Statements contained in this presentation which are not historical facts and which pertain to future operating results of Prosperity Bancshares, Inc.® and its subsidiaries constitute “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements involve significant risks and uncertainties. Actual results may differ materially from the results discussed in these forward-looking statements. Factors that might cause such a difference include, but are not limited to, those discussed in the company’s periodic reports and filings with the SEC. Copies of the SEC filings for Prosperity Bancshares, Inc.® may be downloaded from the Internet at no charge from www.prosperitybankusa.com.
2Q17 Highlights

• Net income of $68.554 million and earnings per share (diluted) of $0.99 for three months ending June 30, 2017

• Assets of $22.297 billion, loans of $9.864 billion, and deposits of $17.071 billion at June 30, 2017

• Common equity tier 1 ratio was 14.80% and leverage ratio was 8.82% at June 30, 2017

• Sound asset quality with annualized net charge offs/average loans of 0.13% at June 30, 2017

• Non-performing assets to average earning assets remain low at 0.24% or $47.618 million for the second quarter 2017

• Efficiency ratio of 42.34% for the second quarter 2017

• Declared cash dividend of $0.34 per share for the second quarter 2017
Strong Presence in Texas and Oklahoma

• A Texas-based financial holding company with approximately $22.297 billion in total assets

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

• Shareholder driven with 4.9% fully diluted insider ownership

• Successful integration of 42 acquisitions (whole bank, branch and failed bank transactions)

243 Full Service Locations

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

Source: SNL Financial.

(1) Includes Texas headquartered banks. Deposits as of 06/30/2016
Balance Sheet Summary

Totals as of 06/30/2017
- Loans = $9.864 Billion
- Deposits = $17.071 Billion
- Assets = $22.297 Billion

10 year CAGR
- Loans = 16.0%
- Deposits = 16.6%
- Assets = 17.1%

$ in millions

Loans
Deposits
Assets
Equity

$0 $500 $1,000 $1,500 $2,000 $2,500 $3,000 $3,500 $4,000
0 $5 $10 $15 $20 $25 $30 $35 $40
Net Income

10 Year CAGR 16.1%
5 Year CAGR 14.1%

* Net Income amounts include the following ($ in thousands):

<table>
<thead>
<tr>
<th>Provision for Credit Losses</th>
<th>$760</th>
<th>$9,867</th>
<th>$28,775</th>
<th>$13,585</th>
<th>$5,200</th>
<th>$6,100</th>
<th>$17,240</th>
<th>$18,275</th>
<th>$7,560</th>
<th>$24,000</th>
<th>$6,000</th>
<th>$2,750</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loan Discount Accretion</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>$26,413</td>
<td>$62,723</td>
<td>$95,875</td>
<td>$52,122</td>
<td>$38,970</td>
<td>$9,304</td>
</tr>
</tbody>
</table>

$ in millions
EPS Growth Diluted

10 Year CAGR 7.3%
5 Year CAGR 5.5%

* EPS amounts include the following ($ in thousands):

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
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<td>$760</td>
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<td>$7,560</td>
<td>$24,000</td>
<td>$6,000</td>
<td>$2,750</td>
<td></td>
</tr>
</tbody>
</table>

| Loan Discount Accretion | - | - | - | - | - | - | $26,413 | $62,723 | $95,875 | $52,122 | $38,970 | $9,304 | $4,471 |

EPS (*)
EPS (excluding Purchase Accounting Adjustments)
## Net Interest Margin

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Interest Margin (Tax Equivalent)</th>
<th>Net Interest Margin (excluding Purchase Accounting Adjustments)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>4.06%</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>3.96%</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>4.08%</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>4.04%</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>3.98%</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>3.53%</td>
<td>3.35%</td>
</tr>
<tr>
<td>2013</td>
<td>3.58%</td>
<td>3.20%</td>
</tr>
<tr>
<td>2014</td>
<td>3.80%</td>
<td>3.29%</td>
</tr>
<tr>
<td>2015</td>
<td>3.38%</td>
<td>3.13%</td>
</tr>
<tr>
<td>2016</td>
<td>3.35%</td>
<td>3.16%</td>
</tr>
<tr>
<td>2Q16</td>
<td>3.37%</td>
<td>3.19%</td>
</tr>
<tr>
<td>2Q17</td>
<td>3.06%</td>
<td>3.14%</td>
</tr>
</tbody>
</table>
$6,372
$9,072
$8,850
$14,584
$18,642
$14,584
$18,642
$21,508
$22,037
$22,331
$22,297

