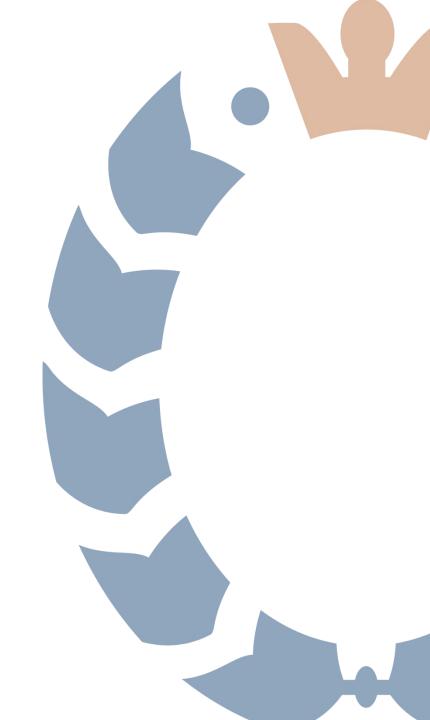


Investor Presentation

First Quarter 2023 —



"Safe Harbor" Statement

Under the Private Securities Litigation Reform Act of 1995

"Safe Harbor" Statement under the Private Securities Litigation Reform Act of 1995: This presentation contains, and the remarks by Prosperity's management at the annual meeting 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. From time to time, oral or written forward-looking statements may also be included in other information released to the public. Such forward-looking statements are typically, but not exclusively, identified by the use in the statements of words or phrases such as "aim," "anticipate," "believe," "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, changes in deposits, borrowings and the investment securities portfolio, future capital structure or changes therein, as well as the plans and objectives of management for Prosperity's future operations, future or proposed acquisitions, including the pending transactions with First Bancshares and Lone Star, 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 each of the pending transactions, and statements about the assumptions underlying any such statement, as well as expectations regarding the effects of the COVID-19 pandemic on Prosperity'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 First Bancshares and Lone Star; 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 pending transactions with First Bancshares and Lone Star, 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. Prosperity disclaims any obligation to update such factors or to publicly announce the results of any revisions to any of the forward-looking statements included herein to reflect future events or developments. These and various other factors are discussed in Prosperity's Annual Report on Form 10-K for the year ended December 31, 2022, and other reports and statements Prosperity has filed with the Securities and Exchange Commission ("SEC"). Copies of the SEC filings for Prosperity may be downloaded from the Internet at no charge from http://www.prosperitybankusa.com.



First Quarter Highlights

- Net income of \$124.7 million and earnings per share (diluted) of \$1.37 for three months ended
 March 31, 2023
- Assets of \$37.8 billion, total loans of \$19.3 billion, and deposits of \$27.0 billion at March 31, 2023
- Common equity tier 1 ratio of 15.59% and leverage ratio of 10.06% at March 31, 2023
- Loans, excluding Warehouse Purchase Program loans, increased \$436.0 million or 2.4% (9.6% annualized) during the first quarter 2023
- Sound asset quality with annualized net charge-offs (recoveries) / quarterly average loans of (0.01%)
- Nonperforming assets to average earning assets remain low at 0.07% or \$24.5 million for the first quarter 2023
- Allowance for credit losses on loans and on off-balance sheet credit exposure of \$312.1 million
- Allowance for credit losses to total loans, excluding Warehouse Purchase Program loans, of 1.52%
- Efficiency ratio of 43.7% for the first quarter 2023
- Declared cash dividend of \$0.55 for the second quarter 2023
- Received regulatory approvals for the acquisition of First Bancshares of Texas, Inc.
- Pending acquisition of Lone Star State Bancshares, Inc.



Strong Presence in Texas and Oklahoma

A Texas-based financial holding company with \$37.8 billion in total assets

 Prosperity has been ranked in the Top 10 of Forbes America's Best Banks since the list's inception in 2010, and was ranked #6 in 2023

Ranked #2 in deposit market share in Texas (1)

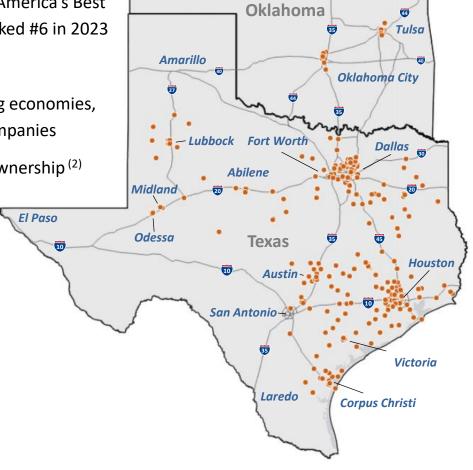
 Texas and Oklahoma continue to benefit from strong economies, and are home to 56 Fortune 500 headquartered companies

Shareholder driven with 4.2% fully diluted insider ownership (2)

