RED RIVER BANCSHARES, INC.

INVESTOR PRESENTATION

As of June 30, 2021

Nasdaq: RRBI

Forward-Looking Statements and Non-GAAP Information

This presentation contains forward-looking statements that are based on various facts and derived utilizing numerous important assumptions and are subject to known and unknown risks, uncertainties, and other factors that may cause Red River Bancshares, Inc.'s (the "Company," "RRBI," "Red River," "we," or "our") actual results, performance, or achievements to be materially different from any future results, performance, or achievements expressed or implied by such forward-looking statements. Forward-looking statements include the information concerning our future financial performance, business and growth strategy, projected plans and objectives, as well as projections of macroeconomic and industry trends, which are inherently unreliable due to the multiple factors that impact economic trends. Words or phrases such as "may," "should," "could," "predict," "potential," "believe," "will likely result," "expect," "continue," "will," "anticipate," "seek," "estimate," "intend," "plan," "projection," "would," and "outlook," or the negative version of those words, or such other comparable words or phrases are intended to identify forward-looking statements but are not the exclusive means of identifying such statements. These forward-looking statements are not historical facts, and are based on current expectations, estimates, and projections about the Company's industry, management's beliefs, and certain assumptions made by management, many of which, by their nature, are inherently uncertain and beyond the Company's control. Accordingly, you are cautioned that any such forward-looking statements are not guarantees of future performance and are subject to certain risks, assumptions, and uncertainties that are difficult to predict. Although the Company believes that the expectations reflected in these forward-looking statements are reasonable as of the date made, actual results may prove to be materially different from the results expressed or implied by the forward-looking statements. Unless required by law, the Company also disclaims any obligation to update any forward-looking statements. Interested parties should not place undue reliance on any forward-looking statement and should carefully consider the risks and other factors that the Company faces. For a discussion of these risks and other factors, please see the sections titled "Cautionary Note Regarding Forward-Looking Statements" and "Risk Factors" in the Company's most recent Annual Report on Form 10-K and any subsequent quarterly reports on Form 10-Q, and in other documents that we file with the SEC from time to time.

This presentation includes industry and trade association data, forecasts, and information that we have prepared based, in part, upon data, forecasts, and information obtained from independent trade associations, industry publications and surveys, government agencies, and other information publicly available to us, which information may be specific to particular markets or geographic locations. Some data is also based on our good faith estimates, which are derived from management's knowledge of the industry and independent sources. Industry publications, surveys, and forecasts generally state that the information contained therein has been obtained from sources believed to be reliable. Statements as to our market position are based on market data currently available to us. Although we believe these sources are reliable, we have not independently verified the information. While we are not aware of any misstatements regarding our industry data presented herein, our estimates involve risks and uncertainties and are subject to change based on various factors. Similarly, we believe our internal research is reliable, even though such research has not been verified by any independent sources.

This presentation contains non-GAAP financial measures, including tangible book value per share, tangible common equity to tangible assets, and PPP-adjusted metrics. The non-GAAP financial measures that we discuss in this presentation should not be considered in isolation or as a substitute for the most directly comparable or other financial measures calculated in accordance with GAAP. A reconciliation of the non-GAAP financial measures used in this presentation to the most directly comparable GAAP measures is provided in the Appendix to this presentation.

Glossary of Terms

RED RIVER BANCSHARES, INC.

- 3Q22 – Third Quarter of 2022
- 1Q21 – First Quarter of 2021
- 2Q21 – Second Quarter of 2021
- 1H21 – First Half of 2021
- 3Q21 – Third Quarter of 2021
- 4Q21 – Fourth Quarter of 2021
- 2Q20 – Second Quarter of 2020
- 3Q20 – Third Quarter of 2020
- 4Q20 – Fourth Quarter of 2020
- 1-4 FR – One-to-Four Family Residential
- AFS – Available for sale securities
- ALL – Allowance for loan losses
- bp(s) – Basis point(s)
- C&D – Construction and land development loans
- C&I – Commercial and industrial loans
- CAGR – Compound annual growth rate
- COVID-19 – Coronavirus Disease 2019
- CRE – Commercial real estate
- DDA – Noninterest-bearing demand deposit accounts
- EP – Energy portfolio
- EPS – Earnings per share
- FDIC – Federal Deposit Insurance Corporation
- FTE – Fully taxable equivalent basis
- GAAP – Generally Accepted Accounting Principles in the United States of America
- HFI – Held for investment
- HFS – Held for sale
- HTM – Held to maturity securities
- IPO – Initial public offering
- LPO/DPO – Loan production office and deposit production office
- M – Dollars in millions
- MBS – Mortgage backed securities
- MSA – Metropolitan statistical area
- NIM – Net interest margin
- NOW – Negotiable order of withdrawal
- NPA(s) – Nonperforming asset(s)
- NPL(s) – Nonperforming loans
- PPP – Paycheck Protection Program
- PPP1 – PPP First Draw
- PPP1.2 – PPP First Draw Second Round
- PPP2 – PPP Second Draw
- QTD – Quarter-to-date
- ROA – Return on average assets
- ROE – Return on average equity
- SBIC – Small Business Investment Company
- SEC – Securities and Exchange Commission
- VS. – Versus
- YTD – Year-to-date

RED RIVER BANK

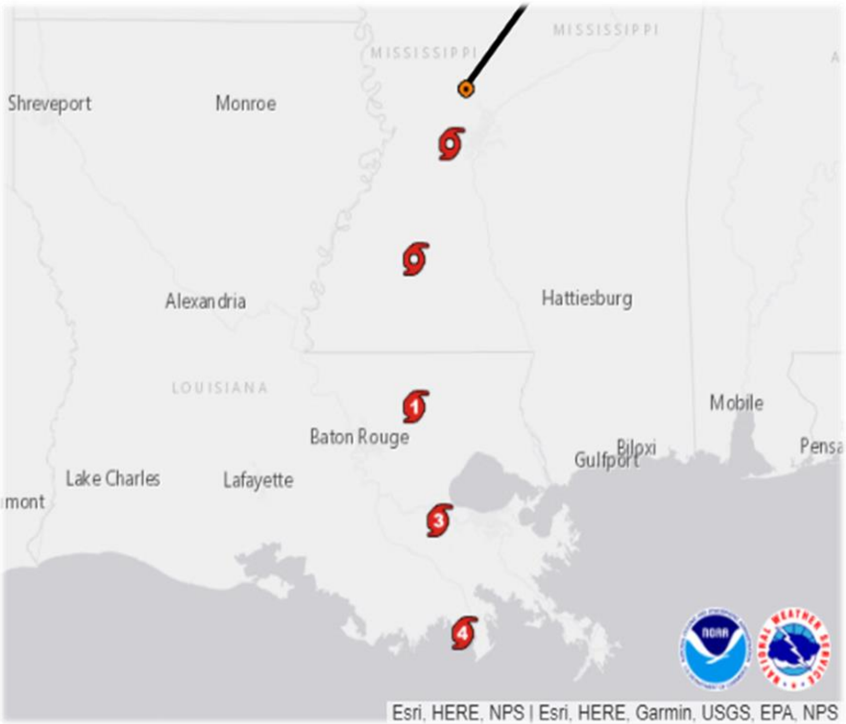
Authentic community banking focused on building personal relationships and maximizing shareholder value

- Banking
- Mortgage
- Investments

Member FDIC

Hurricane Ida Update

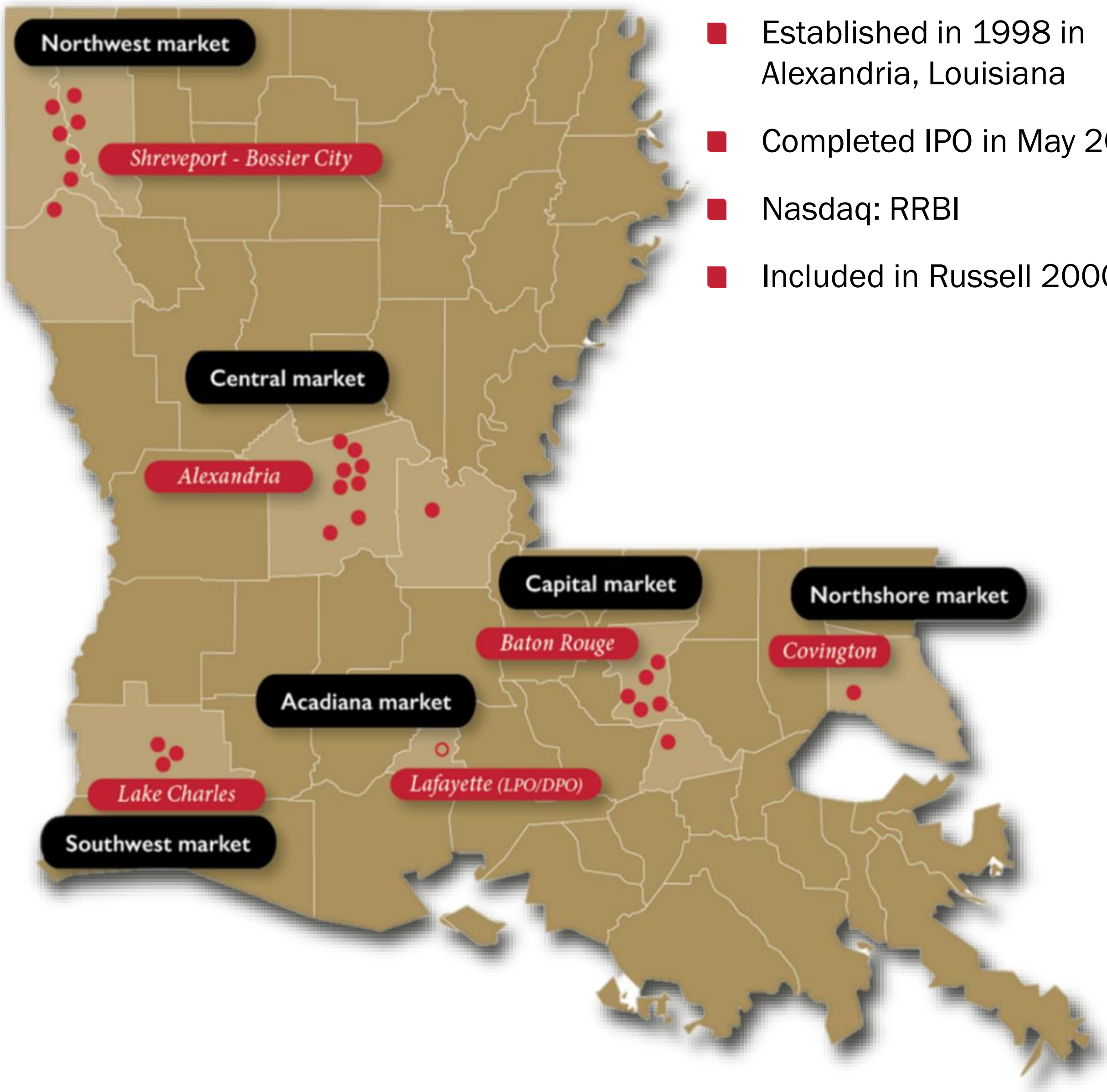
- Hurricane Ida made landfall on Sunday, August 29 in Southeast Louisiana as a Category 4 hurricane.
- No significant damage to any Red River Bank locations or impact to personnel.
- Operational systems, digital and mobile banking, and ATMs fully functional in areas with power and internet.
- All impacted markets had banking locations available to customers on Tuesday, August 31.
- Assessments for damage and impact to customers are under way; however, based on preliminary reports, no major issues are anticipated.



