.3 million at September 30, 2018. Exclusive of these transactions, total deposits increased \$164.4 million or 2% since December 31, 2017.

The table below presents the composition of Heartland's deposits by category as of September 30, 2018, and December 31, 2017, in thousands:

DEPOSITS	September 30, 2018		December 31, 2017	
	Amount	Percent	Amount	Percent
Demand	\$ 3,427,819	36.04%	\$ 2,983,128	36.62%
Savings	4,958,430	52.12	4,240,328	52.05
Time	1,125,914	11.84	923,453	11.33
Total	\$ 9,512,163	100.00%	\$ 8,146,909	100.00%

Demand deposits totaled \$3.43 billion at September 30, 2018, an increase of \$444.7 million or 15% since year-end 2017. Excluding \$299.0 million of demand deposits attributable to the Signature Bancshares, Inc. and FBLB transactions, demand deposits increased \$145.7 million or 5% since year-end 2017. Savings deposits increased \$718.1 million or 17% to \$4.96 billion at September 30, 2018, from \$4.24 billion at December 31, 2017. Excluding savings deposits of \$619.0 million acquired in the Signature Bancshares, Inc. and FBLB transactions, savings deposits increased \$99.1 million or 2% since year-end 2017. Time deposits increased \$202.5 million or 22% since year-end 2017, and exclusive of \$333.1 million of time deposits acquired in 2018, time deposits decreased \$130.6 million or 14% since December 31, 2017.

Short-Term Borrowings

Short-term borrowings, which Heartland defines as borrowings with an original maturity of one year or less, were as follows as of September 30, 2018, and December 31, 2017, in thousands:

	September 30, 2018	December 31, 2017
Securities sold under agreement to repurchase	\$ 88,606	\$ 107,957
Federal funds purchased	3,900	168,250
Advances from the FHLB	30,000	40,000
Other short-term borrowings	8,633	8,484
Total	\$ 131,139	\$ 324,691

Short-term borrowings generally include federal funds purchased, securities sold under agreements to repurchase, short-term FHLB advances and discount window borrowings from the Federal Reserve Bank. These funding alternatives are utilized in varying degrees depending on their pricing and availability. All of Heartland's bank subsidiaries own FHLB stock in one of the Chicago, Dallas, Des Moines, San Francisco or Topeka FHLBs, enabling them to borrow funds from their respective FHLB for short-term or long-term purposes under a variety of programs. The amount of short-term borrowings of Heartland was \$131.1 million at September 30, 2018, compared to \$324.7 million at year-end 2017, a decrease of \$193.6 million or 60%.

All of the Heartland bank subsidiaries provide retail repurchase agreements to their customers as a cash management tool, which sweep excess funds from demand deposit accounts into these agreements. Although the aggregate balance of these retail repurchase agreements is subject to variation, the account relationships represented by these balances are principally local. The balances of

retail repurchase agreements were \$88.6 million at September 30, 2018, compared to \$108.0 million at December 31, 2017, a decrease of \$19.4 million or 18%.

Also included in short-term borrowings is a \$30.0 million revolving credit line agreement Heartland has with an unaffiliated bank, primarily to provide liquidity to Heartland. The borrowing capacity of this revolving credit line was increased from \$25.0 million to \$30.0 million on June 14, 2018. During the first nine months of 2018, \$25.0 million was drawn and repaid on this credit line. The outstanding balance was \$0 at both September 30, 2018, and December 31, 2017.

Other Borrowings

The outstanding balances of other borrowings, which Heartland defines as borrowings with an original maturity date of more than one year, are shown in the table below, net of discount and issuance costs amortization as of September 30, 2018, and December 31, 2017, in thousands:

	September 30, 2018	December 31, 2017
Advances from the FHLB	\$ 3,523	\$ 6,702
Wholesale repurchase agreements	—	30,000
Trust preferred securities	130,722	121,886
Senior notes	6,000	11,000
Note payable to unaffiliated bank	60,167	33,667
Contracts payable for purchase of real estate and other assets	1,964	1,881
Subordinated notes	74,107	74,000
Other borrowings	1,080	5,875
Total	\$ 277,563	\$ 285,011

As of September 30, 2018, the amount of other borrowings was \$277.6 million, a decrease of \$7.4 million or 3% since year-end 2017. The decrease since year-end 2017 was due to scheduled principal payments in accordance with the debt agreements. Heartland acquired \$5.9 million of subordinated debt in the Signature Bancshares, Inc. transaction and \$3.9 million of other debt in the FBLB transaction, which were paid off simultaneously with the closing of the respective transaction. In connection with the FBLB transaction, Heartland acquired \$8.2 million of trust preferred securities.