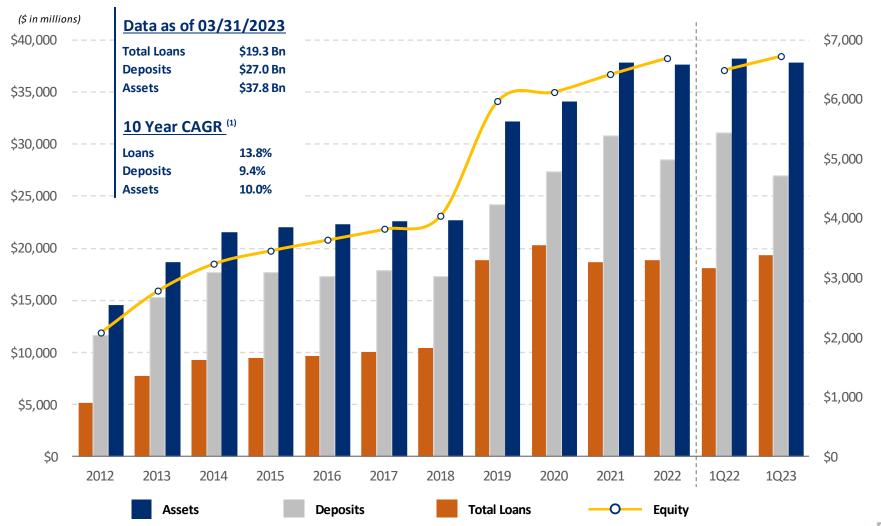
 Successful completion of 43 acquisitions (whole bank, branch and failed bank transactions)

272 Full-Service Locations

- in Bryan/College Station Area
- 6 in Central Oklahoma Area
- 29 in Central Texas Area
- 62 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



Balance Sheet Summary





Net Income



Net Income (Excluding Purchase Accounting Adjustments)



⁽¹⁾ Represents the Compound Annual Growth Rate of net income (excluding purchase accounting adjustments) from 12/31/2012 – 12/31/2022

Net Income



⁽²⁾ Represents the Compound Annual Growth Rate of net income (excluding purchase accounting adjustments) from 12/31/2017 – 12/31/2022

⁽³⁾ Includes NOL tax benefit of \$20.145 million related to the CARES Act

Earnings Per Share



Core EPS (Excluding Purchase Accounting Adjustments)

EPS

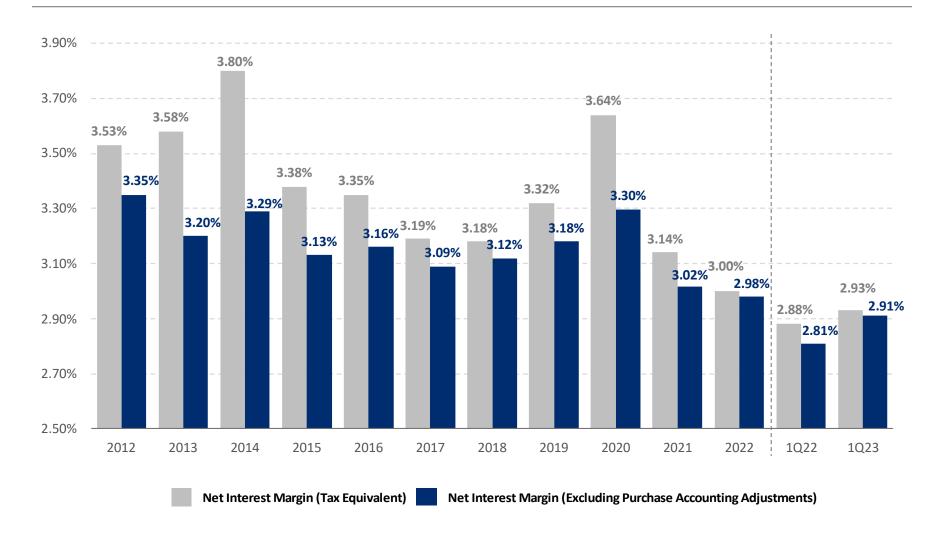
Source: Company Documents

⁽¹⁾ Represents the Compound Annual Growth Rate for EPS (excluding purchase accounting adjustments) from 12/31/2012 – 12/31/2022

⁽²⁾ Represents the Compound Annual Growth Rate for EPS (excluding purchase accounting adjustments) from 12/31/2017 – 12/31/2022

