Board of Governors of the Federal Reserve System

Annual Report of Holding Companies—FR Y-6

Report at the close of business as of the end of fiscal year

This Report is required by law: Section 5(c)(1)(A) of the Bank Holding Company Act (12 U.S.C. § 1844(c)(1)(A)); sections 8(a) and 13(a) of the International Banking Act (12 U.S.C. §§ 3106(a) and 3108(a)); sections 11(a)(1), 25, and 25A of the Federal Reserve Act (12 U.S.C. §§ 248(a)(1), 602, and 611a); and sections 113, 165, 312, 618, and 809 of the Dodd-Frank Act (12 U.S.C. §§ 5361, 5365, 5412, 1850a(c)(1), and 5468(b)(1)). Return to the appropriate Federal Reserve Bank the original and the number of copies specified.

This report form is to be filed by all top-tier bank holding companies, top-tier savings and loan holding companies, and U.S. intermediate holding companies organized under U.S. law, and by any foreign banking organization that does not meet the requirements of and is not treated as a qualifying foreign banking organization under Section 211.23 of Regulation K (12 C.F.R. § 211.23). (See page one of the general instructions for more detail of who must file.) The Federal Reserve may not conduct or sponsor, and an organization (or a person) is not required to respond to, an information collection unless it displays a currently valid OMB control number.

NOTE: The *Annual Report of Holding Companies* must be signed by one director of the top-tier holding company. This individual should also be a senior official of the top-tier holding company. In the event that the top-tier holding company does not have an individual who is a senior official and is also a director, the chairman of the board must sign the report. If the holding company is an ESOP/ESOT formed as a corporation or is an LLC, see the General Instructions for the authorized individual who must sign the report.

I, Ralph W. Babb, Jr.
Name of the Holding Company Director and Official

Chairman and Chief Executive Officer
Title of the Holding Company Director and Official

attest that the *Annual Report of Holding Companies* (including the supporting attachments) for this report date has been prepared in conformance with the instructions issued by the Federal Reserve System and are true and correct to the best of my knowledge and belief.

With respect to information regarding individuals contained in this report, the Reporter certifies that it has the authority to provide this information to the Federal Reserve. The Reporter also certifies that it has the authority, on behalf of each individual, to consent or object to public release of information regarding that individual. The Federal Reserve may assume, in the absence of a request for confidential treatment submitted in accordance with the Board's "Rules Regarding Availability of Information," 12 C.F.R. Part 261, that the Reporter and individual consent to public release of all details in the report concerning that individual.

Ralph W Babb Jr
Signature of Holding Company Director and Official

3/20/19
Date of Signature

Date of Report (top-tier holding company's fiscal year-end):
December 31, 2018
Month / Day / Year

I9Q57JVPWHHZ3ZGBW498
Reporter's Legal Entity Identifier (LEI) (20-Character LEI Code)

Reporter's Name, Street, and Mailing Address

Comerica Incorporated
Legal Title of Holding Company

1717 Main Street, MC 6506
(Mailing Address of the Holding Company) Street / P.O. Box

Dallas	TX	75201
City	State	Zip Code

Physical Location (if different from mailing address)

Person to whom questions about this report should be directed:

John D. Buchanan	EVP & Corporate Secretary
Name	Title

214-462-4376
Area Code / Phone Number / Extension

214-462-4400
Area Code / FAX Number

jdbuchanan@comerica.com
E-mail Address

http://www.comerica.com
Address (URL) for the Holding Company's web page

For holding companies not registered with the SEC-
Indicate status of Annual Report to Shareholders:

- ☐ is included with the FR Y-6 report
- ☐ will be sent under separate cover
- ☐ is not prepared

Is confidential treatment requested for any portion of this report submission? ..... 0=No 1=Yes: 0

In accordance with the General Instructions for this report (check only one),

1. a letter justifying this request is being provided along with the report ..... ☐
2. a letter justifying this request has been provided separately ... ☐

NOTE: Information for which confidential treatment is being requested must be provided separately and labeled as "confidential."

For Federal Reserve Bank Use Only

RSSD ID _____
C.I. _____

Public reporting burden for this information collection is estimated to vary from 1.3 to 101 hours per response, with an average of 5.50 hours per response, including time to gather and maintain data in the required form and to review instructions and complete the information collection. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Secretary, Board of Governors of the Federal Reserve System, 20th and C Streets, NW, Washington, DC 20551, and to the Office of Management and Budget, Paperwork Reduction Project (7100-0297), Washington, DC 20503.

For Use By Tiered Holding Companies

Top-tiered holding companies must list the names, mailing address, and physical locations of each of their subsidiary holding companies below.

Comerica Holdings Incorporated
Legal Title of Subsidiary Holding Company

1717 Main Street, MC 6506
(Mailing Address of the Subsidiary Holding Company) Street / P.O. Box

Dallas | TX | 75201
City | State | Zip Code

Physical Location (if different from mailing address)

Legal Title of Subsidiary Holding Company

(Mailing Address of the Subsidiary Holding Company) Street / P.O. Box

City | State | Zip Code

Physical Location (if different from mailing address)

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Legal Title of Subsidiary Holding Company

(Mailing Address of the Subsidiary Holding Company) Street / P.O. Box

City | State | Zip Code

Physical Location (if different from mailing address)

Report Item 2a: Organization Chart

An organization chart showing Comerica Incorporated's interest in entities reportable on an FR Y-10 is attached as Exhibit A, and, to the extent not included in the organization chart, a list of the state or country (if foreign) of incorporation or organization of each such entity, and the city and state or country (if foreign) of principal business of each such entity is attached as Exhibit B. In addition, Comerica Incorporated has made the following investments that are not reportable on an FR Y-10 in which it controls greater than 5% but less than 25% of the outstanding shares of any class of voting securities:

Name (Physical Address City, State)	State of Incorporation/ Organization
Detroit Investment Fund, LP (Detroit, MI)	Delaware
JHW Greentree Capital, LP (New Canaan, CT)	Delaware
Kelly Services, Inc. (Troy, Michigan)	Delaware

None of these entities have LEI codes.

Moreover, Comerica Incorporated, indirectly through its wholly owned subsidiary, Comerica Bank, has made the following investments that are not reportable on an FR Y-10 in which it controls greater than 5% but less than 25% of the outstanding shares of any class of voting securities:

Name (Physical Address City, State)	State of Incorporation/ Organization
Alliant Tax Credit Fund 44, Ltd. (Woodland Hills, CA)	Florida
Boston Capital Corporate Tax Credit Fund XVII, LP (Boston, MA)	Massachusetts
Boston Capital Corporate Tax Credit Fund XX, LP (Boston, MA)	Massachusetts
Boston Capital Corporate Tax Credit Fund XX-A, LP (Boston, MA)	Massachusetts
Boston Capital Corporate Tax Credit Fund XXIV, LP (Boston, MA)	Massachusetts
Boston Capital Corporate Tax Credit Fund XXVI, LP (Boston, MA)	Massachusetts
Boston Capital Corporate Tax Credit Fund XXVIII, LP (Boston, MA)	Massachusetts
Boston Capital Corporate Tax Credit Fund XXX, LP (Boston, MA)	Massachusetts
Boston Capital Corporate Tax Credit Fund XXXII, LP (Boston, MA)	Massachusetts
Boston Capital Corporate Tax Credit Fund XLI, LP (Boston, MA)	Massachusetts
Boston Financial Institutional Tax Credit Fund XXXIX (Boston, MA)	Massachusetts
California Corporate Tax Credit Fund II (Boston, MA)	Massachusetts
California Corporate Tax Credit Fund VII LP (Boston, MA)	Massachusetts
California Equity Fund 2002 LLC (Chicago, IL)	Delaware
California Equity Fund 2013 LP (Chicago, IL)	Illinois
California Equity Fund 2014 LP (Chicago, IL)	Illinois
California Equity Fund 2015 LP (Chicago, IL)	Illinois
California Equity Fund 2017 LP (Chicago, IL)	Illinois
Centerline Corporate Partners XVII, LP (New York, NY)	Delaware

Name (Physical Address City, State)	State of Incorporation/ Organization
Centerline Corporate Partners XXIX, LP (New York, NY)	Delaware
Centerline Corporate Partners XXVII, LP (New York, NY)	Delaware
Centerline Corporate Partners XXXVI, LP (New York, NY)	Delaware
Cinnaire Fund for Housing Limited Partnership 32 (Lansing, MI)	Michigan
Cinnaire Fund for Housing Limited Partnership 33 (Lansing, MI)	Michigan
Columbia Housing/PNC Institutional Fund XII, LP (Lexington, KY)	Massachusetts
CREA Corporate Tax Credit Fund, XXIX, LLC (Indianapolis, IN)	Delaware
CREA Corporate Tax Credit Fund, XXXII, LLC (32) (Indianapolis, IN)	Delaware
CREA Corporate Tax Credit Fund, XXXIX, LLC (Indianapolis, IN)	Delaware
CREA Corporate Tax Credit Fund 43, LLC (Indianapolis, IN)	Delaware
CREA Corporate Tax Credit Fund 51, LLC (Indianapolis, IN)	Delaware
CREA California Corporate Tax Credit Fund 58, LP (Indianapolis, IN)	Delaware
Enterprise Housing Partners XXIX LP (Columbia, MD)	Maryland
Enterprise Housing CalGreen Fund II, LP (Columbia, MD)	Maryland
Enterprise Housing CalGreen Fund IV, LP (Columbia, MD)	Maryland
Enterprise Housing Partners CalGreen V Fund, L.P. (Columbia, MD)	Maryland
Great Lakes Capital Fund for Housing LP XII (Lansing, MI)	Michigan
Great Lakes Capital Fund for Housing LP XIV (Lansing, MI)	Michigan
Great Lakes Capital Fund for Housing LP XV (Lansing, MI)	Michigan
Great Lakes Capital Fund for Housing LP XVII (Lansing, MI)	Michigan
Great Lakes Capital Fund for Housing LP XVIII (Lansing, MI)	Michigan
Great Lakes Capital Fund for Housing LP XXV (Lansing, MI)	Michigan
Great Lakes Capital Fund for Housing LP XXVI (Lansing, MI)	Michigan
Great Lakes Capital Fund for Housing LP XXVII (Lansing, MI)	Michigan
Great Lakes Capital Fund for Housing LP XXVIII (Lansing, MI)	Michigan
Great Lakes Capital Fund for Housing LP XXIX (Lansing, MI)	Michigan
Great Lakes Capital Fund for Housing Limited Partnership 30 (Lansing, MI)	Michigan*
Homestead Equity Fund XIV LP (Chicago, Illinois)	Illinois
Merritt Community Capital Fund VII, LP (Oakland, CA)	California
Merritt Community Capital Fund XIII, LP (Oakland, CA)	California
Merritt Community Capital Fund XIV, LP (Oakland, CA)	California*
Merritt Community Capital Fund XV, LP (Oakland, CA)	California
Merritt Community Capital Fund XVI, LP (Oakland, CA)	California
Merritt Community Capital Fund XVII, LP (Oakland, CA)	California
Merritt Community Capital Fund XVIII, LP (Oakland, CA)	California
Merritt Community Capital Fund XIX, LP (Oakland, CA)	California
Michigan Capital Fund for Housing IV LP (Lansing, MI)	Michigan
Michigan Capital Fund for Housing LP V (Lansing, MI)	Michigan
Michigan Capital Fund for Housing LP VII (Lansing, MI)	Michigan
Michigan Capital Fund for Housing LP VIII (Lansing, MI)	Michigan
Michigan Capital Fund for Housing VI LP (Lansing, MI)	Michigan
Midland Corporate Tax Credit VIII, LP (Boston, MA)	Delaware
Midland Corporate Tax Credit XII Limited Partnership (Boston, MA)	Florida

Name (Physical Address City, State)	State of Incorporation/ Organization
Midland Corporate Tax Credit XIV Limited Partnership (Boston, MA)	Delaware
NAPICO National Corporate Tax Credit Fund XII, L.P. (Toledo, OH)	California
National Equity Fund 2008 II LP (Chicago, IL)	Delaware
National Equity Fund 2009 LP (Chicago, IL)	Delaware
National Equity Fund 2013 LP (Chicago, IL)	Illinois
NEF Regional Fund V – Chicago LP (Chicago, IL)	Illinois
NEF Regional Fund V – Chicago VIII (Chicago, IL)	Illinois
NEF 2018 Texas Reginal Fund LP (Chicago, IL)	Delaware
NHT 27 Tax Credit Fund, LLC (Columbus, OH)	Ohio
Phoenix Realty Tax Credit Fund II, LP (New York, NY)	Delaware
PNC Multifamily Capital Institutional Fund XXI, LP (Portland, OR)	Massachusetts
PNC Multifamily Capital Institutional Fund XXX, LP (Lexington, KY)	Delaware
PNC Multifamily Capital Institutional Fund XXXI, LP (Lexington, KY)	Delaware
PNC Multifamily Capital Institutional Fund XXXV, LP (Lexington, KY)	Delaware
PNC Multifamily Capital Institutional Fund XXXIX, LP (Lexington, KY)	Delaware
PNC Multifamily Capital Institutional Fund XL, LP (Lexington, KY)	Delaware
PNC Multifamily Capital Institutional Fund XLI, LP (Lexington, KY)	Delaware
PNC Tax Credit Capital Institutional Fund 43, L.P. (Lexington, KY)	Delaware
PNC Tax Credit Capital Institutional Fund 46, L.P. (Lexington, KY)	Delaware
PNC Tax Credit Capital Institutional Fund 56, L.P. (Portland, OR)	Delaware
PNC Real Estate Tax Credit Capital Institutional Fund 50, L.P. (Lexington, KY)	Delaware
PNC Real Estate Tax Credit Capital Institutional Fund 64, L.P. (Portland, OR)	Delaware
PNC Real Estate Tax Credit Capital Institutional Fund 66, L.P. (Portland, OR	Delaware
Raymond James Tax Credit Fund 35 LLC (St. Petersburg, FL)	Florida
Raymond James California Housing Opportunities Fund I, LLC (St. Petersburg, FL)	Florida
Raymond James California Housing Opportunities Fund II, LLC (St. Petersburg, FL)	Florida
Raymond James California Housing Opportunities Fund III, LLC (St. Petersburg, FL)	Florida
Raymond James California House Opportunities Fund IV, LLC (St. Petersburg, FL)	Florida
RBC Apollo National Fund – 9, LP (Greenwich, CT)	Delaware
RBC Tax Credit Equity National Fund – 12, LP (Greenwich, CT)	Delaware
RBC Tax Credit Equity California Fund – 3, LP (Cleveland, OH)	Delaware
RBC Tax Credit Equity California Fund-4, L.P. (Cleveland, OH)	Delaware
Southern California Business Development Corporation (Los Angeles, CA)	California
Texas Mezzanine Fund, Inc. (Dallas, TX)	Texas
THOF III, Ltd. (Austin, TX)	Texas
THOF V, Ltd. (Austin, TX)	Texas
USA Institutional Tax Credit Fund XXXIV LP (Greenwhich, CT)	Delaware
USA Institutional Tax Credit Fund LXXXIX LP (89) (Greenwich, CT)	Delaware

Name (Physical Address City, State)	State of Incorporation/ Organization
WNC Institutional Tax Credit Fund X California Series (2) LP (Irvine, CA)	California
WNC Institutional Tax Credit Fund XIV LP (Irvine, CA)	California

* None of the entities listed above have LEI codes, other than Great Lakes Capital Fund for Housing Limited Partnership 30 (549300DBWXSU6INK9172) and Merritt Community Capital Fund XIV, LP (549300DWHXHS37HRQX81).