Heartland has a non-revolving credit facility with an unaffiliated bank, which provides a borrowing capacity of up to \$70.0 million. The borrowing capacity was reduced to \$70.0 million from \$75.0 million on June 14, 2018. At September 30, 2018, \$60.2 million was outstanding on this non-revolving credit line compared to \$33.7 million outstanding at December 31, 2017. At September 30, 2018, Heartland had \$8.3 million available on this non-revolving credit facility, of which no balance was drawn.

A schedule of Heartland's trust preferred securities outstanding excluding deferred issuance costs, as of September 30, 2018, is as follows, in thousands:

	Amount Issued	Issuance Date	Interest Rate	Interest Rate as of 9/30/18 ⁽¹⁾	Maturity Date	Callable Date
Heartland Financial Statutory Trust IV	\$ 10,310	03/17/2004	2.75% over LIBOR	5.08% ⁽²⁾	03/17/2034	12/17/2018
Heartland Financial Statutory Trust V	20,619	01/27/2006	1.33% over LIBOR	3.67% ⁽³⁾	04/07/2036	01/07/2019
Heartland Financial Statutory Trust VI	20,619	06/21/2007	1.48% over LIBOR	3.81% ⁽⁴⁾	09/15/2037	12/15/2018
Heartland Financial Statutory Trust VII	20,619	06/26/2007	1.48% over LIBOR	3.80% ⁽⁵⁾	09/01/2037	12/01/2018
Morrill Statutory Trust I	8,970	12/19/2002	3.25% over LIBOR	5.62% ⁽⁶⁾	12/26/2032	12/26/2018
Morrill Statutory Trust II	8,615	12/17/2003	2.85% over LIBOR	5.18% ⁽⁷⁾	12/17/2033	12/17/2018
Sheboygan Statutory Trust I	6,418	09/17/2003	2.95% over LIBOR	5.28%	09/17/2033	12/17/2018
CBNM Capital Trust I	4,346	09/10/2004	3.25% over LIBOR	5.58%	12/15/2034	12/15/2018
Citywide Capital Trust III	6,369	12/19/2003	2.80% over LIBOR	5.14%	12/19/2033	01/23/2019
Citywide Capital Trust IV	4,224	09/30/2004	2.20% over LIBOR	4.51%	09/30/2034	11/23/2018
Citywide Capital Trust V	11,467	05/31/2006	1.54% over LIBOR	3.87%	07/25/2036	12/15/2018
OCGI Statutory Trust III	2,987	06/27/2002	3.65% over LIBOR	5.99% ⁽⁸⁾	09/30/2032	12/30/2018
OCGI Capital Trust IV	5,272	09/23/2004	2.50% over LIBOR	4.83% ⁽⁹⁾	12/15/2034	12/15/2018
	<u>\$ 130,835</u>					

(1) Effective weighted average interest rate as of September 30, 2018, was 5.45% due to interest rate swap transactions on the variable rate securities as discussed in Note 7 to Heartland's consolidated financial statements included herein.

(2) Effective interest rate as of September 30, 2018, was 5.01% due to an interest rate swap transaction as discussed in Note 7 to Heartland's consolidated financial statements included herein.

(3) Effective interest rate as of September 30, 2018, was 4.69% due to an interest rate swap transaction as discussed in Note 7 to Heartland's consolidated financial statements included herein.

(4) Effective interest rate as of September 30, 2018, was 3.87% due to an interest rate swap transaction as discussed in Note 7 to Heartland's consolidated financial statements included herein.

(5) Effective interest rate as of September 30, 2018, was 3.83% due to an interest rate swap transaction as discussed in Note 7 to Heartland's consolidated financial statements included herein.