Source: National Oceanic and Atmospheric Administration

Company Overview

RED RIVER BANCSHARES, INC.

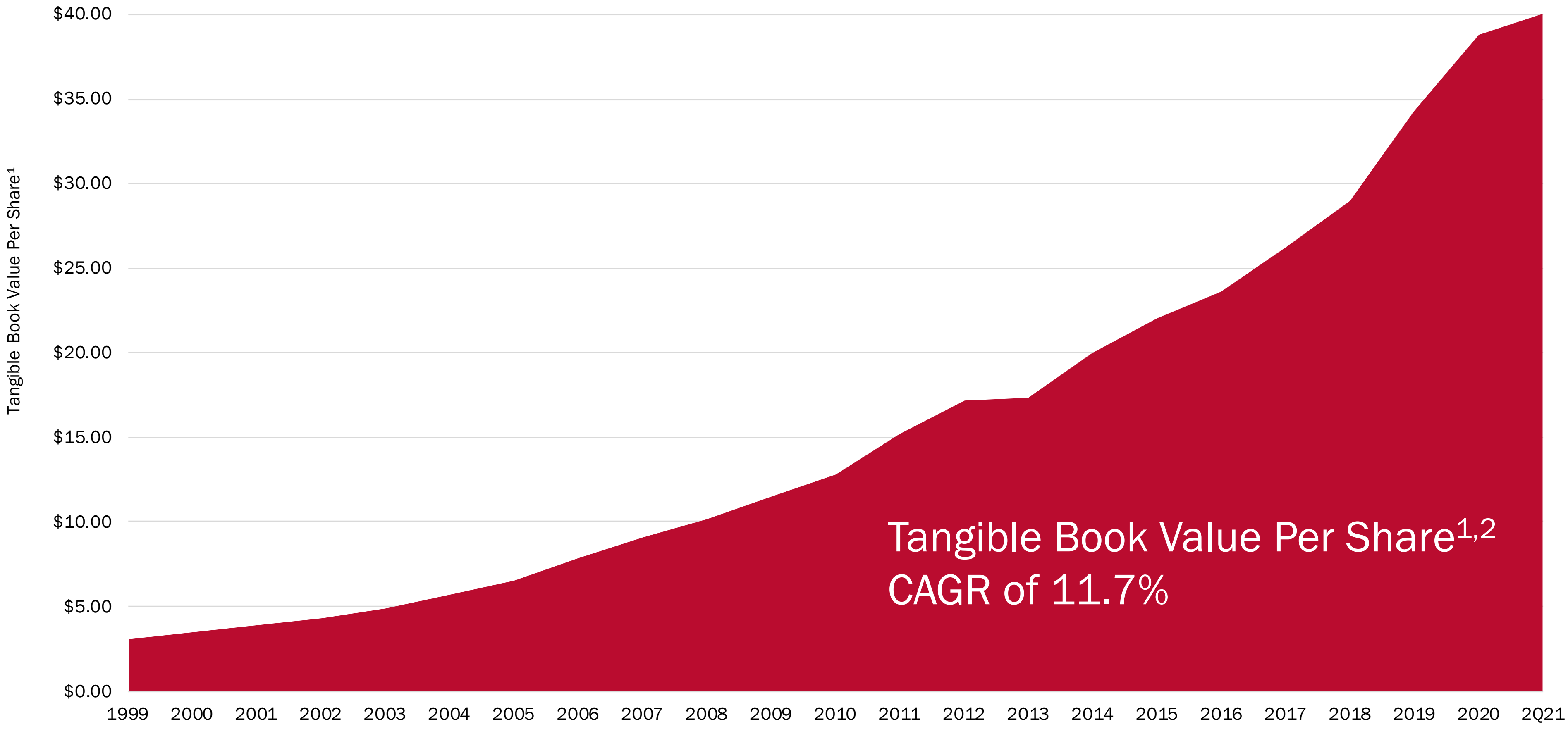


- Established in 1998 in Alexandria, Louisiana
- Completed IPO in May 2019
- Nasdaq: RRBI
- Included in Russell 2000 Index

- As of June 30, 2021:
  - Assets = \$2.88 billion
  - Loans HFI = \$1.60 billion
  - Deposits = \$2.57 billion
  - Market capitalization = \$368.0 million
- Ownership
  - Insiders = 33%
  - Institutions = 18%[1]
  - Public and other = 49%
- Third largest Louisiana headquartered bank based on assets as of June 30, 2021
- Included in Forbes Magazine 2021 Best-In-State Banks in America
- Ranked 37th out of 123 public banks with \$1 - \$5 billion in assets by Bank Director Magazine 2021 Bank Performance Scorecard

[1]Source: Based on filings made with the SEC, as reported by S&P Capital IQ Pro

Tangible Book Value Growth



Note: Each year on the Tangible Book Value Graph represents year-end financial data.
[1]Non-GAAP measure. See "Forward-Looking Statements and Non-GAAP Information" on slide 2 and "Non-GAAP Reconciliation" slides in the Appendix for additional information.
[2]Adjusted for 2-for-1 stock split with a record date of October 1, 2018 and 15-for-1 stock split with a record date of November 30, 2005.

Company Strengths

- Consistent, long-term track record of financial results and steady growth
- Conservative credit culture with solid asset quality
- Stable, low cost core deposit base
- Strategic banking center network
  - 26 banking centers and 1 LPO/DPO in Louisiana
  - Average deposits per center = $102.8 million
  - Average staff per center = 5
- Strong capital position
  - Consistent quarterly dividends
  - Stock repurchase program in place
- Continuity of leadership – four of our top executives are part of the founding management team

Growth Strategies

RED RIVER BANCSHARES, INC.

De Novo Growth Strategies

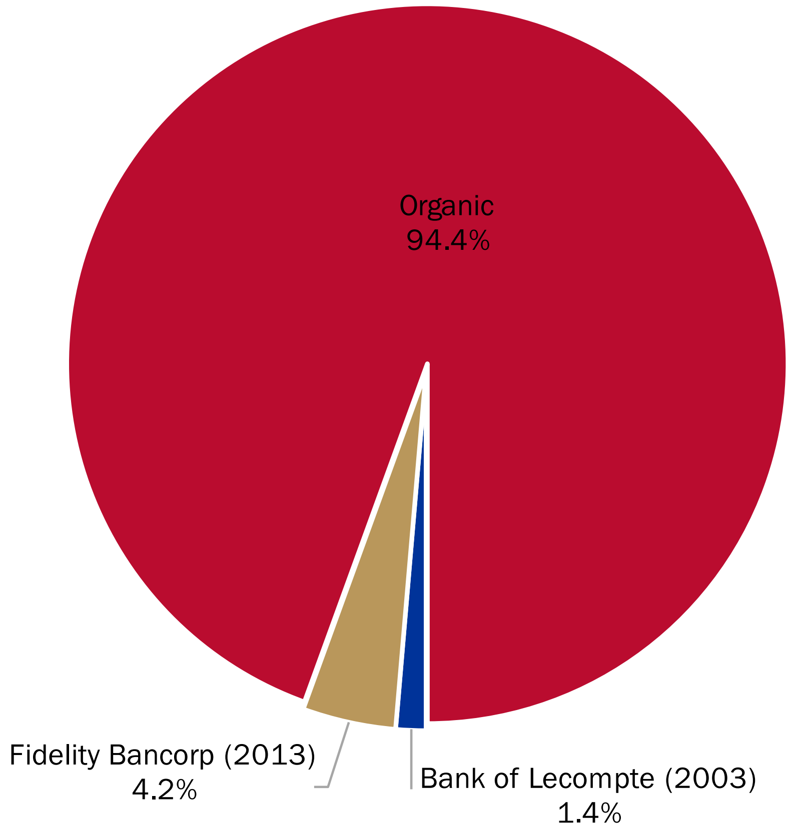
- Concentrate on urban markets with growth potential
- Focused on markets where market share is held by large national and regional banks
- Target markets with significant disruption by competitors
- Hire experienced leadership from the market to build a team
- Offer an authentic, full-service community bank experience

Disciplined Acquisition Strategy

- Successfully integrated two acquisitions and positioned to capitalize on future opportunities

Historical Asset Growth Method

As of June 30, 2021



Recent Expansion Highlights

RED RIVER BANCSHARES, INC.

Lake Charles Banking Center

Lafayette Banking Center

Southwest Market – Lake Charles, Louisiana

- 4Q20 – Purchased an existing banking center in Lake Charles, Louisiana.
- 3Q21 – Remodeled and opened the third location in the Southwest market as the 26th Red River Bank banking center on July 6, 2021.

Acadiana Market – Lafayette, Louisiana

- 3Q20 – Entered Acadiana Market. Opened with a new loan and deposit production office. Hired an experienced banker as market president.
- 4Q20 – Purchased an existing banking center in Lafayette, Louisiana.
- 4Q21 – Planned opening as the 27th Red River Bank banking center.

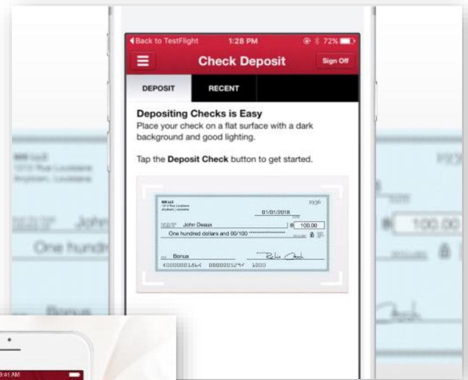
New Orleans Market – New Orleans, Louisiana

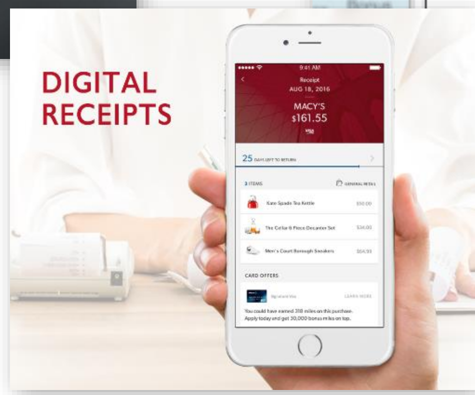
- 3Q21 – Hired an experienced banker with knowledge of the New Orleans market as market president.