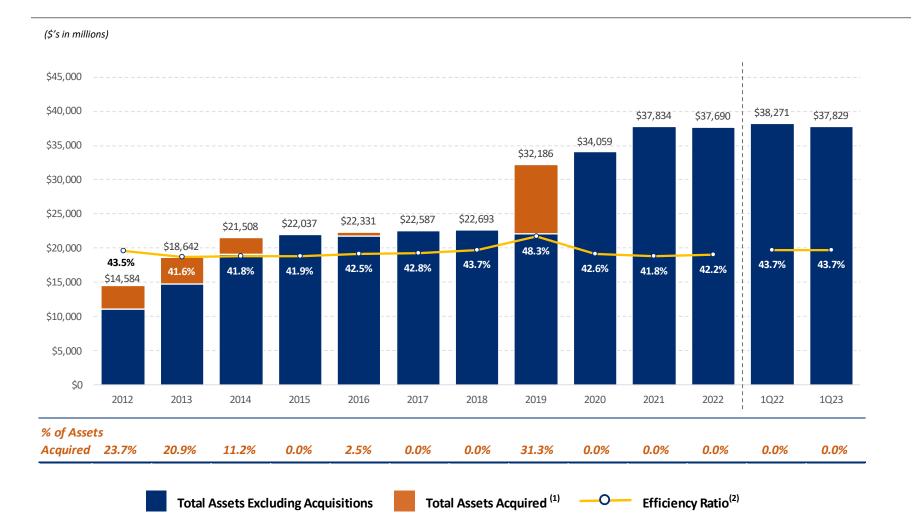
⁽³⁾ Includes NOL tax benefit of \$20.145 million related to the CARES Act

Net Interest Margin





Acquisitions & Efficiency Ratio



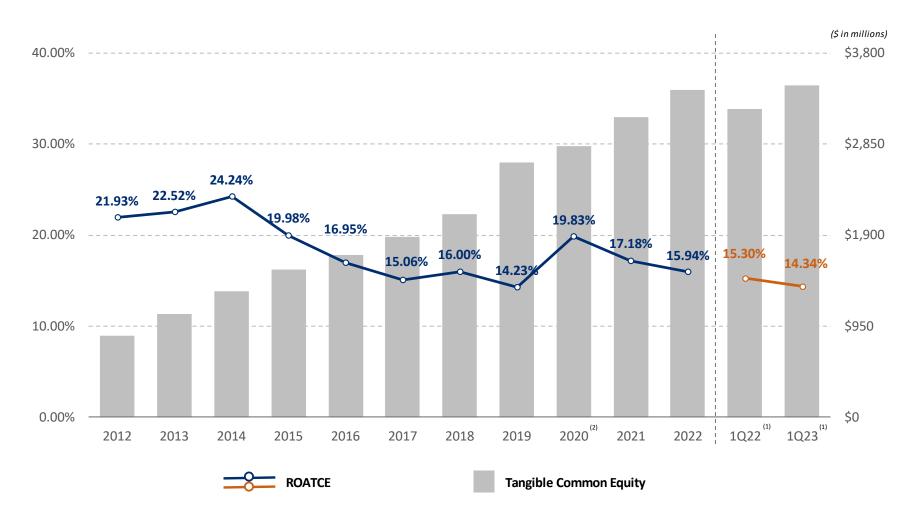
Source: Company Documents



¹⁾ Representative of target assets at closing

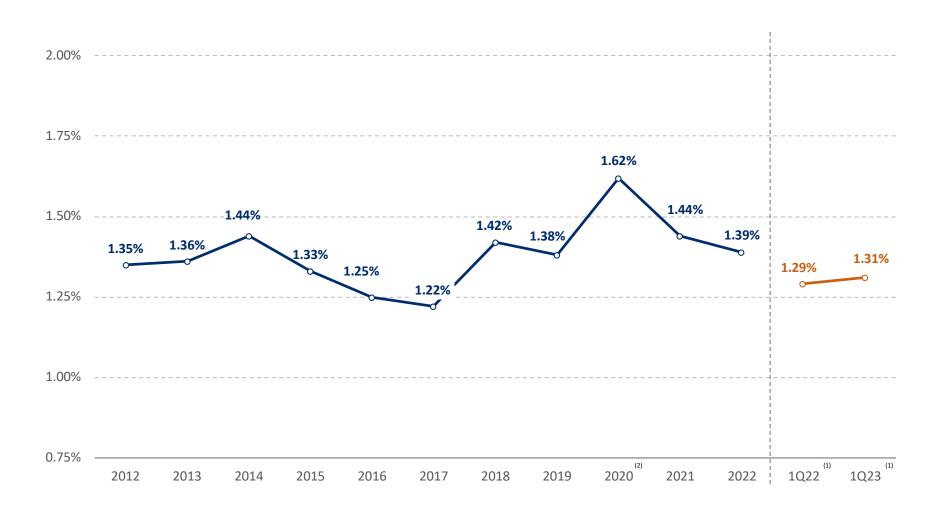
Calculated by dividing total noninterest expense, excluding credit loss provisions, by net interest income plus noninterest income, excluding net gains and losses on the sale or write down of assets and securities. Additionally, taxes are not part of this calculation.