(6) Effective interest rate as of September 30, 2018, was 4.92% due to an interest rate swap transaction as discussed in Note 7 to Heartland's consolidated financial statements included herein.

(7) Effective interest rate as of September 30, 2018, was 4.51% due to an interest rate swap transaction as discussed in Note 7 to Heartland's consolidated financial statements included herein.

(8) Effective interest rate as of September 30, 2018, was 5.53% due to an interest rate swap transaction as discussed in Note 7 to Heartland's consolidated financial statements included herein.

(9) Effective interest rate as of September 30, 2018, was 4.37% due to an interest rate swap transaction as discussed in Note 7 to Heartland's consolidated financial statements included herein.

CAPITAL REQUIREMENTS

The Federal Reserve Board, which supervises bank holding companies, has adopted capital adequacy guidelines that are used to assess the adequacy of capital of a bank holding company. The federal banking agencies implemented final rules (the "Final Rules") to establish a new comprehensive regulatory capital framework with a phase-in period beginning on January 1, 2015, and ending on January 1, 2019. The Final Rules implemented the third installment of the Basel Accords ("Basel III") regulatory capital reforms and changes required by the Dodd-Frank Act. The Final Rules substantially revised the regulatory risk-based capital rules applicable to Heartland. Under Basel III, Heartland must hold a conservation buffer above the adequately capitalized risk-based capital ratios. The capital conservation buffer for 2018 is 1.875%.

The most recent notification from the FDIC categorized Heartland and each of its bank subsidiaries as well capitalized under the regulatory framework for prompt corrective action. There are no conditions or events since that notification that management believes have changed the categorization of any of these entities.

Heartland's capital ratios are calculated in accordance with Federal Reserve Board instructions and are required regulatory financial measures. The following table illustrates Heartland's capital ratios and the Federal Reserve Board's current capital adequacy guidelines for the dates indicated, in thousands:

	Total Capital (to Risk- Weighted Assets)	Tier 1 Capital (to Risk- Weighted Assets)	Common Equity Tier 1 (to Risk- Weighted Assets)	Tier 1 Capital (to Average Assets)
September 30, 2018	13.59%	12.02%	10.50%	9.53%
Minimum capital requirement	8.00%	6.00%	4.50%	4.00%
Well capitalized requirement	10.00%	8.00%	6.50%	5.00%
Minimum capital requirement, including fully-phased in capital conservation buffer (2019)	10.50%	8.50%	7.00%	N/A
Risk-weighted assets	\$ 8,615,005	\$ 8,615,005	\$ 8,615,005	N/A
Average Assets	N/A	N/A	N/A	\$ 10,863,820
December 31, 2017	13.45%	11.70%	10.07%	9.20%
Minimum capital requirement	8.00%	6.00%	4.50%	4.00%
Well capitalized requirement	10.00%	8.00%	6.50%	5.00%
Minimum capital requirement, including fully-phased in capital conservation buffer (2019)	10.50%	8.50%	7.00%	N/A
Risk-weighted assets	\$ 7,511,544	\$ 7,511,544	\$ 7,511,544	N/A
Average Assets	N/A	N/A	N/A	\$ 9,552,227

Retained earnings that could be available for the payment of dividends to Heartland from its banks totaled approximately \$319.5 million and \$242.3 million at September 30, 2018, and December 31, 2017, respectively, under the capital requirements to remain well capitalized. At September 30, 2018, and December 31, 2017, retained earnings that could be available for the payment of dividends under the most restrictive minimum capital requirements totaled \$491.8 million and \$392.5 million, respectively.

On July 29, 2016, Heartland filed a universal shelf registration statement with the SEC to register debt or equity securities. This shelf registration statement, which was effective immediately, provides Heartland with the ability to raise capital, subject to market conditions and SEC rules and limitations, if Heartland's board of directors decides to do so. This registration statement will permit Heartland, from time to time, in one or more public offerings, to offer debt securities, subordinated notes, common stock, preferred stock, rights or any combination of these securities. The amount of securities that may be offered is not specified in the registration statement, and the terms of any future offerings will be established at the time of the offering. In November 2016, Heartland offered and sold 1,379,690 shares of its common stock pursuant to this registration statement.

