CROSSFIRST

BANKSHARES, INC.™

Raymond James 2021 U.S. Bank Conference

September 9, 2021

Ben Clouse, CFO
Randy Rapp, CCO & CRO
Heather Worley, Director of IR

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FORWARD-LOOKING STATEMENTS. The financial results in this presentation reflect preliminary, unaudited results, which are not final until the Company's Quarterly Report on Form 10-Q is filed. This presentation and oral statements made during this meeting contain forward-looking statements. These forward-looking statements reflect our current views with respect to, among other things, future events and our financial performance. These statements are often, but not always, made through the use of words or phrases such as "may," "might," "should," "could," "predict," "potential," "believe," "expect," "continue," "will," "anticipate," "seek," "estimate," "intend," "plan," "strive," "projection," "goal," "target," "outlook," "aim," "would," "annualized" and "outlook," or the negative version of those words or other comparable words or phrases of a future or forward-looking nature. These forward-looking statements are not historical facts, and are based on current expectations, estimates and projections about our industry, management's beliefs and certain assumptions made by management, many of which, by their nature, are inherently uncertain and beyond our control. Accordingly, we caution you that any such forward-looking statements are not guarantees of future performance and are subject to risks, assumptions, estimates and uncertainties that are difficult to predict. Although we believe 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. There are or will be important factors that could cause our actual results to differ materially from those indicated in these forward-looking statements, including, but not limited to, the following: risks relating to the COVID-19 pandemic; risks related to general business and economic conditions and any regulatory responses to such conditions; our ability to effectively execute our growth strategy and manage our growth, including identifying and consummating suitable mergers and acquisitions; the geographic concentration of our markets; fluctuation of the fair value of our investment securities due to factors outside our control; our ability to successfully manage our credit risk and the sufficiency of our allowance; regulatory restrictions on our ability to grow due to our concentration in commercial real estate lending; our ability to attract, hire and retain qualified management personnel; interest rate fluctuations; our ability to raise or maintain sufficient capital; competition from banks, credit unions and other financial services providers; the effectiveness of our risk management framework in mitigating risks and losses; our ability to maintain effective internal control over financial reporting; our ability to keep pace with technological changes; system failures and interruptions, cyber-attacks and security breaches; employee error, fraudulent activity by employees or clients and inaccurate or incomplete information about our clients and counterparties; our ability to maintain our reputation; costs and effects of litigation, investigations or similar matters; risk exposure from transactions with financial counterparties; severe weather, acts of god, acts of war or terrorism; compliance with governmental and regulatory requirements; changes in the laws, rules, regulations, interpretations or policies relating to financial institutions, accounting, tax, trade, monetary and fiscal matters; compliance with requirements associated with being a public company; level of coverage of our business by securities analysts; and future equity issuances.

Any forward-looking statement speaks only as of the date on which it is made, and we do not undertake any obligation to update or review any forward-looking statement, whether as a result of new information, future developments or otherwise, except as required by law.

NON-GAAP FINANCIAL INFORMATION. This presentation contains certain non-GAAP measures. These non-GAAP measures, as calculated by CrossFirst, are not necessarily comparable to similarly titled measures reported by other companies. Additionally, these non-GAAP measures are not measures of financial performance or liquidity under GAAP and should not be considered alternatives to the Company's other financial information determined under GAAP. See reconciliations of certain non-GAAP measures included at the end of this presentation.

MARKET AND INDUSTRY DATA. This presentation references certain market, industry and demographic data, forecasts and other statistical information. We have obtained this data, forecasts and information from various independent, third party industry sources and publications. Nothing in the data, forecasts or information used or derived from third party sources should be construed as advice. Some data and other information are also based on our good faith estimates, which are derived from our review of industry publications and surveys and independent sources. We believe that these sources and estimates are reliable but have not independently verified them. Statements as to our market position are based on market data currently available to us. Although we are not aware of any misstatements regarding the economic, employment, industry and other market data presented herein, these estimates involve inherent risks and uncertainties and are based on assumptions that are subject to change.

EXPERIENCED MANAGEMENT TEAM

CROSSFIRST BANKSHARES, INC.

Mike Maddox – *President, CEO and Director*

- Joined CrossFirst in 2008 after serving as Kansas City regional president for Intrust Bank
- Practicing lawyer for more than six years before joining Intrust Bank
- Graduate School of Banking at the University of Wisconsin – Madison
- Appointed to CEO June 1, 2020 after 12 years of service

Ben Clouse – *Chief Financial Officer*

- 25 years of experience in financial services, asset and wealth management, banking, retail and transportation, including public company CFO experience
- Joined CrossFirst in July 2021 after serving as CFO of Waddell & Reed Financial, Inc. (formerly NYSE: WDR) until its acquisition in 2021
- Significant experience leading financial operations as well as driving operational change
- Obtained CPA designation and FINRA Series 27 license

Randy Rapp – *Chief Risk and Chief Credit Officer*

- More than 30 years of experience in banking, primarily as a credit analyst, commercial relationship manager and credit officer
- Joined CrossFirst in April 2019 after serving as Executive Vice President and Chief Credit Officer of Texas Capital Bank, National Association from May 2015 until March 2019
- Mr. Rapp joined Texas Capital Bank in 2000

Heather Worley –*Director of Investor Relations*

- More than 15 years of experience in marketing, communications and investor relations in banking and finance
- Joined CFB in September 2021. Previously, SVP & Director of IR for Texas Capital Bancshares, Inc. (NASDAQ: TCBI)
- Recognized by Institutional Investor magazine All-America Executive Team 2017 | Top Investor Relations Professional & All-America Executive Team 2019 | Top Investor Relations Program
- B.A. Communications, Mississippi State University

Other Senior Executives

Aisha Reynolds
General Counsel of CrossFirst
15+ years of experience
Joined CrossFirst in 2018

Steve Peterson
Chief Banking Officer of CrossFirst Bank
21+ years of banking experience
Joined CrossFirst in 2011

Amy Fauss
COO & CHRO of CrossFirst Bank
28+ years of banking experience
Joined CrossFirst in 2009

Jana Merfen
Chief Technology Officer of CrossFirst Bank
12+ years of technology experience
Joined CrossFirst in 2021

OUR ROAD TO SUCCESS

ONE TEAM

Focusing on:

- Elevating our Strong Corporate Culture by Living our CrossFirst Values
- Attracting and Retaining High Performing Talent
- Well-being of our Employees

ONE BANK

Focusing on:

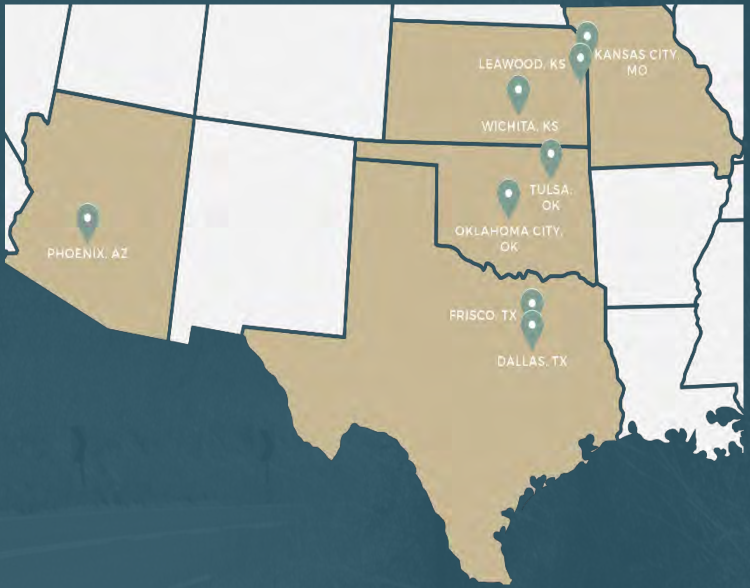
- Targeting Businesses and Professionals
- Branch-Lite – Technology Focused
- Delivering Extraordinary Service and Customer Experience

SHARED VISION

Focusing on:

- Performance & Profitability
- Seizing Growth Opportunities
- Strong Credit Quality
- Enhancing Products and Services
- Managing Enterprise Risk
- Contributing to our Communities

3rd Largest Bank Headquartered in Kansas City MSA



Total Assets	Gross Loans	Total Deposits	Book Value / Share
$5.3 billion	$4.3 billion	$4.4 billion	$12.50

Note: As of 6/30/21.

SECOND QUARTER 2021 SUMMARY & HIGHLIGHTS

Net Income	PTPP[1]	NIM (FTE)	Diluted EPS	ROAA
$15.6M	$22.3M	3.12%	$0.30	1.10%

Balance Sheet Update	0%[2] Loan growth YoY	1% Deposit growth YoY	9% DDA Deposit growth YoY	7%[1] TBV / Share growth YoY
Credit Performance	1.09% NPAs / Asset	0.23% NCOs / Avg Loans	1.87%[2] Reserves / Loans	24% Classified Loans / Capital + ALLL
Capital & Liquidity	12.40% CET 1 Capital Ratio	13.67% Total Risk-Based Capital	97% Loans / Deposits	18% Cash and Securities / Assets
Efficiency	53.61% Q2 2021 Efficiency Ratio	1.82% Non-Interest Expense / Avg Assets	$15.9M Assets / Employee	

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Note: Interim periods are annualized.

(1) Represents a non-GAAP financial measure. See Non-GAAP Reconciliation slides at the end of this presentation for additional detail.

(2) Gross loans net of unearned income; excludes PPP loans.

Q2 2021 AND YTD 2021 HIGHLIGHTS AND SUMMARY

CROSSFIRST BANKSHARES, INC.

