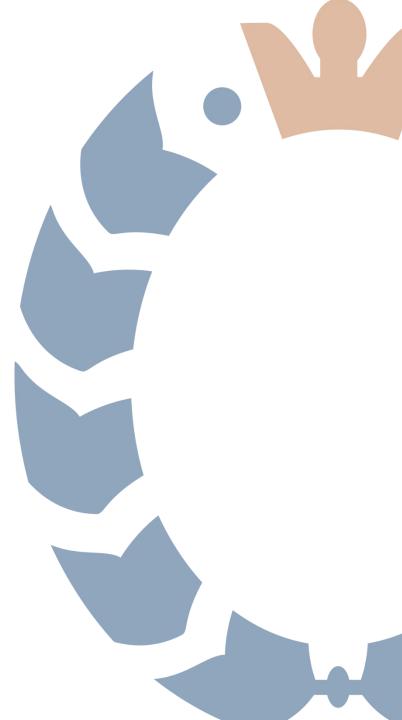


Investor Presentation

Second Quarter 2020 ——



"Safe Harbor" Statement

2

Under the Private Securities Litigation Reform Act of 1995

"Safe Harbor" Statement under the Private Securities Litigation Reform Act of 1995: This release contains, and the remarks by Prosperity's management on the conference call may contain, forward-looking statements within the meaning of the federal securities laws, including Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements are typically, but not exclusively, identified by the use in the statements of words or phrases such as "aim," "anticipate," "estimate," "expect," "goal," "guidance," "intend," "is anticipated," "is expected," "is intended," "objective," "plan," "projected," "projection," "will affect," "will be," "will continue," "will decrease," "will grow," "will impact," "will increase," "will incur," "will reduce," "will remain," "will result," "would be," variations of such words or phrases (including where the word "could," "may," or "would" is used rather than the word "will" in a phrase) and similar words and phrases indicating that the statement addresses some future result, occurrence, plan or objective. Forward-looking statements include all statements other than statements of historical fact, including forecasts or trends, and are based on current expectations, assumptions, estimates and projections about Prosperity Bancshares and its subsidiaries. These forward-looking statements may include information about Prosperity's possible or assumed future economic performance or future results of operations, including future revenues, income, expenses, provision for loan losses, provision for taxes, effective tax rate, earnings per share and cash flows and Prosperity's future capital expenditures and dividends, future financial condition and changes therein, including changes in Prosperity's loan portfolio and allowance for loan losses, future capital structure or changes therein, as well as the plans and objectives of management for Prosperity's future operations, future or proposed acquisitions, the future or expected effect of acquisitions on Prosperity's operations, results of operations, financial condition, and future economic performance, statements about the anticipated benefits of the proposed transaction, and statements about the assumptions underlying any such statement, as well as expectations regarding the effects of the COVID-19 pandemic on the Bank's operating income, financial condition and cash flows. These forward-looking statements are not guarantees of future performance and are subject to risks and uncertainties, many of which are outside of Prosperity's control, which may cause actual results to differ materially from those expressed or implied by the forward-looking statements. These risks and uncertainties include but are not limited to whether Prosperity can: successfully identify acquisition targets and integrate the businesses of acquired companies and banks, including LegacyTexas; continue to sustain its current internal growth rate or total growth rate; provide products and services that appeal to its customers; continue to have access to debt and equity capital markets; and achieve its sales objectives. Other risks include, but are not limited to: the possibility that credit quality could deteriorate; actions of competitors; changes in laws and regulations (including changes in governmental interpretations of regulations and changes in accounting standards); the possibility that the anticipated benefits of an acquisition transaction, including the LegacyTexas transaction, are not realized when expected or at all, including as a result of the impact of, or problems arising from, the integration of two companies or as a result of the strength of the economy and competitive factors generally; a deterioration or downgrade in the credit quality and credit agency ratings of the securities in Prosperity's securities portfolio; customer and consumer demand, including customer and consumer response to marketing; effectiveness of spending, investments or programs; fluctuations in the cost and availability of supply chain resources; economic conditions, including currency rate, interest rate and commodity price fluctuations; the effect, impact potential duration or other implications of the COVID-19 pandemic; and weather. These and various other factors are discussed in Prosperity Bancshares' Annual Report on Form 10-K for the year ended December 31, 2019, Quarterly Report on Form 10-Q for the period ended March 31, 2020, and other reports and statements Prosperity Bancshares has filed with the Securities and Exchange Commission ("SEC"). Copies of the SEC filings for Prosperity Bancshares may be downloaded from the Internet at no charge from PB http://www.prosperitybankusa.com. NYSE

2020 Second Quarter Highlights

- Net income of \$130.9 million and earnings per share (diluted) of \$1.41 for three months ended June 30, 2020
- Assets of \$33.0 billion, total loans of \$21.0 billion, and deposits of \$26.2 billion at June 30, 2020
- Common equity tier 1 ratio of 12.29% and leverage ratio of 9.41% at June 30, 2020
- Nonperforming assets to average earning assets remain low at 0.28% or \$77.9 million for the second quarter 2020
- Allowance for credit losses on loans and on off-balance sheet credit exposure of \$354.2 million
- Allowance for credit losses to total loans, excluding Warehouse Purchase Program and SBA Paycheck Protection Program loans, of 1.90%
- Efficiency ratio of 46.6% for the second quarter 2020 or 44.0% excluding one-time merger expenses
- Declared cash dividend of \$0.46 for the third quarter 2020

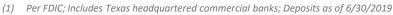
Strong Presence in Texas and Oklahoma

- A Texas-based financial holding company with \$33.0 billion in total assets
- Ranked #3 in deposit market share in Texas ⁽¹⁾
- Texas and Oklahoma continue to benefit from strong economies, and are home to 55 Fortune 500 headquartered companies
- Shareholder driven with 4.0% fully diluted insider ownership⁽²⁾
- Successful completion of 43 acquisitions (whole bank, branch and failed bank transactions)