Digital Banking Strategy

RED RIVER BANCSHARES, INC.

- Providing our customers with the digital tools to manage their personal and business banking needs
- Providing a full suite of treasury management systems and services
- Also supplying access to knowledgeable bankers in addition to digital platforms allowing customers to choose the best option
- Expanding our web-based services
- Continuing to build out our digital tools for customers through multiple platforms
- Automating back office functions that are expected to streamline operations, improve efficiency, and minimize errors, including a new loan processing system to provide customers with an online, digital loan application process
- In 2Q21, invested in JAM FINTOP Banktech, L.P. fund to strategically develop technology systems





Competitive Landscape

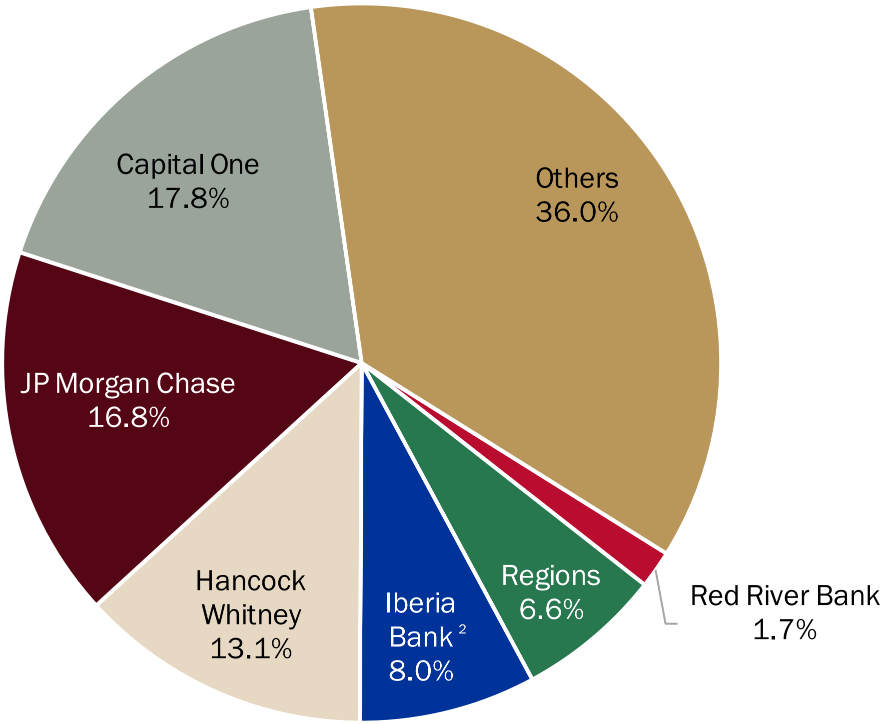
RED RIVER BANCSHARES, INC.

- Red River Bank has 1.7% of Louisiana deposits (as of June 30, 2020)[1]
- 62.3% of deposits in the state are held by large national or regional banks

Deposits in Louisiana[1]

$124.1 billion

As of June 30, 2020



Deposit Market Share

As of June 30, 2020

Red River Bank Markets	1st Banking Center Opened	Deposits ($M)	Banking Centers	Market Rank	Deposit Market Share[1]
Central	1999	$ 1,257	9	1st	36.2%
Northwest	2006	$ 426	7	9th	4.8%
Capital	2013	$ 387	6	8th	1.9%
Southwest	2018	$ 14	2	16th	0.3%
Northshore	2019	$ 10	1	24th	0.2%
Louisiana	1999	$ 2,094	25	8th	1.7%

[1]Source: FDIC, Deposits as of June 30, 2020.
[2]IberiaBank merged with First Horizon Bank, headquartered in Memphis, TN, in July 2020.

Second Quarter 2021 Financial Results

RED RIVER BANCSHARES, INC.

- Quarterly net income increased $174,000 from prior quarter to $8.2 million for 2Q21
  - Provision for loan losses expense decreased $1.3 million
  - PPP loan income decreased $1.1 million
- EPS (diluted) was $1.13 and ROA was 1.15% for 2Q21
- Assets increased 2.0%, or $57.8 million, to $2.88 billion
- Non-PPP loans increased 2.3%, or $34.7 million, to $1.52 billion
- PPP loans decreased 30.5%, or $36.4 million, to $83.0 million due to forgiveness of PPP1 loans outpacing issuance of PPP2 loans
- Deposits increased 2.2%, or $54.3 million, to $2.57 billion
- NIM FTE decreased 22 bps to 2.54%
- NPAs to assets ratio improved to 0.11%
- Allowance for loan losses to loans HFI ratio = 1.22%
  - Allowance for loan losses to non-PPP loans HFI ratio = 1.28%[1]
- Active stock repurchase program. Repurchased 21,653 shares of common stock. Average buyback price = $53.53

(dollars in thousands, except per share data)	2Q21	1Q21	2Q20
Net Income	$ 8,239	$ 8,065	$ 6,854
EPS, Diluted	$ 1.13	$ 1.10	$ 0.93
ROA	1.15%	1.20%	1.20%
ROE	11.41%	11.36%	10.30%
NIM FTE	2.54%	2.76%	3.12%
Efficiency Ratio	56.62%	54.02%	56.50%
Assets	$2,878,476	$2,820,672	$2,361,866
Loans HFI	$1,600,388	$1,602,086	$1,615,298
Deposits	$2,569,599	$2,515,275	$2,069,322
Stockholders' Equity	$ 292,924	$ 284,911	$ 271,117
Tangible Common Equity[1]	$ 291,378	$ 283,365	$ 269,571
Stockholders' Equity to Assets	10.18%	10.10%	11.48%
Tangible Common Equity to Tangible Assets[1]	10.13%	10.05%	11.42%
Leverage Ratio	10.13%	10.43%	11.52%
Total Risk-Based Capital Ratio	19.10%	18.87%	18.22%
NPAs to Assets	0.11%	0.13%	0.18%
Net Charge-offs to Average Loans	0.01%	0.00%	0.06%
Allowance for Loan Losses to Loans HFI	1.22%	1.21%	0.92%
Loans HFI to Deposits Ratio	62.28%	63.69%	78.06%
Noninterest-bearing Deposits to Deposits Ratio	40.14%	40.37%	41.48%
Book Value Per Share	$ 40.21	$ 38.99	$ 37.03
Tangible Book Value Per Share[1]	$ 40.00	$ 38.78	$ 36.81
Cash Dividends Per Share	$ 0.07	$ 0.07	$ 0.06

[1] Non-GAAP measure. See “Forward-Looking Statements and Non-GAAP Information” on slide 2 and “Non-GAAP Reconciliation” slides in the Appendix for additional information.

June 30, 2021 Year-to-Date Financial Results

RED RIVER BANCSHARES, INC.

- Assets increased 8.9%, or $235.8 million, to $2.88 billion
  - Non-PPP loans increased 3.2%, or $47.4 million, to $1.52 billion
  - PPP loans decreased 30.0%, or $35.5 million, to $83.0 million
- Deposits increased 9.8%, or $229.2 million, to $2.57 billion
- Year-to-date net income increased 20.0%, or $2.7 million, to $16.3 million compared to same period in 2020
- EPS (diluted) was $2.22 and ROA was 1.18%
- NIM FTE decreased 62 bps to 2.64%

(dollars in thousands, except per share data)	6/30/21	12/31/20
Assets	$ 2,878,476	$ 2,642,634
Loans HFI	$ 1,600,388	$ 1,588,446
Deposits	$ 2,569,599	$ 2,340,360
Stockholders' Equity	$ 292,924	$ 285,478
Tangible Common Equity[1]	$ 291,378	$ 283,932
Stockholders' Equity to Assets	10.18%	10.80%
Tangible Common Equity to Tangible Assets[1]	10.13%	10.75%
Leverage Ratio	10.13%	10.92%
Total Risk-Based Capital Ratio	19.10%	18.68%
NPAs to Assets	0.11%	0.16%
Allowance for Loan Losses to Loans HFI	1.22%	1.13%
Loans HFI to Deposits Ratio	62.28%	67.87%
Noninterest-bearing Deposits to Deposits Ratio	40.14%	40.32%
Book Value Per Share	$ 40.21	$ 38.97
Tangible Book Value Per Share[1]	$ 40.00	$ 38.76

(dollars in thousands, except per share data)	YTD 6/30/21	YTD 6/30/20
Net Income	$ 16,304	$ 13,599
EPS, Diluted	$ 2.22	$ 1.85
ROA	1.18%	1.27%
ROE	11.38%	10.41%
NIM FTE	2.64%	3.26%
Efficiency Ratio	55.30%	56.93%
Net Charge-offs to Average Loans	0.01%	0.07%
Cash Dividends Per Share	$ 0.14	$ 0.12

[1] Non-GAAP measure. See “Forward-Looking Statements and Non-GAAP Information” on slide 2 and “Non-GAAP Reconciliation” slides in the Appendix for additional information.

Conservative Balance Sheet

RED RIVER BANCSHARES, INC.

- Increasing liquidity
  - Overnight liquidity to assets = 22.0%
- Conservative securities portfolio
  - Securities AFS to assets = 17.8%
- Noninterest-bearing deposits to total deposits = 40.14%
- Loans HFI to Deposits = 62.28%
- No brokered deposits
- No subordinated debt or other borrowings
- Well capitalized with 10.13% leverage ratio
- Quarterly dividend consistent at $0.07 per share for 2Q21
- Active stock repurchase programs
  - $3.0 million August 2020 program completed
  - New $5.0 million program effective September 1, 2021

Balance Sheet

(dollars in thousands)		As of June 30, 2021
Assets		
Cash and due from banks	$	33,728
Interest-bearing deposits in other banks		633,744
Securities AFS		512,012
Loans HFI		1,600,388
Loans HFS		12,291
Allowance for loan losses		(19,460)
Other assets		105,773
Total Assets	**$**	**2,878,476**
Liabilities		
Noninterest-bearing deposits	$	1,031,486
Interest-bearing deposits		1,538,113
Total Deposits		2,569,599
Other liabilities		15,953
Total Liabilities	**$**	**2,585,552**
Total Stockholders' Equity		292,924
Total Liabilities and Stockholders' Equity	**$**	**2,878,476**

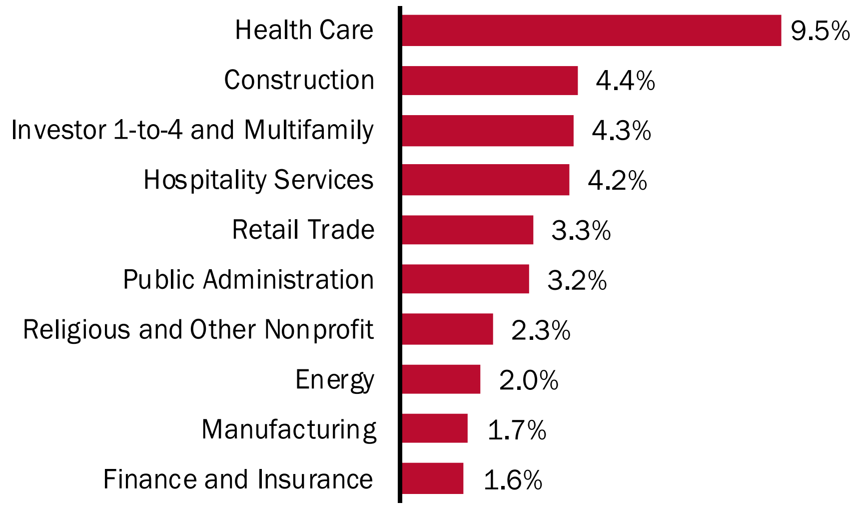
Loan Portfolio Overview

RED RIVER BANCSHARES, INC.