Financial Performance

- ✓ Strongest quarterly net income in Company's history during Q2 2021 of $15.6 million and YTD net income of $27.6 million (includes $11 million of loan loss provisions)
- ✓ Quarterly Return on Average Assets of 1.10% and Return on Equity of 9.86%
- ✓ Net Interest Margin Fully Tax Equivalent (FTE) of 3.12% compared to 3.00% in Q1 2021
- ✓ Efficiency ratio of 53.6% for Q2 2021 and 52.1% for the YTD, a non-GAAP core efficiency ratio [(1)] of 51.7% for YTD 2021 after adjusting for nonrecurring items
- ✓ At June 30, 2021, stockholders' equity totaled $637 million, or $12.50 per share, compared to $624 million, or $12.08 per share, at December 31, 2020

Balance Sheet

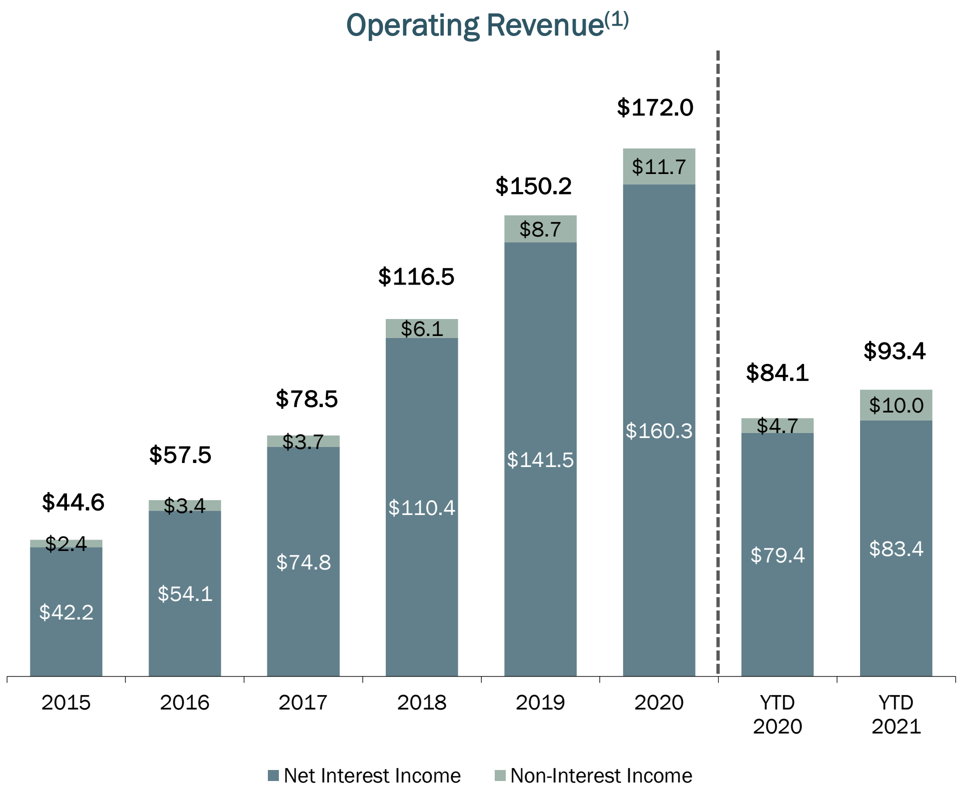
- ✓ $5.3 billion of assets, a quarter-over-quarter reduction to improve balance sheet efficiency
- ✓ Reduced cash position by strategically lowering core institutional, wholesale, and brokered deposit exposure
- ✓ 9% Demand Deposits growth from June 30, 2020 and now account for 19% of total deposits
- ✓ 2021 loan-to-deposit ratio of 97.3%

Strategic Initiatives

- ✓ Completed $20 million dollar share repurchase program at a weighted average price of $12.68
- ✓ Expanded into new Phoenix, AZ market and increased Frisco, TX office banking team
- ✓ Ben Clouse assumed the role of CFO, Dave O'Toole to assist with transition
- ✓ Further reduced Energy portfolio concentration

(1) Represents a Non-GAAP financial measure, see Non-GAAP reconciliation slides at the end of the presentation for more detail.

OPERATING REVENUE GROWTH



- Historically, our balance sheet growth combined with a relatively stable net interest margin has enabled robust operating revenue growth
- The Company's core earnings power continued to increase as non-interest income offset net interest margin pressure

Operating Revenue	Q2 2021 QoQ	Q2 2021 YoY	FY 2020 YoY	2015 -2020 CAGR
Net Interest Income	▲ 3%	▲ 3%	▲ 13%	▲ 31%
Non-Interest Income	▲ 41%	▲ 121%	▲ 35%	▲ 38%
Total Revenue	▲ 6%	▲ 10%	▲ 15%	▲ 31%

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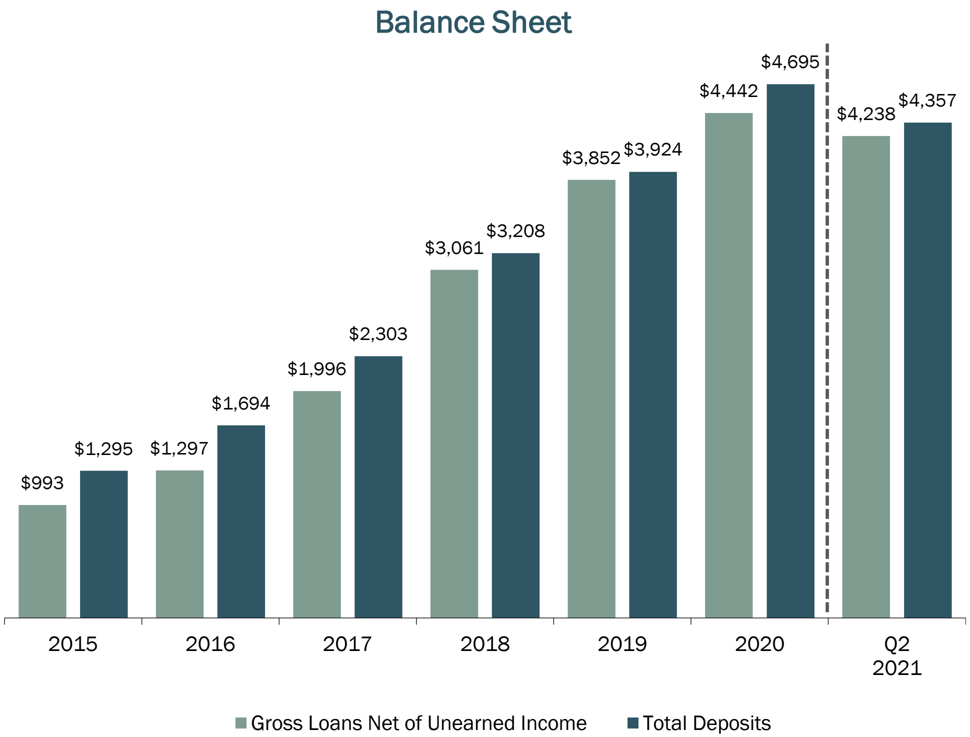
Note: Dollars are in millions.

(1) Defined as net interest income plus non-interest income

BALANCE SHEET GROWTH



- The Company improved balance sheet efficiency in Q2 2021 which enhanced earnings, but impacted balance sheet growth metrics
- Loan growth affected by PPP forgiveness and paydowns of low yielding commercial and industrial lines drawn on during the pandemic
- Reduced excess cash compared to prior quarter by rolling off wholesale and non-relational institution deposits

Balance Sheet	Q2 2021		FY 2020	2015 -2020
	QoQ	YoY	YoY	CAGR
Gross Loans	▼ -6%	▼ -4%	▲ 15%	▲ 35%
Total Deposits	▼ -14%	▲ 1%	▲ 20%	▲ 29%
Total Assets	▼ -11%	▼ -3%	▲ 15%	▲ 29%

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Note: Dollars are in millions.