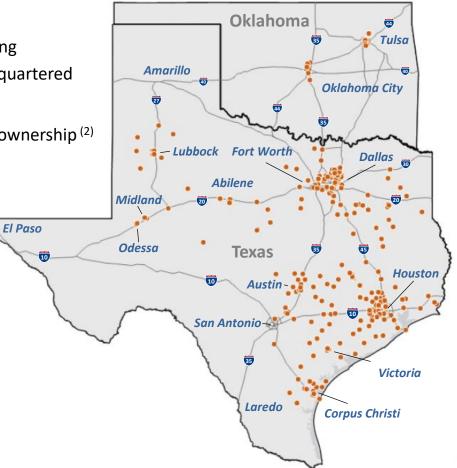
275 Full-Service Locations

- 16 in Bryan/College Station Area
- 6 in Central Oklahoma Area
- 29 in Central Texas Area
- 65 in Dallas/Fort Worth Area
- 22 in East Texas Area
- 65 in Houston Area
- 30 in South Texas Area
- 8 in Tulsa Area
- 34 in West Texas Area



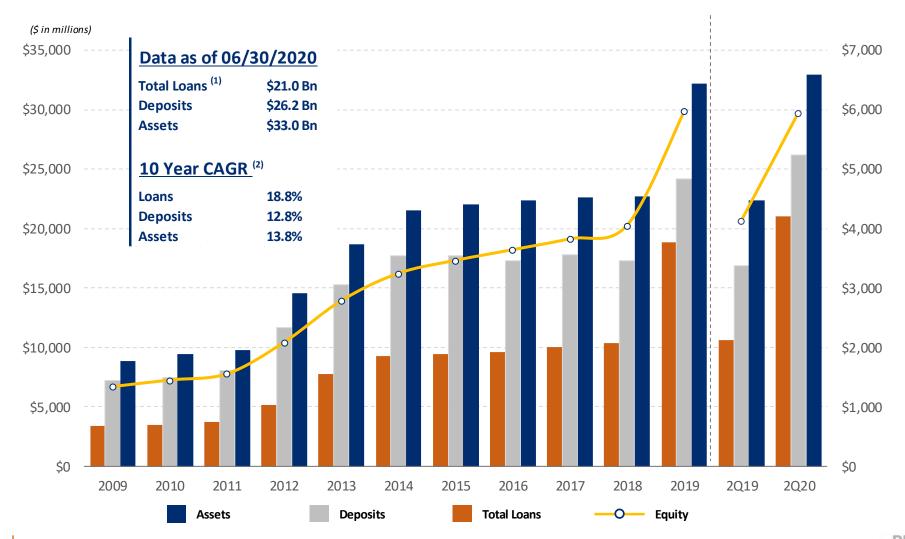


(2) Per proxy statement (Form DEF 14A) filed on 3/14/2020





Balance Sheet Summary



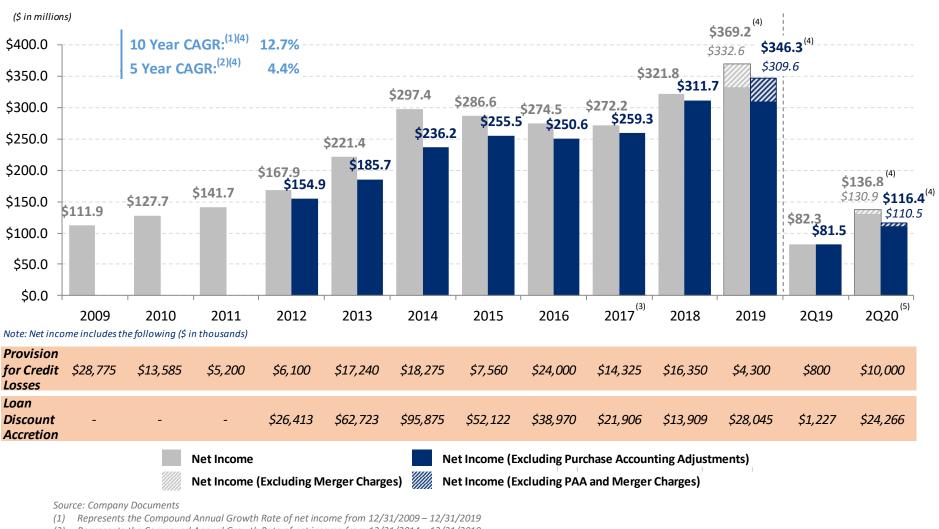
Source: Company Documents

5

(1) Total loans include Warehouse Purchase Program (WPP) loans

(2) Represents the Compound Annual Growth Rate from 12/31/2009 – 12/31/2019

Net Income



PB

NYSE

(2) Represents the Compound Annual Growth Rate of net income from 12/31/2014 – 12/31/2019

(3) Net income includes a one-time non-cash charge of \$1.431 million related to the "Tax Cuts and Jobs Act" enacted on December 22, 2017

(4) Excludes after-tax merger related charges of (\$36.658) million for the fourth quarter 2019 and (\$5.904) million for the second quarter ended 2020 respectively

(5) Net income includes a one-time tax benefit of \$20.145 million related to net operating losses (NOLs) carryback as a result of the "CARES Act" enacted on March 27, 2020

Earnings Per Share



Core EPS (Excluding PAA and Merger Charges)

(3) Net income includes a one-time non-cash charge of \$0.02 per diluted share related to the "Tax Cuts and Jobs Act" enacted on December 22, 2017

EPS (Excluding Merger Charges)