Return on Average Tangible Common Equity





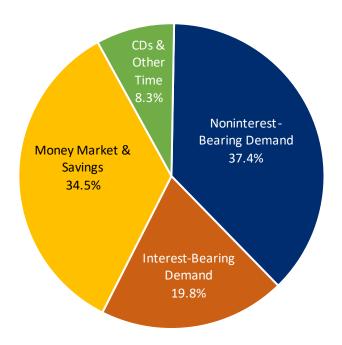
Return on Average Assets





Deposit Composition

As of March 31, 2023 (\$ in millions)



	Şmm	Cost (%)*'
Noninterest-Bearing Demand	\$10,108	0.00%
Interest-Bearing Demand	\$5,332	0.26%
Money Market & Savings	\$9,326	1.50%
CDs & Other Time	\$2,238	1.59%

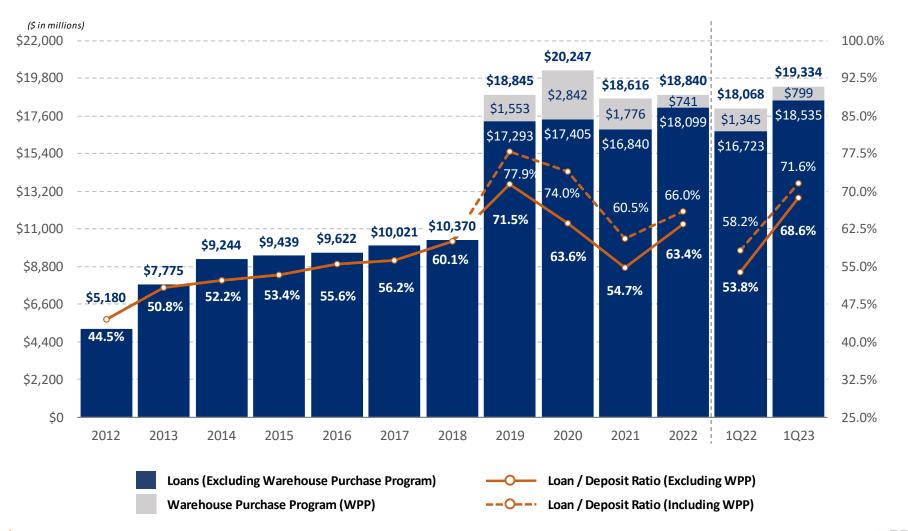
Total Deposits: \$27.0Bn

Total Cost of Deposits: 0.69%⁽¹⁾

Cost of Interest-Bearing Deposits: 1.10%⁽¹⁾



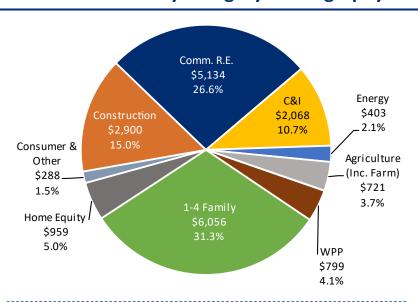
Loan Growth



Loan Portfolio Overview

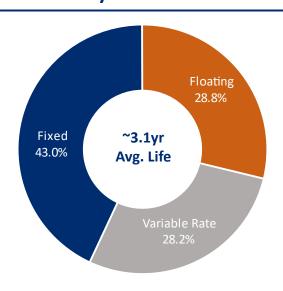
As of March 31, 2023 (\$ in millions)

Loan Portfolio by Category & Geography



Loans By Area	Amount ⁽²⁾⁽⁴⁾	% of Total	
Bryan / College Station	\$789	4.3%	
Central Oklahoma	\$641	3.5%	
Central Texas	\$2,358	12.8%	
Dallas / Ft. Worth	\$6,367	34.5%	
East Texas	\$740	4.0%	
Houston	\$4,462	24.1%	
South Texas	\$1,448	7.8%	
Tulsa	\$578	3.1%	
West Texas	\$1,095	5.9%	

Loans by Rate Structure



Total Loans: \$19.3Bn Loans HFI (Excl. WPP): \$18.5Bn

Yield on Total Loans: 5.29%⁽¹⁾
Yield on Loans HFI (Excl. WPP): 5.24%⁽¹⁾
Core Yield on Loans HFI (Excl. WPP): 5.22%⁽¹⁾⁽³⁾

Source: Company Documents

- (1) Data for the three months ended March 31, 2023
- Excludes \$55 million in loans assigned to the Corporate Group
- (3) Core yield excludes purchase accounting adjustments
- (4) Excludes Warehouse Purchase Program (WPP) loans

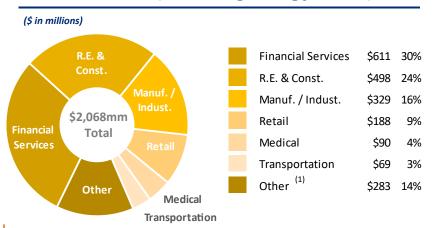
Loan Portfolio Detail

As of March 31, 2023 (\$ in millions)