Report Item 2b: Domestic Branch Listing

The updated domestic branch list is attached and labeled as part of this filing.

Report Item 2b: Domestic Branch Listing

Annual Report of Holding Companies – FR Y-6

Comerica Incorporated

1717 Main Street, MC 6506

Dallas, Texas 75201

Results: A list of branches for your holding company: COMERICA INCORPORATED (1199844) of DALLAS, TX.
The data are as of 12/31/2018. Data reflects information that was received and processed through 01/06/2019.

Reconciliation and Verification Steps
1. In the **Data Action** column of each branch row, enter one or more of the actions specified below
2. If required, enter the date in the **Effective Date** column

Actions
OK: If the branch information is correct, enter 'OK' in the **Data Action** column.
Change: If the branch information is incorrect or incomplete, revise the data, enter 'Change' in the **Data Action** column and the date when this information first became valid in the **Effective Date** column.
Close: If a branch listed was sold or closed, enter 'Close' in the **Data Action** column and the sale or closure date in the **Effective Date** column.
Delete: If a branch listed was never owned by this depository institution, enter 'Delete' in the **Data Action** column.
Add: If a reportable branch is missing, insert a row, add the branch data, and enter 'Add' in the **Data Action** column and the opening or acquisition date in the **Effective Date** column.

If printing this list, you may need to adjust your page setup in MS Excel. Try using landscape orientation, page scaling, and/or legal sized paper.

Submission Procedure
When you are finished, send a saved copy to your FRB contact. See the detailed instructions on this site for more information.
If you are e-mailing this to your FRB contact, put your institution name, city and state in the subject line of the e-mail.

Note:
To satisfy the **FR Y-10** reporting requirements, you must also submit FR Y-10 Domestic Branch Schedules for each branch with a **Data Action** of Change, Close, Delete, or Add.
The FR Y-10 report may be submitted in a hardcopy format or via the FR Y-10 Online application - https://y10online.federalreserve.gov.

* FDIC UNINUM, Office Number, and ID_RSSD columns are for reference only. Verification of these values is not required.

Data Action	Effective Date	Branch Service Type	Branch ID_RSSD*	Popular Name	Street Address	City	State	Zip Code	County	Country	FDIC UNINUM*	Office Number*	Head Office	Head Office ID_RSSD*	Comments
OK		Full Service (Head Office)	60143	COMERICA BANK	1717 MAIN STREET	DALLAS	TX	75201	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3565375	AVONDALE-MCDOWELL BANKING CENTER	10115 WEST MCDOWELL ROAD	AVONDALE	AZ	85392-4435	MARICOPA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3933459	GOODYEAR-ESTRELLA FALLS MALL BANKING CENTER	1831 NORTH PEBBLE CREEK PARKWAY	GOODYEAR	AZ	85395-2533	MARICOPA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3588472	MESA-GATEWAY BANKING CENTER	5725 SOUTH POWER ROAD	MESA	AZ	85212	MARICOPA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3688463	MESA-RIVERVIEW BANKING CENTER BRANCH	925 NORTH DOBSON ROAD	MESA	AZ	85201-7573	MARICOPA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3402146	MESA-VAL VISTA BRANCH	1825 SOUTH VAL VISTA DRIVE	MESA	AZ	85204	MARICOPA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	4844864	75TH AND THUNDERBIRD BANKING CENTER	7525 WEST THUNDERBIRD ROAD	PEORIA	AZ	85381	MARICOPA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3562613	20TH STREET AND CAMELBACK BANKING CENTER	1959 EAST CAMELBACK ROAD	PHOENIX	AZ	85016-4140	MARICOPA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3688659	44TH AND THOMAS BANKING CENTER BRANCH	2804 NORTH 44TH STREET	PHOENIX	AZ	85008-1567	MARICOPA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	4366049	CACTUS AND TATUM BANKING CENTER	4707 EAST CACTUS ROAD	PHOENIX	AZ	85032	MARICOPA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3397877	NORTH CENTRAL PHOENIX BRANCH	3200 NORTH CENTRAL AVENUE, SUITE 100	PHOENIX	AZ	85012	MARICOPA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3774058	PHOENIX - DOWNTOWN BRANCH	1 NORTH CENTRAL AVENUE, SUITE 110	PHOENIX	AZ	85004	MARICOPA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3321233	PHOENIX - HAPPY VALLEY BANKING CENTER	2025 WEST HAPPY VALLEY ROAD	PHOENIX	AZ	85085	MARICOPA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
CHANGE	3/4/2019	Full Service	3581473	SCOTTSDALE - GREENWAY BRANCH	14301 NORTH SCOTTSDALE ROAD, ~~SUITE 105~~ NO SUITE	SCOTTSDALE	AZ	85254	MARICOPA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	4157602	SCOTTSDALE-MCDOWELL BANKING CENTER	7170 EAST MCDOWELL ROAD	SCOTTSDALE	AZ	85257	MARICOPA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3683100	SCOTTSDALE-RIVERWALK BANKING CENTER BRANCH	4545 NORTH SCOTTSDALE ROAD, SUITE 105	SCOTTSDALE	AZ	85251-7637	MARICOPA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3382797	BELL & BULLARD BANKING CENTER	14211 WEST BELL ROAD	SURPRISE	AZ	85374	MARICOPA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3566903	TEMPE-MILL BANKING CENTER BRANCH	425 SOUTH MILL AVENUE, SUITE 101	TEMPE	AZ	85281-2803	MARICOPA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3565502	ALAMEDA-PARK CENTRAL BANKING BRANCH	2416 CENTRAL AVENUE	ALAMEDA	CA	94501-4516	ALAMEDA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3681557	ANAHEIM - KATELLA BRANCH	2432 EAST KATELLA AVENUE, BUILDING A	ANAHEIM	CA	92806	ORANGE	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	359961	APTOS BRANCH	1 RANCHO DEL MAR	APTOS	CA	95003	SANTA CRUZ	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	919465	BEVERLY HILLS BANKING CENTER	9595 SOUTH SANTA MONICA BOULEVARD	BEVERLY HILLS	CA	90210-4304	LOS ANGELES	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3581338	BREA BRANCH	2500 EAST IMPERIAL HIGHWAY, SUITE 190	BREA	CA	92821	ORANGE	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3565676	BURBANK BRANCH	1090 N SAN FERNANDO BLVD.	BURBANK	CA	91504	LOS ANGELES	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3690130	BURLINGAME BRANCH	1351 HOWARD AVENUE	BURLINGAME	CA	94010-4212	SAN MATEO	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	363367	CAPITOLA BRANCH	1560 41ST AVENUE	CAPITOLA	CA	95010	SANTA CRUZ	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3841718	CARLSBAD - EL CAMINO REAL AND HOSP BANKING CENTER	2626 EL CAMINO REAL, SUITE C	CARLSBAD	CA	92008	SAN DIEGO	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3581576	CARLSBAD - PALOMAR AIRPORT BRANCH	1000 AVIARA PARKWAY, SUITE 104	CARLSBAD	CA	92011	SAN DIEGO	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	1428311	CARMEL BRANCH	7TH AVENUE AND DOLORES STREET	CARMEL	CA	93923	MONTEREY	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3688614	CERRITOS BANKING CENTER BRANCH	11355 SOUTH STREET	CERRITOS	CA	90703-5413	LOS ANGELES	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3772287	CHINO HILLS BANKING CENTER	13920 CITY CENTER DRIVE, SUITE 4000	CHINO HILLS	CA	91709	SAN BERNARDINO	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	699169	CITY OF INDUSTRY BRANCH	13200 CROSSROADS PARKWAY NORTH, SUITE 100	CITY OF INDUSTRY	CA	91746	LOS ANGELES	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2292180	COSTA MESA BRANCH	611 ANTON BOULEVARD, SUITE 100	COSTA MESA	CA	92626	ORANGE	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	601657	CUPERTINO BRANCH	10020 NORTH DE ANZA BOULEVARD	CUPERTINO	CA	95014	SANTA CLARA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3402155	CYPRESS BRANCH	6812 KATELLA AVENUE	CYPRESS	CA	90630	ORANGE	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3393386	DANVILLE BRANCH	318 DIABLO ROAD, SUITE 100	DANVILLE	CA	94526	CONTRA COSTA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3763045	EL SEGUNDO BRANCH	2321 ROSECRANS AVENUE, SUITE 1225	EL SEGUNDO	CA	90245	LOS ANGELES	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3681535	ENCINITAS BRANCH	110 SOUTH EL CAMINO REAL	ENCINITAS	CA	92024	SAN DIEGO	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3688490	ESCONDIDO BANKING CENTER BRANCH	260 WEST GRAND AVENUE	ESCONDIDO	CA	92025-2604	SAN DIEGO	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3849161	FREMONT-PASEO PADRE BANKING CENTER	39008 PASEO PADRE PARKWAY	FREMONT	CA	94538	ALAMEDA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3687569	BRAND & MILFORD BRANCH	525 NORTH BRAND BLVD., SUITE 101	GLENDALE	CA	91203	LOS ANGELES	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3337670	HAYWARD BANKING CENTER	658 B STREET	HAYWARD	CA	94541	ALAMEDA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3074468	HUNTINGTON BEACH BRANCH	17011 BEACH BOULEVARD, SUITE 100	HUNTINGTON BEACH	CA	92647-5959	ORANGE	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3681530	IRVINE BRANCH	6540 IRVINE CENTER DRIVE	IRVINE	CA	92618	ORANGE	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	4339910	LA MESA-GROSSMONT BANKING CENTER	5450 JACKSON DRIVE	LA MESA	CA	91942	SAN DIEGO	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3681549	LAKE FOREST BRANCH	23718-B EL TORO ROAD	LAKE FOREST	CA	92630	ORANGE	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	227160	EAST LONG BEACH BRANCH	1650 XIMENO AVENUE	LONG BEACH	CA	90804	LOS ANGELES	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	222869	LONG BEACH BRANCH	301 EAST OCEAN BOULEVARD, SUITE 102	LONG BEACH	CA	90802-4828	LOS ANGELES	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3652200	MARKETPLACE LONG BEACH BANKING CENTER	6451 EAST PACIFIC COAST HIGHWAY, #17	LONG BEACH	CA	90803	LOS ANGELES	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2359727	LOS ALTOS OFFICE	275 THIRD STREET	LOS ALTOS	CA	94022	SANTA CLARA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3691521	BRENTWOOD BRANCH	12001 SAN VICENTE BOULEVARD	LOS ANGELES	CA	90049	LOS ANGELES	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3691352	CENTURY CITY BRANCH	2000 AVENUE OF THE STARS, SUITE 110	LOS ANGELES	CA	90067	LOS ANGELES	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3691512	HOLLYWOOD - SUNSET BOULEVARD BRANCH	6255 WEST SUNSET BOULEVARD, SUITE 100	LOS ANGELES	CA	90028	LOS ANGELES	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3681503	LA CRENSHAW BRANCH	3425 CRENSHAW BOULEVARD, SUITE 101	LOS ANGELES	CA	90008	LOS ANGELES	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3652223	LOS ANGELES - KOREATOWN BANKING CENTER	635 SOUTH HOBART BLVD., SUITE B	LOS ANGELES	CA	90005	LOS ANGELES	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	918566	LOS ANGELES DOWNTOWN BRANCH	601 SOUTH FIGUEROA STREET	LOS ANGELES	CA	90017-3874	LOS ANGELES	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	280763	WESTWOOD BRANCH	1031 GLENDON AVENUE	LOS ANGELES	CA	90024-2907	LOS ANGELES	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	757657	LOS GATOS BRANCH	444 NORTH SANTA CRUZ AVENUE	LOS GATOS	CA	95030	SANTA CLARA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3318925	MARINA DEL REY BANKING CENTER	4040 LINCOLN BLVD.	MARINA DEL REY	CA	90292	LOS ANGELES	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	1414342	MENLO - ATHERTON OFFICE	800 OAK GROVE AVENUE	MENLO PARK	CA	94025	SAN MATEO	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3564566	MILLBRAE BRANCH	49 EL CAMINO REAL	MILLBRAE	CA	94030	SAN MATEO	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	694958	MILPITAS BRANCH	1289 SOUTH PARK VICTORIA DRIVE	MILPITAS	CA	95035	SANTA CLARA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3693511	MISSION VIEJO BANKING CENTER BRANCH	26131 LA PAZ ROAD, SUITE B1	MISSION VIEJO	CA	92691-5336	ORANGE	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	1445925	MONTEREY OFFICE	35 BONIFACIO PLAZA	MONTEREY	CA	93940	MONTEREY	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3651558	FASHION ISLAND - NEWPORT BEACH BRANCH	650 NEWPORT CENTER DRIVE, SUITE 790	NEWPORT BEACH	CA	92660	ORANGE	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