Represents the Compound Annual Growth Rate for EPS from 12/31/2009 - 12/31/2019

Represents the Compound Annual Growth Rate for EPS from 12/31/2014 - 12/31/2019

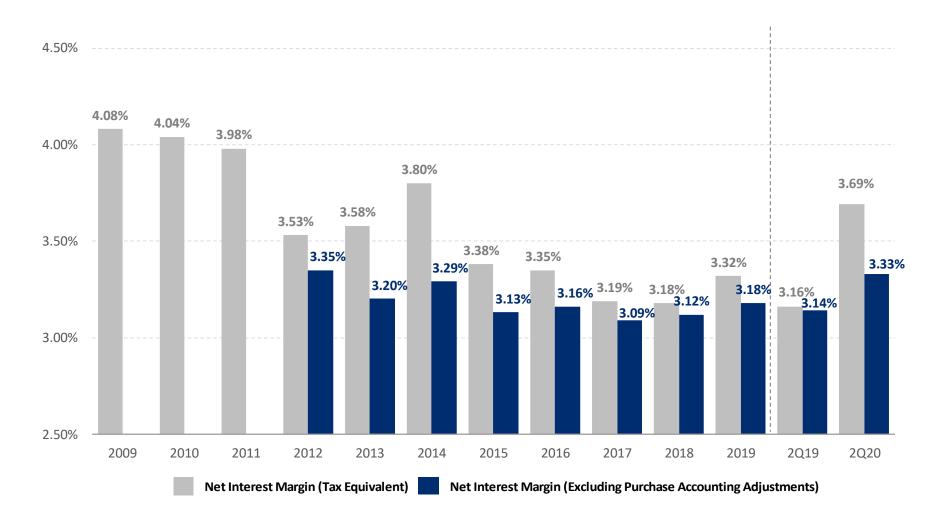
(4) Excludes after-tax merger related charges of (\$0.50) per share for the year ended 2019 and (\$0.06) per share for the second quarter ended 2020 respectively

(5) Net income includes a one-time tax benefit of \$0.22 per share related to net operating losses (NOLs) carryback as a result of the "CARES Act" enacted on March 27, 2020

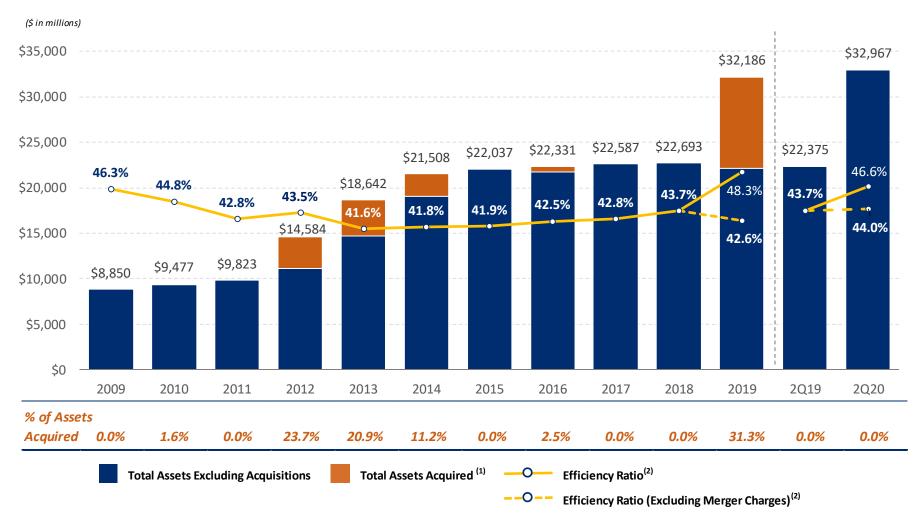
(1) (2)

Source: Company Documents

Net Interest Margin



Acquisitions & Efficiency Ratio



Source: Company Documents

(1) Representative of target assets at closing

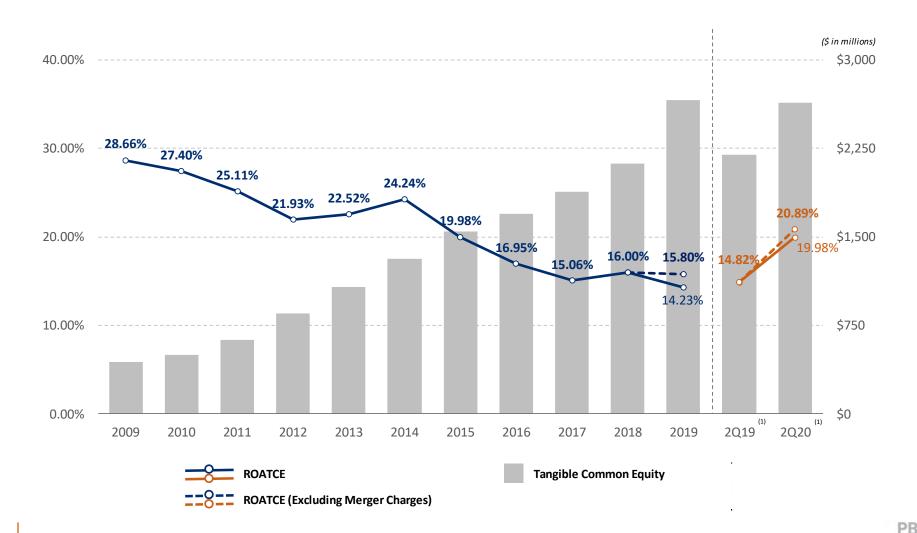
Calculated by dividing total noninterest expense, excluding credit loss provisions, by net interest income plus noninterest income, excluding net gains and losses on the sale or wirte down of assets and securities. Additionally, taxes are not part of this calculation.