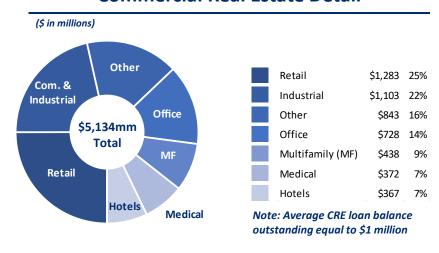
Portfolio Commentary

- Loan portfolio is diversified across the Bank's market areas and by underlying collateral type
- CRE and construction loans conservatively underwritten to cost of collateral
- 35% of commercial real estate is owner occupied
- Average total CRE loan-to value of 51%
- Average office CRE loan-to-value of 53%
- Non-owner-occupied office CRE of \$512 million, or 2.7% of total loans

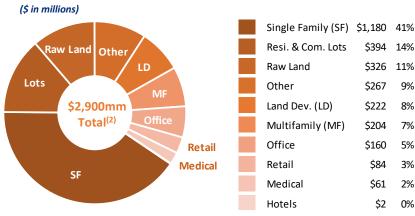
C&I Detail (Excluding Energy Loans)



Commercial Real Estate Detail



Construction Detail

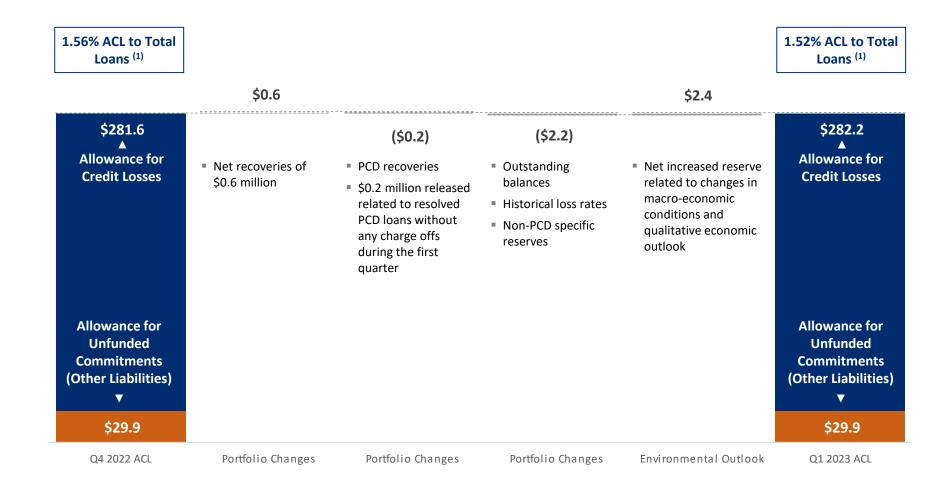


Source: Company Documents

- (1) Includes State & Political loans
- (2) Total includes a net unaccreted discount of (\$11,000) not shown in graph

Changes to Allowance for Credit Losses

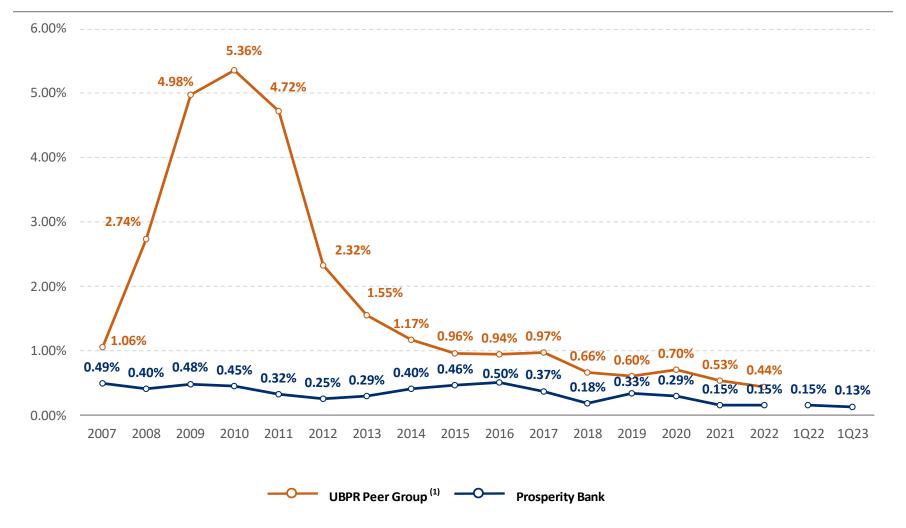
(\$ in millions)