CHANGE	3/4/2019	Full Service	3420908	~~WESTCLIFF - NEWPORT BEACH~~ BRANCH Newport Beach-Westcliff	2131 WESTCLIFF DRIVE	NEWPORT BEACH	CA	92660	ORANGE	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3312576	OAKLAND-BROADWAY BANKING CENTER BRANCH	1200 BROADWAY	OAKLAND	CA	94612	ALAMEDA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
CHANGE	3/23/2015	Full Service	3420917	ONTARIO BRANCH	4235 CONCOURS, ~~SUITE 110~~ No Suite #	ONTARIO	CA	91764	SAN BERNARDINO	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	917667	PALO ALTO BRANCH	250 LYTTON AVENUE	PALO ALTO	CA	94301	SANTA CLARA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3420537	PASADENA BRANCH	35 NORTH LAKE AVENUE, SUITE 120	PASADENA	CA	91101	LOS ANGELES	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3351345	PLEASANTON - MAIN STREET BANKING CENTER	600 MAIN STREET, SUITE A	PLEASANTON	CA	94566-6604	ALAMEDA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	1445907	PRUNEDALE OFFICE	7315 SAN MIGUEL CANYON ROAD	PRUNEDALE	CA	93907	MONTEREY	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	4236067	RANCHO CUCAMONGA BANKING CENTER	12035 FOOTHILL BLVD.	RANCHO CUCAMONGA	CA	91730	SAN BERNARDINO	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	1445916	SALINAS MAIN OFFICE	430 SOUTH MAIN STREET	SALINAS	CA	93901	MONTEREY	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3638451	SAN CARLOS BANKING CENTER BRANCH	644 LAUREL STREET	SAN CARLOS	CA	94070-3112	SAN MATEO	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3681594	CARMEL MOUNTAIN RANCH BRANCH	11608 CARMEL MOUNTAIN ROAD	SAN DIEGO	CA	92128	SAN DIEGO	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3774043	DEL MAR HEIGHTS BRANCH	11943 EL CAMINO REAL, SUITE 110A	SAN DIEGO	CA	92130	SAN DIEGO	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3420926	LA JOLLA BRANCH	9235 TOWN CENTRE DRIVE, SUITE 110	SAN DIEGO	CA	92121	SAN DIEGO	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	4210736	MIRA MESA BANKING CENTER	9350 MIRA MESA BLVD.	SAN DIEGO	CA	92126	SAN DIEGO	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3513676	MISSION VALLEY BANKING CENTER	2307 FENTON PARKWAY, SUITE C109	SAN DIEGO	CA	92108	SAN DIEGO	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3681361	PACIFIC BEACH BRANCH	1602 GARNET AVENUE	SAN DIEGO	CA	92109	SAN DIEGO	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3681334	SAN DIEGO - DIAMOND VIEW TOWER BRANCH	955 J STREET	SAN DIEGO	CA	92101	SAN DIEGO	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3352194	SAN DIEGO - HILLCREST BANKING CENTER	412 WASHINGTON STREET	SAN DIEGO	CA	92103-2112	SAN DIEGO	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	831969	SAN FRANCISCO - EMBARCADERO BRANCH	1 EMBARCADERO CENTER	SAN FRANCISCO	CA	94111	SAN FRANCISCO	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3681606	SAN FRANCISCO - UNION BRANCH	2001 UNION STREET	SAN FRANCISCO	CA	94123	SAN FRANCISCO	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3420971	ALMADEN VALLEY BRANCH	1092 BLOSSOM HILL ROAD	SAN JOSE	CA	95123	SANTA CLARA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	733166	SAN JOSE - AIRPORT BRANCH	226 AIRPORT PARKWAY	SAN JOSE	CA	95110	SANTA CLARA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	803359	SAN JOSE MAIN BRANCH	333 WEST SANTA CLARA STREET	SAN JOSE	CA	95113	SANTA CLARA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3397868	SILVER CREEK BRANCH	5601 SILVER CREEK VALLEY ROAD	SAN JOSE	CA	95138	SANTA CLARA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3420933	WILLOW GLEN BRANCH	1191 LINCOLN AVENUE	SAN JOSE	CA	95125	SANTA CLARA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	604266	WINCHESTER BRANCH	1245 SOUTH WINCHESTER BOULEVARD	SAN JOSE	CA	95128	SANTA CLARA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3300742	SAN JUAN CAPISTRANO BANKING CENTER	32022 CAMINO CAPISTRANO, SUITE F3	SAN JUAN CAPISTRANO	CA	92675	ORANGE	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3341709	SAN LEANDRO BANKING CENTER	1301 EAST 14TH STREET	SAN LEANDRO	CA	94577-4713	ALAMEDA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3420953	SAN MATEO BRANCH	444 SOUTH EL CAMINO REAL	SAN MATEO	CA	94402	SAN MATEO	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3581491	SAN RAMON BRANCH	3110 CROW CANYON PLACE, SUITE A	SAN RAMON	CA	94583	CONTRA COSTA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	483564	EAST SANTA CRUZ BRANCH	1237 SOQUEL AVENUE	SANTA CRUZ	CA	95062	SANTA CRUZ	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	360768	SANTA CRUZ MAIN BRANCH	25 RIVER STREET	SANTA CRUZ	CA	95060	SANTA CRUZ	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	4183978	SANTA MONICA MAIN BANKING CENTER	400 WILSHIRE BOULEVARD, SUITE 400	SANTA MONICA	CA	90401	LOS ANGELES	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3681325	SARATOGA BANKING CENTER	13000 SARATOGA-SUNNYVALE ROAD	SARATOGA	CA	95070	SANTA CLARA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	362865	SCOTTS VALLEY BRANCH	228 MOUNT HERMON ROAD	SCOTTS VALLEY	CA	95066	SANTA CRUZ	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	734462	SHERMAN OAKS BRANCH	15303 VENTURA BOULEVARD, SUITE 100, LOWER PLAZA	SHERMAN OAKS	CA	91403	LOS ANGELES	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	4152402	SOUTH PASADENA BANKING CENTER	824 FAIR OAKS AVENUE	SOUTH PASADENA	CA	91030	LOS ANGELES	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3681615	SOUTH SAN FRANCISCO BRANCH	401 GRAND AVENUE	SOUTH SAN FRANCISCO	CA	94080	SAN MATEO	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3420894	STUDIO CITY BRANCH	12050 VENTURA BOULEVARD, SUITE A-105	STUDIO CITY	CA	91604	LOS ANGELES	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	4865391	SUNNYVALE BANKING CENTER	600 EAST EL CAMINO REAL	SUNNYVALE	CA	94087	SANTA CLARA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	567660	TORRANCE MAIN BANKING CENTER	21153 HAWTHORNE BOULEVARD	TORRANCE	CA	90503	LOS ANGELES	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3666550	TORRANCE TOWN CENTER BANKING CENTER BRANCH	2735 PACIFIC COAST HIGHWAY	TORRANCE	CA	90505-7001	LOS ANGELES	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3554833	TUSTIN BRANCH	3015 EL CAMINO REAL	TUSTIN	CA	92782	ORANGE	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	4152411	VISTA-MELROSE BANKING CENTER	625 SOUTH MELROSE DRIVE	VISTA	CA	92081	SAN DIEGO	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	1839038	WALNUT CREEK OFFICE	1442 NORTH MAIN STREET	WALNUT CREEK	CA	94596	CONTRA COSTA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	483665	WATSONVILLE SQUARE BRANCH	1993 MAIN STREET	WATSONVILLE	CA	95076	SANTA CRUZ	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	4224514	9200 SUNSET BANKING CENTER	9200 WEST SUNSET BLVD., SUITE 150	WEST HOLLYWOOD	CA	90069	LOS ANGELES	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3420540	WESTLAKE VILLAGE BANKING CENTER	2915 TOWNSGATE ROAD	WESTLAKE VILLAGE	CA	91361	VENTURA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3774067	WOODLAND HILLS BRANCH	5700 CANOGA AVENUE, BUILDING G, SUITE 100	WOODLAND HILLS	CA	91367	LOS ANGELES	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3511057	BOCA RATON FLORIDA BRANCH #504	1675 NORTH MILITARY TRAIL	BOCA RATON	FL	33486-4310	PALM BEACH	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	4224532	EAST BOCA RATON BANKING CENTER #317	1 SOUTH FEDERAL HIGHWAY	BOCA RATON	FL	33432	PALM BEACH	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3510839	BROWARD-NE THIRD AVENUE BRANCH #505	100 NORTHEAST 3RD AVENUE, SUITE 100	FORT LAUDERDALE	FL	33301	BROWARD	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3533092	NAPLES BRANCH #402	3001 NORTH TAMIAMI TRAIL, SUITE 100	NAPLES	FL	34103	COLLIER	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3511011	PALM BEACH GARDENS BRANCH #506	2401 PGA BOULEVARD, SUITE 198	PALM BEACH GARDENS	FL	33410	PALM BEACH	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3564906	SINGER ISLAND BRIDGE BRANCH #314	155 EAST BLUE HERON BOULEVARD	RIVIERA BEACH	FL	33404	PALM BEACH	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3681624	WELLINGTON BRANCH #311	1037 SOUTH STATE ROAD 7, SUITE 117	WEST PALM BEACH	FL	33414	PALM BEACH	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3094176	ALLEN PARK BRANCH #341	6534 ALLEN ROAD	ALLEN PARK	MI	48101	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2416959	CARPENTER ROAD BRANCH #424	2735 CARPENTER ROAD	ANN ARBOR	MI	48108	WASHTENAW	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2067935	JACKSON-ZEEB BRANCH #343	5370 JACKSON ROAD	ANN ARBOR	MI	48103	WASHTENAW	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2416968	MAIN-HURON BRANCH #429	101 NORTH MAIN STREET	ANN ARBOR	MI	48104	WASHTENAW	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2416865	PLYMOUTH-NIXON BRANCH #435	2665 PLYMOUTH ROAD	ANN ARBOR	MI	48105	WASHTENAW	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2067958	SOUTH STATE EISENHOWER BRANCH #436	3001 SOUTH STATE STREET	ANN ARBOR	MI	48103	WASHTENAW	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2067584	STADIUM BOULEVARD-PAULINE BRANCH #433	1959 WEST STADIUM BOULEVARD	ANN ARBOR	MI	48103	WASHTENAW	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Limited Service	3777483	WASHINGTON STREET BRANCH #429 A	314 EAST WASHINGTON STREET	ANN ARBOR	MI	48104	WASHTENAW	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2068013	WASHTENAW-HURON PARKWAY BRANCH #432	3305 WASHTENAW AVENUE	ANN ARBOR	MI	48104	WASHTENAW	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2059011	CBAC - COMERICA BANK AUBURN HILLS CAMPUS - BRANCH 119	3501 HAMLIN ROAD, SUITE 1	AUBURN HILLS	MI	48326	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3145335	I-75 BALDWIN BRANCH #350	260 BROWN ROAD	AUBURN HILLS	MI	48326	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2928566	BECKLEY OFFICE #663	5475 BECKLEY ROAD, SUITE 130	BATTLE CREEK	MI	49015	CALHOUN	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	19543	CENTRAL OFFICE BRANCH #660	49 WEST MICHIGAN AVENUE	BATTLE CREEK	MI	49017	CALHOUN	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	