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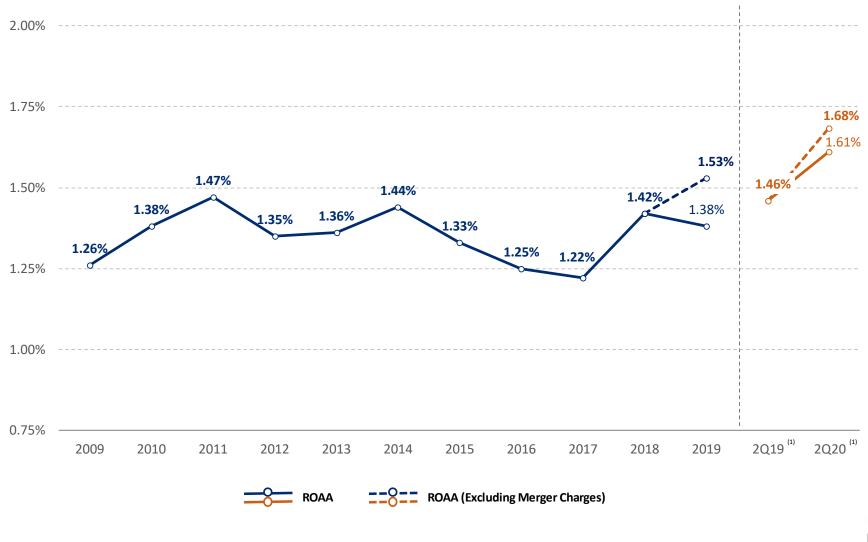
NYSE

(2)

Return on Average Tangible Common Equity

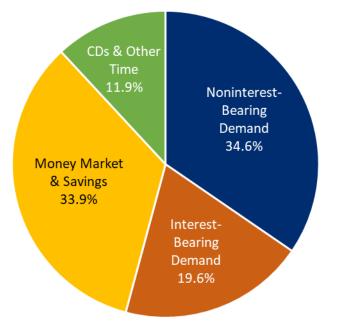


Return on Average Assets



Deposit Composition

As of June 30, 2020 (\$ in millions)

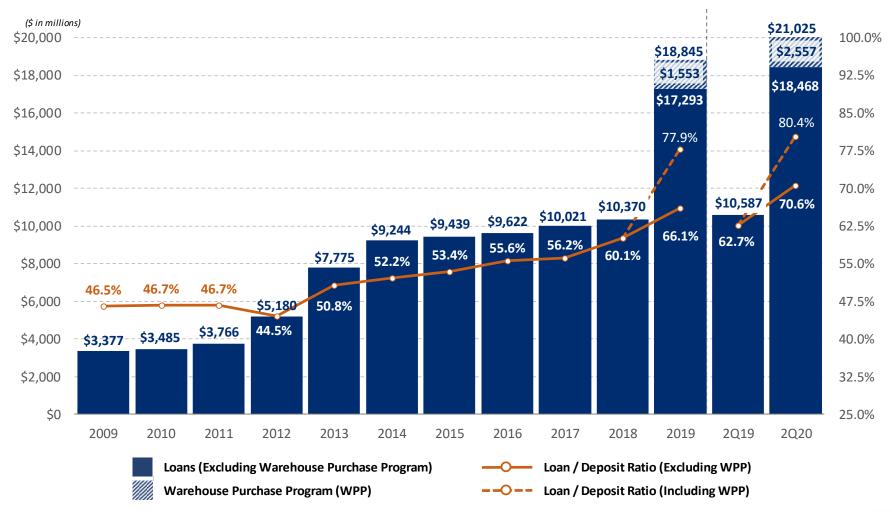


	\$mm	Cost (%) ⁽¹⁾
Noninterest-Bearing Demand	\$9,040	0.00%
Interest-Bearing Demand	\$5,130	0.38%
Money Market & Savings	\$8,871	0.41%
CDs & Other Time	\$3,111	1.48%

Total Deposits: \$26.2Bn

Total Cost of Deposits: 0.40%⁽¹⁾ Cost of Interest-Bearing Deposits: 0.61%⁽¹⁾

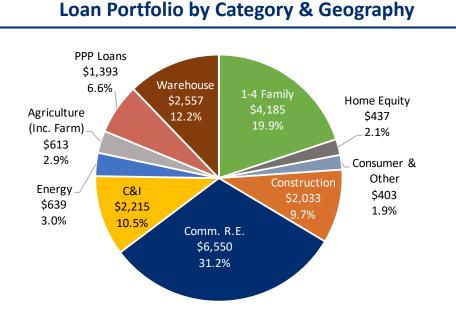
Loan Growth





Loan Portfolio Overview

As of June 30, 2020 (\$ in millions)



Loans By Area ⁽⁴⁾	<u>Amount⁽²⁾⁽⁴⁾</u>	<u>% of Total</u>
Bryan / College Station	\$697	3.8%
Central Oklahoma	\$651	3.6%
Central Texas	\$1,628	8.9%
Dallas / Ft. Worth	\$8,051	43.9%
East Texas	\$497	2.7%
Houston	\$3,674	20.1%
South Texas	\$1,411	7.7%
Tulsa	\$650	3.5%
West Texas	\$1,067	5.8%

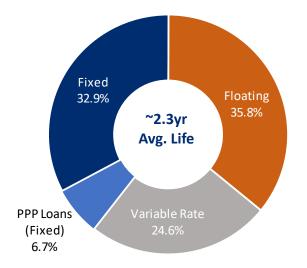
Source: Company Documents

Data for the three months ended June 30. 2020 (1)

Excludes \$142 million in loans assigned to the Corporate Group (2)

Core yield excludes purchase accounting adjustments Excludes Warehouse Purchase Program (WPP) loans

Loans by Rate Structure



Total Loans: \$21.0Bn Loans (Excl. WPP): \$18.5Bn

Yield on Total Loans: 4.87%⁽¹⁾ Yield on Loans HFI (Excl. WPP): 5.06%⁽¹⁾⁽⁴⁾ Core Yield on Loans HFI (Excl. WPP): 4.52%⁽¹⁾⁽³⁾⁽⁴⁾