- Non-PPP loans totaled $1.52 billion as of June 30, 2021
- Broad diversification by industry
- Highest industry concentration is in health care at 9.5% (excluding PPP loans)[1]
- Loans indexed to LIBOR were $93.4 million, or 6.2%, of non-PPP loans HFI[1]

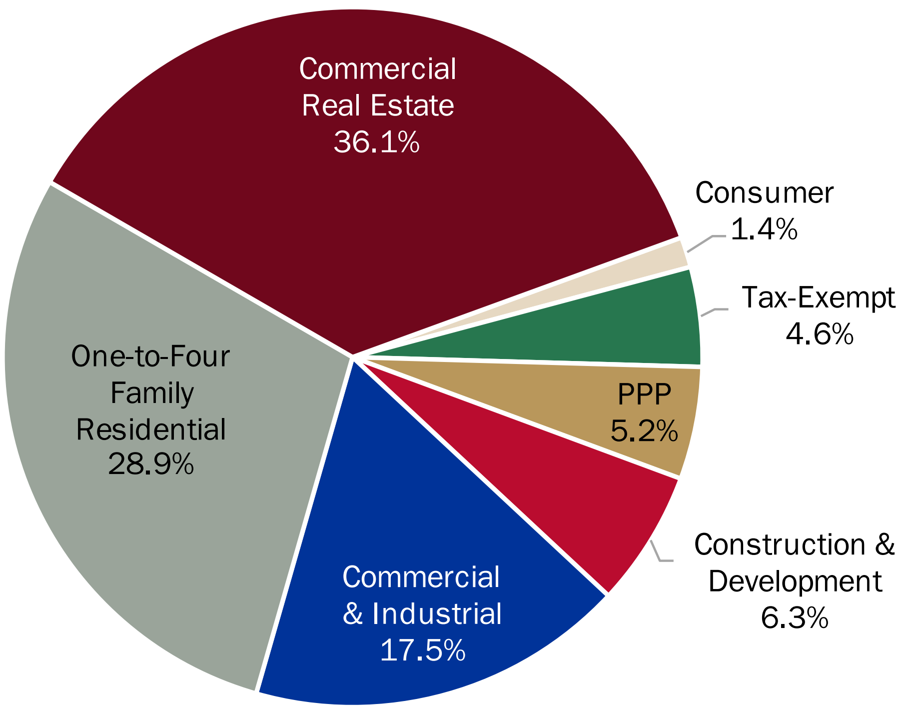
Largest Industry Concentrations

As of June 30, 2021 (excluding PPP Loans)[1]



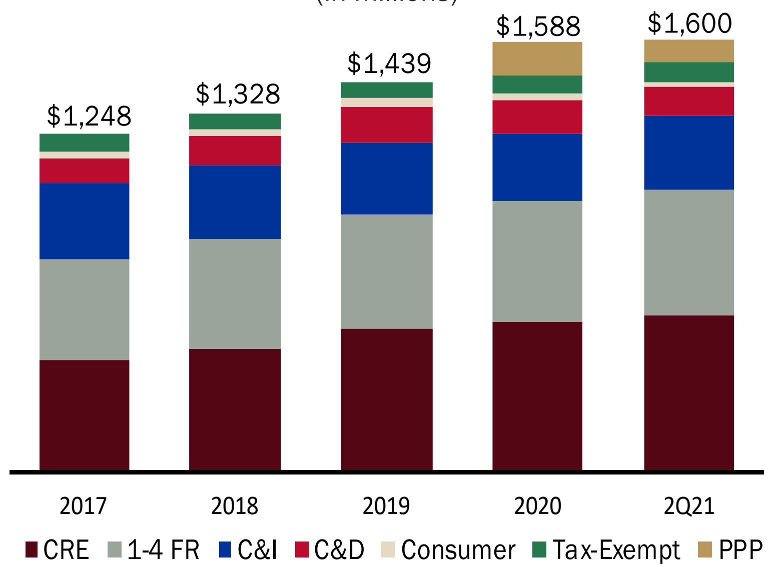
Loans HFI Mix

As of June 30, 2021



Total Loans HFI

(in millions)



[1]Non-GAAP measure. See "Forward-Looking Statements and Non-GAAP Information" on slide 2 and "Non-GAAP Reconciliation" slides in the Appendix for additional information.

Loans By Market

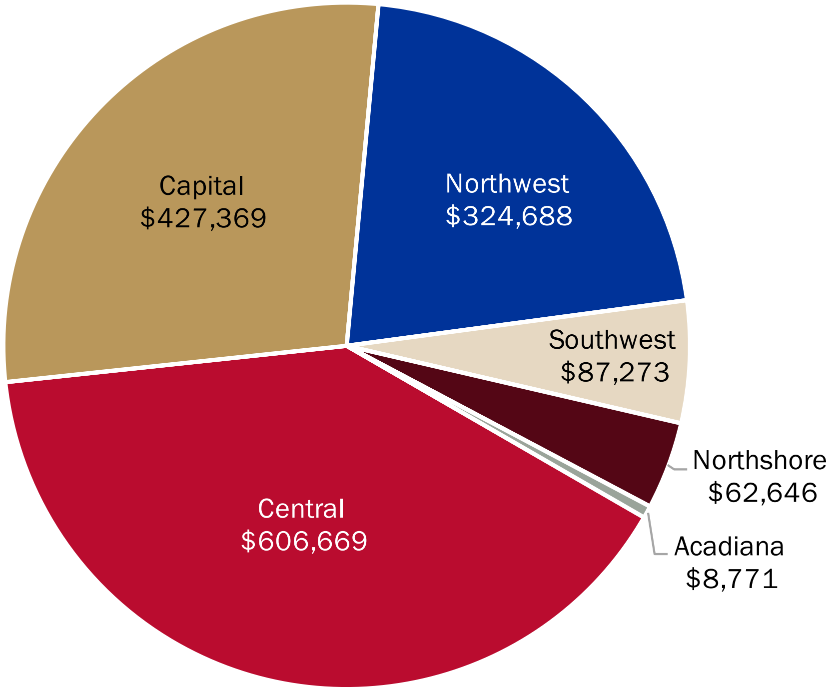
- Focus on major markets and MSA's in Louisiana
- Five of our six markets have unemployment rates below state of Louisiana average
- Three of our markets have unemployment rates below national average

Non-PPP Loans HFI[1]

Originated by geographic market

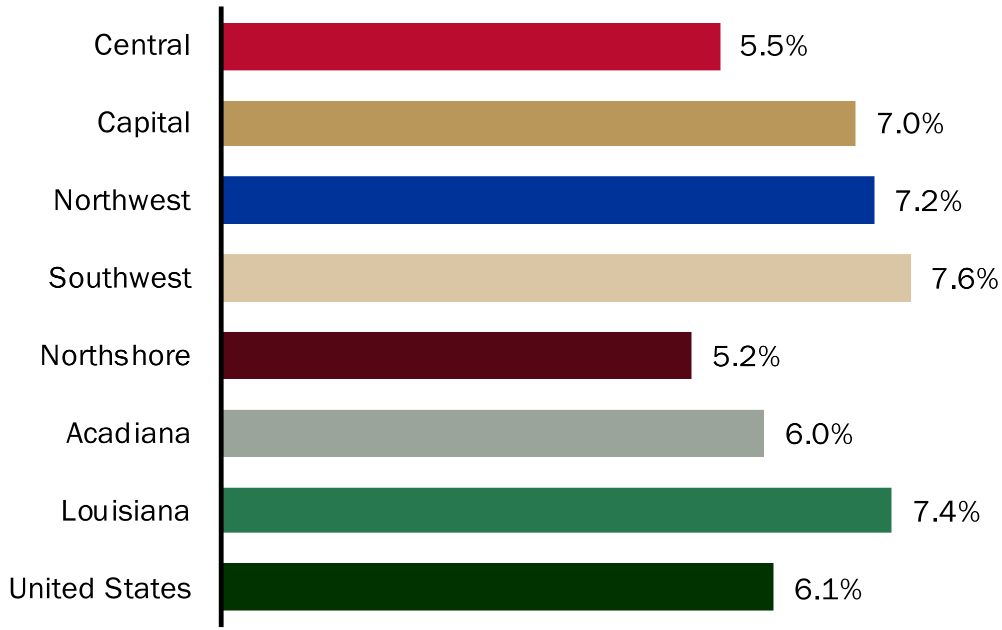
As of June 30, 2021

(in thousands)



Unemployment Rate

As of June 2021[2]



[1]Non-GAAP measure. See "Forward-Looking Statements and Non-GAAP Information" on slide 2 and "Non-GAAP Reconciliation" slides in the Appendix for additional information.

[2]Source: Louisiana Workforce Commission data for June 2021

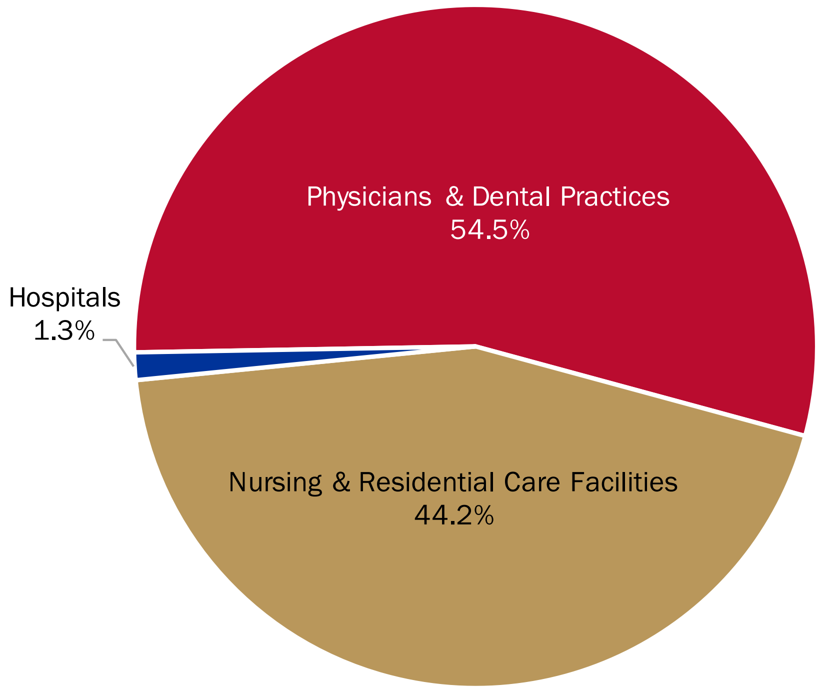
Health Care Loans

RED RIVER BANCSHARES, INC.