OK		Full Service	2067315	COLUMBIA-RIVERSIDE BRANCH #674	192 EAST COLUMBIA AVENUE	BATTLE CREEK	MI	49015	CALHOUN	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2067276	SPRINGFIELD BRANCH #654	215 NORTH 20TH STREET	BATTLE CREEK	MI	49037	CALHOUN	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2065030	BELLEVILLE I-94 BRANCH #108	11531 BELLEVILLE ROAD	BELLEVILLE	MI	48111	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	3769054	WOODWARD-FOURTEEN MILE BRANCH #50	33101 WOODARD AVENUE	BIRMINGHAM	MI	48009	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2061818	WOODWARD-HAMILTON BRANCH #49	183 NORTH OLD WOODWARD AVENUE	BIRMINGHAM	MI	48009	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2063139	MAPLE-TELEGRAPH BRANCH #207	4057 WEST MAPLE ROAD	BLOOMFIELD HILLS	MI	48301	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2069750	TELEGRAPH-LONG LAKE BRANCH #270	3910 TELEGRAPH ROAD, SUITE 100	BLOOMFIELD HILLS	MI	48302	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2069252	WOODWARD-HUNTER BOULEVARD OFFICE #212	35440 WOODWARD AVENUE	BLOOMFIELD HILLS	MI	48304	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2069467	WOODWARD-WINTHROP BRANCH #269	43333 SOUTH WOODWARD AVENUE	BLOOMFIELD HILLS	MI	48302	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2416936	EAST GRAND RIVER-WHITEMORE LAKE BRANCH #140	5671 WHITMORE LAKE ROAD	BRIGHTON	MI	48116	LIVINGSTON	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2188831	GRAND RIVER-HILTON BRANCH #313	8250 HILTON ROAD	BRIGHTON	MI	48114	LIVINGSTON	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2057034	BROOKLYN BRANCH #602	11351 BROOKLYN ROAD	BROOKLYN	MI	49230	JACKSON	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2069055	FORD-SHELDON BRANCH #269	44420 FORD ROAD	CANTON	MI	48187	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	3510872	MICHIGAN-CANTON BRANCH #353	45420 MICHIGAN AVENUE	CANTON	MI	48188	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	3510845	DIXIE-DEER LAKE BRANCH #357	7505 DIXIE HIGHWAY	CLARKSTON	MI	48346	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	3681633	SASHABAW-CLARKSTON BRANCH #545	7783 SASHABAW ROAD	CLARKSTON	MI	48348	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	632643	CLINTON BRANCH #426	169 WEST MICHIGAN AVENUE	CLINTON	MI	49236	LENAWEE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2065405	GARFIELD-CANAL BRANCH #134	41941 GARFIELD ROAD	CLINTON TOWNSHIP	MI	48038	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2061797	GARFIELD-METRO PARKWAY BRANCH #67	36565 GARFIELD ROAD	CLINTON TOWNSHIP	MI	48035	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2063424	GRATIOT-HILLSIDE BRANCH #219	35795 GRATIOT AVENUE	CLINTON TOWNSHIP	MI	48035	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2054829	GROESBECK-HARRINGTON BRANCH #92	39010 GROESBECK HIGHWAY	CLINTON TOWNSHIP	MI	48036	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2070052	UNION LAKE COMMERCE BRANCH #309	3000 UNION LAKE ROAD	COMMERCE TOWNSHIP	MI	48382	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	4844882	COOPERSVILLE BANKING CENTER	31 68TH AVENUE NORTH	COOPERSVILLE	MI	49404	OTTAWA	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2182890	HENRY FORD VILLAGE RETIREMENT BRANCH #322	15101 FORD ROAD	DEARBORN	MI	48126	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2069261	MICHIGAN-AMERICAN ROAD BRANCH #163	16150 MICHIGAN AVENUE	DEARBORN	MI	48126	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2069092	MICHIGAN-MASON BRANCH #157	22101 MICHIGAN AVENUE	DEARBORN	MI	48124	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2115524	OAKBROOK COMMONS RETIREMENT BRANCH #153	16351 ROTUNDA DRIVE	DEARBORN	MI	48120	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2069551	TELEGRAPH-SHERIDAN BRANCH #160	850 NORTH TELEGRAPH ROAD	DEARBORN	MI	48128	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2069104	WARREN-CALHOUN BRANCH #158	13335 WEST WARREN AVENUE	DEARBORN	MI	48126	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2064435	FORD-BEECH DALY BRANCH #175	25745 FORD ROAD	DEARBORN HEIGHTS	MI	48127	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2061854	JOY-BEECH DALY BRANCH #55	25351 JOY ROAD	DEARBORN HEIGHTS	MI	48127	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2069533	TELEGRAPH-LEHIGH BRANCH #230	4401 SOUTH TELEGRAPH ROAD	DEARBORN HEIGHTS	MI	48125	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	4299035	COMERICA BANK CENTER (CBC)	411 WEST LAFAYETTE BLVD.	DETROIT	MI	48226	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2416838	EIGHT MILE-HUNTINGTON BRANCH #111	19333 WEST EIGHT MILE ROAD	DETROIT	MI	48219	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2055542	FISHER BUILDING BRANCH #43	3011 WEST GRAND BOULEVARD	DETROIT	MI	48202	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2068161	FORT-14TH BRANCH #239	2200 WEST FORT STREET	DETROIT	MI	48216	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2064864	GRAND RIVER-OUTER DRIVE BRANCH #105	19401 GRAND RIVER AVENUE	DETROIT	MI	48223	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2064211	GRATIOT-CHENE BRANCH #318	2241 GRATIOT AVENUE	DETROIT	MI	48207	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2065049	GRATIOT-EIGHT MILE BRANCH #102	15261 GRATIOT AVENUE	DETROIT	MI	48205	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	3511002	JEFFERSON-CHENE BRANCH #65	2631 EAST JEFFERSON AVENUE	DETROIT	MI	48207	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2069001	JEFFERSON-COPLIN BRANCH #170	13233 EAST JEFFERSON AVENUE	DETROIT	MI	48215	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2069314	LIVERNOIS-LYNDON BRANCH #173	14530 LIVERNOIS AVENUE	DETROIT	MI	48238	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2053477	MACK-HILLCREST BRANCH #34	15345 MACK AVENUE	DETROIT	MI	48239	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2055255	MCNICHOLS-MEYERS BRANCH #72	16933 MEYERS ROAD	DETROIT	MI	48235	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2064293	MICHIGAN-CENTRAL BRANCH #95	7720 MICHIGAN AVENUE	DETROIT	MI	48210	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2054996	MIDTOWN OFFICE BRANCH #7	4 EAST ALEXANDRINE STREET	DETROIT	MI	48201	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2053468	MOUND-EIGHT MILE BRANCH #38	20555 MOUND ROAD	DETROIT	MI	48234	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	3771280	PENOBSCOT BUILDING BRANCH	645 GRISWOLD STREET, SUITE 70	DETROIT	MI	48226	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	371344	RENAISSANCE CENTER BRANCH #159	300 RENAISSANCE CENTER	DETROIT	MI	48243	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2069588	VERNOR-INGLIS BANKING CENTER #172	8050 WEST VERNOR HIGHWAY	DETROIT	MI	48209	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2064202	WARREN-EVERGREEN BRANCH #107	19310 WEST WARREN AVENUE	DETROIT	MI	48228	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2069917	WEST CHICAGO-SCHAEFER BRANCH #219	13500 WEST CHICAGO STREET	DETROIT	MI	48228	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2069609	EIGHT MILE-FARMINGTON BRANCH #224	33457 WEST EIGHT MILE ROAD	FARMINGTON	MI	48335	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	1998104	GRAND RIVER-DRAKE BRANCH #139	35405 GRAND RIVER AVENUE	FARMINGTON	MI	48335	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2061809	GRAND RIVER-MIDDLEBELT BRANCH #52	29469 GRAND RIVER	FARMINGTON	MI	48336	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2070360	THIRTEEN MILE-NORTHWESTERN BRANCH #236	30840 NORTHWESTERN HIGHWAY	FARMINGTON	MI	48334	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2106634	TWELVE MILE-HALSTEAD BRANCH #316	37550 TWELVE MILE ROAD	FARMINGTON	MI	48331	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2054669	TWELVE MILE-ORCHARD LAKE BRANCH #54	31500 TWELVE MILE ROAD	FARMINGTON	MI	48334	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	3383129	OWEN-SILVER PARKWAY BRANCH #544	3500 OWEN ROAD	FENTON	MI	48430	GENESEE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2096876	NINE MILE-HILTON BRANCH #70	1000 EAST NINE MILE ROAD	FERNDALE	MI	48220	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2055013	FRANKLIN VILLAGE BRANCH #53	32682 FRANKLIN ROAD	FRANKLIN	MI	48025	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	3421044	ROBBINS ROAD BRANCH #450	1102 ROBBINS ROAD	GRAND HAVEN	MI	49417	OTTAWA	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	451442	CAMPAU SQUARE BRANCH #494	99 MONROE AVENUE NORTHWEST	GRAND RAPIDS	MI	49503	KENT	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2067145	CASCADE BRANCH #488	6511 28TH STREET SOUTHEAST	GRAND RAPIDS	MI	49546	KENT	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2070039	FOUR MILE-ALPINE BRANCH #495	857 FOUR MILE ROAD	GRAND RAPIDS	MI	49544	KENT	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2416922	PLAINFIELD BRANCH #491	4065 PLAINFIELD AVENUE NORTHEAST	GRAND RAPIDS	MI	49525	KENT	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	3510920	WOODLAND MALL BRANCH #481	3215 28TH STREET SOUTHEAST	GRAND RAPIDS	MI	49512	KENT	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2245748	GRANDVILLE-44TH WILSON BRANCH #456	4450 WILSON AVENUE	GRANDVILLE	MI	49418	KENT	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2067016	GRASS LAKE BRANCH #604	115 EAST MICHIGAN AVENUE	GRASS LAKE	MI	49240	JACKSON	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	928841	FISHER-ST PAUL BRANCH #320	415 FISHER ROAD	GROSSE POINTE	MI	48230	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2068723	MACK-BAYS BRANCH #251	21303 MACK AVENUE	GROSSE POINTE	MI	48236	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2069331	MACK-LOCHMOOR BRANCH #161	20200 MACK AVENUE	GROSSE POINTE	MI	48236	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2056583	JEFFERSON-SHOOK BRANCH #81	35320 JEFFERSON AVENUE	HARRISON TOWNSHIP	MI	48045	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2068255	WOODWARD-MARGARET BRANCH #22	18222 WOODWARD AVENUE	HIGHLAND PARK	MI	48203	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2595528	HOLLAND COMER MART BRANCH #517	50 DOUGLAS AVENUE	HOLLAND	MI	49424	OTTAWA	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2115494	LATSON-GRAND RIVER BRANCH #359	1050 SOUTH LATSON	HOWELL	MI	48843	LIVINGSTON	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2067137	AIRPORT ROAD BRANCH #615	2707 AIRPORT ROAD	JACKSON	MI	49202	JACKSON	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Limited Service	2068059	DOWNTOWN-AUTO BANK DRIVE-IN BRANCH #616	301 NORTH JACKSON STREET	JACKSON	MI	49201	JACKSON	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2067052	EAST JACKSON BRANCH #608	2315 EAST MICHIGAN AVENUE	JACKSON	MI	49202	JACKSON	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	1012443	JACKSON MAIN BRANCH #601	245 WEST MICHIGAN AVENUE	JACKSON	MI	49201	JACKSON	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2043216	WESTWOOD MALL BRANCH #614	1620 WEST MICHIGAN AVENUE	JACKSON	MI	49202	JACKSON	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	3510863	COMSTOCK BRANCH #527	5937 KING HIGHWAY	KALAMAZOO	MI	49048	KALAMAZOO	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2067539	GULL ROAD BRANCH #531	5560 GULL ROAD	KALAMAZOO	MI	49048	KALAMAZOO	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	143843	MAIN OFFICE BRANCH #522	151 SOUTH ROSE STREET	KALAMAZOO	MI	49007	KALAMAZOO	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2067427	MAPLE HILL BRANCH #521	5080 WEST MAIN STREET	KALAMAZOO	MI	49009	KALAMAZOO	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2067472	OAKWOOD BRANCH #530	2025 WHITES ROAD	KALAMAZOO	MI	49008	KALAMAZOO	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2069177	SYLVAN LAKE BRANCH #233	2340 ORCHARD LAKE ROAD	KEEGO HARBOR	MI	48320	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
CHANGE	3/4/2019	Full Service	2067833	52ND-KALAMAZOO BRANCH #482	5135 KALAMAZOO AVENUE SE	KENTWOOD Grand Rapids	MI	49508	KENT	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	3421080	LAKE ORION BRANCH #344	1237 SOUTH LAPEER ROAD	LAKE ORION	MI	48360	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2069083	AIRPORT BRANCH #370	5101 NORTH GRAND RIVER AVENUE	LANSING	MI	48906	INGHAM	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	3421008	EASTWOOD TOWNE CENTER BRANCH #351	2615 LAKE LANSING ROAD	LANSING	MI	48912	INGHAM	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2069274	FRANDOR BRANCH #367	223 NORTH CLIPPERT STREET	LANSING	MI	48912	INGHAM	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2068795	JOLLY-CEDAR BRANCH #365	5226 SOUTH CEDAR STREET	LANSING	MI	48911	INGHAM	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2068830	LANSING MALL BRANCH #366	5510 WEST SAGINAW HIGHWAY	LANSING	MI	48917	EATON	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	175542	NORTH WASHINGTON SQUARE BRANCH #362	101 NORTH WASHINGTON SQUARE	LANSING	MI	48933	INGHAM	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2000031	FIVE MILE-LEVAN BRANCH #201	36700 FIVE MILE ROAD	LIVONIA	MI	48154	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2068338	FIVE MILE-MERRIMAN BRANCH #189	31425 FIVE MILE ROAD	LIVONIA	MI	48154	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2069506	LAUREL PARK-SIX MILE BRANCH #292	17111 NORTH LAUREL PARK DRIVE	LIVONIA	MI	48152	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Electronic Banking	4472379	WWW.COMERICA.COM BRANCH	33200 WEST SIX MILE ROAD	LIVONIA	MI	48152	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2063195	HAYES-HALL ROAD BRANCH #255	15301 HALL ROAD	MACOMB	MI	48044	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2183502	TWENTY FOUR MILE-HAYES BRANCH #315	15251 24 MILE ROAD	MACOMB	MI	48042	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	3511039	TWENTY ONE MILE-CARD BRANCH #354	21455 21 MILE ROAD	MACOMB	MI	48044	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	3511066	TWENTY SIX MILE-ROMEO PLANK BRANCH #347	16700 26 MILE ROAD	MACOMB	MI	48042	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	322645	MANCHESTER BRANCH #620	135 EAST MAIN STREET	MANCHESTER	MI	48158	WASHTENAW	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2070098	MARNE BRANCH #494	14695 16TH AVENUE	MARNE	MI	49435	OTTAWA	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2069159	MELVINDALE BRANCH #176	18225 ALLEN ROAD	MELVINDALE	MI	48122	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2416874	DOWNTOWN MIDLAND BRANCH #590	201 MCDONALD STREET	MIDLAND	MI	48640	MIDLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2067593	EASTMAN BRANCH #585	1616 NORTH SAGINAW ROAD	MIDLAND	MI	48640	MIDLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2067801	EASTSIDE BRANCH #443	2133 EAST APPLE AVENUE	MUSKEGON	MI	49442	MUSKEGON	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2416833	MUSKEGON HEIGHTS BRANCH #442	2730 SANFORD STREET	MUSKEGON	MI	49444	MUSKEGON	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2067632	NORTHSIDE BRANCH #446	414 CENTER STREET	MUSKEGON	MI	49445	MUSKEGON	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2067829	NORTON SHORES BRANCH #447	875 WEST NORTON AVENUE	MUSKEGON	MI	49441	MUSKEGON	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	3511075	NAPOLEON BRANCH #610	121 BROOKLYN ROAD	NAPOLEON	MI	49261	JACKSON	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2416995	GRATIOT-COTTON BANKING CENTER #358	50300 GRATIOT AVENUE	NEW BALTIMORE	MI	48051	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2070164	TWENTY THREE MILE-CHESTERFIELD BRANCH #295	32777 23 MILE ROAD	NEW BALTIMORE	MI	48047	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	3421071	LYON TOWNSHIP BRANCH #352	30244 MILFORD ROAD	NEW HUDSON	MI	48165	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	3421059	FIVE MILE-BECK BRANCH #345	16081 TECHNOLOGY DRIVE	NORTHVILLE	MI	48168	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2068611	NORTHVILLE BRANCH #208	129 EAST MAIN STREET	NORTHVILLE	MI	48167	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	3421053	FOX RUN RETIREMENT BRANCH #540	41100 FOX RUN ROAD	NOVI	MI	48377	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	3421062	GRAND RIVER-BECK BRANCH #351	47440 GRAND RIVER AVENUE	NOVI	MI	48374	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2067730	TEN MILE-HAGGERTY BRANCH #301	39475 WEST TEN MILE ROAD	NOVI	MI	48375	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	1939378	COOLIDGE-SHERWOOD BRANCH #144	25555 COOLIDGE HIGHWAY	OAK PARK	MI	48237	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2056159	GREENFIELD-TEN MILE BRANCH #59	25182 GREENFIELD ROAD	OAK PARK	MI	48237	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2069225	MERIDIAN MALL BRANCH #358	4529 MARSH ROAD	OKEMOS	MI	48864	INGHAM	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2068273	PLEASANT RIDGE BRANCH #206	24024 WOODWARD AVENUE	PLEASANT RIDGE	MI	48069	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2059551	ANN ARBOR-LILLEY BRANCH #69	42345 EAST ANN ARBOR ROAD	PLYMOUTH	MI	48170	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2473370	FIVE MILE-HAGGERTY BRANCH #326	15455 HAGGERTY ROAD	PLYMOUTH	MI	48170	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2067511	PORTAGE BRANCH #524	7941 SOUTH WESTNEDGE AVENUE	PORTAGE	MI	49002	KALAMAZOO	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2069832	FIVE MILE-KINLOCH BRANCH #167	26095 FIVE MILE ROAD	REDFORD	MI	48239	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	3533649	SCHOOLCRAFT-INKSTER BRANCH #60	27357 SCHOOLCRAFT	REDFORD	MI	48239	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2914277	ADAMS-SILVERBELL BRANCH #333	4930 NORTH ADAMS ROAD	ROCHESTER	MI	48306	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2416799	ROCHESTER-AVON BRANCH #82	823 SOUTH ROCHESTER ROAD	ROCHESTER	MI	48307	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	3581419	ROCHESTER-TIENKEN BRANCH #346	1412 NORTH ROCHESTER ROAD	ROCHESTER	MI	48307	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2059084	WALTON-ADAMS BRANCH #246	3012 WALTON BOULEVARD	ROCHESTER HILLS	MI	48309	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2068657	ROMULUS BRANCH #213	36450 GODDARD ROAD	ROMULUS	MI	48174	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2054025	GRATIOT-MARTIN BRANCH #77	27950 GRATIOT AVENUE	ROSEVILLE	MI	48066	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2054799	GROESBECK-TWELVE MILE BRANCH #79	28801 GROESBECK HIGHWAY	ROSEVILLE	MI	48066	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2057183	KELLY-TEN MILE BRANCH #69	25300 KELLY ROAD	ROSEVILLE	MI	48066	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	814343	HARPER-GROSSEDALE BRANCH #293	30200 HARPER AVENUE	SAINT CLAIR SHORES	MI	48082	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2358264	JEFFERSON-MARTER BRANCH #324	23191 MARTER ROAD	SAINT CLAIR SHORES	MI	48080	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2070267	SALINE BRANCH #422	114 EAST MICHIGAN AVENUE	SALINE	MI	48176	WASHTENAW	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	3681400	PONTIAC TRAIL-ELEVEN MILE BRANCH #541	25950 PONTIAC TRAIL	SOUTH LYON	MI	48178	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2070221	ELEVEN MILE-LAHSER BRANCH #799	27100 LAHSER ROAD	SOUTHFIELD	MI	48034	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	837242	SOUTHFIELD TOWER BRANCH #304	29201 TELEGRAPH ROAD	SOUTHFIELD	MI	48034	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2064408	SOUTHFIELD-EDWARDS BRANCH #225	29251 SOUTHFIELD ROAD	SOUTHFIELD	MI	48076	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2064145	TEN MILE-TELEGRAPH BRANCH #310	24770 TELEGRAPH ROAD	SOUTHFIELD	MI	48033	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2064396	TOWN CENTER BRANCH #221	2000 TOWN CENTER SUITE 140	SOUTHFIELD	MI	48075	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2067173	SPRING ARBOR BRANCH #619	7991 SPRING ARBOR ROAD	SPRING ARBOR	MI	49283	JACKSON	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2069449	EIGHTEEN MILE-DEQUINDRE BRANCH #243	1955 EIGHTEEN MILE ROAD	STERLING HEIGHTS	MI	48314	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2056908	FIFTEEN MILE & SCHOENHERR BRANCH #87	13655 FIFTEEN MILE ROAD	STERLING HEIGHTS	MI	48312	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2054753	FOURTEEN MILE-DEQUINDRE BRANCH #66	1915 EAST FOURTEEN MILE ROAD	STERLING HEIGHTS	MI	48310	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2063380	SEVENTEEN MILE-RYAN BRANCH #232	4200 SEVENTEEN MILE ROAD	STERLING HEIGHTS	MI	48310	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	169343	SIXTEEN MILE-VAN DYKE BRANCH #280	36910 VAN DYKE AVENUE	STERLING HEIGHTS	MI	48312	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2069430	VAN DYKE-UTICA BRANCH #233	43020 VAN DYKE AVENUE	STERLING HEIGHTS	MI	48314	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2056186	EUREKA-PARDEE BRANCH #60	14700 PARDEE	TAYLOR	MI	48180	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2068684	TELEGRAPH-KING BRANCH #252	21333 SOUTH TELEGRAPH ROAD	TRENTON	MI	48183	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2063043	CROOKS & MAPLE BRANCH #242	1495 CROOKS ROAD	TROY	MI	48084	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	417644	CROOKS-LONG LAKE BRANCH #240	4999 CROOKS ROAD	TROY	MI	48098	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2063401	JOHN R-MAPLE BRANCH #243	1494 JOHN R ROAD	TROY	MI	48083	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	1998122	LONG LAKE-LIVERNOIS BRANCH #133	31 EAST LONG LAKE ROAD	TROY	MI	48085	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	3510850	ROCHESTER-WATTLES BRANCH #286	4035 ROCHESTER ROAD	TROY	MI	48085	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	
OK		Full Service	2063746	TWENTY ONE MILE-VAN DYKE BRANCH #57	47127 VAN DYKE AVENUE	UTICA	MI	48317	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK		60143	