46.19% 46.51% 46.27% 44.83% 42.76% 43.48% 41.60% 41.81% 41.87% 42.50% 42.34%

$0
$5,000
$10,000
$15,000
$20,000
$25,000

Total Assets Acquired (at Acquisition Closing)
Total Assets without Acquisitions
Efficiency Ratio

Acquisitions & Efficiency Ratio*

*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 of assets and securities. Additionally, taxes are not part of this calculation.
Return on Average Tangible Common Equity

Interim periods annualized.
Return on Average Assets

Interim periods annualized.
Loan Growth

Loans

Loans/Deposits Ratio

$ in millions


$3,093 $3,567 $3,377 $3,485 $3,766 $5,180 $7,775 $9,244 $9,439 $9,622 $9,650 $9,864

59.1% 48.8% 46.5% 46.7% 46.7% 44.5% 50.8% 52.2% 53.4% 55.6% 56.0% 57.8%

30.0% 35.0% 40.0% 45.0% 50.0% 55.0% 60.0% 65.0% 70.0%

59.1% 48.8% 46.5% 46.7% 46.7% 44.5% 50.8% 52.2% 53.4% 55.6% 56.0% 57.8%
Loan Portfolio

June 30, 2017
Loans/Deposits: 57.8%

Approximate $ in millions

<table>
<thead>
<tr>
<th>Type</th>
<th>Amount</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Industrial</td>
<td>$1,202</td>
<td>12.2%</td>
</tr>
<tr>
<td>Construction</td>
<td>$1,384</td>
<td>14.0%</td>
</tr>
<tr>
<td>1-4 Family Residential</td>
<td>$2,432</td>
<td>24.7%</td>
</tr>
<tr>
<td>Home Equity</td>
<td>$284</td>
<td>2.9%</td>
</tr>
<tr>
<td>Commercial R.E.</td>
<td>$3,309</td>
<td>33.5%</td>
</tr>
<tr>
<td>Agriculture (includes farmland)</td>
<td>$699</td>
<td>7.1%</td>
</tr>
<tr>
<td>Consumer &amp; Other</td>
<td>$266</td>
<td>2.7%</td>
</tr>
<tr>
<td>Energy</td>
<td>$288</td>
<td>2.9%</td>
</tr>
<tr>
<td>Gross Loans</td>
<td>$9,864</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Loans By Area
Approximate $ in millions

- Bryan/College Station: $616
- Central Oklahoma: $491
- Central Texas: $1,334
- Dallas/Ft. Worth: $1,052
- East Texas: $373
- Houston: $3,288
- South Texas: $1,272
- Tulsa Oklahoma: $640
- West Texas: $798

Construction Loan Breakout
Approximate $ in thousands

- Single Family: $410
- Land Development: $80
- Raw Land: $200
- Residential Lots: $131
- Commercial/Other: $565
- Purchase Accounting Discount: ($2)

CRE Loan Breakout
Approximate $ in millions

- Owner Occupied: $1,500
- Shopping Center: $507
- Office Building: $346
- Multi-family: $164
- Other: $792
Energy Portfolio
As of June 30, 2017

- Total outstanding balance of $287.8 million, or 2.9% of total loans
- Total unfunded commitments of $175.0 million
- Total energy reserves of 2.94% or $8.5 million
- $13.8 million of energy loans are subject to a fair value mark of $3.4 million
- Three energy loans are Shared National Credits (SNCs) with an outstanding balance of $2.9 million
- Average relationship size for both producers and servicers is under $1.0 million, with only six relationships over $10.0 million
- Reserve-based lending is only on proven producing reserves
- Servicing portfolio is well-diversified

Outstanding Balance

- Producers: $115.3 million (51%)
- Servicers: $172.5 million (49%)

Unfunded Commitments

- Producers: $89.9 million (51%)
- Servicers: $85.1 million (49%)