- Health care loans as of June 30, 2021, totaled $144.0 million, or 9.5%, of non-PPP loans HFI[1]
- Largest industry concentration
- No shared national credits, real estate investment trusts, or assisted living facilities
- Skilled nursing care facilities operate under a certificate of need system in Louisiana
- Average loan size = $307,000

Health Care Loans by Subtype

As of June 30, 2021

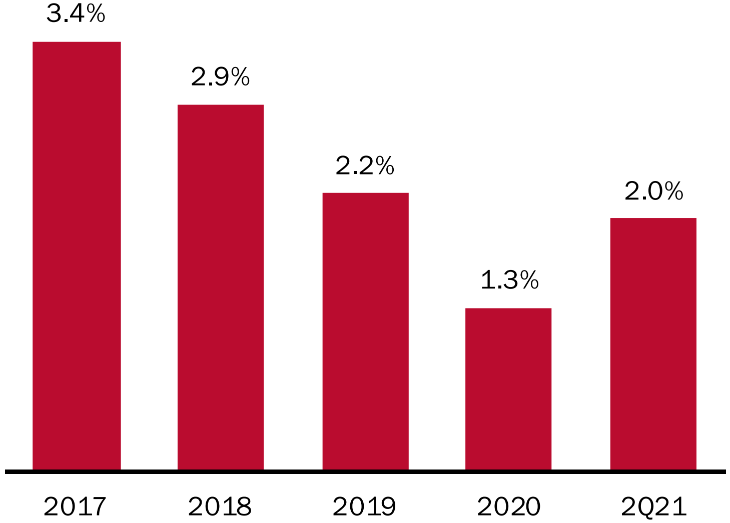


[1]Non-GAAP measure. See "Forward-Looking Statements and Non-GAAP Information" on slide 2 and "Non-GAAP Reconciliation" slides in the Appendix for additional information.

Energy Portfolio Loans

- EP loans as of June 30, 2021 totaled $30.1 million, or 2.0%, of non-PPP loans HFI[1]
- Average loan size = $626,000
- Charge-offs since 2017 were $2.8 million
- As of June 30, 2021, nonperforming energy loans to total energy loans = 2.6%
- No reserve-based lending

EP / Non-PPP Loans HFI[1]

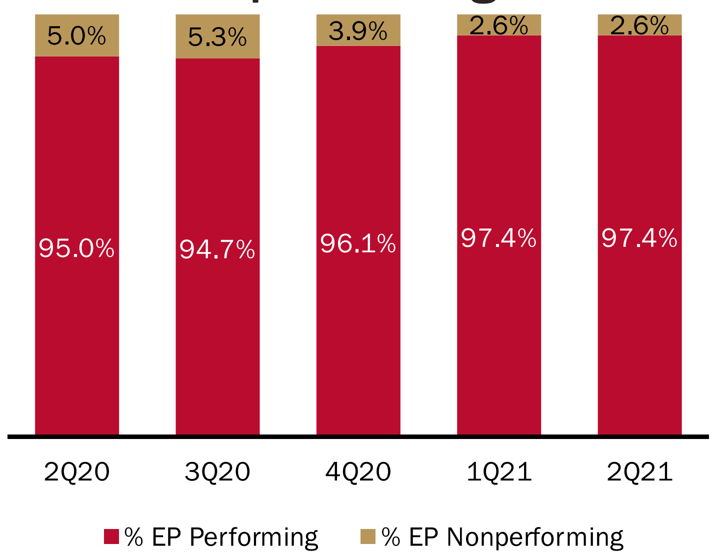


Energy Portfolio

As of June 30, 2021

	Originated by					
	Red River Bank		Other Banks		Total	
(dollars in thousands)	Amount	Percent	Amount	Percent	Amount	Percent
Performing	$28,337	94.3%	$ 938	3.1%	$29,275	97.4%
Nonperforming	-	0.0%	786	2.6%	786	2.6%
Total EP	$28,337	94.3%	$ 1,724	5.7%	$30,061	100.0%
Not criticized	$22,501	74.9%	$ 938	3.1%	$23,439	78.0%
Criticized	5,836	19.4%	786	2.6%	6,622	22.0%
Total EP	$28,337	94.3%	$ 1,724	5.7%	$30,061	100.0%

Performing vs. Nonperforming EP

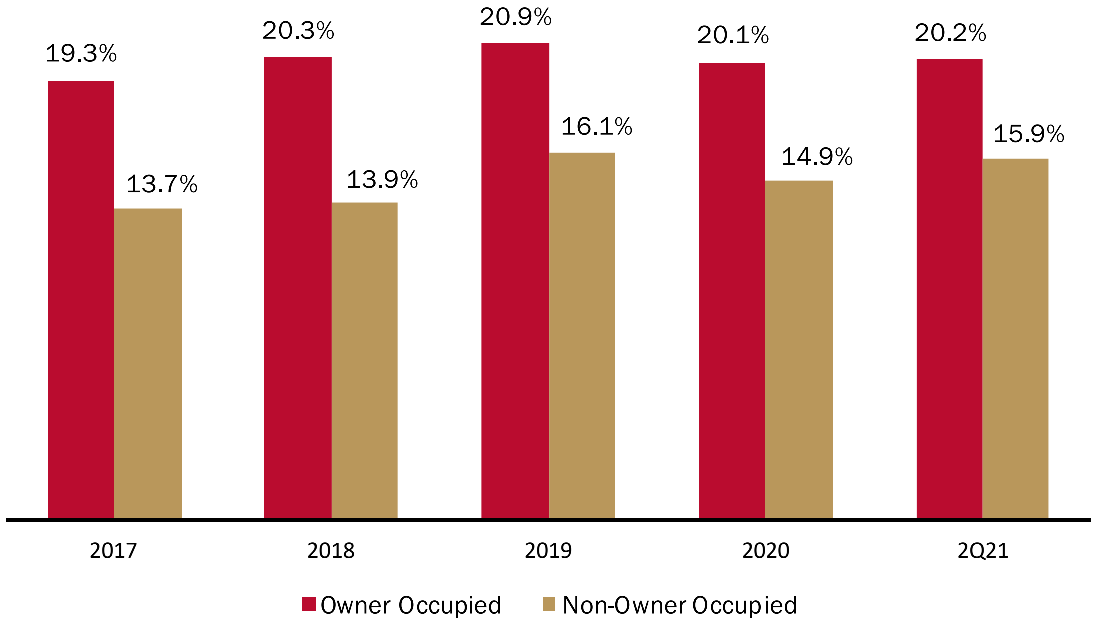


[1]Non-GAAP measure. See "Forward-Looking Statements and Non-GAAP Information" on slide 2 and "Non-GAAP Reconciliation" slides in the Appendix for additional information.

Commercial Real Estate Loans

- CRE loans were $578.0 million, or 36.1%, of loans HFI as June 30, 2021
- Low levels of CRE relative to state, regional, and national peers
- CRE criticized loans were $4.3 million, or 0.7% of total CRE loans
- CRE NPLs were $747,000, or 0.1% of total CRE loans
- CRE concentration ratios as a % of risk-based capital are well below bank regulatory guidelines
  - C&D Ratio = 35.0%
  - CRE Ratio = 123.7%

CRE / Loans HFI



Paycheck Protection Program

RED RIVER BANCSHARES, INC.

2Q21

- Forgiveness of PPP1 loans outpaced issuance of PPP2 loans
- PPP loan income was $1.1 million for 2Q21 and $2.1 million for 1Q21

PPP First Draw (PPP1 and PPP1.2) Loans

- PPP1 forgiveness and income decreased in 2Q21 vs. 1Q21
- As of June 30, 2021, loan payments for 91.2% of the 1,384 PPP1 loans and 87.9% of the $199.0 million originated have been received
- PPP1 loans - 95.8% of the $7.0 million original deferred fees have been recognized
- $296,000 in deferred fees remain outstanding
- As of August 31, 2021, loan payments for 99.6% of the $199.0 million of PPP1 loans have been received
- Expect PPP1 loan forgiveness to be completed in 3Q21

PPP Second Draw (PPP 2) Loans

- Completed issuance of PPP2 loans in 2Q21
- As of June 30, 2021, 488 loans originated for $58.3 million with an average size of $119,000
- Loan fees of $2.7 million are deferred and amortized over 60-month loan term or until payoff
    - $2.5 million in deferred fees remain outstanding
- Expect PPP2 loan forgiveness to occur between 3Q21 and 3Q22

Originated PPP Loans

Through June 30, 2021

(dollars in thousands)	PPP1	PPP1.2	PPP2	Total
Amount	$ 199,047	$ 3,486	$ 58,261	$ 260,794
Number of Loans	1,384	16	488	1,888
Deferred Fees	$ 7,014	$ 85	$ 2,707	$ 9,806
Average Size	$ 144	$ 218	$ 119	$ 138
Gross Fee Yield (24 mo)	3.52%			
Gross Fee Yield (60 mo)		2.43%	4.65%	

Outstanding PPP Loan Status

As of June 30, 2021

(dollars in thousands)	PPP1	PPP1.2	PPP2	Total
Amount	$ 24,111	$ 3,486	$ 58,261	$ 85,858
Deferred Fees	$ 296	$ 80	$ 2,510	$ 2,886
Number of Loans	122	16	488	626

Total PPP Loans

(dollars in thousands)

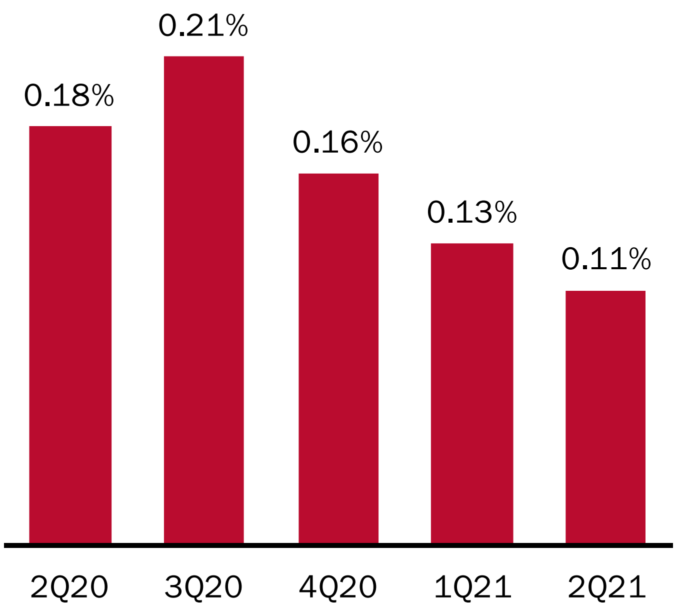
	Average Balance	PPP Income	Yield
2Q20	$154,400	$1,153	2.99%
3Q20	$193,038	$1,386	2.84%
4Q20	$161,109	$3,023	7.45%
1Q21	$108,334	$2,132	7.97%
2Q21	$109,182	$1,062	3.89%

Asset Quality

RED RIVER BANCSHARES, INC.