OK		Full Service	3421035	TWENTY SIX MILE-VAN DYKE BRANCH #349	8660 26 MILE ROAD	UTICA	MI	48316	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2065188	TWENTY THREE MILE-MOUND BRANCH #109	50955 MOUND ROAD	UTICA	MI	48317	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2115435	FOURTEEN MILE-HAGGERTY BRANCH #145	39350 FOURTEEN MILE ROAD	WALLED LAKE	MI	48390	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3510957	MAPLE M-5 BRANCH #542	2730 E WEST MAPLE	WALLED LAKE	MI	48390	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2238678	PONTIAC TRAIL-BECK BRANCH #323	47060 PONTIAC TRAIL	WALLED LAKE	MI	48390	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2062543	FOURTEEN MILE-HAYES BRANCH #264	15050 EAST 14 MILE ROAD	WARREN	MI	48088	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2062516	TEN MILE-RYAN BRANCH #266	4225 EAST TEN MILE ROAD	WARREN	MI	48091	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	260046	THIRTEEN MILE-VAN DYKE BRANCH #260	30500 VAN DYKE AVENUE	WARREN	MI	48093	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2115515	TWELVE MILE-DEQUINDRE BRANCH #152	28230 DEQUINDRE ROAD	WARREN	MI	48092	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2070324	TWELVE MILE-DESMOND BRANCH #279	11441 TWELVE MILE ROAD	WARREN	MI	48093	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2063607	TWELVE MILE-RYAN BRANCH #262	29409 RYAN ROAD	WARREN	MI	48092	MACOMB	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2063456	M59-OAKLAND AIRPORT BRANCH #302	7070 HIGHLAND ROAD	WATERFORD	MI	48327	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2416501	FOURTEEN MILE-FARMINGTON BRANCH #34	33140 WEST FOURTEEN MILE ROAD	WEST BLOOMFIELD	MI	48322	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2054771	MAPLE-ORCHARD LAKE BRANCH #74	5630 WEST MAPLE ROAD	WEST BLOOMFIELD	MI	48322	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
CHANGE	3/4/2019	Full Service	2059311	ORCHARD LAKE-LONE PINE BRANCH #254	4430 ORCHARD LAKE ROAD (c/o Orchard)	WEST BLOOMFIELD	MI	48323	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2054735	ANN ARBOR-MERRIMAN BRANCH #54	31200 ANN ARBOR TRAIL	WESTLAND	MI	48185	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2069412	WAYNE-CANTON BRANCH #294	330 SOUTH WAYNE ROAD	WESTLAND	MI	48185	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2069029	WAYNE-WARREN BRANCH #63	6370 NORTH WAYNE ROAD	WESTLAND	MI	48185	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2106652	M59-ELIZABETH LAKE ROAD BRANCH #321	10351 HIGHLAND ROAD	WHITE LAKE	MI	48386	OAKLAND	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3133641	WEST ALLEN BRANCH #338	23120 ALLEN ROAD	WOODHAVEN	MI	48183	WAYNE	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3184264	MCDERMOTT-75 BRANCH	805 WEST MCDERMOTT DRIVE	ALLEN	TX	75013	COLLIN	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
CHANGE	3/4/2019	Full Service	3581642	STACY ROAD ANGEL PARKWAY BRANCH	1610 EAST STACY ROAD	ALLEN	TX	75002	COLLIN	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2452313	COOPER/I-20 BRANCH	4200 SOUTH COOPER STREET, SUITE 100	ARLINGTON	TX	76015	TARRANT	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	136150	LAMAR-LINCOLN OFFICE	707 EAST LAMAR BOULEVARD	ARLINGTON	TX	76011	TARRANT	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	4022457	35TH - JEFFERSON BANKING CENTER	1701 WEST 35TH STREET	AUSTIN	TX	78703	TRAVIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	4185950	ANDERSON-BURNET BANKING CENTER	7820 BURNET ROAD	AUSTIN	TX	78757-1230	TRAVIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3698605	AVERY RANCH BANKING CENTER BRANCH	14950 AVERY RANCH BLVD.	AUSTIN	TX	78717	WILLIAMSON	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	1456930	DOWNTOWN AUSTIN BRANCH	300 WEST 6TH STREET, SUITE 2250	AUSTIN	TX	78701	TRAVIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	1443195	NORTHEAST AUSTIN BRANCH	2315 EAST ANDERSON LANE	AUSTIN	TX	78752	TRAVIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3952557	PARMER - I35 BANKING CENTER	13200 NORTH IH35, BUILDING C	AUSTIN	TX	78753	TRAVIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	1456921	TARRYTOWN BRANCH	2414 EXPOSITION, SUITE D-110	AUSTIN	TX	78703	TRAVIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2330402	BEDFORD BRANCH	2120 CENTRAL DRIVE	BEDFORD	TX	76021	TARRANT	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3246500	BELLAIRE BRANCH	5408 BISSONNET	BELLAIRE	TX	77401-3352	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	1493614	JOSEY/TRINITY MILLS BRANCH	2625 NORTH JOSEY LANE, SUITE 200	CARROLLTON	TX	75007	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3585093	CEDAR PARK BANKING CENTER	810 EAST WHITESTONE BLVD., BUILDING C	CEDAR PARK	TX	78613	WILLIAMSON	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3474095	COMFORT BRANCH	609 FRONT ST	COMFORT	TX	78013	KENDALL	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	1393437	COPPELL BRANCH	128 NORTH DENTON TAP ROAD	COPPELL	TX	75019	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3515020	ABRAMS GOLIAD BRANCH	7311 ABRAMS ROAD	DALLAS	TX	75214	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3771413	BENT TREE BRANCH	4581 FRANKFORD ROAD	DALLAS	TX	75287	COLLIN	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
CHANGE	3/4/2019	Full Service	3939316	BISHOP-COLORADO BANKING CENTER	1222 NORTH BISHOP AVENUE, SUITE 100	DALLAS	TX	75208	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2255934	COLE/FITZHUGH BRANCH	3202 NORTH FITZHUGH AVENUE	DALLAS	TX	75204	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3421129	FOREST - PLANO BRANCH	10601 FOREST LANE	DALLAS	TX	75243	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	1443696	FOREST-WEBB CHAPEL BANKING CENTER	3115 FOREST LANE	DALLAS	TX	75234	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	1393567	FOREST/INWOOD BRANCH	5200 FOREST LANE	DALLAS	TX	75244	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	4142412	FORT WORTH-BAHAMA BANKING CENTER	2727 FORT WORTH AVENUE	DALLAS	TX	75211	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2541721	GALLERIA BRANCH	5006 VERDE VALLEY	DALLAS	TX	75254	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	782856	GARLAND/JUPITER BANKING CENTER	11155 GARLAND ROAD	DALLAS	TX	75218	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	851555	GREENVILLE-LOVERS BANKING CENTER	5302 GREENVILLE AVENUE	DALLAS	TX	75206	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	1830026	MIDWAY/SPRING VALLEY BRANCH	4102 SPRING VALLEY ROAD	DALLAS	TX	75244	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	1463059	MOCKINGBIRD-ABRAMS BRANCH	6760 EAST MOCKINGBIRD LANE	DALLAS	TX	75214	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3533332	MOCKINGBIRD-STEMMONS BANKING CENTER	1350 WEST MOCKINGBIRD LANE, SUITE 100	DALLAS	TX	75247	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	723054	NORTHPARK BRANCH	8350 BOEDEKER DRIVE	DALLAS	TX	75225	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	506939	PRESTON CENTER BRANCH	8225 PRESTON ROAD	DALLAS	TX	75225-6206	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3641651	PRESTON ROAD MAPLESHADE BRANCH	19176 PRESTON ROAD	DALLAS	TX	75252	COLLIN	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	912158	R L THORNTON BRANCH	5201 EAST R L THORNTON FREEWAY	DALLAS	TX	75223	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	1823377	SKILLMAN/ABRAMS BANKING CENTER	6410 LARMANDA STREET	DALLAS	TX	75231	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	4224523	WHEATLAND-I20 BANKING CENTER	2375 WEST WHEATLAND ROAD	DALLAS	TX	75237	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3421110	WOODALL MAPLE ROUTH BRANCH	2121 ROUTH STREET	DALLAS	TX	75201	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	549255	WYNNEWOOD BANKING CENTER	753 WEST ILLINOIS AVENUE	DALLAS	TX	75224	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3539403	DEER PARK BRANCH	1500 CENTER STREET	DEER PARK	TX	77536	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	1443935	HAMPTON-WINTERGREEN BRANCH	1483 NORTH HAMPTON	DESOTO	TX	75115	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3664131	DUNCANVILLE BRANCH	338 SOUTH CEDAR RIDGE DRIVE	DUNCANVILLE	TX	75116	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	4350358	8TH - MAGNOLIA BANKING CENTER	1560 WEST MAGNOLIA AVENUE	FORT WORTH	TX	76104	TARRANT	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3852219	BRYANT IRVIN AND OVERTON RIDGE - HULEN BANKING CENTER	5925 OVERTON RIDGE BLVD.	FORT WORTH	TX	76132-3573	TARRANT	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	4122565	CAMP BOWIE-RIDGLEA BANKING CENTER	6385 CAMP BOWIE	FORT WORTH	TX	76116	TARRANT	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3849189	FOSSIL CREEK BANKING CENTER	4351 WESTERN CENTER BLVD.	FORT WORTH	TX	76137	TARRANT	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
CHANGE	3/4/2019	Full Service	3849170	SUNDANCE SQUARE-THE CARNEGIE ~~3RD AND TAYLOR BANKING CENTER~~	421 WEST 3RD STREET, SUITE 101	FORT WORTH	TX	76102	TARRANT	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	243452	FRIENDSWOOD BRANCH	203 S FRIENDSWOOD DR	FRIENDSWOOD	TX	77546	GALVESTON	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3845594	PAGE AND TOLLWAY - FRISCO BANKING CENTER	8422 DALLAS PARKWAY	FRISCO	TX	75034	COLLIN	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	1423963	GALENA PARK BANKING CENTER	1515 CLINTON DRIVE	GALENA PARK	TX	77547	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3565694	NORTH GARLAND - NAAMAN FOREST BRANCH	4950 NORTH GARLAND AVENUE	GARLAND	TX	75040	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	5331615	2 RIVERWAY BRANCH	2 RIVERWAY DRIVE, SUITE 160	HOUSTON	TX	77056	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2067977	AIRPORT BRANCH	9103 AIRPORT BLVD	HOUSTON	TX	77061	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	709353	ALMEDA BRANCH	13300 ALMEDA ROAD	HOUSTON	TX	77045	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	196958	BAYOU BEND OFFICE	5757 MEMORIAL DRIVE	HOUSTON	TX	77007-8000	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3402164	BERRINGTON - HIGHWAY 6 SOUTH BRANCH	8707 HIGHWAY 6 SOUTH	HOUSTON	TX	77083	FORT BEND	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3581679	BRIAR FOREST CITY WEST BRANCH	10459 BRIAR FOREST DRIVE	HOUSTON	TX	77042	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3581343	BUFFALO SPEEDWAY BRANCH	3133 SOUTHWEST FREEWAY	HOUSTON	TX	77098	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	553357	CHAMPIONS BRANCH	6333 FM 1960 W	HOUSTON	TX	77069	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	645559	CLEAR LAKE BRANCH	16211 SPACE CENTER BOULEVARD	HOUSTON	TX	77062	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2535110	CYPRESS STATION BRANCH	355 FM 1960 WEST	HOUSTON	TX	77090	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3581709	FALLING CREEK 1960 BRANCH	3850 FM 1960 ROAD WEST	HOUSTON	TX	77068	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	1455096	GESSNER-KEMPWOOD BRANCH	2820 GESSNER DRIVE	HOUSTON	TX	77080	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3581688	GREENSPOINT BRANCH	370 GREENS ROAD	HOUSTON	TX	77060	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3627097	GULF FREEWAY BRANCH	9397 ALMEDA-GENOA ROAD	HOUSTON	TX	77075	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3628632	GULFGATE BANKING CENTER BRANCH	200 GULFGATE MALL	HOUSTON	TX	77087	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3565760	HEDWIG VILLAGE BRANCH	8899 KATY FREEWAY	HOUSTON	TX	77024	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	1914177	HEIGHTS BRANCH	414 W 19TH ST	HOUSTON	TX	77008	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3928589	HIGHWAY 249 - LOUETTA ROAD BANKING CENTER	10939 LOUETTA ROAD	HOUSTON	TX	77070	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	1193301	HIGHWAY 6 BRANCH	6655 HWY 6 N	HOUSTON	TX	77084	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3830114	HOLCOMBE AND MORNINGSIDE - MEDICAL CENTER BANKING CENTER	2337 WEST HOLCOMBE BLVD.	HOUSTON	TX	77030	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	632657	LOCKWOOD BRANCH	800 LOCKWOOD	HOUSTON	TX	77020	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	8356	MANGUM BRANCH	2201 MANGUM RD	HOUSTON	TX	77092	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	647250	MEMORIAL BRANCH	14606 MEMORIAL	HOUSTON	TX	77079	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2350414	MEMORIAL CITY BRANCH	835 GESSNER, SUITE 100	HOUSTON	TX	77024	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	1970725	NORTHSHORE BRANCH	12727 EAST FREEWAY	HOUSTON	TX	77015	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
CHANGE	3/4/2019	Full Service	3045942	NORTHWEST 290 - FAIRBANKS BRANCH	14109 NORTHWEST FREEWAY	HOUSTON	TX	77040-5014	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3581370	SAN FELIPE - WINROCK BRANCH	6412 SAN FELIPE STREET	HOUSTON	TX	77057	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
CHANGE	3/4/2019	Full Service	2225535	TWO SHELL PLAZA BANKING CENTER	~~777 WALKER STREET~~ 811 LOUISIANA ST., STE. 2720	HOUSTON	TX	77002	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2535754	UPPER KIRBY BRANCH	2525 KIRBY DRIVE	HOUSTON	TX	77019	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
CHANGE	3/4/2019	Full Service	220152	WEST BRANCH	13111 WESTHEIMER RD, SUITE 100	HOUSTON	TX	77077	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3581697	WINDERMERE 1960 BRANCH	11950 FM 1960 ROAD WEST	HOUSTON	TX	77065	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3845985	ATASCOCITA BANKING CENTER	6503 FM 1960 ROAD EAST	HUMBLE	TX	77346	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	582350	HUMBLE EAST BANKING CENTER	111 FM 1960 E BYPASS	HUMBLE	TX	77338	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3217317	HUMBLE WEST BANKING CENTER	8450 FM 1960 BYPASS WEST ROAD	HUMBLE	TX	77338-4012	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3474026	HUNT STORE BANKING CENTER	1634 HIGHWAY 39	HUNT	TX	78024	KERR	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3345010	INGRAM BRANCH	3186 JUNCTION HIGHWAY	INGRAM	TX	78025	KERR	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
CHANGE	3/4/2019	Full Service	1473236	IRVING/O'CONNOR BRANCH	301 WEST IRVING BOULEVARD	IRVING	TX	75060	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
CHANGE	3/4/2019	Full Service	3683584	LAS COLINAS-114 BANKING CENTER	1050 WEST CARPENTER FREEWAY	IRVING	TX	75039	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
CHANGE	3/4/2019	Full Service	3565737	BELT LINE ROAD - HIGHWAY 161	4301 NORTH BELT LINE ROAD	IRVING	TX	75038	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	742757	KATY BRANCH	810 SOUTH MASON ROAD	KATY	TX	77450	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3393977	WESTHEIMER PARKWAY - GRAND PARKWAY BRANCH	23330 WESTHEIMER PARKWAY	KATY	TX	77494	FORT BEND	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2686136	KERRVILLE MAIN OFFICE	1075 JUNCTION HIGHWAY	KERRVILLE	TX	78028	KERR	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3664168	KERRVILLE SOUTH BANKING CENTER	1015 SIDNEY BAKER SOUTH	KERRVILLE	TX	78028	KERR	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	757659	LEWISVILLE BRANCH	1656 SOUTH STATE HIGHWAY 121	LEWISVILLE	TX	75067	DENTON	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3652651	MANSFIELD BRANCH	2301 HIGHWAY 157 N	MANSFIELD	TX	76063	TARRANT	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3397792	TOWNE CENTRE-635 BRANCH	16595 LBJ FREEWAY	MESQUITE	TX	75150	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	907266	FAIRMONT PARKWAY - BELTWAY 8 BRANCH	5940 FAIRMONT PARKWAY	PASADENA	TX	77505	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3355112	PASADENA-SPENCER HIGHWAY BANKING CENTER	4041 SPENCER HIGHWAY	PASADENA	TX	77504-1201	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3374635	PEARLAND BANKING CENTER	11151 BROADWAY STREET	PEARLAND	TX	77584	BRAZORIA	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	970765	PFLUGERVILLE BRANCH	100 WEST MAIN	PFLUGERVILLE	TX	78660	TRAVIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3421101	CHAPEL HILL - TOLLWAY BRANCH	2560 DALLAS PARKWAY	PLANO	TX	75093	COLLIN	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3397783	COIT-121 BRANCH	3700 STATE HIGHWAY 121	PLANO	TX	75025	COLLIN	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	1433212	PARKER-PREMIER OFFICE	3310 PREMIER DRIVE	PLANO	TX	75023	COLLIN	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	1418329	PRESTON - HEADQUARTERS BANKING CENTER	8208 PRESTON ROAD	PLANO	TX	75024	COLLIN	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	601169	CAMPBELL - CENTRAL BANKING CENTER	910 EAST CAMPBELL ROAD	RICHARDSON	TX	75081	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3074365	CENTRAL/SPRING VALLEY BRANCH	811 SOUTH CENTRAL EXPRESSWAY	RICHARDSON	TX	75080	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	1433650	RICHARDSON - BELTLINE BANKING CENTER	1201 EAST BELTLINE ROAD	RICHARDSON	TX	75081	DALLAS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	2144757	ALAMO HEIGHTS BANKING CENTER	4040 BROADWAY STREET	SAN ANTONIO	TX	78209	BEXAR	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	1005262	DOWNTOWN SAN ANTONIO BRANCH	100 N SANTA ROSA STREET, SUITE 110	SAN ANTONIO	TX	78207	BEXAR	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	1006357	EASTSIDE BRANCH	403 S WW WHITE ROAD	SAN ANTONIO	TX	78219	BEXAR	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	517160	HIGHWAY 281 BRANCH	13750 SAN PEDRO	SAN ANTONIO	TX	78232	BEXAR	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3147755	NORTH LOOP 410 BRANCH	615 NW LOOP 410, SUITE 100	SAN ANTONIO	TX	78216	BEXAR	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3771338	RESEARCH FOREST-SIX PINES BRANCH	1600 RESEARCH FOREST DRIVE	SPRING	TX	77381	MONTGOMERY	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3771507	WOODLANDS PARKWAY-KUYKENDAHL BRANCH	6417 WOODLANDS PARKWAY	SPRING	TX	77381	MONTGOMERY	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3681650	ELLIOR DANIEL DRIVE HIGHWAY 6 BRANCH	1525 HIGHWAY 6	SUGAR LAND	TX	77478	FORT BEND	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	395359	SUGAR CREEK BRANCH	1 SUGAR CREEK CENTER BOULEVARD	SUGAR LAND	TX	77478	FORT BEND	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Limited Service	3771374	SUGAR CREEK DRIVE-IN BRANCH	14015 SOUTHWEST FREEWAY	SUGAR LAND	TX	77478	FORT BEND	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	4096131	THE COLONY - JOSEY AND 121 BANKING CENTER	4730 SH 121	THE COLONY	TX	75056	DENTON	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	1431085	WAXAHACHIE BANKING CENTER	820 FERRIS AVENUE	WAXAHACHIE	TX	75165	ELLIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service	3683641	BAY AREA BLVD. BANKING CENTER BRANCH	19415 GULF FREEWAY	WEBSTER	TX	77598-2504	HARRIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
CHANGE	3/4/2019	Full Service	3731855	WESTLAKE-BEE CAVES ROAD BRANCH	3801 BEE CAVES ROAD	WEST LAKE HILLS	TX	78746-6401	TRAVIS	UNITED STATES	Not Required	Not Required	COMERICA BANK	60143	
OK		Full Service (Head Office)	772446	COMERICA BANK & TRUST, NATIONAL ASSOCIATION	101 NORTH MAIN STREET	ANN ARBOR	MI	48104	WASHTENAW	UNITED STATES	Not Required	Not Required	COMERICA BANK & TRUST, NATIONAL ASSOCIATION	772446	