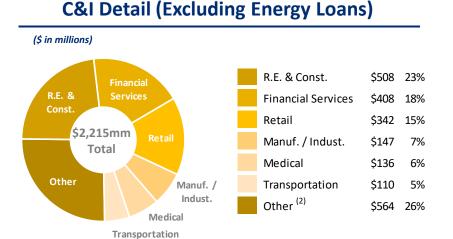
(3) (4)

Loan Portfolio Detail

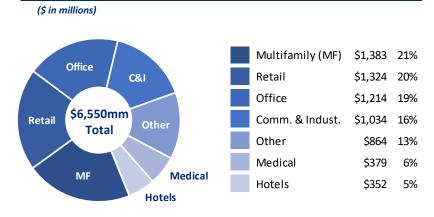
As of June 30, 2020 (\$ in millions)

Portfolio Commentary

- 29% of commercial real estate is owner occupied
- CRE and construction loans conservatively underwritten to cost of collateral
- Medical loans equal to ~3% of total loans
- Hotel loans equal to ~2% of total loans
- Restaurant loans equal to ~1% of total loans



Commercial Real Estate Detail



(\$ in millions) Raw Land MF \$2,033mm Total⁽¹⁾ SF Hotels Single Famil Multifamily Raw Land Resi. & Com Other Land Dev. (L Office Retail Medical Hotels

Construction Detail

Single Family (SF)	\$710	35%
Multifamily (MF)	\$370	18%
Raw Land	\$274	13%
Resi. & Com. Lots	\$248	12%
Other	\$129	6%
Land Dev. (LD)	\$115	6%
Office	\$52	3%
Retail	\$63	3%
Medical	\$56	3%
Hotels	\$18	1%

PR

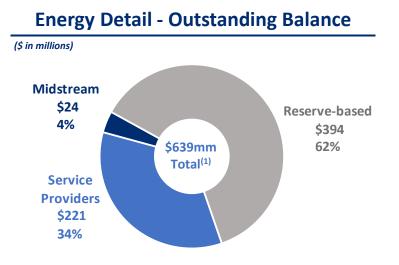
Source: Company Documents

(1) Total includes a net unaccreted discount of (\$1.921) million, not shown in graph

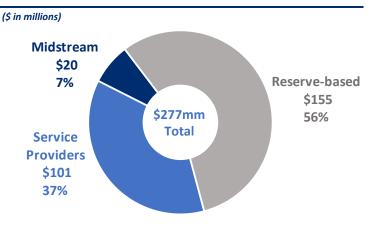
(2) Includes State & Political loans

Energy Portfolio Detail

As of June 30, 2020 (\$ in millions)



Energy Detail - Unfunded Commitments



Portfolio Commentary

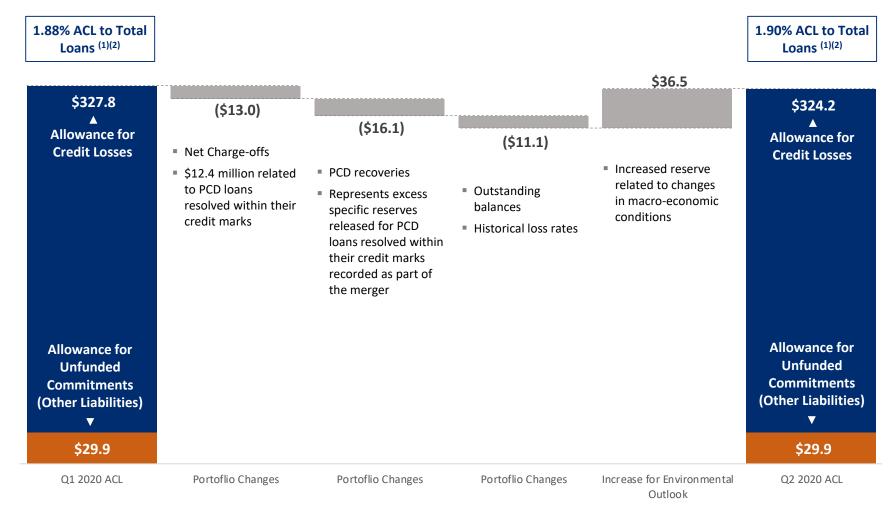
- Total energy loan loss reserves of 9.3%, or \$59.5 million (excluding fair value marks)⁽¹⁾
- \$329.7 million, or 51.6% of energy loans are subject to fair value marks of \$15.2 million in addition to general and specific loan loss reserves
- Portfolio largely company-led with only 2 Shared National Credits (SNCs), with an outstanding balance of \$42.8 million
- Portfolio focused on lending on proven producing reserves and therefore not dependent on ongoing development
- Acquired oil portfolio is 89.8% hedged during 2020 at a weighted average price of \$49.42 and 49.9% hedged during 2021 at a weighted average price of \$49.50
- Acquired gas portfolio is 50.6% hedged during 2020 at a weighted average price of \$2.41 and 47.3% hedged during 2021 at a weighted average price of \$2.17

16 Source: Company Documents

(1) Amount shown net of discount related to purchase accounting; Excludes PPP loans

Changes to Allowance for Credit Losses

(\$ in millions)