NON-INTEREST EXPENSE MANAGEMENT

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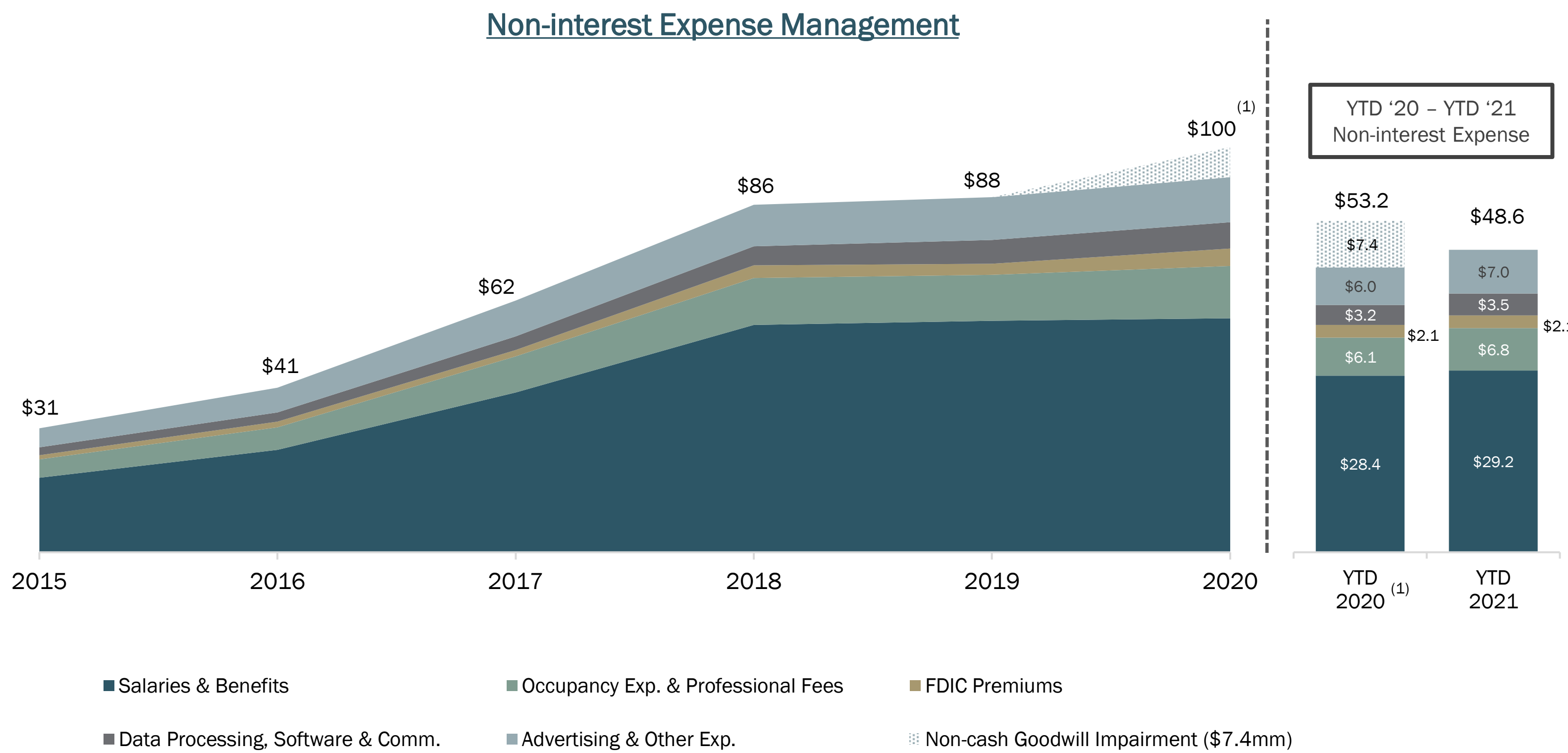

Note: Dollars are in millions and amounts shown are as of the end of the period unless otherwise specified.
(1) Includes $7.4mm Goodwill Impairment.

OPERATING LEVERAGE

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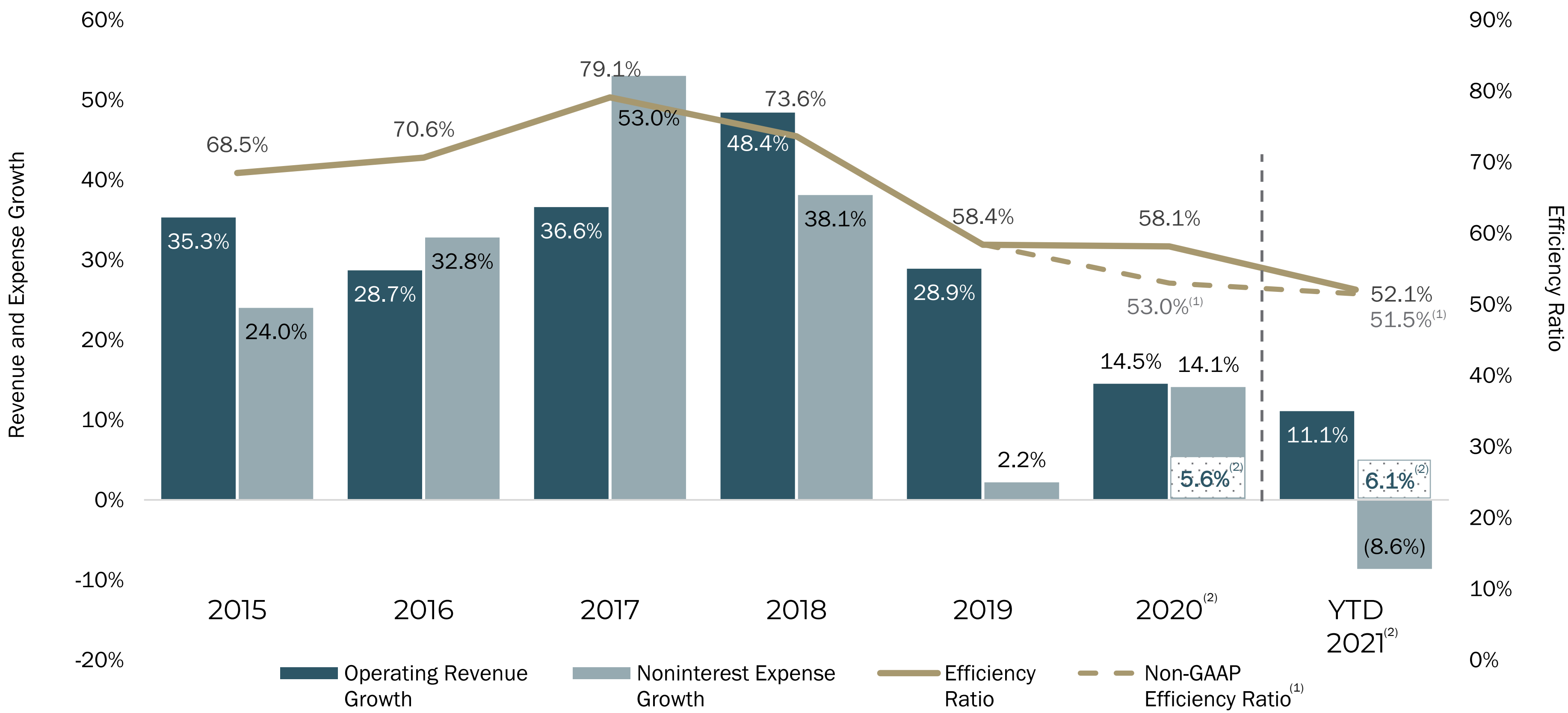
Improving Efficiency while Growing Revenue



(1) Represents a Non-GAAP financial measure, see Non-GAAP reconciliation slides at the end of the presentation for more detail.
(2) 2020 Non-interest expense Non-GAAP label non-GAAP reconcile [Excludes $7.4 million goodwill impairment charge] recorded in Q2 of 2020

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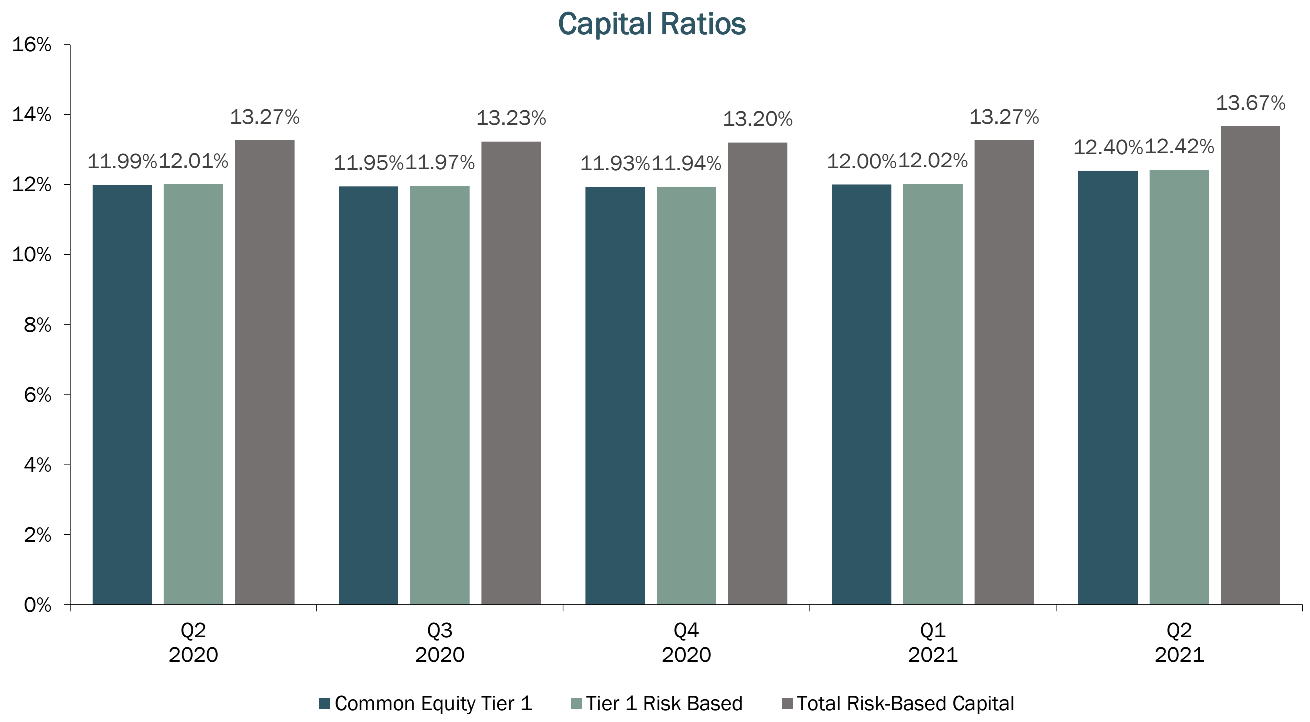
CAPITAL RATIOS

Commentary

- Maintained strong capital levels to support future growth
- The Bank had $1.7 billion in unfunded loan commitments as of June 30, 2021
- Capital stress test shows CrossFirst well-capitalized under extreme scenarios