Asset Quality

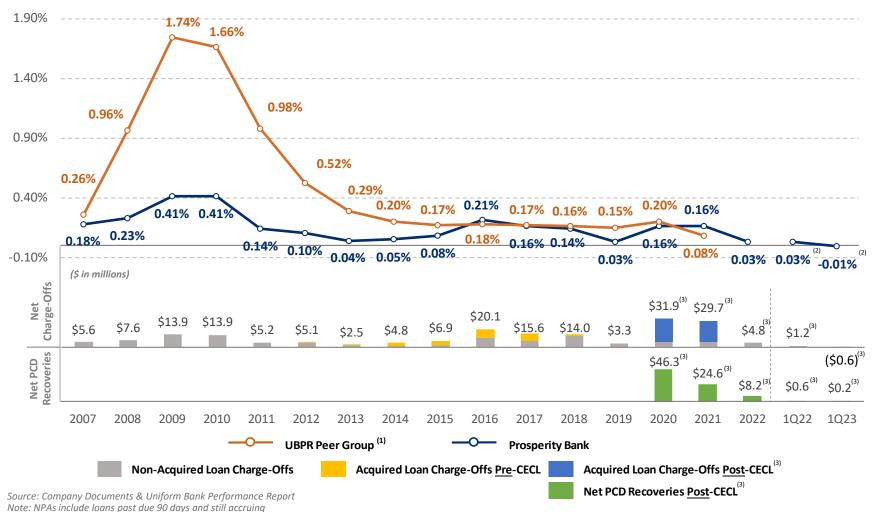
NPAs / Loans + OREO





Asset Quality

Net Charge-Offs / Average Loans



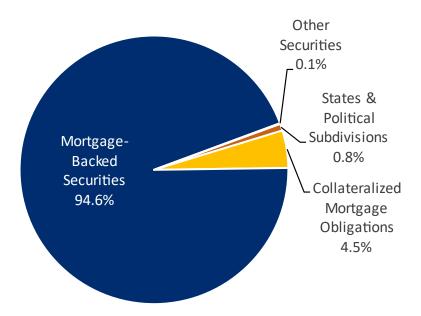
(1) UBPR = Uniform Bank Performance Report; Peer Group 2 (113 banks) – Insured commercial banks having assets between \$10 billion and \$100 billion Interim period net charge-off ratios shown on an annualized basis

Reflects all charge-offs and recoveries on acquired 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.



Securities Portfolio Detail

As of March 31, 2023 (\$ in millions)



96.7% Held to Maturity 3.3% Available for Sale

	\$mm
Mortgage-Backed Securities	\$13,309
Collateralized Mortgage Obligations	\$635
States & Political Subdivisions	\$115
Other Securities	\$12

Total Securities: \$14.1Bn

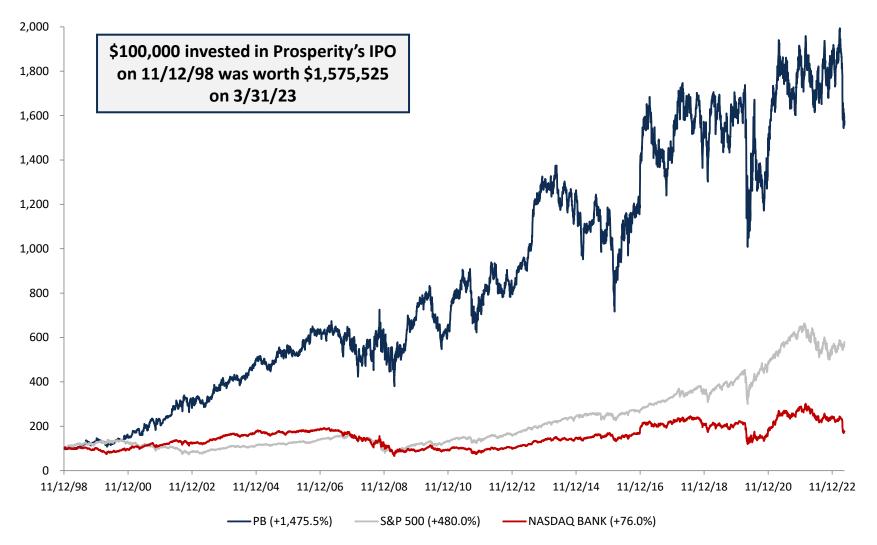
Yield on Securities: 2.07%⁽¹⁾
Duration: ~4.5 Yrs.⁽²⁾

Avg. Yearly Cash Flow: ~\$2.2Bn

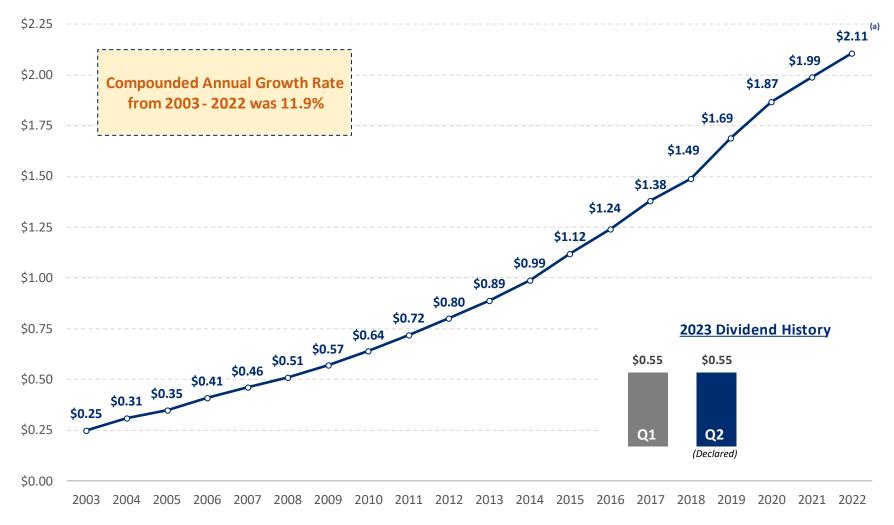


Total Return Performance

IPO (November 12, 1998) to March 31, 2023



Dividend History



Presence in Fast-Growing Markets

Positioned in Strong Markets



- Today, Texas is the 2nd largest state in the U.S by population with over 29 million residents
- Ranked #1 on the Fortune 500 list with 53 headquartered companies in 2022
- Ranked #1 state for business for the 9th consecutive time by U.S. corporate executives in an International Economic Development Council survey