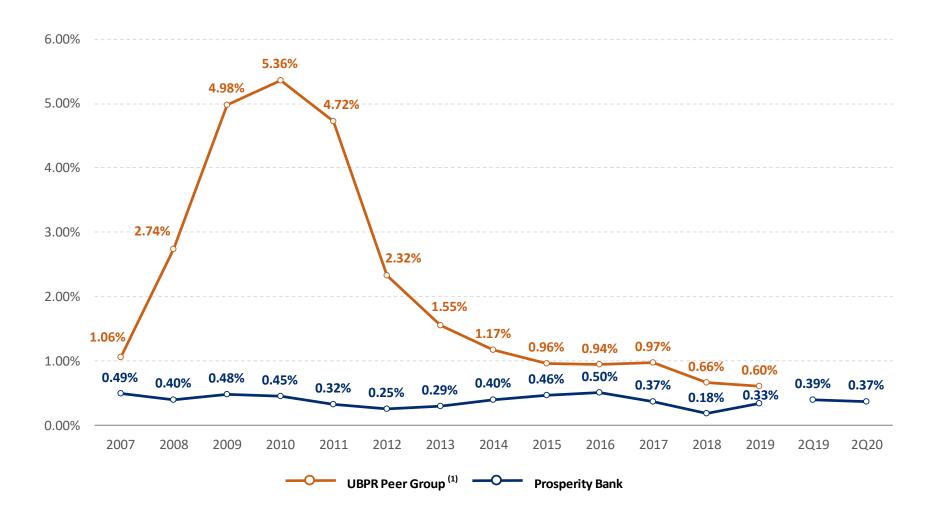




(1) Excludes Warehouse Purchase Program (WPP) and SBA Paycheck Protection Program (PPP) loans

(2) Excludes allowance for credit losses on off-balance sheet credit exposures (allowance for unfunded commitments)

Asset Quality NPAs / Loans + OREO



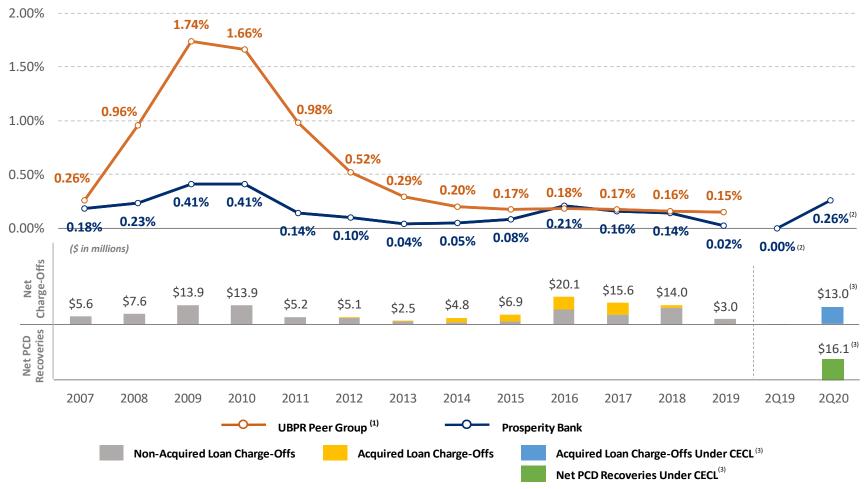
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Note: NPAs include loans past due 90 days and still accruing

(1) UBPR = Uniform Bank Performance Report; Peer Group 2 (94 banks) – Insured commercial banks having assets between \$10 billion and \$100 billion

Asset Quality Net Charge-Offs / Average Loans



Source: Company Documents & Uniform Bank Performance Report

Note: NPAs include loans past due 90 days and still accruing

19

- (1) UBPR = Uniform Bank Performance Report; Peer Group 2 (94 banks) Insured commercial banks having assets between \$10 billion and \$100 billion
- (2) Interim period net charge-off ratios shown on an annualized basis

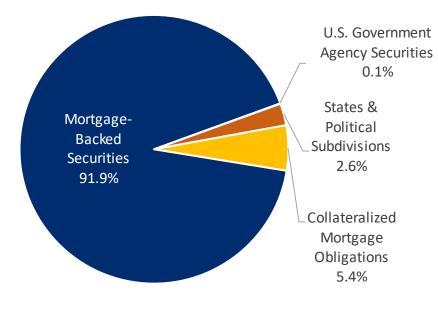
(3) Reflects charge-offs and Purchased Credit Deteriorated (PDD) loan recoveries resolved within their respective credit marks on acquired PCD loans in accordance with CECL accounting practices; Prior to the adoption of CECL in the first quarter of 2020, PCD loans were classified as Purchased Credit Impaired (PCI) loans and their assigned fair-value marks were netted against the outstanding loan balance with a charge-off only being recorded when the loss exceeded the amount of fair-value marks remaining.

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Securities Portfolio Detail

As of June 30, 2020 (\$ in millions)

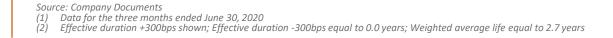


96.0% Held to Maturity 4.0% Available for Sale

	\$mm
Mortgage-Backed Securities	\$7,093
Collateralized Mortgage Obligations	\$420
States & Political Subdivisions	\$203
U.S. Government Agency Securities	\$4

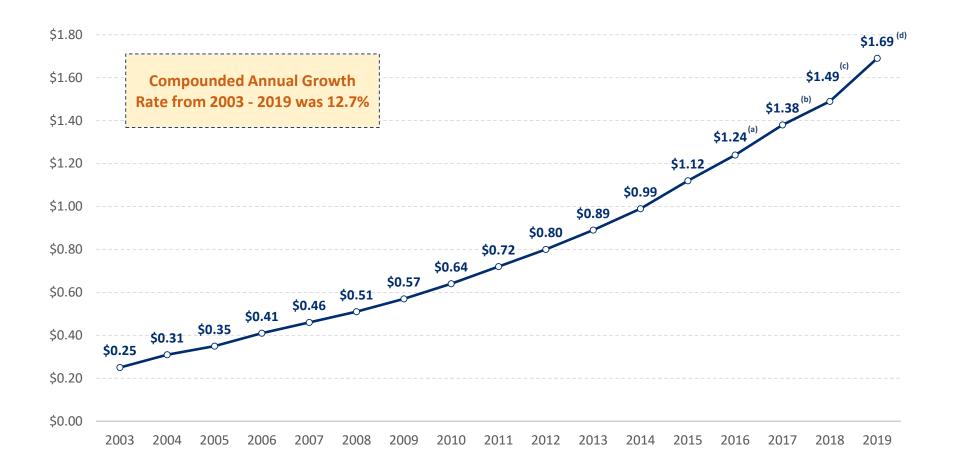
Total Securities: \$7.7Bn

Yield on Securities: 2.19%⁽¹⁾ Duration: ~2.5 Yrs.⁽²⁾ Avg. Yearly Cash Flow: ~\$2.3Bn