$ in millions
Houston MSA CRE Portfolio
As of June 30, 2017

TOTAL: $1.1 Billion

- Shopping Center/Retail: $218.0
- Commercial & Industrial: $114.7
- Office: $77.3
- Medical: $55.2
- Multi-Family: $25.0
- Hotel: $46.6
- Other: $76.4
- Owner Occupied: $486.6

$ in millions
Asset Quality

NPA*/Loans + OREO

*Includes loans past due 90 days and still accruing
Source: UBPR = Uniform Bank Performance Report; Peer Group 11 (231 Banks) – insured commercial bank having assets greater than $3 billion
Deposit Composition

June 30, 2017
Cost of Deposits: 0.27%

<table>
<thead>
<tr>
<th>Deposit Type</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDA - Non-Interest Bearing</td>
<td>$5,397</td>
</tr>
<tr>
<td>DDA - Interest Bearing</td>
<td>3,703</td>
</tr>
<tr>
<td>Money Market &amp; Savings</td>
<td>5,692</td>
</tr>
<tr>
<td>Certificates &amp; Other Time Deposits</td>
<td>2,278</td>
</tr>
<tr>
<td><strong>TOTAL DEPOSITS</strong></td>
<td><strong>$17,070</strong></td>
</tr>
</tbody>
</table>
Dividend History

Compounded Annual Growth Rate from 2003-2016 was 13.11%

(a) 2014 dividend consists of $0.24 per share declared in 1Q 2014, 2Q 2014, 3Q 2014 and $0.2725 per share declared in 4Q 2014
(b) 2015 dividend consists of $0.2725 per share declared in 1Q 2015, 2Q 2015, 3Q 2015 and $0.30 per share declared in 4Q 2015
(c) 2016 dividend consists of $0.30 per share declared in 1Q 2016, 2Q 2016, 3Q 2016 and $0.34 per share declared in 4Q 2016
Total Return Performance

IPO (November 12, 1998) to June 30, 2017

$100,000 invested in Prosperity’s IPO on 11/12/98 was worth $1,410,380 on 06/30/17

PB (+1,310.4%)  S&P 500 (+208.7%)  NASDAQ BANK (+109.3%)
Presence in Fast-Growing Markets

Positioned in Strong Markets

- Texas is the second largest state in the U.S. with nearly 28 million residents
- Ranked #2 on the Fortune 500 list with 54 headquartered companies as of 2016
- Economy centered around the real estate, manufacturing and energy sectors

- Oklahoma City and Tulsa comprise 45% of the state’s population
- Economy centered around aviation, energy, telecommunications and biotechnology
- Ranked third in the nation for production of natural gas

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

<table>
<thead>
<tr>
<th>#</th>
<th>MSA</th>
<th>Prosperity Presence</th>
<th>Prosperity Deposits ($mm)</th>
<th>2017 - 2022 Population Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Austin-Round Rock, TX</td>
<td>✓</td>
<td>$859.2</td>
<td>10.0%</td>
</tr>
<tr>
<td>2</td>
<td>Houston-The Woodlands-Sugar Land, TX</td>
<td>✓</td>
<td>$5,190.1</td>
<td>8.8</td>
</tr>
<tr>
<td>3</td>
<td>San Antonio-New Braunfels, TX</td>
<td>✓</td>
<td>$340.0</td>
<td>8.4</td>
</tr>
<tr>
<td>4</td>
<td>Orlando-Kissimmee-Sanford, FL</td>
<td></td>
<td>--</td>
<td>8.3</td>
</tr>
<tr>
<td>5</td>
<td>Raleigh, NC</td>
<td></td>
<td>--</td>
<td>8.2</td>
</tr>
<tr>
<td>6</td>
<td>Dallas-Fort Worth-Arlington, TX</td>
<td>✓</td>
<td>$1,393.8</td>
<td>8.1</td>
</tr>
<tr>
<td>7</td>
<td>Denver-Aurora-Lakewood, CO</td>
<td></td>
<td>--</td>
<td>8.1</td>
</tr>
<tr>
<td>8</td>
<td>Las Vegas-Henderson-Paradise, NV</td>
<td></td>
<td>--</td>
<td>7.2</td>
</tr>
<tr>
<td>9</td>
<td>Charlotte-Concord-Gastonia, NC-SC</td>
<td></td>
<td>--</td>
<td>7.2</td>
</tr>
<tr>
<td>10</td>
<td>Phoenix-Mesa-Scottsdale, AZ</td>
<td></td>
<td>--</td>
<td>7.1</td>
</tr>
</tbody>
</table>