- Oklahoma City and Tulsa MSAs comprise over 60% of the state's population
- Oklahoma is home to 3 of the 2022 Fortune 500 Companies
- Top 5 state for production of natural gas and production of crude oil
- Oklahoma is one of the top 5 producers of wheat in the United States

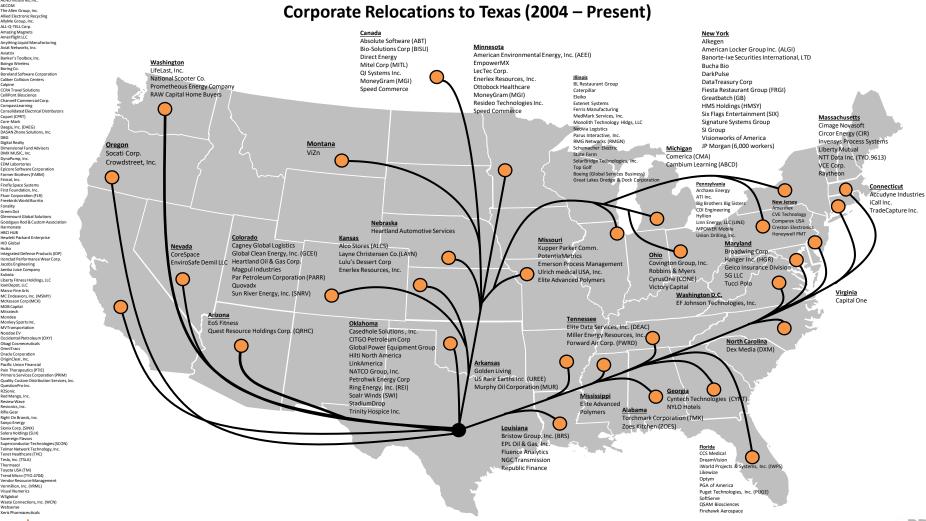
Top 10 Fastest Growing MSAs in the U.S. (1)

Metropolitan Statistical Area	Prosperity Presence	Prosperity Deposits (\$mm)	2023 - 2028 Population Growth
Austin-Round Rock-Georgetown, TX	✓	\$1,491	7.8%
Raleigh-Cary, NC			7.4%
Jacksonville, FL			6.9%
Orlando-Kissimmee-Sanford, FL			6.3%
Nashville-DavidsonMurfreesboroFranklin, TN			6.1%
Charlotte-Concord-Gastonia, NC-SC			5.8%
Tampa-St. Petersburg-Clearwater, FL			5.2%
San Antonio-New Braunfels, TX	✓	\$585	5.0%
Dallas-Fort Worth-Arlington, TX	✓	\$8,161	5.0%
Houston-The Woodlands-Sugar Land, TX	✓	\$6,677	4.8%

 Presence in the top four fastest growing MSAs in the United States



Corporate Relocations to Texas



California Aatonomy AccentCare AECOM

The Allen Group, Inc Allied Flectronic Recyclin Amazing Magnets Ameriflight LLC

Boingo Wireless

CCRA Travel Solutions

Copart (CPRT)

Digital Realty

DynaPump, Inc.

EDM Labortories Enicore Software Cornoration

Dimensional Fund Advisors DMX MUSIC, Inc.

Farmer Brothers (FARM) Finical, Inc. Firefly Space Systems

First Foundation, Inc.

Fluor Corporation (FLR) Freebirds World Burrito

HBCI HUB Hewlett Packard Enterprise

Jamba Juice Company

loanDepot, LLC Marco Fine Arts

MDB Capital Mitratech Mondee Monkey Sports Inc

MVTransportation Noodoe EV Occidental Ptetroleum (OXY) Obagi Cosmeceuticals OmniTracs

Oracle Cornoration

Question Pro Inc.

Review Wave

Sionix Corp. (SINX)

Tesla, Inc. (TSLA)

Thermasol Toyota USA (TM)

Vermillion Inc (VRMI)

Xeris Pharmaceuticals

W3global Waste Connections, Inc. (WCN)

Solera Holdings (SLH)

Telmar Network Technology, Inc.

Rifle Gear

OriginClear, Inc. Pacific Union Financia

Pain Therapeutics (PTIE)

Liberty Fitness Holdings, LLC

MC Endeavors, Inc. (MSMY) McKesson Corp (MCK)

Integrated Defense Products (IDP) Ironclad Performance Wear Corp.