Report Item 3: Securities Holders – Comerica Incorporated

(1) List each securities holder, of record, that directly or indirectly owns, controls, or holds with power to vote 5 percent or more of any class of voting securities of the holding company as of the fiscal year end of the holding company. In addition, list each person, entity, or person acting in concert (including families), that holds options, warrants or other securities or rights that can be converted into or exercised for voting securities, which, in their aggregate, and including voting securities currently held, would equal or exceed 5 percent of any such class of voting securities.

(a) BlackRock, Inc., New York, New York (incorporated under the laws of Delaware, USA), has indicated on a Schedule 13G/A (filed with the US Securities and Exchange Commission on February 4, 2019) that it is a parent holding company or control person in accordance with 240.13d-1(b)(1)(ii)(G). Based on information in that Schedule 13G/A relating to its beneficial ownership of Comerica Incorporated as of December 31, 2018, and using Comerica Incorporated's actual shares outstanding at December 31, 2018, Black Rock, Inc. and certain affiliates held 7.4% of Comerica Incorporated's Common Stock as of December 31, 2018. Black Rock, Inc. indicated in its Schedule 13G/A that it has sole power to vote or to direct the vote with respect to 10,462,890 shares and sole dispositive power with respect to 11,870,043 shares. BlackRock, Inc. filed on behalf of the following subsidiaries: BlackRock (Luxembourg) S.A.; BlackRock (Netherlands) B.V.; Blackrock (Singapore) Limited; BlackRock Advisors (UK) Limited; BlackRock Advisors, LLC; BlackRock Asset Management Canada Limited; BlackRock Asset Management Ireland Limited; BlackRock Asset Management North Asia Limited; BlackRock Asset Management Schweiz AG; BlackRock Financial Management, Inc.; BlackRock Fund Advisors; BlackRock Fund Managers Ltd; BlackRock Institutional Trust Company, N.A.; BlackRock International Limited; BlackRock Investment Management (Australia) Limited; BlackRock Investment Management (UK) Ltd; BlackRock Investment Management, LLC; BlackRock Japan Co., Ltd and BlackRock Life Limited.

(b) State Street Corporation, Boston, Massachusetts (incorporated under the laws of Massachusetts), has indicated on a Schedule 13G (filed with the US Securities and Exchange Commission on February 14, 2019) that it is a parent holding company or control person in accordance with 240.13d-1(b)(1)(ii)(G). Based on information in that Schedule 13G relating to its beneficial ownership of Comerica Incorporated as of December 31, 2018, and using Comerica Incorporated's actual shares outstanding at December 31, 2018, State Street Corporation and certain affiliates held 5.1% of Comerica Incorporated's Common Stock as of December 31, 2018. State Street Corporation indicated in its Schedule 13G that it has shared power to vote or to direct the vote with respect to 7,581,033 shares and shared dispositive power with respect to 8,250,502 shares. State Street Corporation filed on behalf of the following subsidiaries: SSGA Funds Management, Inc.; State Street Global Advisors Limited (UK); State Street

Global Advisors Ltd (Canada); State Street Global Advisors GmbH; State Street Global Advisors, Australia Limited; State Street Global Advisors (Asia) Limited; State Street Global Advisors (Japan) Co., Ltd.; State Street Global Advisors Singapore Ltd.; State Street Global Advisors Ireland Limited; and State Street Global Advisors Trust Company.

(c) The Vanguard Group, Inc., Malvern, Pennsylvania (incorporated under the laws of Pennsylvania), has indicated on a Schedule 13G/A (filed with the US Securities and Exchange Commission on February 11, 2019) that it is an investment advisor in accordance with 240.13d-1(b)(1)(ii)(E). Based on information in that Schedule 13G/A relating to its beneficial ownership of Comerica Incorporated as of December 31, 2018, and using Comerica Incorporated's actual shares outstanding at December 31, 2018, The Vanguard Group, Inc. and certain affiliates held 11.5% of Comerica Incorporated's Common Stock as of December 31, 2018. The Vanguard Group, Inc. indicated in its Schedule 13G/A that it has sole power to vote or direct the vote on 205,614 shares, and shared voting power with respect to 34,989 shares. It has sole dispositive power with respect to 18,291,520 shares, and shared dispositive power with respect to 225,433 shares. Vanguard Fiduciary Trust Company, a wholly-owned subsidiary of The Vanguard Group, Inc., is the beneficial owner of 139,236 shares as a result of its serving as investment manager of collective trust accounts. Vanguard Investments Australia, Ltd., a wholly-owned subsidiary of The Vanguard Group, Inc., is the beneficial owner of 150,812 shares as a result of its serving as investment manager of Australian investment offerings.