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SUPPLEMENTAL INFORMATION

NET INTEREST MARGIN

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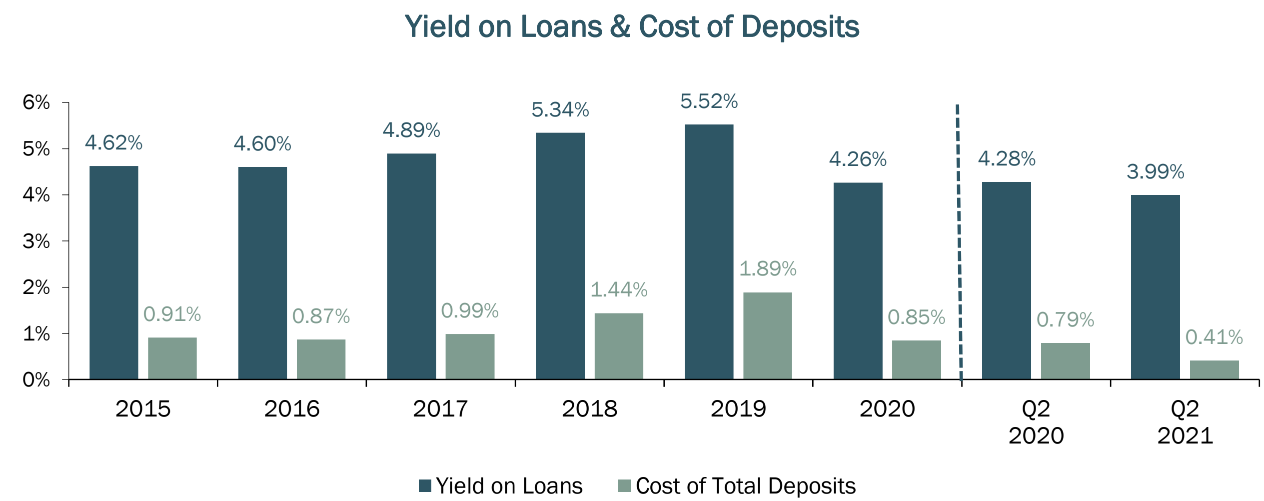
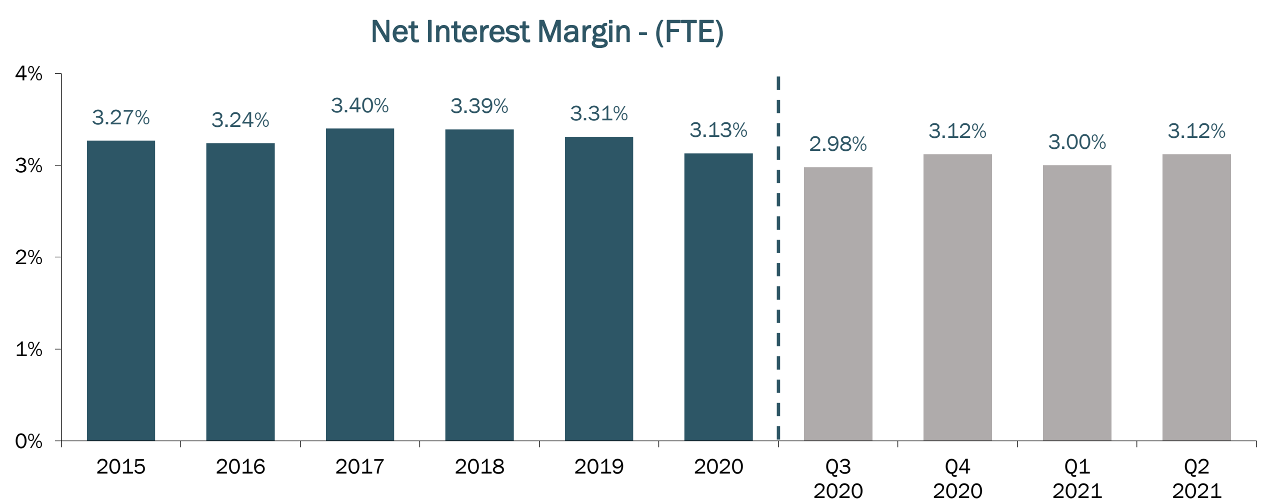
Commentary

- Fully tax-equivalent net interest margin increased 12bps to 3.12% from Q1 2021 due to improvement in balance sheet and reduction of excess cash
- Loan yield increased 5bps compared to Q1 2021 from reduction of lower yielding commercial & industrial loans and increased fees
- The Company further offset margin pressure by adjusting deposit pricing which reduced total deposit costs by 7bps compared to Q1 2021
- Loan to deposit ratio increased to 97% from 89% in Q1 2021, but decreased from 103% in Q2 2020





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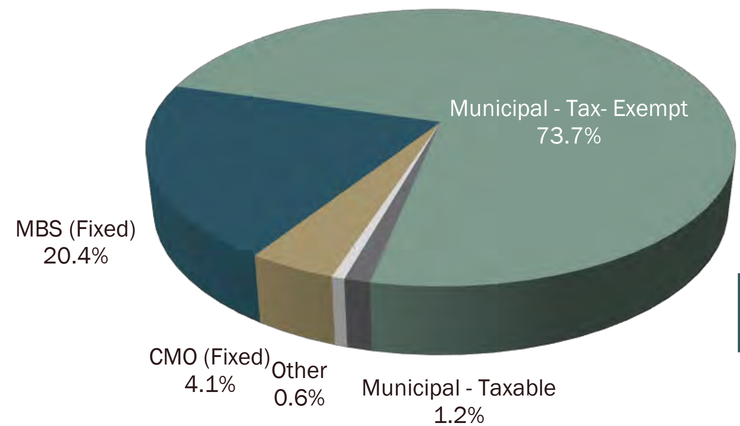
SECURITIES PORTFOLIO

Commentary

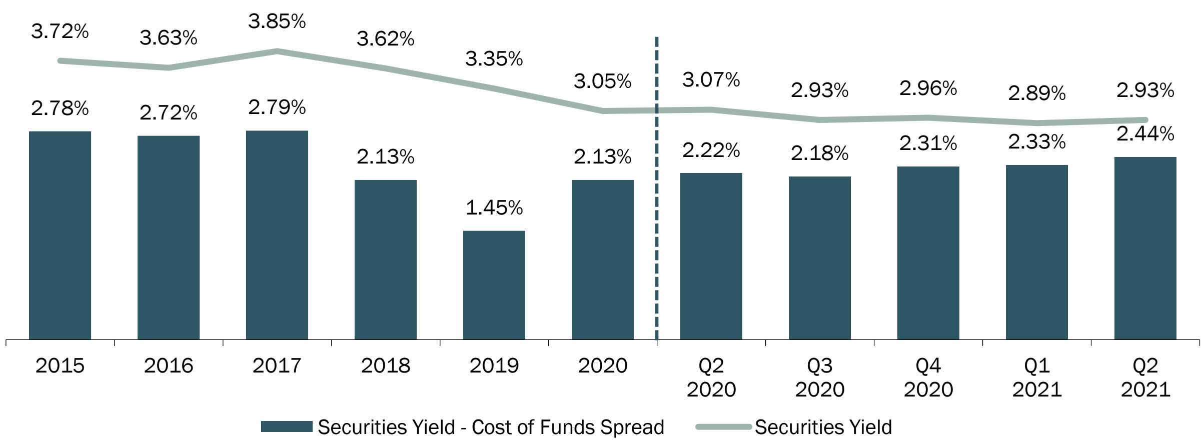
- Continue to exercise caution in the investment portfolio and maintain high-quality investment securities
- At the end of Q2 2021, the portfolio's duration was approximately 5.0 years
- The fully taxable equivalent yield for Q2 2021 rose 4bps to 2.93%
- During Q2 2021, $23 million of MBS/CMO paydowns were received and no securities were sold
- During Q2 2021, $49 million of new securities were purchased with an average tax equivalent yield of 2.24%
- The securities portfolio has unrealized gains of approximately $35 million as of June 30, 2021

Investment Portfolio Breakout as of June 30, 2021(1)



Total: ~$712 million(1)

Securities Yield - Fully Tax-Equivalent



(1) Based on approximate fair value.