- Presence in the top three fastest growing MSAs in the United States and four of the top six
- Combined, Texas and Oklahoma accounted for $1.8 trillion, or 10%, of the GDP in the United States in 2015


(1) Includes MSAs with greater than one million in total population. Deposit data as of 6/30/2016.
Houston Market Highlights

Market Highlights

- Houston is the 5th most populous metropolitan area in the nation
- Headquarters to 25 Fortune 500 companies
- Port of Houston is ranked 1st in the United States in foreign tonnage in 2015
- Home of the Texas Medical Center – the world’s largest medical complex
- The number of high-wage, professional service jobs increased by 48% since 2000 (2.0x the rate of San Francisco, 2.5x NYC and Chicago, and 4.0x Los Angeles)
- Houston’s population is expected to grow 8.8% from 2017 to 2022

Fortune 500 Companies

Sources: Greater Houston Partnership, Oden Hughes and SNL Financial.
References to Houston refer to the Houston – The Woodlands – Sugar Land metropolitan statistical area.
Dallas/Ft. Worth Market Highlights

- Dallas/Ft. Worth is the 4th most populous metropolitan area in the nation
- Headquarters to 25 Fortune 500 companies
- Added 119,300 jobs from February 2016 to February 2017, representing a 3.5% growth rate, which is more than double the national average rate of 1.7%
- Population grew by 143,435 residents from July 2015 to July 2016, the most of any metropolitan area in the U.S.
- Dallas/Ft. Worth population is expected to grow 8.1% from 2017 to 2022

Fortune 500 Companies

Austin Market Highlights

- Austin has nearly doubled in size over the last 10 years, from 1.2 million residents in 2000 to 2.0 million residents in 2015
- Jobs in the technology industry total nearly 129,700, or 13.6% of all jobs, compared to 6.7% nationally
- Austin’s population growth rate from 2005 to 2015 was 37.7%, compared to 20.6% for Texas and 8.7% for the nation
- Austin’s population is expected to grow 10.0% from 2017 to 2022
- Ranked #1 place to live in the U.S. in 2017 by U.S. News and World Report

Fortune 500 Companies

Amazon, Cisco, eBay, Apple, Google, IBM, Intel, Oracle, 3M, Whole Foods Market, Dell

Texas Markets: Economic Diversity

Houston Employment by Industry

- Information: 1%
- Financial activities: 5%
- Trade, transportation, and utilities: 20%
- Professional and business services: 16%
- Manufacturing: 7%
- Education and health services: 13%
- Leisure and hospitality: 11%
- Other services: 3%
- Mining and logging: 3%

DFW Employment by Industry

- Information: 2%
- Financial activities: 8%
- Trade, transportation, and utilities: 21%
- Professional and business services: 17%
- Manufacturing: 7%
- Education and health services: 12%
- Leisure and hospitality: 11%
- Other services: 4%
- Government: 12%

Austin Employment by Industry

- Information: 3%
- Financial activities: 6%
- Professional and business services: 17%
- Trade, transportation, and utilities: 17%
- Education and health services: 12%
- Other services: 4%
- Leisure and hospitality: 12%
- Manufacturing: 5%
- Government: 18%

References to Houston refer to the Houston – The Woodlands – Sugar Land metropolitan statistical area.
References to Dallas refer to the Dallas – Fort Worth – Arlington metropolitan statistical area.
References to Austin refer to the Austin – Round Rock metropolitan statistical area.
Contact Information

Corporate Headquarters
Prosperity Bank Plaza
4295 San Felipe
Houston, Texas  77027

281.269.7199  Telephone
281.269-7222  Fax
www.prosperitybankusa.com

Investor Contacts
David Zalman
Chairman & Chief Executive Officer
979.543.2200
david.zalman@prosperitybankusa.com

David Hollaway
Chief Financial Officer
281.269.7199
david.hollaway@prosperitybankusa.com