(2) List any shareholder not listed in section 3(1) above that owned or controlled 5 percent or more of any class of voting securities in the holding company during the fiscal year for which the report is being filed. In addition, list each person or entity, or person acting in concert (including families) that held options, warrants or other securities or rights that could have been converted into or exercised for voting securities, which, in their aggregate, and including voting securities held, would have equaled or exceeded 5 percent of any such class of voting securities.

None.

Report Item 4: Insiders - Comerica Incorporated

List each principal securities holder, director, trustee, partner, executive officer, or person exercising similar functions of the holding company, regardless of title or compensation, as of the fiscal year end, showing the following:

(1) Name, city and state/country (do not include street address or social security number):

Ralph W. Babb, Jr.
Dallas, Texas U.S.A.

(2) Principal occupation, if other than with the holding company:

None

(3) Title or position, as of 12/31/18, with:

(a) the holding company:

Director, Chairman and Chief Executive Officer

(b) all direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

Director, Chairman and Chief Executive Officer - Comerica Bank

(c) any other company in which the person is a director, trustee, partner, or executive officer:

Director - Texas Instruments Incorporated
Director - The Clearing House Payments Company, LLC
Director - Southwestern Medical Foundation
Member of Governance and Stockholder Relations Committee – Texas Instruments Incorporated
Member - The Conference Board
Member - Catalyst
Member - Downtown Dallas
Member – Bank Policy Institute Business Innovation Technology Security Committee
Member – UTSW Medical Group and Institutional Audit Committee
Advisory Board Member - Crystal Charity Ball
Advisory Council Member - Dallas Arboretum
Advisory Board Member – SMU Cary M. Maguire Center for Ethics & Public Responsibility

(4) Percentage of each class of voting securities owned, controlled, or held with power to vote (including options, warrants or other securities or rights that can be converted into or exercised for voting securities) in:

(a) the holding company:

Less than 1%

(b) direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company, if 25 percent or more of its outstanding voting securities or proportionate interest in a partnership are held. List the name of the company and the percentage of voting securities owned, controlled, or held with power to vote:

None

Report Item 4: Insiders - Comerica Incorporated

List each principal securities holder, director, trustee, partner, executive officer, or person exercising similar functions of the holding company, regardless of title or compensation, as of the fiscal year end, showing the following:

(1) Name, city and state/country (do not include street address or social security number):

Michael E. Collins
Fletcher, North Carolina U.S.A.

(2) Principal occupation, if other than with the holding company:

Business Executive and Attorney

(3) Title or position, as of 12/31/18, with:

(a) the holding company:

Director

(b) all direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company in which the person is a director, trustee, partner, or executive officer:

Chair and Senior Counselor of the Blake Collins Group
Member of Executive Committee - Our Lady of Lourdes Health Care Services, Inc.
Member of Finance Committee - Our Lady of Lourdes Health Care Services, Inc.
Trustee of ABA, Jeffrey and Diana Owen Scholarship for Emerging Bank Leaders

(4) Percentage of each class of voting securities owned, controlled, or held with power to vote (including options, warrants or other securities or rights that can be converted into or exercised for voting securities) in:

(a) the holding company:

Less than 1%

(b) direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company, if 25 percent or more of its outstanding voting securities or proportionate interest in a partnership are held. List the name of the company and the percentage of voting securities owned, controlled, or held with power to vote:

None

Report Item 4: Insiders - Comerica Incorporated

List each principal securities holder, director, trustee, partner, executive officer, or person exercising similar functions of the holding company, regardless of title or compensation, as of the fiscal year end, showing the following:

(1) Name, city and state/country (do not include street address or social security number):

Roger A. Cregg
Scottsdale, Arizona U.S.A.

(2) Principal occupation, if other than with the holding company:

Business Executive

(3) Title or position, as of 12/31/18, with:

(a) the holding company:

Director

(b) all direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company in which the person is a director, trustee, partner, or executive officer:

Advisory Board Member - Abriza, Inc.

(3) Percentage of each class of voting securities owned, controlled, or held with power to vote (including options, warrants or other securities or rights that can be converted into or exercised for voting securities) in:

(a) the holding company:

Less than 1%

(b) direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company, if 25 percent or more of its outstanding voting securities or proportionate interest in a partnership are held. List the name of the company and the percentage of voting securities owned, controlled, or held with power to vote:

None

Report Item 4: Insiders - Comerica Incorporated

List each principal securities holder, director, trustee, partner, executive officer, or person exercising similar functions of the holding company, regardless of title or compensation, as of the fiscal year end, showing the following:

(1) Name, city and state/country (do not include street address or social security number):

T. Kevin DeNicola
Kemah, Texas U.S.A.

(2) Principal occupation, if other than with the holding company:

Retired Business Executive

(3) Title or position, as of 12/31/18, with:

(a) the holding company:

Director

(b) all direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company in which the person is a director, trustee, partner, or executive officer:

President – DeNicola Family Foundation

(4) Percentage of each class of voting securities owned, controlled, or held with power to vote (including options, warrants or other securities or rights that can be converted into or exercised for voting securities) in:

(a) the holding company:

Less than 1%

(b) direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company, if 25 percent or more of its outstanding voting securities or proportionate interest in a partnership are held. List the name of the company and the percentage of voting securities owned, controlled, or held with power to vote:

None

Report Item 4: Insiders - Comerica Incorporated

List each principal securities holder, director, trustee, partner, executive officer, or person exercising similar functions of the holding company, regardless of title or compensation, as of the fiscal year end, showing the following:

(1) Name, city and state/country (do not include street address or social security number):

Curtis C. Farmer
Dallas, Texas U.S.A.

(2) Principal occupation, if other than with the holding company:

None

(3) Title or position, as of 12/31/18, with:

(a) the holding company:

Director and President

(b) all direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

Director and President - Comerica Bank
President - Comerica Holdings Incorporated
Director, Chairman, President and Chief Executive Officer - Comerica Bank & Trust, National Association

(c) any other company in which the person is a director, trustee, partner, or executive officer:

Trustee - Wake Forest University

(d) Trustee - Boy Scouts of America, Circle 10 Council

(4) Percentage of each class of voting securities owned, controlled, or held with power to vote (including options, warrants or other securities or rights that can be converted into or exercised for voting securities) in:

(a) the holding company:

Less than 1%

(b) direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company, if 25 percent or more of its outstanding voting securities or proportionate interest in a partnership are held. List the name of the company and the percentage of voting securities owned, controlled, or held with power to vote:

None

Report Item 4: Insiders - Comerica Incorporated

List each principal securities holder, director, trustee, partner, executive officer, or person exercising similar functions of the holding company, regardless of title or compensation, as of the fiscal year end, showing the following:

(1) Name, city and state/country (do not include street address or social security number):

Jacqueline P. Kane
Reno, Nevada U.S.A.

(2) Principal occupation, if other than with the holding company, as of 12/31/16:

Retired Business Executive

(3) Title or position, as of 12/31/18, with:

(a) the holding company:

Director

(b) all direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company in which the person is a director, trustee, partner, or executive officer:

Director – The Door County Wisconsin YMCA

(4) Percentage of each class of voting securities owned, controlled, or held with power to vote (including options, warrants or other securities or rights that can be converted into or exercised for voting securities) in:

(a) the holding company:

Less than 1%

(b) direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company, if 25 percent or more of its outstanding voting securities or proportionate interest in a partnership are held. List the name of the company and the percentage of voting securities owned, controlled, or held with power to vote:

None

Report Item 4: Insiders - Comerica Incorporated

List each principal securities holder, director, trustee, partner, executive officer, or person exercising similar functions of the holding company, regardless of title or compensation, as of the fiscal year end, showing the following:

(1) Name, city and state/country (do not include street address or social security number):

Richard G. Lindner
San Antonio, Texas U.S.A.

(2) Principal occupation, if other than with the holding company:

Retired Business Executive

(3) Title or position, as of 12/31/18, with:

(a) the holding company:

Director

(b) all direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company in which the person is a director, trustee, partner, or executive officer:

Board Member - United Way of San Antonio and Bexar County

(4) Percentage of each class of voting securities owned, controlled, or held with power to vote (including options, warrants or other securities or rights that can be converted into or exercised for voting securities) in:

(a) the holding company:

(b) Less than 1%

(c) direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(d) any other company, if 25 percent or more of its outstanding voting securities or proportionate interest in a partnership are held. List the name of the company and the percentage of voting securities owned, controlled, or held with power to vote:

None

Report Item 4: Insiders - Comerica Incorporated

List each principal securities holder, director, trustee, partner, executive officer, or person exercising similar functions of the holding company, regardless of title or compensation, as of the fiscal year end, showing the following:

(1) Name, city and state/country (do not include street address or social security number):

Barbara R. Smith
Flower Mound, Texas U.S.A.

(2) Principal occupation, if other than with the holding company:

Business Executive

(3) Title or position, as of 12/31/18, with:

(a) the holding company:

Director

(b) all direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company in which the person is a director, trustee, partner, or executive officer:

Director, Chairman, Chief Executive Officer and President – Commercial Metals Company
Director – American Heart Association – Dallas Division

(4) Percentage of each class of voting securities owned, controlled, or held with power to vote (including options, warrants or other securities or rights that can be converted into or exercised for voting securities) in:

(a) the holding company:

Less than 1%

(b) direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company, if 25 percent or more of its outstanding voting securities or proportionate interest in a partnership are held. List the name of the company and the percentage of voting securities owned, controlled, or held with power to vote:

None

Report Item 4: Insiders - Comerica Incorporated

List each principal securities holder, director, trustee, partner, executive officer, or person exercising similar functions of the holding company, regardless of title or compensation, as of the fiscal year end, showing the following:

(1) Name, city and state/country (do not include street address or social security number):

Robert S. Taubman
Bloomfield Hills, Michigan U.S.A.

(2) Principal occupation, if other than with the holding company:

Business Executive

(3) Title or position, as of 12/31/18, with:

(a) the holding company:

Director

(b) all direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company in which the person is a director, trustee, partner, or executive officer:

Director, Chairman, President & Chief Executive Officer - Taubman Centers, Inc.
Director, Chairman, President & Chief Executive Officer - The Taubman Company
Director – The A. Alfred Taubman Foundation
Board Committee Member - William Beaumont Hospital
Director - Business Leaders for Michigan
Director - The Real Estate Roundtable
Advisory Board of Governors - National Association of Real Estate Investment Trusts
Trustee & Chairman of Audit Committee - Cranbrook Educational Community
Investment Committee Member - The Skillman Foundation
International Council Member – Belfer Center
Executive Committee Member – Southeastern Michigan Council of Goverments
President - A.T. Associates, Inc.
President - Taubman SunValley Associates I, Inc.
Member - MRW, LLC
President - TG Michigan, Inc.
President - TKL-Detroit Associates I, Inc.

Strategic Planning Committee Member – William Beaumont Hospital
Member - Taubman Ventures Group LLC (TVG)
Ownership through TVG, and direct ownership - Taubman Investments Long/Short Strategies, LLC
Ownership through TVG - Overseas Tech Ventures, LLC
Ownership through TVG - TILC Private Equity, LLC
Ownership through TVG - TVG Financing LLC
Ownership through TVG - TILC HGV, LLC
Ownership through TVG - TILC Holdings, LLC
Ownership through TVG - TVG Oil & Gas LLC
Ownership through TVG – Kansas Industrial Equity Holdings LLC
Ownership through TVG – Kansas Industrial Realty Holdings LLC
Ownership through TVG – DJS Funding, LLC
Ownership through TVG – Taubman Capital LLC
Ownership through TVG – Taubman Capital Management LLC
Member - Taubman Production Company, LLC (TPC)
Member through TPC - Michigan Motion Picture Holdings, LLC (MMPH)
Member through MMPH - Michigan Motion Picture Studios, LLC
Member through MMPH - Michigan Motion Picture Productions, LLC
Member through MMPH - Michigan Motion Picture Lender LLC
Member - Taub-Co. Holdings LLC
Member - Taubman Hurricanes, LLC
Limited Partner -Taubman Real Properties Company
Member -TG Partners LLC
Member - RST Sub-TRAP, LLC
Member -T-MMP Taubman Group-Assembly, LLC
Member -Taubman Ventures II, LLC (TVII)
Partner through TVII -BSB 900 King Street Investments, LLC
Partner through TVII -Athena Real Estate Partners L.P. IIA
Partner through TVII -Brier Creek Associates LP (fka Athena Airport Assemblage, LP)
Member -TF Services LLC
Partner through TF Services LLC -AAT Services LLC
Partner through TF Services LLC -GTK Services LLC
Partner through TF Services LLC -RST Services LLC
Partner through TF Services LLC - WST Services LLC
Sole Member -RSTCO LLC
Sole Member - Backpack Ventures, LLC
Member - Taubman Tech Associates, LLC
Member - R&W TRG, LLC
Member - Urban Land Institute
Member - International Council of Shopping Center
Member – Taub-SV, LLC

(3) Percentage of each class of voting securities owned, controlled, or held with power to vote (including options, warrants or other securities or rights that can be converted into or exercised for voting securities) in:

(a) the holding company:

Less than 1%

(b) direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company, if 25 percent or more of its outstanding voting securities or proportionate interest in a partnership are held. List the name of the company and the percentage of voting securities owned, controlled, or held with power to vote:

Backpack Ventures, LLC - 100%
MRW, LLC - 33.3%
RST Sub-TRAP, LLC – 64.4%
RSTCO LLC - 100%
R&W TRG, LLC - 47.0%
Taub-Co Holdings, LLC - 28.4%
Taubman Hurricanes, LLC - 33.3%
Taubman Production Company, LLC - 33%
Taubman Real Properties Company - 33%
Taubman Ventures II, LLC - 30%
T-MMP Group-Assembly, LLC -33.3%

Report Item 4: Insiders - Comerica Incorporated

List each principal securities holder, director, trustee, partner, executive officer, or person exercising similar functions of the holding company, regardless of title or compensation, as of the fiscal year end, showing the following:

(1) Name, city and state/country (do not include street address or social security number):

Reginald M. Turner, Jr.
Detroit, Michigan U.S.A.