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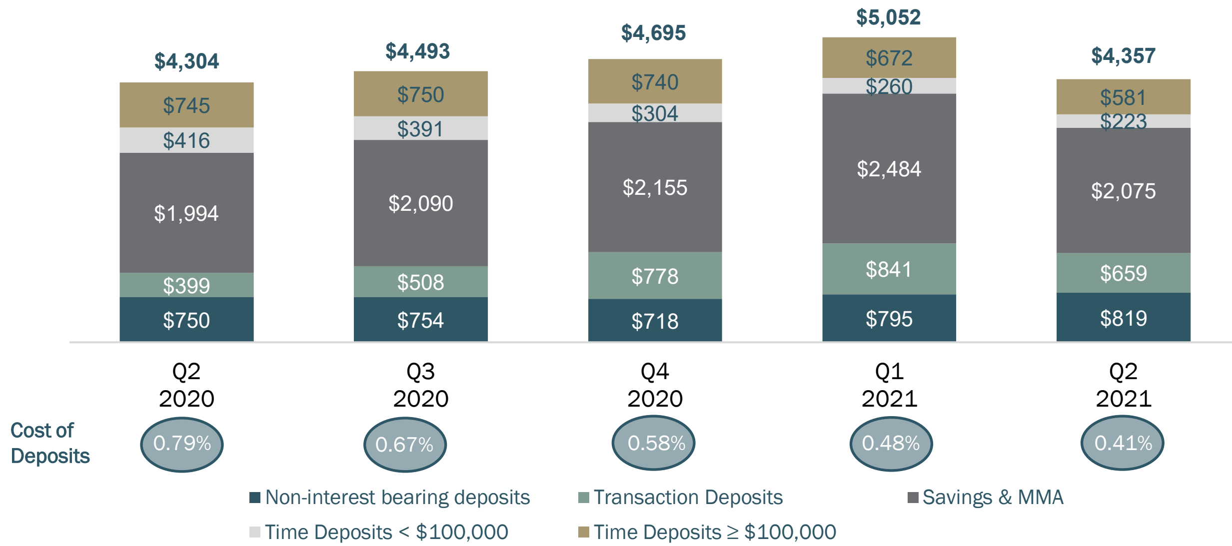
GROWING CORE FUNDING BASE

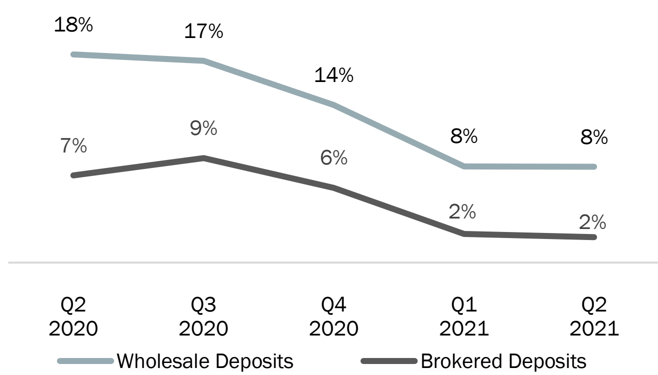
Commentary

- CrossFirst worked to improve the efficiency of its balance sheet in Q2 2021, lowering brokered, wholesale and institutional interest-bearing accounts
- Brokered deposits were $117 million at end of Q2 2021, down 62% from Q2 2020, and down 20% from Q1 2021
- Deposit costs have trended down due to the persistent low-rate environment and management's balance sheet strategy
- Demand deposits increased
  - +9% compared to Q2 2020
  - +3% compared to Q1 2021

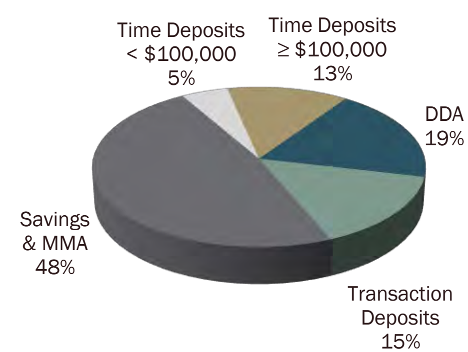
Deposit Mix by Type



Focus on Core Funding *



Q2 2021 Deposit Composition



Note: Dollars are in millions and amounts shown are as of the end of the period.
* As a percentage of Bank assets

DIVERSE LOAN PORTFOLIO

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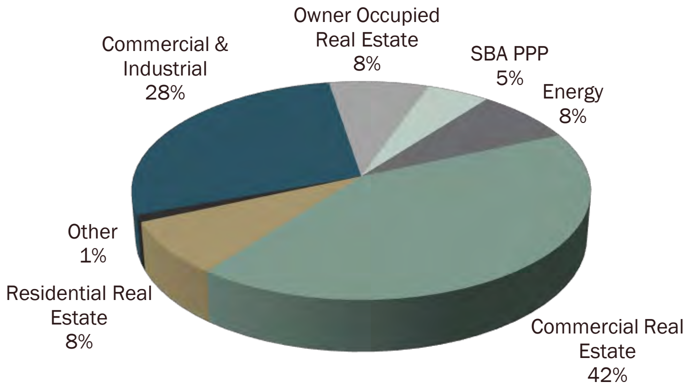
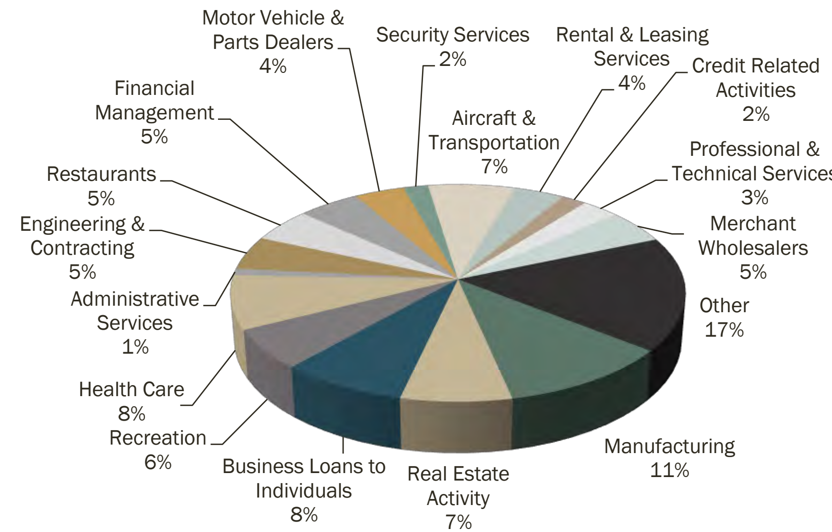
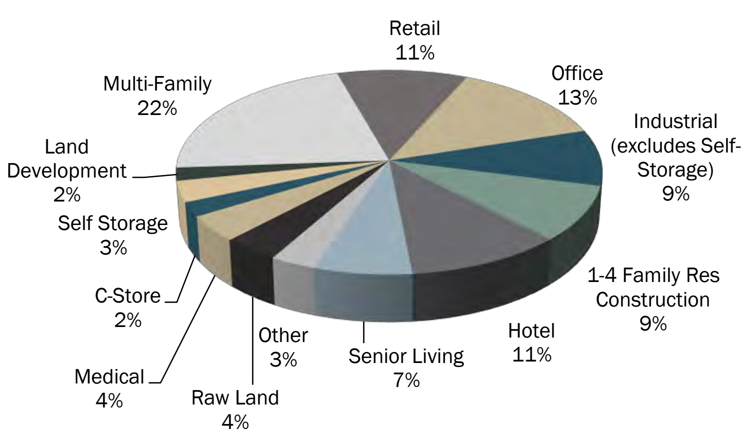
Loan Mix by Type ($4.3bn) (1)



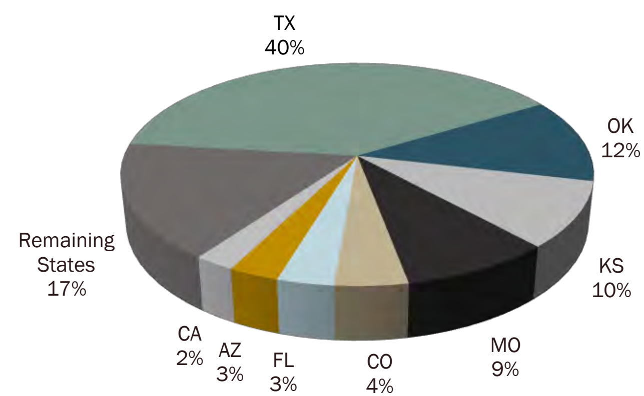
Commercial and Industrial Loan Breakdown by Type ($1.2bn)



CRE Loan Portfolio by Segment ($1.8bn)(1)



CRE Loans by Geography ($1.8bn)(1)



Note: Data as of June 30, 2021.
(1) CRE as defined by regulators (including construction and development).

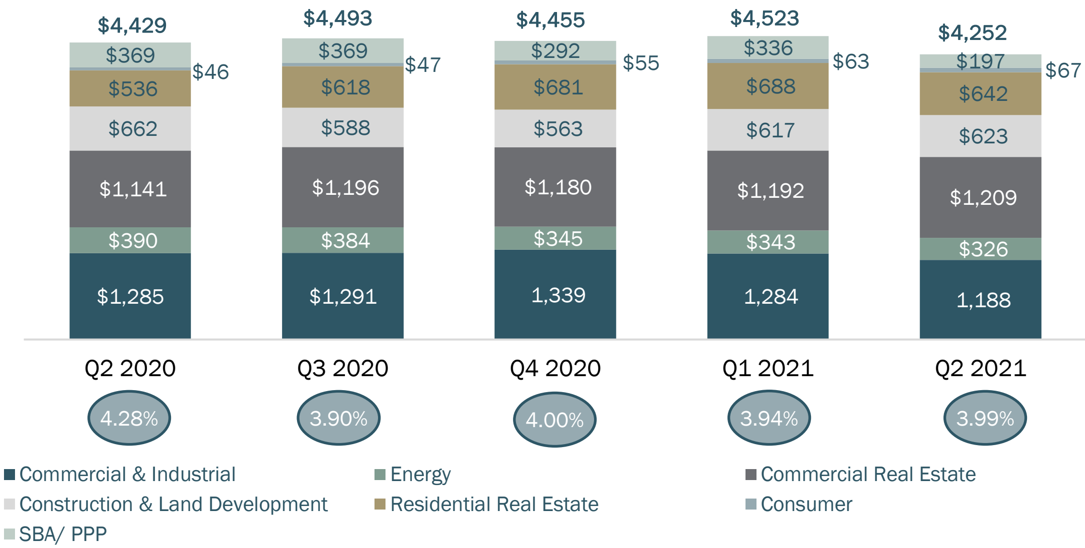
LOAN PORTFOLIO DETAILS

CROSSFIRST BANKSHARES, INC.