- NPAs – decreased in 2021 due to payoff of nonaccrual loans, partially offset by increase in foreclosed assets
- Provision for loan loss expense - decreased compared to 1Q21. Favorable asset quality metrics; pandemic-related economic restrictions eased
- The need for reserve build has diminished
- ALL to non-PPP loans HFI[1] = 1.28%

NPAs / Total Assets



Asset Quality Metrics

As of and for the quarter ended

(dollars in thousands)	2Q20	3Q20	4Q20	1Q21	2Q21
NPLs	$ 3,442	$ 4,387	$ 3,310	$ 2,811	$ 2,027
NPLs to Loans HFI	0.21%	0.27%	0.21%	0.18%	0.13%
NPLs to Non-PPP Loans HFI[1]	0.24%	0.30%	0.23%	0.19%	0.13%
NPAs	$ 4,294	$ 5,215	$ 4,206	$ 3,604	$ 3,086
NPAs to Total Assets	0.18%	0.21%	0.16%	0.13%	0.11%
Criticized Loans (CL)	$17,550	$18,295	$12,607	$12,482	$11,277
CLs to Loans HFI	1.09%	1.11%	0.79%	0.78%	0.70%
Provision Expense	$ 1,525	$ 1,590	$ 2,675	$ 1,450	$ 150
ALL to Loans HFI	0.92%	0.98%	1.13%	1.21%	1.22%
ALL to Non-PPP Loans HFI[1]	1.05%	1.11%	1.22%	1.31%	1.28%
Net Charge-offs to Average Loans	0.06%	0.02%	0.06%	0.00%	0.01%

[1]Non-GAAP measure. See "Forward-Looking Statements and Non-GAAP Information" on slide 2 and "Non-GAAP Reconciliation" slides in the Appendix for additional information.

Loan Sectors with Heightened Risk due to COVID-19

Red River Bancshares, Inc.

- Active deferrals, all in the hospitality services sector, continue to decline and were $8.1 million, or 0.5% of non-PPP loans HFI[1] as of June 30, 2021
- Restaurant portfolio has performed well due to the high proportion of limited service restaurant clients
- Full service dine-in restaurant clients have adjusted to carryout and delivery, in addition to supporting their operations through PPP loans and funds from the Restaurant Revitalization Fund
- Loans collateralized by non-owner occupied properties leased to retail establishments totaled $42.5 million, or 2.8% of non-PPP loans HFI[1]

Loans

As of June 30, 2021

(dollars in thousands)	Amount	% Non-PPP Loans HFI[1]
By Industry		
Hospitality services:		
Hotels and other overnight lodging	$ 26,356	1.7%
Restaurants - full service	13,947	0.9%
Restaurants - limited service	16,442	1.1%
Other	6,536	0.5%
Total hospitality services	$ 63,281	4.2%
Average size	$ 514	
Retail trade (excluding auto dealers)	$ 20,632	1.4%
Average size	$ 154	
Energy	$ 30,061	2.0%
Average size	$ 626	
Total sectors	$ 113,974	7.6%

[1]Non-GAAP measure. See “Forward-Looking Statements and Non-GAAP Information” on slide 2 and “Non-GAAP Reconciliation” slides in the Appendix for additional information.

Securities Portfolio - Conservative

RED RIVER BANCSHARES, INC.

Key metrics

- Securities AFS portfolio totaled $512.0 million as of June 30, 2021
- 17.8% of assets
- 2Q21 FTE yield = 1.86%
- Effective duration = 4.1 years
- Average life = 5.3 years

Investment Activity 2Q21

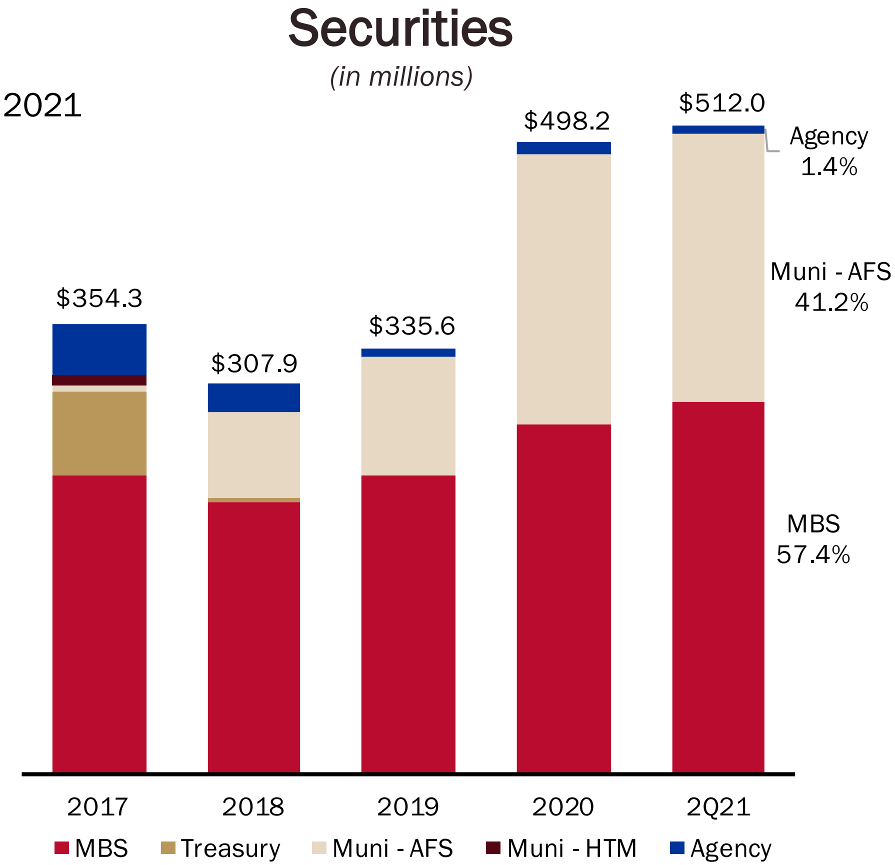
- Performed a restructuring transaction to improve the structure and yield of the portfolio
- Purchases were primarily short duration MBS with an average yield of 1.11%

Key strengths of municipal portfolio

- Geographic diversification
- 66.0% of municipals carry support through state enhancements, insurance, or escrowed collateral
- Credit quality is strong with 100% of the portfolio either having an overall rating of “A” or better, or is pre-refunded

Future Strategies

- Redeploy investment cash flows and PPP loan forgiveness payments into the securities portfolio while balancing price risk and yield
- Focused on transactions to reduce extension risk, shorten duration, and improve yield

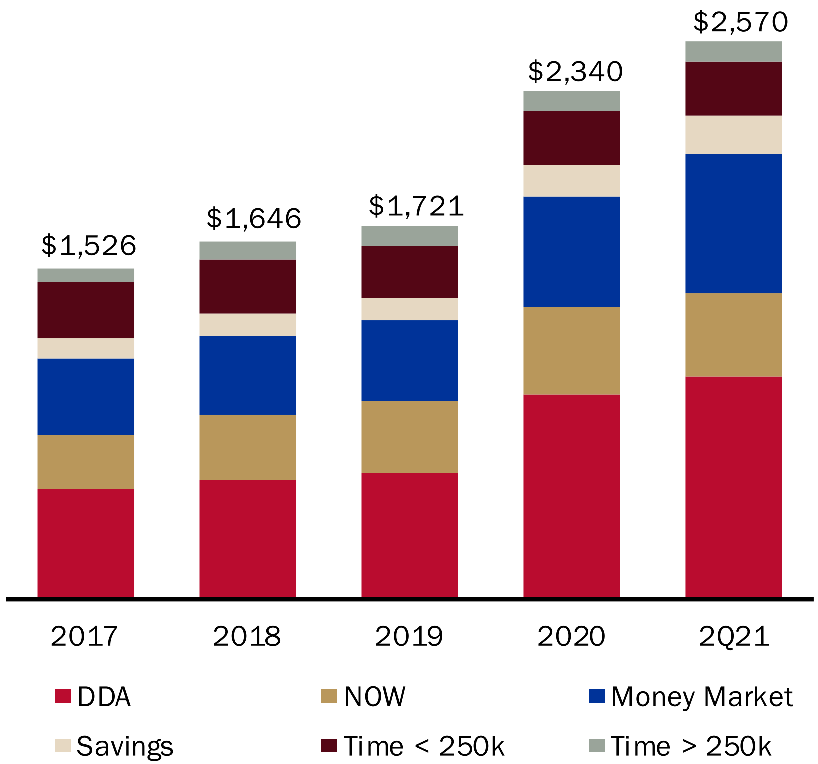


Attractive Core Deposit Base

- Deposits increased $54.3 million, or 2.2%, in 2Q21 due to customers maintaining higher deposit balances
- Cost of deposits was 0.22% for 2Q21; down from 1Q21 due to an eight bp decrease in the rate on interest-bearing deposits
- No brokered deposits

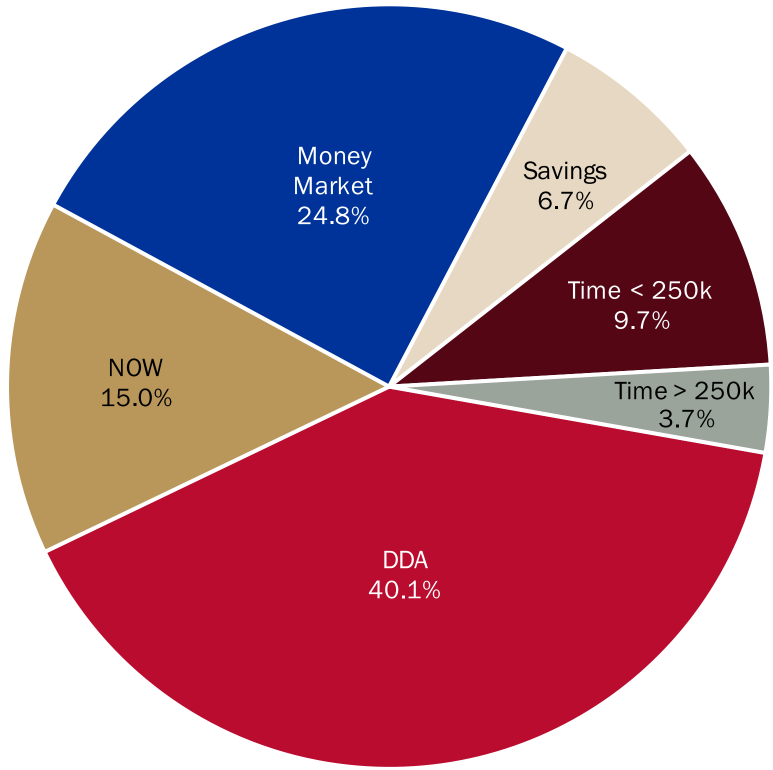
Total Deposits

(in millions)