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 price of \$53.55 per share of common stock on February 23, 2018, the aggregate consideration was approximately \$61.4 million, which was paid by delivery of 1,000,843 shares of common stock and \$7.8 million of cash.

On May 18, 2018, Heartland completed the acquisition of Lubbock, Texas based First Bank Lubbock Bancshares, Inc., parent company of First Bank & Trust, and PrimeWest Mortgage Corporation, which is a wholly-owned subsidiary of First Bank & Trust. Based on Heartland's closing common stock price of \$55.05 per share on May 18, 2018, the aggregate consideration paid to FBLB common shareholders was \$189.9 million, with was paid by delivery of 3,350,664 shares of Heartland common stock and \$5.5 million of cash.

COMMITMENTS AND CONTRACTUAL OBLIGATIONS

Commitments and Contractual Obligations

Commitments to extend credit are agreements to lend to a customer as long as there is no violation of any condition established in the contract. Commitments generally have fixed expiration dates or other termination clauses and may require payment of a fee. Since many of the commitments are expected to expire without being drawn upon, the total commitment amounts do not necessarily represent future cash requirements. Heartland's bank subsidiaries evaluate the creditworthiness of customers to which

they extend a credit commitment on a case-by-case basis and may require collateral to secure any credit extended. The amount of collateral obtained is based upon management's credit evaluation of the counterparty. Collateral held varies but may include accounts receivable, inventory, property, plant and equipment and income-producing commercial properties. Standby letters of credit and financial guarantees are conditional commitments issued by Heartland's bank subsidiaries to guarantee the performance of a customer to a third party. Those guarantees are primarily issued to support public and private borrowing arrangements. The credit risk involved in issuing letters of credit is essentially the same as that involved in extending loan facilities to customers. At September 30, 2018, and December 31, 2017, commitments to extend credit aggregated \$2.41 billion and \$1.96 billion, respectively. Standby letters of credit aggregated \$55.9 million at September 30, 2018, and \$55.5 million at December 31, 2017.

Contractual obligations and other commitments were disclosed in Heartland's Annual Report on Form 10-K for the year ended December 31, 2017. There have been no material changes in Heartland's contractual obligations and other commitments since that report was filed.

On a consolidated basis, Heartland maintains a large balance of short-term securities that, when combined with cash from operations, Heartland believes are adequate to meet its funding obligations.

At the parent company level, routine funding requirements consist primarily of dividends paid to stockholders, debt service on revolving credit arrangements and trust preferred securities issuances, repayment requirements under other debt obligations and payments for acquisitions. The parent company obtains the funding to meet these obligations from dividends paid by its bank subsidiaries and the issuance of debt and equity securities. On June 14, 2018, Heartland's revolving credit agreement with an unaffiliated bank was increased to \$30.0 million from \$25.0 million of maximum borrowing capacity, of which none was outstanding at September 30, 2018. Heartland also has a non-revolving credit line with the same unaffiliated bank. At September 30, 2018, \$8.3 million was available on this non-revolving credit line. These credit agreements contain specific financial covenants, all of which Heartland complied with as of September 30, 2018.

The ability of Heartland to pay dividends to its stockholders is dependent upon dividends paid to Heartland by its subsidiaries. The bank subsidiaries are subject to statutory and regulatory restrictions on the amount they may pay in dividends. To maintain acceptable capital ratios at Heartland's bank subsidiaries, certain portions of their retained earnings are not available for the payment of dividends.

Heartland continues to explore opportunities to expand the size of its independent community banks. In the current banking industry environment, Heartland seeks these opportunities for growth through acquisitions. Heartland is primarily focused on possible acquisitions in the markets it currently serves, in which there would be an opportunity to increase market share, achieve efficiencies and provide greater convenience for current customers. However, Heartland may also pursue acquisitions in areas outside of its current geographic footprint. Future expenditures relating to expansion efforts, in addition to those identified above, cannot be estimated at this time.

Derivative Financial Instruments

Heartland enters into mortgage banking derivatives, which are classified as free standing derivatives. These derivatives include interest rate lock commitments provided to customers to fund certain mortgage loans to be sold into the secondary market and forward commitments for the future delivery of these loans. 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 interest rate changes on the commitments to fund these loans and on the residential mortgage loans held as available for sale. See Note 7 to the consolidated financial statements include in this Quarterly Report on Form 10-Q for additional information on Heartland's derivative financial instruments.