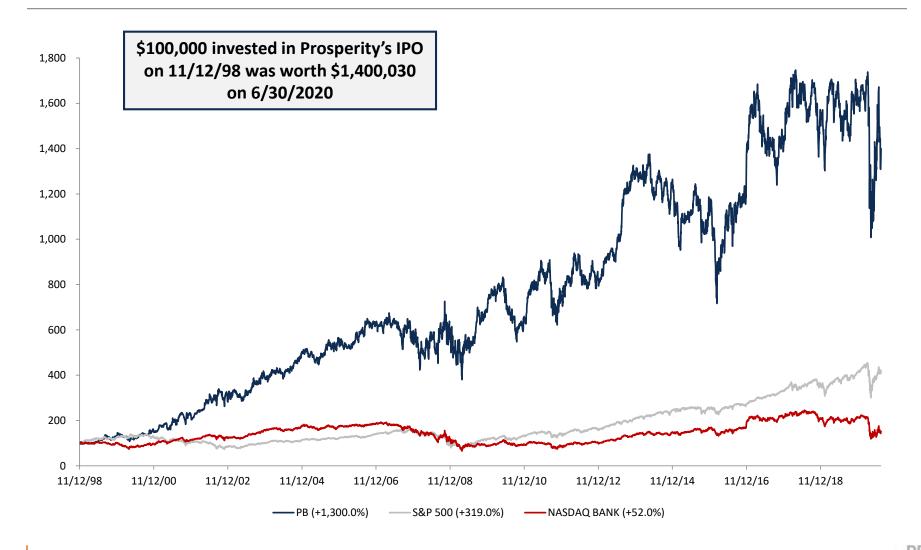
Dividend History



2016 dividend consists of \$0.30 per share declared in 10 2016, 20 2016, 30 2016 and \$0.34 per share declared in 40 2016 2017 dividend consists of \$0.34 per share declared in 10 2017, 20 2017, 30 2017 and \$0.36 per share declared in 40 2017 2018 dividend consists of \$0.36 per share declared in 10 2018, 20 2018, 30 2018 and \$0.41 per share declared in 40 2018 2019 dividend consists of \$0.41 per share declared in 10 2019, 20 2019, 30 2019 and \$0.46 per share declared in 40 2019

Total Return Performance

IPO (November 12, 1998) to June 30, 2020



Presence in Fast-Growing Markets

Positioned in Strong Markets



- Today, Texas is the 2nd largest state in the U.S., and largest in the 48 contiguous U.S. with over 29 million residents
- Ranked #3 on the Fortune 500 list with 50 headquartered companies in 2019
- Ranked 2nd by Forbes in "Best States for Business", including 1st in current economic growth prospects, 3rd in business costs, and 4th in economic climate as of December 2019
- Oklahoma City and Tulsa MSAs comprise over 50% of the state's population
- Oklahoma is home to five Fortune 500 Companies in 2019
- 3rd biggest producer state for natural gas and 5th biggest for crude oil
- Oklahoma is one of the top five producers of wheat and Natural gas in the United States

Top 10 Fastest Growing MSAs in the U.S. ⁽¹⁾

	Metropolitan Statistical Area	Prosperity Presence	Prosperity Deposits ⁽²⁾ (\$mm)	2020 - 2025 Population Growth
1	Austin-Round Rock-Georgetown, TX	\checkmark	\$925	8.5%
2	Orlando-Kissimmee-Sanford, FL			7.9%
3	Raleigh-Cary, NC			7.7%
4	Houston-The Woodlands-Sugar Land, TX	\checkmark	\$4,631	7.5%
5	San Antonio-New Braunfels, TX	\checkmark	\$372	7.5%
6	Dallas-Fort Worth-Arlington, TX	\checkmark	\$8,542	7.4%
7	Las Vegas-Henderson-Paradise, NV			7.2%
8	Phoenix-Mesa-Chandler, AZ			7.2%
9	Charlotte-Concord-Gastonia, NC-SC			7.0%
10	Denver-Aurora-Lakewood, CO			6.9%

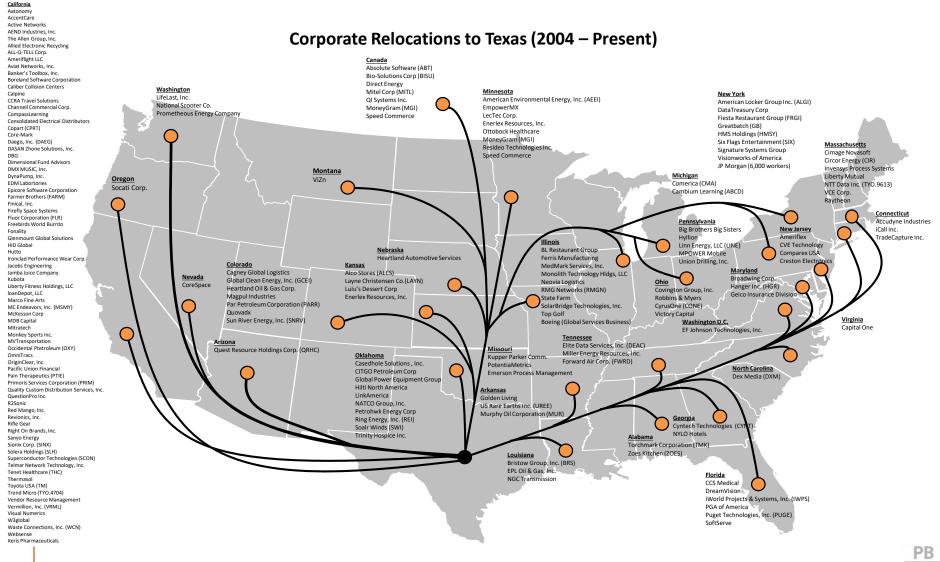
- Presence in four of the top six fastest growing MSAs in the United States
- The South is home of 10 of the 15 fastest growing cities with populations greater than 50,000 in the United States



Source: S&P Global, Worldpopulationreview.com, Statista, and Forbes.