Deposit Mix

As of June 30, 2021

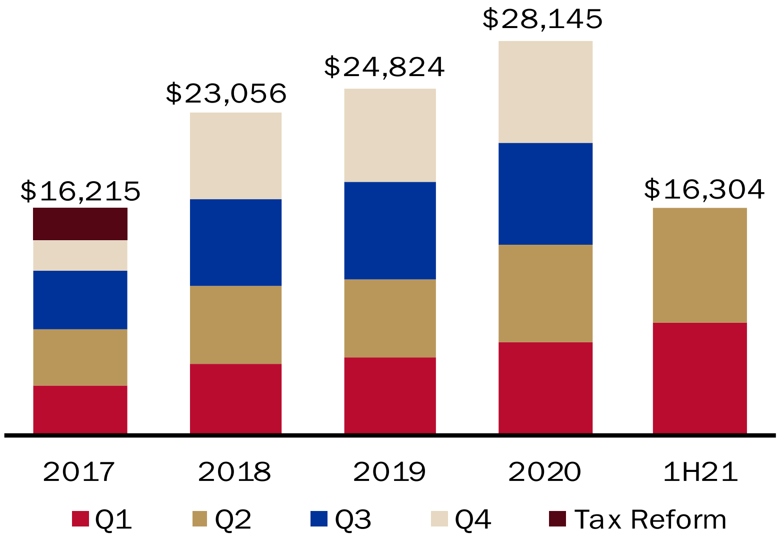


Profitability Trends

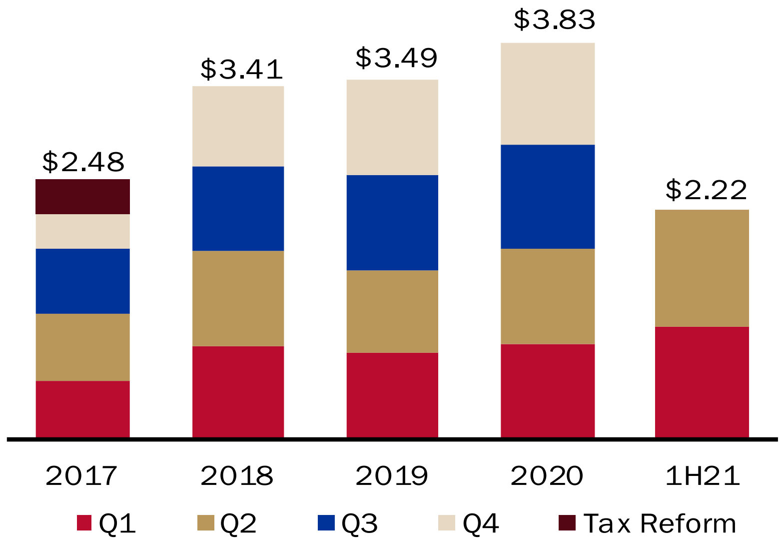
RED RIVER BANCSHARES, INC.

Net Income[1]

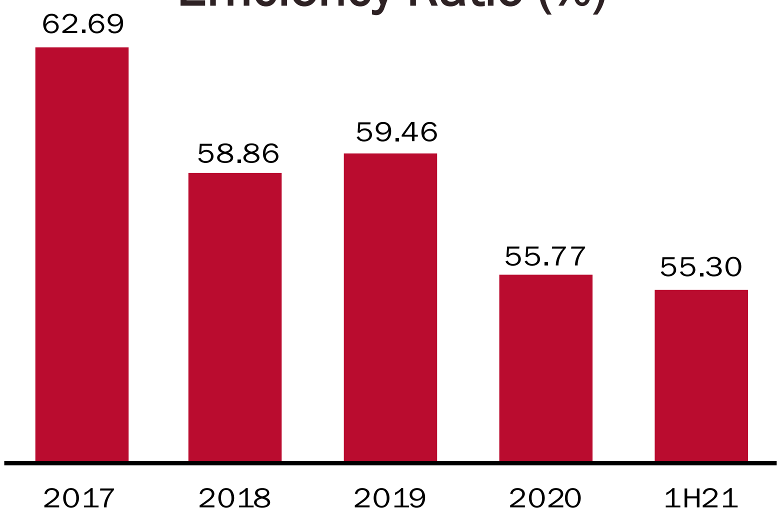
(in thousands)



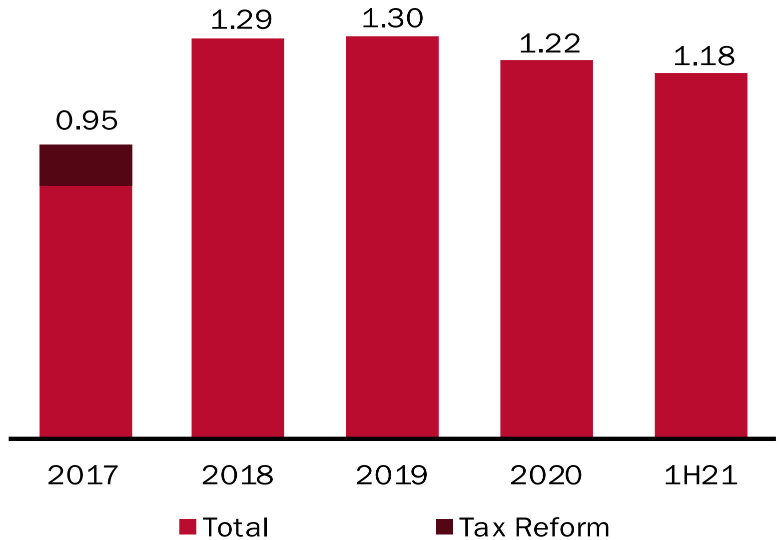
Earnings Per Share (Diluted)[1,2]



Efficiency Ratio (%)



Return on Average Assets (%)[1]



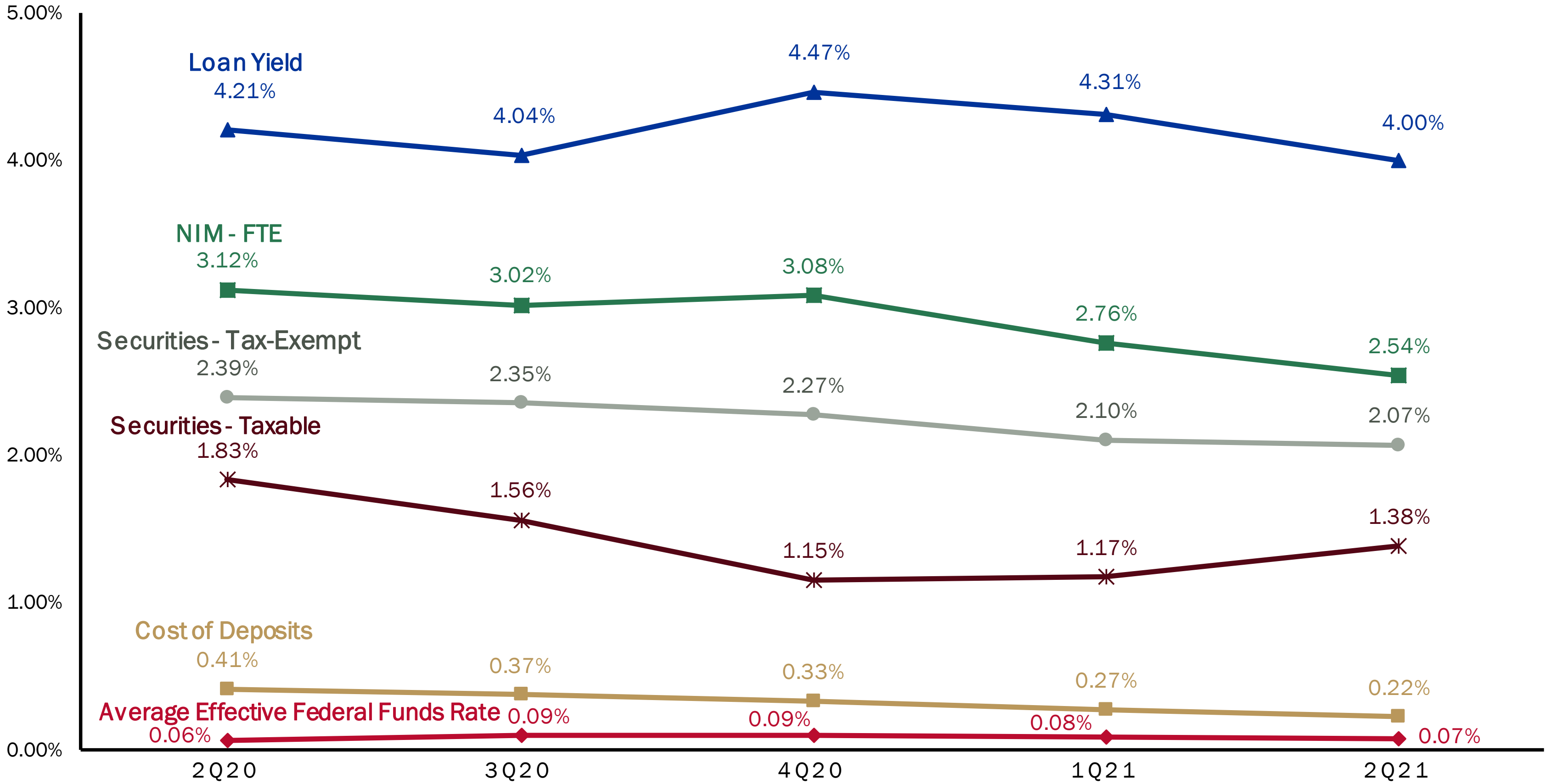
[1] 2017 adjusted for $2.2 million write-down of deferred tax assets associated with changes in tax legislation

[2] 2017 EPS data adjusted for 2-for-1 stock split with a record date of October 1, 2018

Net Interest Margin FTE (2Q21 vs. 1Q21)

RED RIVER BANCSHARES, INC.