LIQUIDITY

Liquidity refers to Heartland's ability to maintain a cash flow that is adequate to meet maturing obligations and existing commitments, to withstand fluctuations in deposit levels, to fund operations and to provide for customers' credit needs. The liquidity of Heartland principally depends on cash flows from operating activities, investment in and maturity of assets, changes in balances of deposits and borrowings and its ability to borrow funds in the money or capital markets.

At September 30, 2018, Heartland had \$437.4 million of cash and cash equivalents, time deposits in other financial institutions of \$5.8 million and securities carried at fair value of \$2.27 billion.

Management of investing and financing activities, and market conditions, determine the level and the stability of net interest cash flows. Management attempts to mitigate the impact of changes in market interest rates to the extent possible, so that balance sheet growth is the principal determinant of growth in net interest cash flows.

Heartland's short-term borrowing balances are dependent on commercial cash management and smaller correspondent bank relationships and, as a result, will normally fluctuate. Management believes these balances, on average, to be stable sources of funds; however, management intends to rely on deposit growth and additional FHLB borrowings as needed in the future. As of September 30, 2018, Heartland had \$131.1 million of short-term borrowings outstanding.

In the event of short-term liquidity needs, Heartland's banks may purchase federal funds from each other or from correspondent banks and may also borrow from the Federal Reserve Bank. Additionally, the banks' FHLB memberships give them the ability to borrow funds for short-term and long-term purposes under a variety of programs. At September 30, 2018, Heartland had \$1.39 billion of borrowing capacity under these programs.

Heartland's revolving credit line agreement with an unaffiliated bank provides a maximum borrowing capacity of \$30.0 million. During the first nine months of 2018, Heartland had advances of \$25.0 million on this line, of which \$0 was outstanding at September 30, 2018. Heartland also has a non-revolving credit line with the same unaffiliated bank, which had \$8.3 million of borrowing capacity at September 30, 2018, of which no balance had been drawn.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market risk is the risk of loss arising from adverse changes in market prices and rates. Heartland's market risk is comprised primarily of interest rate risk resulting from its core banking activities of lending and accepting deposits. Interest rate risk measures the impact on earnings from changes in interest rates and the effect on the current fair market values of Heartland's assets, liabilities and off-balance sheet contracts. Heartland's objective is to measure this risk and manage its balance sheet to avoid unacceptable potential for economic loss.

Management continually develops and applies strategies to mitigate market risk. Exposure to market risk is reviewed on a regular basis by the asset/liability committees of Heartland's bank subsidiaries and, on a consolidated basis, by Heartland's executive management and board of directors. At least quarterly, a detailed review of the balance sheet risk profile is performed for Heartland and each of its bank subsidiaries. Included in these reviews are interest rate sensitivity analyses, which simulate changes in net interest income in response to various interest rate scenarios. These analyses consider current portfolio rates, existing maturities, repricing opportunities and market interest rates, in addition to prepayments and growth under different interest rate assumptions. Selected strategies are modeled prior to implementation to determine their effect on Heartland's interest rate risk profile and net interest income. Heartland believes its primary market risk exposures did not change significantly in the first nine months of 2018.

The core interest rate risk analysis utilized by Heartland examines the balance sheet under increasing and decreasing interest rate scenarios that are neither too modest nor too extreme. All rate changes are ramped over a 12-month horizon based upon a parallel shift in the yield curve and then maintained at those levels over the remainder of the simulation horizon. Using this approach, management is able to see the effect that both a gradual change of rates (year one) and a rate shock (year two and beyond) could have on Heartland's net interest income. Starting balances in the model reflect actual balances on the "as of" date, adjusted for material transactions. Pro-forma balances remain static. This methodology enables interest rate risk embedded within the existing balance sheet structure to be isolated from the interest rate risk often caused by growth in assets and liabilities. Due to the low interest rate environment, the simulations under a decreasing interest rate scenario were prepared using a 100 basis point shift in rates. The most recent reviews at September 30, 2018, and September 30, 2017, provided the following results, in thousands:

	2018		2017	
	Net Interest Margin	% Change From Base	Net Interest Margin	% Change From Base
Year 1				
Down 100 Basis Points	\$ 442,187	(3.07)%	\$ 343,033	(2.69)%
Base	\$ 456,192		\$ 352,502	
Up 200 Basis Points	\$ 454,513	(0.37)%	\$ 351,265	(0.35)%
Year 2				
Down 100 Basis Points	\$ 423,766	(7.11)%	\$ 326,965	(7.24)%
Base	\$ 463,765	1.66 %	\$ 354,238	0.49 %
Up 200 Basis Points	\$ 474,816	4.08 %	\$ 369,712	4.88 %

Heartland uses derivative financial instruments to manage the impact of changes in interest rates on its future interest income or interest expense. Heartland is exposed to credit-related losses in the event of nonperformance by the counterparties to these

derivative instruments, but believes it has minimized the risk of these losses by entering into the contracts with large, stable financial institutions. The estimated fair market values of these derivative instruments are presented in Note 7 to the consolidated financial statements included in this Quarterly Report on Form 10-Q.

Heartland enters into financial instruments with off balance sheet risk in the normal course of business to meet the financing needs of its customers. These financial instruments include commitments to extend credit and standby letters of credit. These instruments involve, to varying degrees, elements of credit and interest rate risk in excess of the amount recognized in the consolidated balance sheets. Commitments to extend credit are agreements to lend funds to a customer as long as there is no violation of any condition established in the contract relating to the commitment. Commitments generally have fixed expiration dates and may require collateral from the borrower. Standby letters of credit are conditional commitments issued by Heartland to guarantee the performance of a customer to a third party up to a stated amount and subject to specified terms and conditions. These commitments to extend credit and standby letters of credit are not recorded on the balance sheet until the loan is made or the letter or credit is issued.

Heartland periodically holds a securities trading portfolio that would also be subject to elements of market risk. These securities are carried on the balance sheet at fair value. At both September 30, 2018, and December 31, 2017, Heartland held no securities in its securities trading portfolio.

ITEM 4. CONTROLS AND PROCEDURES

Based on an evaluation, as of the end of the period covered by this Quarterly Report on Form 10-Q, under the supervision and with the participation of Heartland's management, including its Chief Executive Officer and Chief Financial Officer, the Chief Executive Officer and Chief Financial Officer have concluded that Heartland's disclosure controls and procedures (as defined in Rule 13a-15(e) and Rule 15d-15(e) promulgated under the Securities Exchange Act of 1934, as amended) were effective. During the quarter ended September 30, 2018, there have been no changes in Heartland's internal controls over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, as amended) that have materially affected, or are reasonably likely to materially affect, Heartland's internal control over financial reporting.

PART II

ITEM 1. LEGAL PROCEEDINGS

There are no material pending legal proceedings to which Heartland or its subsidiaries are a party other than ordinary routine litigation incidental to their respective businesses. While the ultimate outcome of current legal proceedings cannot be predicted with certainty, it is the opinion of management that the resolution of these legal actions should not have a material effect on Heartland's consolidated financial position or results of operations.

ITEM 1A. RISK FACTORS

There have been no material changes in the risk factors applicable to Heartland from those disclosed in Part I, Item 1A. "Risk Factors" in Heartland's 2017 Annual Report on Form 10-K. Please refer to that section of Heartland's Form 10-K report for disclosures regarding the risks and uncertainties related to Heartland's business.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

Heartland's board of directors has authorized management to acquire and hold up to 500,000 shares of common stock as treasury shares at any one time. Heartland and its affiliated purchasers made no purchases of its common stock during the quarter ended September 30, 2018.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable

ITEM 5. OTHER INFORMATION

None

ITEM 6. EXHIBITS

Exhibits

- [3.1](#) ⁽¹⁾ [Amendment to Certificate of Incorporation of Heartland Financial USA, Inc. filed August 28, 2018](#)
- [31.1](#) ⁽¹⁾ [Certification of Chief Executive Officer pursuant to Rule 13a-14\(a\) of the Securities Exchange Act.](#)
- [31.2](#) ⁽¹⁾ [Certification of Chief Financial Officer pursuant to Rule 13a-14\(a\) of the Securities Exchange Act.](#)
- [32.1](#) ⁽¹⁾ [Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.](#)
- [32.2](#) ⁽¹⁾ [Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.](#)
- 101 Financial statement formatted in Extensible Business Reporting Language: (i) the Consolidated Balance Sheets, (ii) the Consolidated Statements of Income, (iii) the Consolidated Statements of Comprehensive Income, (iv) the Consolidated Statements of Cash Flows, (v) the Consolidated Statements of Changes in Equity, and (vi) the Notes to Consolidated Financial Statements.