HID Global

Core-Mark

Anything Liquid Manufacturing Aviat Networks, Inc.

Boreland Software Corporation

Consolidated Electrical Distributors

Houston Market Highlights

Market Highlights

- Houston MSA is the 5th largest in the United States by population with nearly 7.4 million residents
 - Population is expected to grow 4.8% from 2023 2028
- Home to NASA's Johnson Space Center and Texas Medical Center the world's largest medical complex
- As of March 2023, total nonfarm employment has increased 4.5% YoY, compared to the 12 month statewide increase of 4.3% and the nationwide increase of 2.7%
 - Employment in Houston has increased 4.8% YoY in the financial activities sector and 5.9% YoY in the education and health services sector, compared to 4.1% and 5.3% statewide, respectively
- Houston has the largest export market in the U.S.
 - The four seaports of Houston area Freeport, Galveston, Houston, and Texas City – handled 243.7 million metric tons of cargo valued at \$296.5 billion, in the 12 months ending January 2023

Select Fortune 500 Companies









































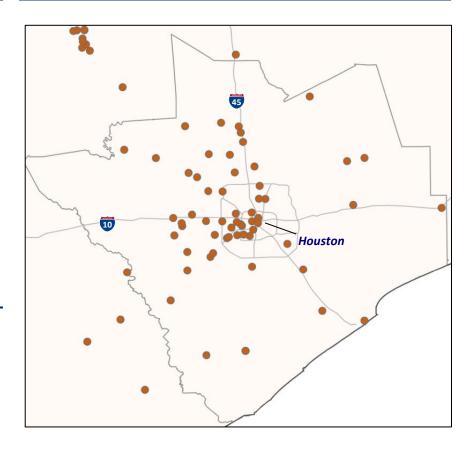








Houston Franchise



Dallas/Ft. Worth Market Highlights

Market Highlights

- Dallas/Ft. Worth MSA is the 4th largest in the United States by population with over 7.9 million residents
 - Population is expected to grow 5.0% from 2023 2028
- As of March 2023, total nonfarm employment has increased 5.1% YoY, compared to the 12 month statewide increase of 4.3% and the nationwide increase of 2.7%
- As of March 2023, employment increased 6.5% YoY in Mining, Logging and Construction and 7.0% in Education and Health Services
 - Among the 12 largest MSAs by population, Dallas had the second largest YoY change in total nonfarm employment, with a gain of 5.3%
- Headquarters to 23 Fortune 500 companies
- Dallas/Ft. Worth MSA is an emerging leader in the life sciences market, with R&D employment increasing by 44.5% since 2019 and \$1.6 billion in life sciences VC funding over the last 4 years

Select Fortune 500 Companies





































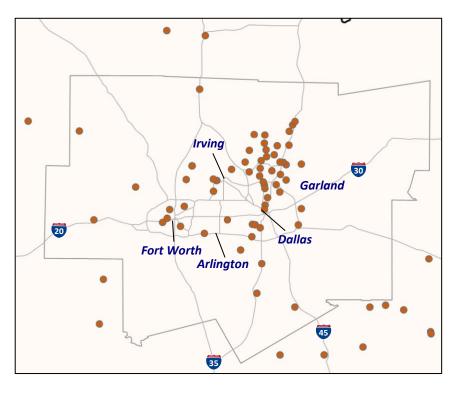








Dallas / Ft. Worth Franchise





Austin Market Highlights

Market Highlights

- Population grew by 33% from 2010 to 2020, the highest of any major MSA in the country
 - Ranks first among MSAs for new residents as a percent of total population
- Expected population growth of 7.8% from 2023 2028
- As of March 2023, total nonfarm employment has increased 5.2% YoY, compared to the 12 month statewide increase of 4.3% and the nationwide increase of 2.7%
 - As of March 2023 employment in Austin has increased 14.6% YoY in the leisure and hospitality sector and 6.4% YoY in manufacturing, compared to 6.5% and 4.0% statewide, respectively
- 8 companies have begun operations and 9 companies expanded their existing operations in the Austin-Round Rock MSA in Q1 2023
- Austin-Round Rock ranks 2nd for best MSA for STEM professionals amongst the top 100 MSAs

Select Fortune 500 Companies

















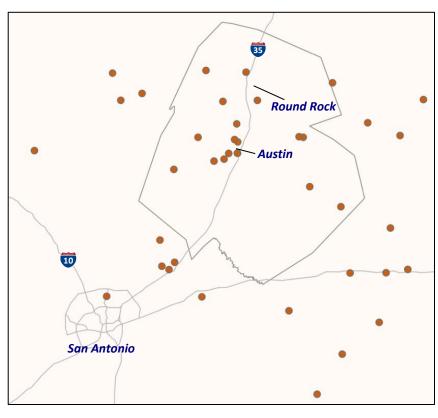








Austin Franchise





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