- NIM FTE decreased 22 bps to 2.54% for 2Q21
- NIM decreased due to lower PPP loan income, lower interest rates on new and renewing non-PPP loans, and having high levels of low-yielding short-term liquid assets
- The high level of liquidity had a 70 bp negative impact to the 2Q21 NIM
- NIM Challenges
  - Higher liquidity levels
  - Lower rates on new and renewing loans
  - Lower security yield on new securities
  - Decreased PPP loan forgiveness and income
- NIM Opportunity
  - Deploy liquidity
  - Loan growth opportunity in new markets
  - Lower cost of deposits



Loan Yield and Net Interest Ratios Excluding PPP Loans[1] (2Q21)

RED RIVER BANCSHARES, INC.

- Non-PPP loan income = $15.3 million yielding 4.01% for the three months ended June 30, 2021
- Excluding PPP loans, NIM FTE decreased 5 bps to 2.48%[1]

	2Q21		1Q21	
Ratios	Actual	Excluding PPP Loans[1]	Actual	Excluding PPP Loans[1]
Loan Yield	4.00%	4.01%	4.31%	4.05%
Net Interest Spread	2.32%	2.27%	2.50%	2.28%
NIM	2.48%	2.42%	2.69%	2.47%
NIM FTE	2.54%	2.48%	2.76%	2.53%

[1]Non-GAAP measure. See "Forward-Looking Statements and Non-GAAP Information" on slide 2 and "Non-GAAP Reconciliation" slides in the Appendix for additional information.

Noninterest Income (2Q21 vs. 1Q21)

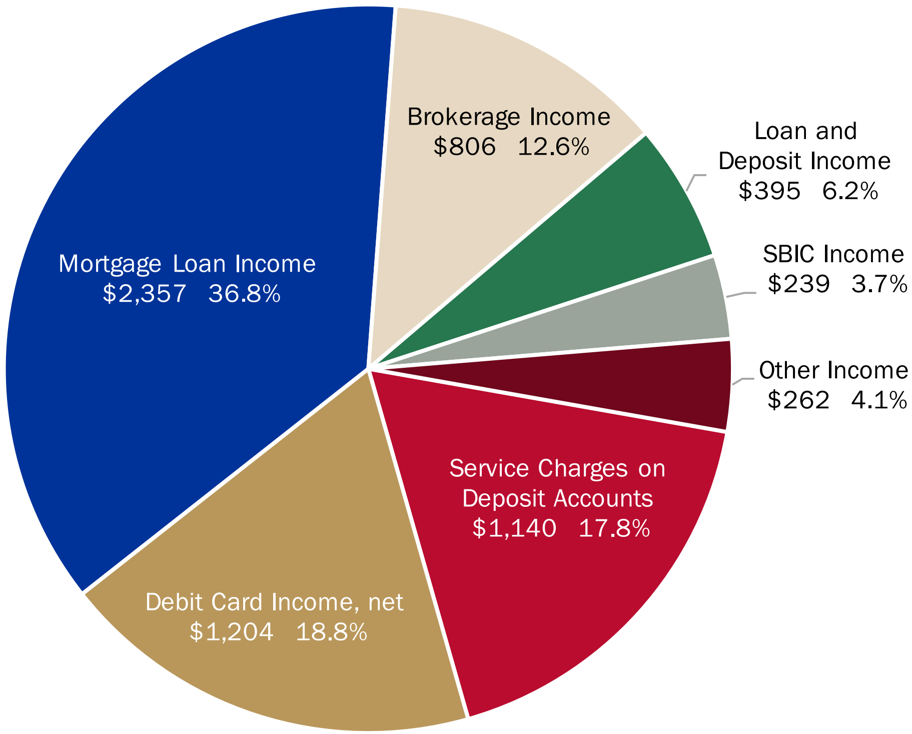
RED RIVER BANCSHARES, INC.

- Noninterest income decreased $372,000 to $6.4 million for 2Q21
- Mortgage income decreased $525,000 to $2.4 million for 2Q21 due to reduced mortgage loan demand
- Debit card income, net increased $158,000 to $1.2 million for 2Q21 due to an increased number of debit card transactions
- Brokerage income decreased $28,000 to $806,000 for 2Q21
  - Assets under management = $735.1 million

Noninterest Income

For the quarter ended June 30, 2021

(dollars in thousands)



Operating Expenses (2Q21 vs. 1Q21)

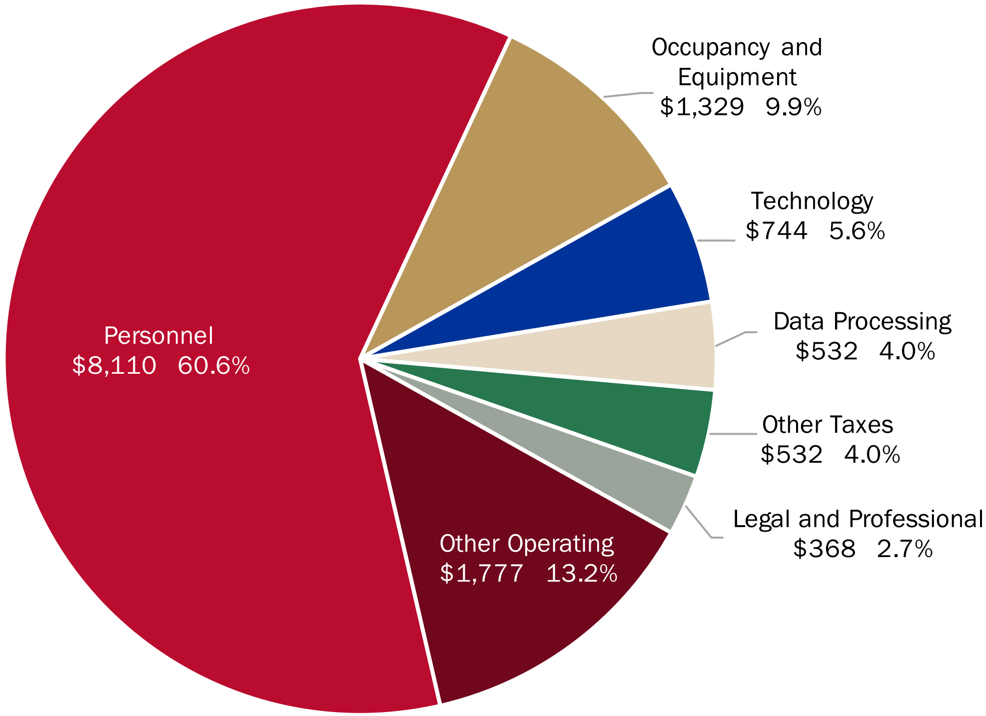
RED RIVER BANCSHARES, INC.

- Operating expenses increased $229,000 to $13.4 million for 2Q21
- Personnel expenses increased $89,000 to $8.1 million for 2Q21, primarily due to annual merit increases effective April 2021
- Data processing expense increased $147,000 to $532,000 for 2Q21 due to receipt of a $173,000 nonrecurring refund from data processing center in 1Q21
- Technology expenses increased $79,000 to $744,000 for 2Q21 due to business continuity planning and implementation of a new loan system

Operating Expenses

For the quarter ended June 30, 2021

(dollars in thousands)



Strategic Outlook

- Disciplined focus on personal, relationship banking and building shareholder value
- Prudently deploy excess liquidity in loans and securities
- Continue building a strong, Louisiana-based, super-community bank
- Open new Lafayette banking center and continue to expand market share in newer South Louisiana markets
- Monitor markets for opportunity for organic growth or key acquisitions
- Seek to take advantage of disruption in the marketplace due to mergers and acquisitions and branch closures/limited service by larger national and regional banks
- Continue to expand mortgage operations and investments division across markets
- Monitor asset quality trends and maintain appropriate level of allowance for loan losses
- Continue to build out digital offerings as needed in order to serve our target customer base
- Disciplined capital management via dividends and stock repurchase plans

Summary

Record-high quarterly net income of $8.2 million

Diversified loan portfolio with solid asset quality and allowance

High liquidity levels with opportunity to deploy into loans and securities

Well capitalized with 10.13% leverage ratio as of June 30, 2021

Consistent returns through June 30, 2021, with
YTD ROA = 1.18% and YTD ROE = 11.38%

Red River Bancshares, Inc.

APPENDIX

Non-GAAP Reconciliation

RED RIVER BANCSHARES, INC.

(dollars in thousands, except per share data)	As of June 30, 2021	As of March 31, 2021	As of December 31, 2020	As of June 30, 2020
Tangible common equity				
Total stockholders' equity	$ 292,924	$ 284,911	$ 285,478	$ 271,117
Adjustments:				
Intangible assets	(1,546)	(1,546)	(1,546)	(1,546)
Total tangible common equity (non-GAAP)	**$ 291,378**	**$ 283,365**	**$ 283,932**	**$ 269,571**
Common shares outstanding	7,284,994	7,306,747	7,325,333	7,322,532
Book value per common share	$ 40.21	$ 38.99	$ 38.97	$ 37.03
Tangible book value per common share (non-GAAP)	$ 40.00	$ 38.78	$ 38.76	$ 36.81
Tangible assets				
Total assets	$ 2,878,476	$ 2,820,672	$ 2,642,634	$ 2,361,866
Adjustments:				
Intangible assets	(1,546)	(1,546)	(1,546)	(1,546)
Total tangible assets (non-GAAP)	**$ 2,876,930**	**$ 2,819,126**	**$ 2,641,088**	**$ 2,360,320**
Total stockholders' equity to assets	10.18%	10.10%	10.80%	11.48%
Tangible common equity to tangible assets (non-GAAP)	10.13%	10.05%	10.75%	11.42%

Non-GAAP Reconciliation

RED RIVER BANCSHARES, INC.

(dollars in thousands)	As of June 30, 2021	As of March 31, 2021	As of December 31, 2020	As of June 30, 2020
Non-PPP loans HFI				
Loans HFI	$ 1,600,388	$ 1,602,086	$ 1,588,446	$ 1,615,298
Adjustments:				
PPP loans, net	(82,972)	(119,358)	(118,447)	(192,655)
Non-PPP loans HFI (non-GAAP)	**$ 1,517,416**	**$ 1,482,728**	**$ 1,469,999**	**$ 1,422,643**
Assets excluding PPP loans, net				
Assets	$ 2,878,476	$ 2,820,672	$ 2,642,634	$ 2,361,866
Adjustments:				
PPP loans, net	(82,972)	(119,358)	(118,447)	(192,655)
Assets excluding PPP loans, net (non-GAAP)	**$ 2,795,504**	**$ 2,701,314**	**$ 2,524,187**	**$ 2,169,211**
Allowance for loan losses	$ 19,460	$ 19,377	$ 17,951	$ 14,882
Deposits	$ 2,569,599	$ 2,515,275	$ 2,340,360	$ 2,069,322
Loans HFI to deposits ratio	62.28%	63.69%	67.87%	78.06%
Non-PPP loans HFI to deposits ratio (non-GAAP)	59.05%	58.95%	62.81%	68.75%
Allowance for loans losses to loans HFI	1.22%	1.21%	1.13%	0.92%
Allowance for loans losses to non-PPP loans HFI (non-GAAP)	1.28%	1.31%	1.22%	1.05%