(1) Filed or furnished herewith.

SIGNATURES

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

HEARTLAND FINANCIAL USA, INC.
(Registrant)

/s/ Bruce K. Lee

By: Bruce K. Lee

President and Chief Executive Officer

(Principal Executive Officer and Duly Authorized Officer)

/s/ Bryan R. McKeag

By: Bryan R. McKeag

Executive Vice President and Chief Financial Officer

(Principal Financial Officer and Duly Authorized Officer)

/s/ Janet M. Quick

By: Janet M. Quick

Executive Vice President and Deputy Chief Financial Officer

(Principal Accounting Officer and Duly Authorized Officer)

Dated: November 6, 2018

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Section 2: EX-3.1 (EXHIBIT 3.1)

**CERTIFICATE OF AMENDMENT
OF
CERTIFICATE OF INCORPORATION
OF
HEARTLAND FINANCIAL USA, INC.**

The undersigned hereby certifies that at a meeting of the stockholders of Heartland Financial USA, Inc., a Delaware corporation (the “Company”), duly called and held on May 16, 2018, the amendments to the Company’s certificate of incorporation set forth below were duly adopted in accordance with the provisions of section 242 of the Delaware General Corporation Law, and that such amendments have not been subsequently modified or rescinded.

The first and second paragraphs of Article XII of the certificate of incorporation, as heretofore amended, were amended and restated to provide as follows:

ARTICLE XII

BOARD OF DIRECTORS

The number of directors constituting the entire board of directors shall not be less than three nor more than eleven as fixed from time to time by resolution of not less than 66 2/3% of the number of directors which immediately prior to such proposed change had been fixed, in the manner prescribed herein, by the board of directors of the corporation, provided, however, that the number of directors shall not be reduced as to shorten the term of any director at the time in office.

No person shall be eligible for election to the board of directors if such person has attained the age of seventy-two (72) years prior to the date of the stockholders' meeting at which directors are to be elected. Directors need not be stockholders of the corporation.

IN WITNESS WHEREOF, I have executed this certificate this 28th day of August, 2018.

/s/ Angela M. Kelley

Angela M. Kelley
Senior Vice President and Secretary

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Section 3: EX-31.1 (EXHIBIT 31.1)

EXHIBIT 31.1

I, Bruce K. Lee, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Heartland Financial USA, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period covered by this report based on such evaluation; and

- d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting, and;
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):
- a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize, and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 6, 2018

/s/ Bruce K. Lee

Bruce K. Lee

President and Chief Executive Officer

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Section 4: EX-31.2 (EXHIBIT 31.2)

EXHIBIT 31.2

I, Bryan R. McKeag, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Heartland Financial USA, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period covered by this report based on such evaluation; and

- d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting, and;
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):
- a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize, and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 6, 2018

/s/ Bryan R. McKeag

Bryan R. McKeag
Executive Vice President
Chief Financial Officer

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Section 5: EX-32.1 (EXHIBIT 32.1)

EXHIBIT 32.1

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

In connection with the Quarterly Report of Heartland Financial USA, Inc. (the "Company") on Form 10-Q for the quarter ending September 30, 2018, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Bruce K. Lee, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

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

/s/ Bruce K. Lee

Bruce K. Lee
President and Chief Executive Officer

Date: November 6, 2018

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Section 6: EX-32.2 (EXHIBIT 32.2)

EXHIBIT 32.2

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

In connection with the Quarterly Report of Heartland Financial USA, Inc. (the “Company”) on Form 10-Q for the quarter ending September 30, 2018, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Bryan R. McKeag, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Bryan R. McKeag

Bryan R. McKeag

Executive Vice President

Chief Financial Officer

Date: November 6, 2018

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