(1) Includes MSAs with greater than one million in total population. Deposit data as of 6/30/2019.

Corporate Relocations to Texas



Houston Market Highlights

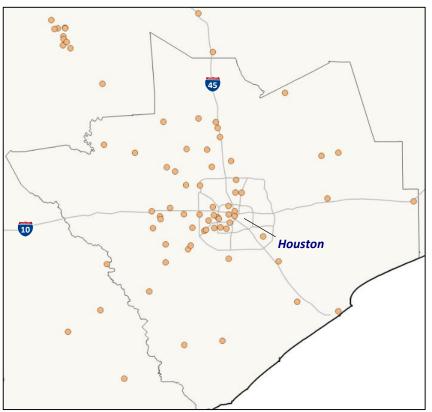
Market Highlights

- Houston MSA is the 5th largest in the United States by population with approximately 7.2 million residents
 - Population is expected to grow 7.5% from 2020 to 2025
- In April 2020, total nonfarm employment dropped 8.5% YoY compared to the national employment drop of 12.9%
 - Among the 12 largest MSA's, 9 areas had greater percentage losses than Houston
- Houston's diversification in industries including manufacturing, aerospace, biotechnology, digital technology, and transportation / logistics provides one of the best business climates in the nation
 - Home to the Texas Medical Center the world's largest medical complex, and NASA's Johnson Space Center where the Mission Control Center is located
 - The Port of Houston is 1st in the U.S. in international waterborne tonnage handled and 2nd in total cargo tonnage handled

Select Fortune 500 Companies



Houston Franchise



Sources: S&P Global, Houston.org, Bureau of Labor Statistics, Forbes.com, Port Houston, Greater Houston Partnership. References to Houston refer to the Houston – The Woodlands – Sugar Land metropolitan statistical area.

Dallas/Ft. Worth Market Highlights

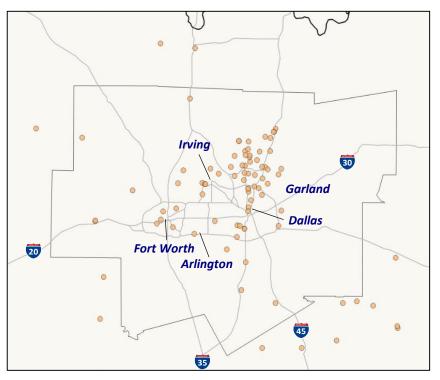
Market Highlights

- Dallas/Ft. Worth MSA is the 4th largest in the United States by population with over 7.7 million residents
 - Population is expected to grow 7.4% from 2020 to 2025
- In June 2020, total nonfarm employment only decreased 3.7% YoY, compared to the statewide decrease of 5.4% YoY and the nationwide decrease of 8.7% YoY
 - Among the 12 largest MSA's, 10 areas had greater percentage losses than Dallas/Ft. Worth
- From the beginning of the year through June, the financial activities / services industry in Dallas saw a 1.1% increase in employment, compared to a 1.3% decrease statewide
- Headquarters to 23 Fortune 500 companies as of June 2020
- The Dallas Economic Recovery Task Force announced a new initiative, Dallas Forward, to assist small and medium-sized businesses with COVID-19 recovery

Select Fortune 500 Companies



Dallas / Ft. Worth Franchise



Sources: Bureau of Labor Statistics, S&P Global, Dallasnews.com, Dallasforward.org, Fortune.com. References to Dallas refer to the Dallas – Fort Worth – Arlington metropolitan statistical area.

Austin Market Highlights

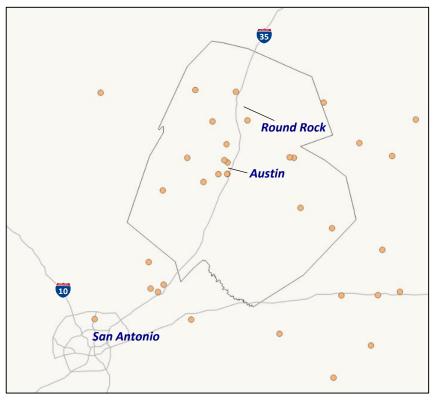
Market Highlights

- Ranked #1 place to live in the U.S. in 2019 by U.S. News and World Report for the third year in a row
- Ranked as the 3rd best city for technology professionals to work
 - IT job growth is expected to expand 15% over the next 5 years
- Austin-Round Rock MSA reported an increase of 30,700 nonagricultural jobs in June (seasonally adjusted), which is the largest month-overmonth increase this year
 - Unemployment rate is 7.5%, the lowest since the start of the pandemic
- Since the end of June, 10+ companies have announced relocations or expansions to existing operations in the Austin-Round Rock MSA
- Relative to other major Texas cities, Austin has the highest percentage of job postings with a "work from home" option

Select Fortune 500 Companies



Austin Franchise Franchise



Sources: Bureau of Labor Statistics, Forbes, U.S. News and World Report, CIO Dive, Austin Chamber. References to Austin refer to the Austin – Round Rock metropolitan statistical area.

Contact Information

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