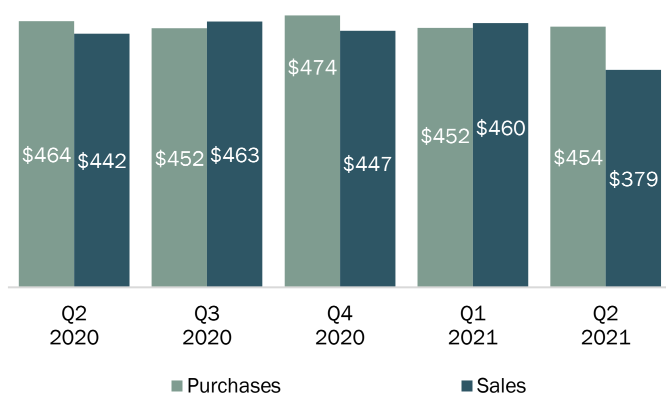
Commentary

- Historically, loan growth has been primarily organic and very strong
- The loan portfolio, excluding PPP loans, at Q2 2021 contracted 3% from previous quarter
- Diversification remains a core tenet
- Generally, the Company only buys syndicated loans with borrowers for which the Company could lead the next borrowing opportunity
  - Purchased loan participations totaled $103 million and a combination of shared national credits and syndications purchased totaled $351 million at June 30, 2021
  - Loan participations sold of $253 million and syndications sold of $126 million at June 30, 2021

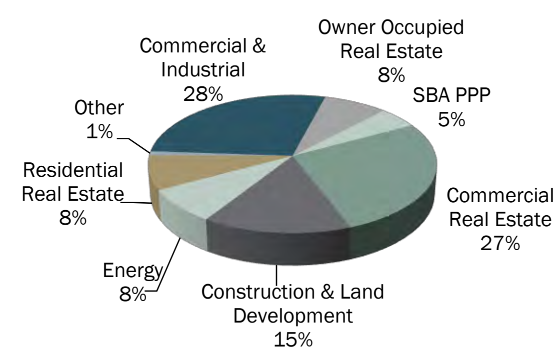
Gross Loans by Type



Loan Participations and Syndications Net Purchases and Sales



Q2 2021 Gross Loan Composition



Note: Dollars in charts are in millions. Amounts shown are as of the end of the period.

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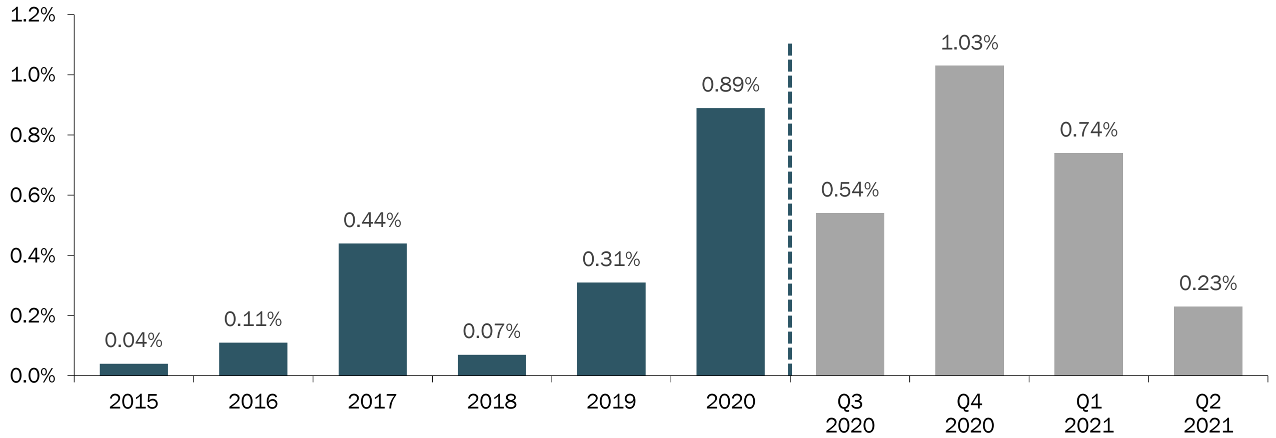
ASSET QUALITY PERFORMANCE

Commentary

- Q2 2021 had $2.6 million of net charge-offs related to two commercial and industrial credits
- Q1 2021 had $8.2 million of net charge-offs related to several commercial and industrial credits

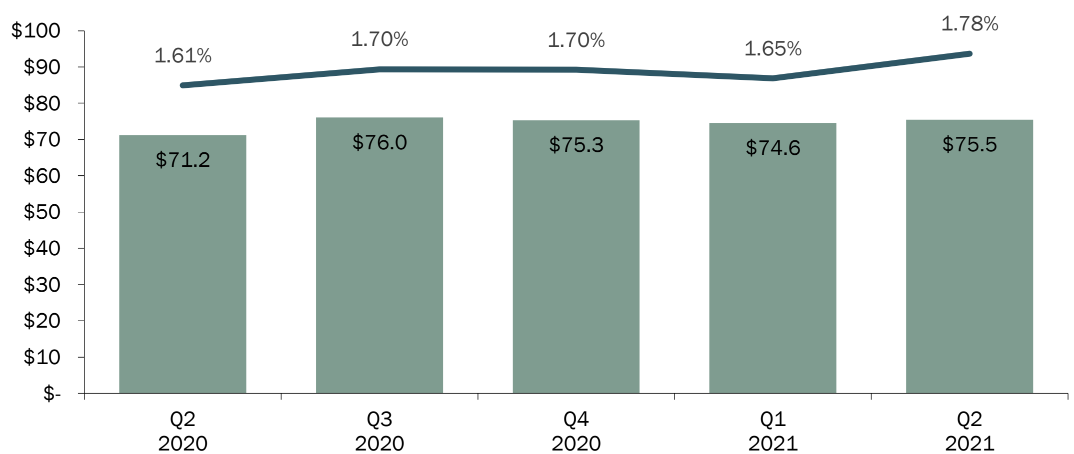
Net Charge-Offs / Average Loans[1]



Commentary

- Prudently maintained ALLL/Total Loans at 1.78%, or 1.87% excluding PPP loans, at end of Q2 2021
- Q2 2021 provision of $3.5 million which is down significantly from prior quarters based on lower charge-off activity and improved credit metrics

Allowance for Loan Losses / Total Loans



(1) Ratio is annualized for interim periods.

ASSET QUALITY PERFORMANCE

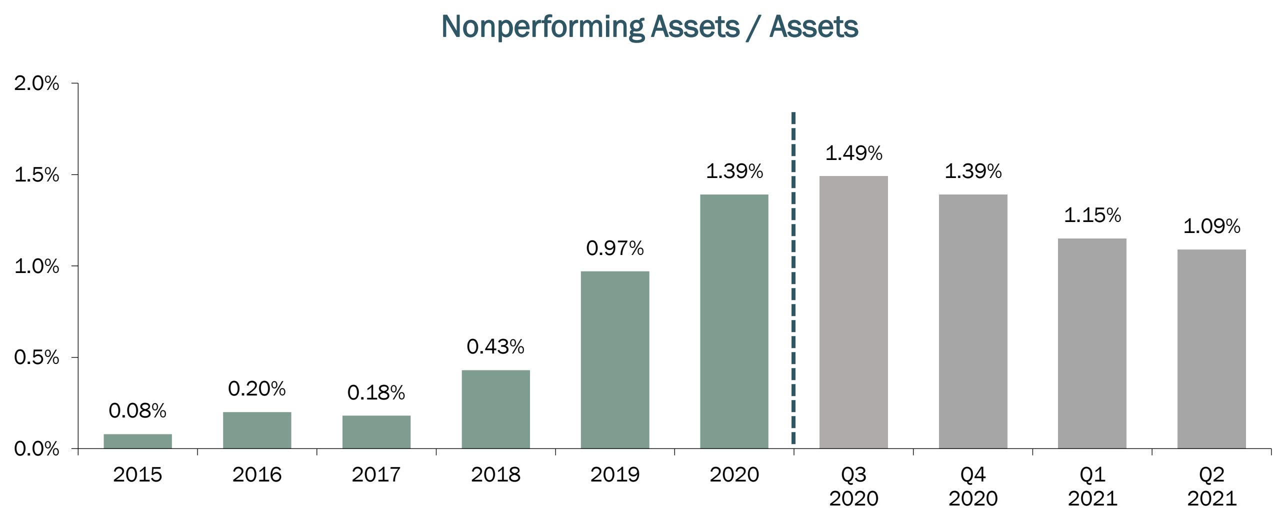
CROSSFIRST BANKSHARES, INC.

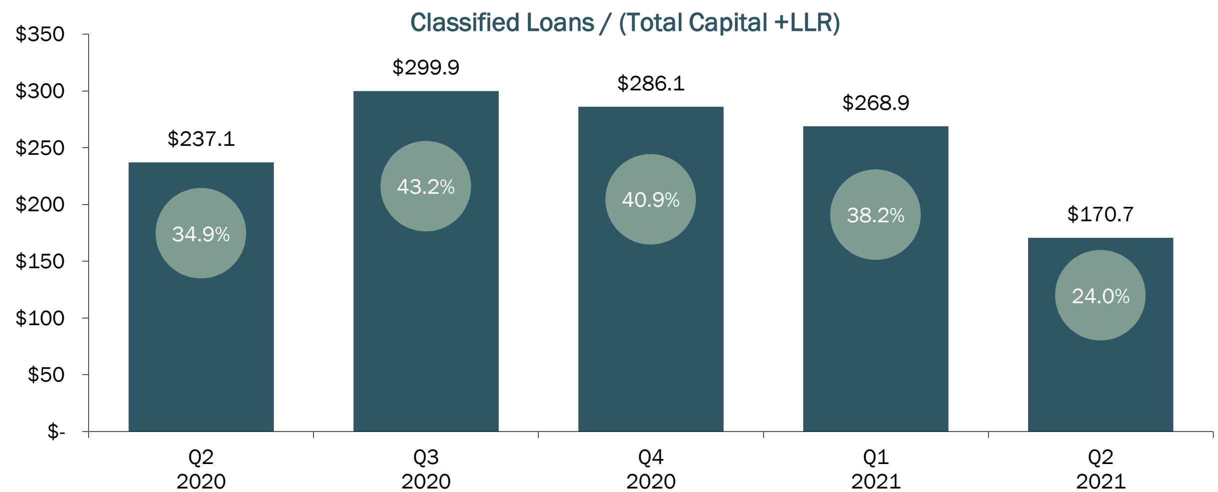
Commentary

- NPAs continue to improve as economic and business outlooks improve
- Reduction in NPAs mostly resulted from paydowns or upgrades in energy loans and commercial and industrial loans
- 46% of the nonperforming asset balance in Q2 2021 relates to energy credits

Commentary

- Classified loans decreased materially due primarily to higher energy prices, improvements in customers' businesses, and improved economic conditions
- 43% of classifieds in Q2 2021 relate to Energy, but Energy classifieds decreased 38% during the quarter

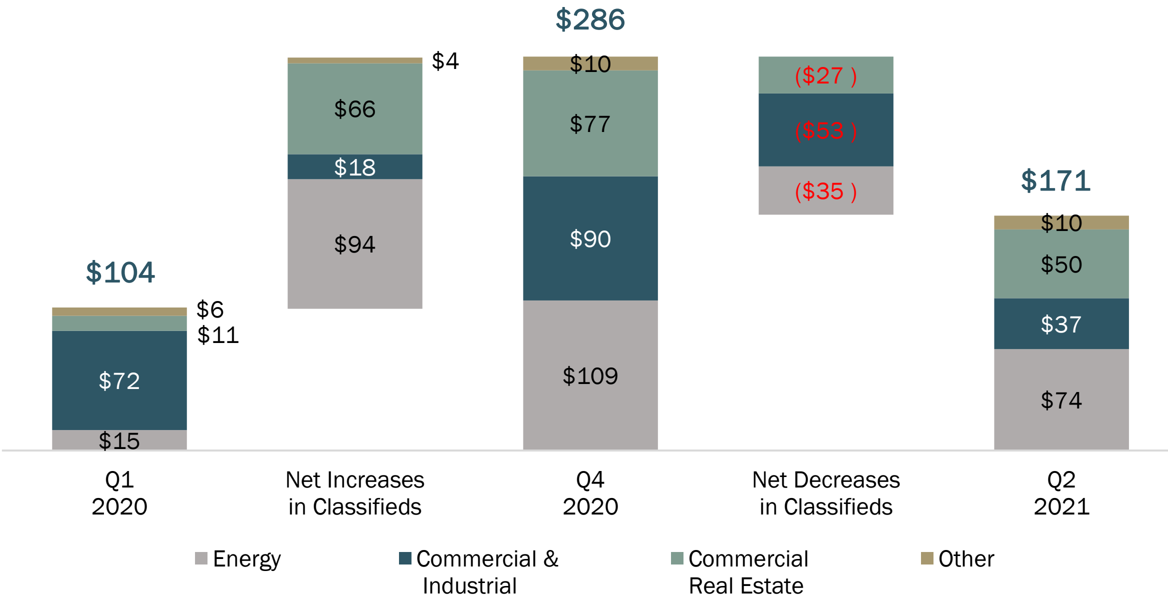




Note: Dollar amounts are in millions.

SIGNIFICANT IMPROVEMENT IN CREDIT QUALITY

Classified Loans Through the Pandemic



Summary of Q2 2020 to Q4 2020 Net Changes[1]

Loan Type	$
Energy	+$94
Commercial & Industrial	+$18
Commercial Real Estate	+$66
Other	+$4
Total Net Downgrades	**$182**

Summary of 2021 Changes[2]

Loan Type	$
Energy	($35)
Commercial & Industrial	($53)
Commercial Real Estate	($27)
Residential & Multifamily	$0
Total Net Upgrades	**($115)**

- Most of our classified assets at June 30, 2021 remain in Energy and COVID-related industries like hospitality, entertainment, travel, or other recreational activities directly impacted from the lockdowns

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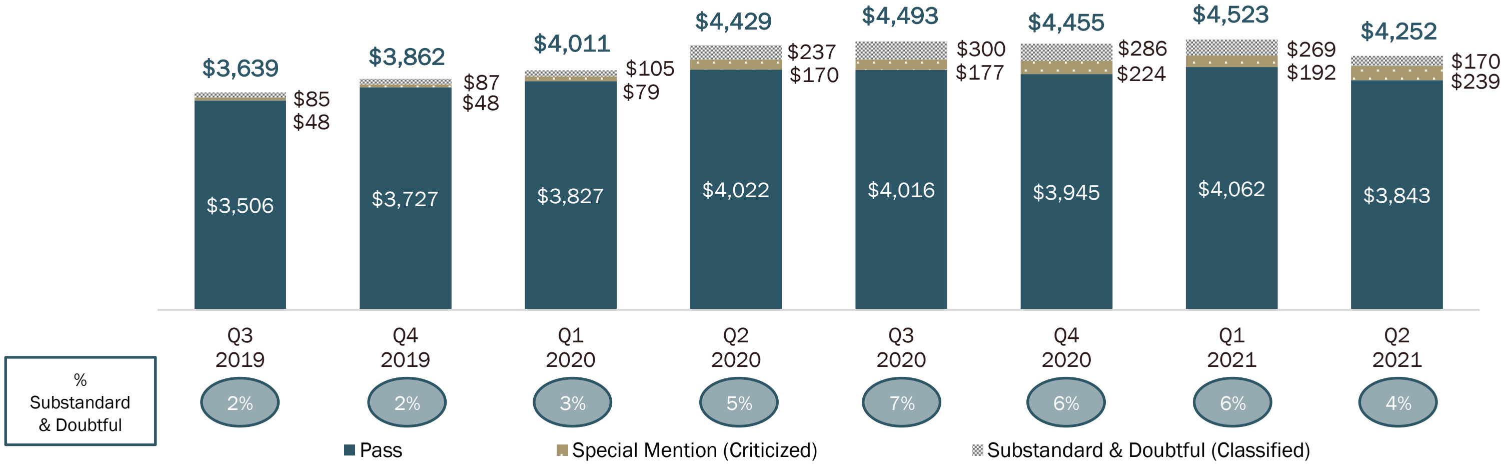
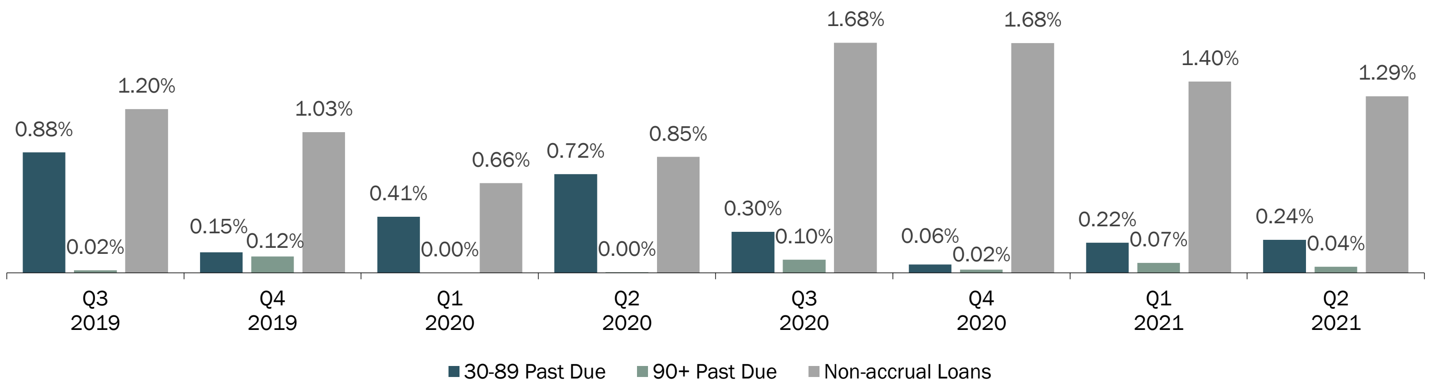
Note: Dollar amounts are in millions.
(1) Represents net change from March 31, 2020, to December 31,2020.
(2) Represents net change from December 31, 2020, to June 30, 2021.

CREDIT MIGRATION AND METRICS



Past Due Trends as % of Total Loans



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Note: Dollar amounts are in millions.

CROSSFIRST ENERGY PORTFOLIO

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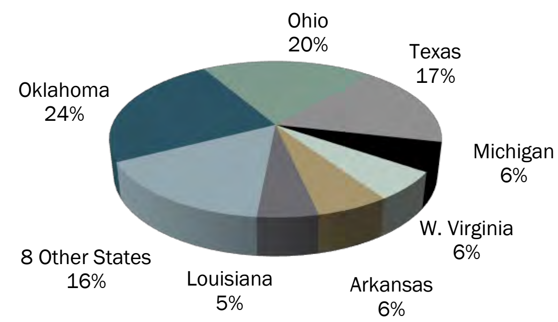
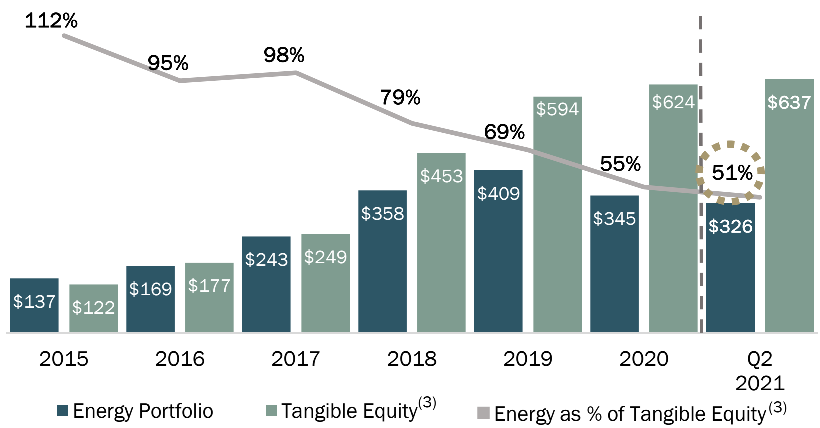
Energy by Composition 6/30/2021					
	# Loans	$ Loan Amount	% Total	Avg % Hedged[1]	Hedge Price[2]
Oil	37	$195	60%	36%	$47.00
Natural Gas	14	$123	38%	49%	$2.53
Other Sources	3	$8	2%	0%	
Total	54	$326	100%	40% [1]	

Energy Exposure by State

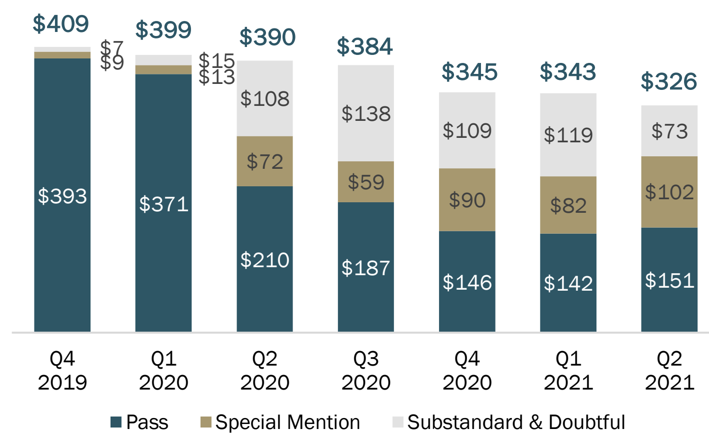


Energy Portfolio and Tangible Equity[3]



Energy Loans by Risk Rating

5.5% of Reserves on Energy Portfolio



Note: Data as of 6/30/21.

Note: Loan dollars in millions; collateral base is predominately comprised of properties with sufficient production history to establish reliable production trends; typically, only lend as a senior secured lender in single bank transactions and as a cash flow lender; Exploration & Production lending only on proven and producing reserves; CrossFirst typically does not lend to shale, oil field services, or midstream energy companies.

(1) Weighted Average.

(2) Hedged rolling 12 month; Oil price in $ per barrel and natural gas price in $ per MMBtu.

(3) Represents a non-GAAP financial measure, see non-GAAP reconciliation slides in the supplemental information for more detail.

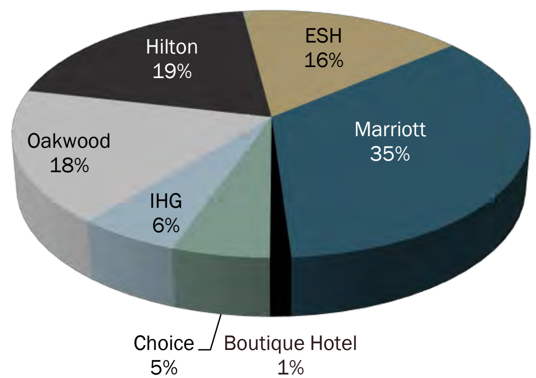
CROSSFIRST HOTEL & LODGING PORTFOLIO

CROSSFIRST BANKSHARES, INC.

Hotel & Lodging Portfolio Dynamics

- Primarily loaning to established brand names
- No "conference center" hotels and ~75% of the properties are in major MSAs; mostly in the Midwest
- $21 million of outstanding hotel loans in the portfolio are classified, the same amount as in Q1 2021
- 96% of the outstanding loans, by dollar amount, have recourse provisions
- Hotel Construction borrowers are sophisticated sponsors with significant invested equity and resources
- $5.5 million of reserves are allocated to hotel portfolio, representing 3.0% of the total outstanding hotel portfolio

Hotels by Brand Ownership



Hotel & Lodging 6/30/2021 *($ millions)*

	# Loans	Amount Outstanding	Unfunded Commitments	Average Size	Amount Classified
Completed Hotels	15	$168	$0	$11	$21
In-Progress Construction	2	$15	$10	$8	$0
Total	**17**	**$183**	**$10**	**$11**[(1)]	**$21**

Note: Data as of 6/30/21.
(1) Weighted average.

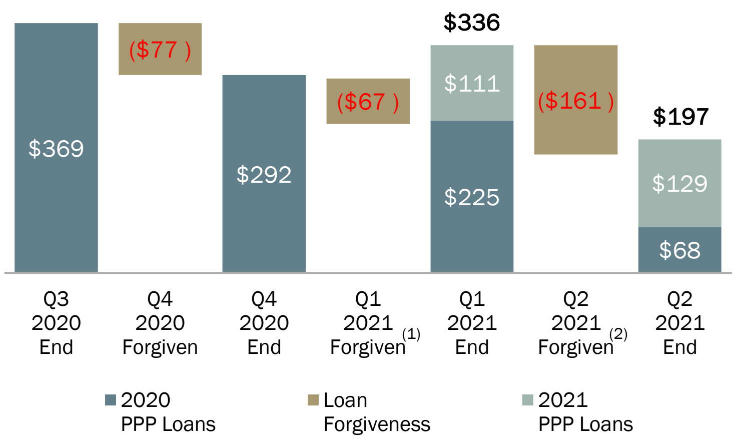
PPP LOAN SUMMARY

CROSSFIRST BANKSHARES, INC.

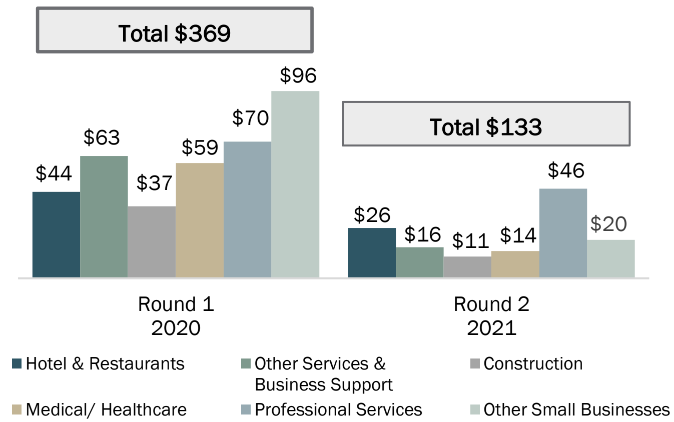
Commentary

- Weighted average rate of approximately 3.8%, in Q2 2021
- $4.7 million in anticipated fees remain from Rounds 1 and 2
- $22 million of new PPP loans were written in Q2 2021
- 53 new customers from Round 2 representing 9% of funding
- Round 1 (2020 programs) were 2-year programs while Round 2 (2021 program) is a 5-year program

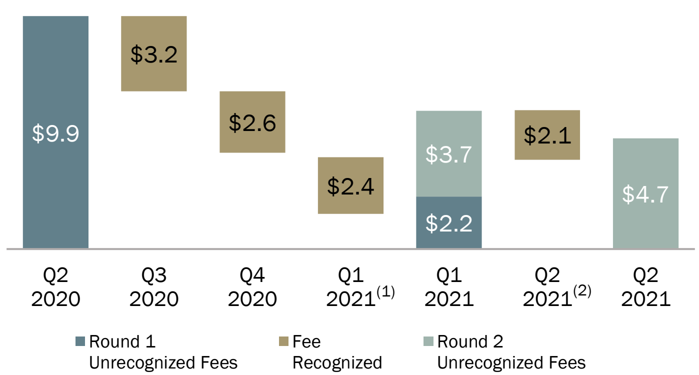
PPP Timeline



Loans Approved by Industry

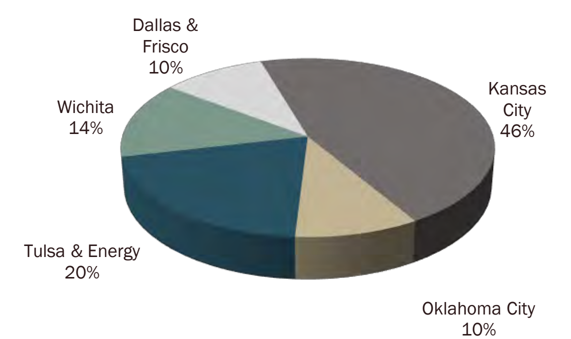


Fee Recognition



Round 2 PPP Loan Portfolio by Market

(Based on $197 million Funded)



Note: As of end of period; dollars in millions.
(1) $2.4 million consists of $1.9 million from Round 1 and $0.5 million from Round 2.
(2) $2.1 million consists of $1.7 million from Round 1 and $0.4 million from Round 2