(2) Principal occupation, if other than with the holding company:

Attorney

(3) Title or position, as of 12/31/18, with:

(a) the holding company:

Director

(b) all direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company in which the person is a director, trustee, partner, or executive officer:

Member and Executive Committee Member - Clark Hill PLC
Director, Audit Committee and Governance Committee Member - Masco Corporation
Director, Vice Chair and Executive Committee Member - Community Foundation for Southeastern Michigan
Director and Chair - Detroit Public Safety Foundation
Director - Hudson-Webber Foundation
Director - Detroit Institute of Arts
Director - National Bar Institute
Director and Executive Committee Member - United Way for Southeastern Michigan
Member - American Bar Association; House of Delegates

(4) Percentage of each class of voting securities owned, controlled, or held with power to vote (including options, warrants or other securities or rights that can be converted into or exercised for voting securities) in:

(a) the holding company:

Less than 1%

(b) direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company, if 25 percent or more of its outstanding voting securities or proportionate interest in a partnership are held. List the name of the company and the percentage of voting securities owned, controlled, or held with power to vote:

None

Report Item 4: Insiders - Comerica Incorporated

List each principal securities holder, director, trustee, partner, executive officer, or person exercising similar functions of the holding company, regardless of title or compensation, as of the fiscal year end, showing the following:

(1) Name, city and state/country (do not include street address or social security number):

Nina G. Vaca (Ximena G. Humrichouse)
Dallas, Texas U.S.A.

(2) Principal occupation, if other than with the holding company:

Business Executive

(3) Title or position, as of 12/31/18, with:

(a) the holding company:

Director

(b) all direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company in which the person is a director, trustee, partner, or executive officer:

Director, Chair and Chief Executive Officer - Pinnacle Technical Resources, Inc.
Director, Chair and Chief Executive Officer - Vaca Industries Inc.
Director and President – Nina Vaca Foundation
Director – Pinnacle One Global, Inc.
Director, Member of Audit Committee and Member of Governance and Nominating Committee - Kohl's Corporation
Director and Member of Nominations and Governance Committee; Chair of Compensation Committee - Cinemark Holdings, Inc.
Director - Pinnacle Light Industrial LLC
Director - Pinnacle Technical Resources Canada
Director (Chair) - United States Hispanic Chamber of Commerce Foundation
Director – MyPlates
Director – Provade, Inc.

(4) Percentage of each class of voting securities owned, controlled, or held with power to vote (including options, warrants or other securities or rights that can be converted into or exercised for voting securities) in:

(a) the holding company:

Less than 1%

(b) direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company, if 25 percent or more of its outstanding voting securities or proportionate interest in a partnership are held. List the name of the company and the percentage of voting securities owned, controlled, or held with power to vote:

Pinnacle Technical Resources, Inc. -100%
Vaca Industries, Inc. - 100%
My Plates of Texas, LLC - 43.5%
Pinnacle Technical Resources Canada - 100%
Pinnacle Light Industrial, LLC - Sole Member

Report Item 4: Insiders - Comerica Incorporated

List each principal securities holder, director, trustee, partner, executive officer, or person exercising similar functions of the holding company, regardless of title or compensation, as of the fiscal year end, showing the following:

(1) Name, city and state/country (do not include street address or social security number):

Michael G. Van de Ven
Plano, Texas U.S.A.

(2) Principal occupation, if other than with the holding company:

Business Executive

(3) Title or position, as of 12/31/18, with:

(a) the holding company:

Director

(b) all direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company in which the person is a director, trustee, partner, or executive officer:

Chief Operating Officer - Southwest Airlines Co.

(4) Percentage of each class of voting securities owned, controlled, or held with power to vote (including options, warrants or other securities or rights that can be converted into or exercised for voting securities) in:

(a) the holding company:

Less than 1%

(b) direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company, if 25 percent or more of its outstanding voting securities or proportionate interest in a partnership are held. List the name of the company and the percentage of voting securities owned, controlled, or held with power to vote:

None

Report Item 4: Insiders - Comerica Incorporated

List each principal securities holder, director, trustee, partner, executive officer, or person exercising similar functions of the holding company, regardless of title or compensation, as of the fiscal year end, showing the following:

(1) Name, city and state/country (do not include street address or social security number):

John D. Buchanan
Dallas, Texas U.S.A.

(2) Principal occupation, if other than with the holding company:

None

(3) Title or position, as of 12/31/18, with:

(a) the holding company:

Executive Vice President, Chief Legal Officer and Corporate Secretary

(b) all direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

Executive Vice President, Chief Legal Officer and Corporate Secretary - Comerica Bank
Director - Comerica Holdings Incorporated

(c) any other company in which the person is a director, trustee, partner, or executive officer:

None

(4) Percentage of each class of voting securities owned, controlled, or held with power to vote (including options, warrants or other securities or rights that can be converted into or exercised for voting securities) in:

(a) the holding company:

Less than 1%

(b) direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company, if 25 percent or more of its outstanding voting securities or proportionate interest in a partnership are held. List the name of the company and the percentage of voting securities owned, controlled, or held with power to vote:

None

Report Item 4: Insiders - Comerica Incorporated

List each principal securities holder, director, trustee, partner, executive officer, or person exercising similar functions of the holding company, regardless of title or compensation, as of the fiscal year end, showing the following:

(1) Name, city and state/country (do not include street address or social security number):

Megan D. Burkhart
Dallas, Texas U.S.A.

(2) Principal occupation, if other than with the holding company:

None

(3) Title or position, as of 12/31/18, with:

(a) the holding company:

Executive Vice President and Chief Human Resources Officer

(b) all direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

Executive Vice President and Chief Human Resources Officer - Comerica Bank
Director, Chairman and President - Comerica Management Company

(c) any other company in which the person is a director, trustee, partner, or executive officer:

Director and Human Resource Committee Member - Girl Scouts of Northeast Texas
Director and Strategic Planning Committee Member - Shelter Ministries of Dallas

(4) Percentage of each class of voting securities owned, controlled, or held with power to vote (including options, warrants or other securities or rights that can be converted into or exercised for voting securities) in:

(a) the holding company:

Less than 1%

(b) direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company, if 25 percent or more of its outstanding voting securities or proportionate interest in a partnership are held. List the name of the company and the percentage of voting securities owned, controlled, or held with power to vote:

None

Report Item 4: Insiders - Comerica Incorporated

List each principal securities holder, director, trustee, partner, executive officer, or person exercising similar functions of the holding company, regardless of title or compensation, as of the fiscal year end, showing the following:

(1) Name, city and state/country (do not include street address or social security number):

Muneera S. Carr
Dallas, Texas U.S.A.

(2) Principal occupation, if other than with the holding company:

None

(3) Title or position, as of 12/31/18, with:

(a) the holding company:

Executive Vice President and Chief Financial Officer

(b) all direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

Director, Executive Vice President and Chief Financial Officer - Comerica Bank
Director, Executive Vice President and Chief Financial Officer - Comerica Bank & Trust, National Association
Director - Comerica Assurance Ltd.
Director - Comerica Financial Incorporated
Executive Vice President, Chief Financial Officer and Assistant Corporate Secretary - Comerica Holdings Incorporated
Director and Executive Vice President - Comerica Leasing Corporation
Director - Comerica Management Company
Director, Chairman and Executive Vice President - Comerica Properties Corporation

(c) any other company in which the person is a director, trustee, partner, or executive officer:

President – CarrVen Inc.

(4) Percentage of each class of voting securities owned, controlled, or held with power to vote (including options, warrants or other securities or rights that can be converted into or exercised for voting securities) in:

(a) the holding company:

Less than 1%

(b) direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company, if 25 percent or more of its outstanding voting securities or proportionate interest in a partnership are held. List the name of the company and the percentage of voting securities owned, controlled, or held with power to vote:

None

Report Item 4: Insiders - Comerica Incorporated

List each principal securities holder, director, trustee, partner, executive officer, or person exercising similar functions of the holding company, regardless of title or compensation, as of the fiscal year end, showing the following:

(1) Name, city and state/country (do not include street address or social security number):

Peter W. Guilfoile
Dallas, Texas U.S.A.

(2) Principal occupation, if other than with the holding company:

None

(3) Title or position, as of 12/31/18, with:

(a) the holding company:

Executive Vice President and Chief Credit Officer

(b) all direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

Director, Executive Vice President & Chief Credit Officer- Comerica Bank
Executive Vice President - Comerica Bank & Trust, National Association
Director, Chairman and President - VRB Corp.
President - VRB Marketplace of Rochester Hills, LLC
President - VRB Comfort, LLC
President – VRB Red Oak, LLC

(c) any other company in which the person is a director, trustee, partner, or executive officer:

None

(4) Percentage of each class of voting securities owned, controlled, or held with power to vote (including options, warrants or other securities or rights that can be converted into or exercised for voting securities) in:

(a) the holding company:

Less than 1%

(b) direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company, if 25 percent or more of its outstanding voting securities or proportionate interest in a partnership are held. List the name of the company and the percentage of voting securities owned, controlled, or held with power to vote:

None

Report Item 4: Insiders - Comerica Incorporated

List each principal securities holder, director, trustee, partner, executive officer, or person exercising similar functions of the holding company, regardless of title or compensation, as of the fiscal year end, showing the following:

(1) Name, city and state/country (do not include street address or social security number):

Michael H. Michalak
Washington Township, Michigan U.S.A.

(2) Principal occupation, if other than with the holding company:

None

(3) Title or position, as of 12/31/18, with:

(a) the holding company:

Executive Vice President and Chief Risk Officer

(b) all direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

Executive Vice President and Chief Risk Officer - Comerica Bank
Director, Chairman and President - Comerica Financial Incorporated
Executive Vice President - Comerica Holdings Incorporated
Director and President - Comerica Properties Corporation
Executive Vice President - WAM Holdings, Inc.
Director – HCM Holdings Limited
Director – Comerica Charitable Foundation

(c) any other company in which the person is a director, trustee, partner, or executive officer:

None

(4) Percentage of each class of voting securities owned, controlled, or held with power to vote (including options, warrants or other securities or rights that can be converted into or exercised for voting securities) in:

(a) the holding company:

Less than 1%

(b) direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company, if 25 percent or more of its outstanding voting securities or proportionate interest in a partnership are held. List the name of the company and the percentage of voting securities owned, controlled, or held with power to vote:

None

Report Item 4: Insiders - Comerica Incorporated

List each principal securities holder, director, trustee, partner, executive officer, or person exercising similar functions of the holding company, regardless of title or compensation, as of the fiscal year end, showing the following:

(1) Name, city and state/country (do not include street address or social security number):

Christine M. Moore
Detroit, Michigan U.S.A.

(2) Principal occupation, if other than with the holding company:

None

(3) Title or position, as of 12/31/18, with:

(a) the holding company:

Executive Vice President and General Auditor

(b) all direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

Executive Vice President and General Auditor - Comerica Bank

(c) any other company in which the person is a director, trustee, partner, or executive officer:

Treasurer – Kacrisuma, Inc.
Director, Vice Chair and Member of Executive Committee – Alternative for Girls

(4) Percentage of each class of voting securities owned, controlled, or held with power to vote (including options, warrants or other securities or rights that can be converted into or exercised for voting securities) in:

(a) the holding company:

Less than 1%

(b) direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company, if 25 percent or more of its outstanding voting securities or proportionate interest in a partnership are held. List the name of the company and the percentage of voting securities owned, controlled, or held with power to vote:

Kacrisuma, Inc. – 25%

Report Item 4: Insiders - Comerica Incorporated

List each principal securities holder, director, trustee, partner, executive officer, or person exercising similar functions of the holding company, regardless of title or compensation, as of the fiscal year end, showing the following:

(1) Name, city and state/country (do not include street address or social security number):

Paul R. Obermeyer
Dallas, Texas U.S.A.

(2) Principal occupation, if other than with the holding company:

None

(3) Title or position, as of 12/31/18, with:

(a) the holding company:

Executive Vice President and Chief Enterprise Technology and Operational Services Officer

(b) all direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

Executive Vice President and Chief Enterprise Technology and Operational Services Officer - Comerica Bank
Director and Executive Vice President – Comerica Bank & Trust, National Association

(c) any other company in which the person is a director, trustee, partner, or executive officer:

Director - Payments Company, LLC (unit of the Clearing House)
Director - Citizens Research Council of Michigan, Inc.

(4) Percentage of each class of voting securities owned, controlled, or held with power to vote (including options, warrants or other securities or rights that can be converted into or exercised for voting securities) in:

(a) the holding company:

Less than 1%

(b) direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company, if 25 percent or more of its outstanding voting securities or proportionate interest in a partnership are held. List the name of the company and the percentage of voting securities owned, controlled, or held with power to vote:

None

Report Item 4: Insiders - Comerica Incorporated

List each principal securities holder, director, trustee, partner, executive officer, or person exercising similar functions of the holding company, regardless of title or compensation, as of the fiscal year end, showing the following:

(5) Name, city and state/country (do not include street address or social security number):

Mauricio A. Ortiz
Dallas, Texas U.S.A.

(6) Principal occupation, if other than with the holding company:

None

(7) Title or position, as of 12/31/18, with:

(a) the holding company:

Senior Vice President and Chief Accounting Officer

(b) all direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

Senior Vice President and Chief Accounting Officer - Comerica Bank
Senior Vice President, Chief Accounting Officer & Controller – Comerica Bank & Trust, National Association
Director and Member of Investment Committee – Comerica Assurance Ltd.
Director – Comerica Charitable Foundation

(c) any other company in which the person is a director, trustee, partner, or executive officer:

None

(8) Percentage of each class of voting securities owned, controlled, or held with power to vote (including options, warrants or other securities or rights that can be converted into or exercised for voting securities) in:

(a) the holding company:

Less than 1%

(b) direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company, if 25 percent or more of its outstanding voting securities or proportionate interest in a partnership are held. List the name of the company and the percentage of voting securities owned, controlled, or held with power to vote:

None

For Use By Tiered Bank Holding Companies

(Tiered bank holding companies must list the names and locations of subsidiary bank holding companies below.)

Comerica Holdings Incorporated 1029259

411 West Lafayette, Detroit, Michigan 48226

Report Item 3: Securities Holders - Comerica Holdings Incorporated

(1) List each shareholder, of record, that directly or indirectly owns, controls, or holds with power to vote 5 percent or more of any class of voting securities of the holding company as of the fiscal year end of the holding company. In addition, list each person, entity, or person acting in concert (including families), that holds options, warrants or other securities or rights that can be converted into or exercised for voting securities, which, in their aggregate, and including voting securities that holds options, warrants or other securities or rights that can be converted into or exercised for voting securities, which, in their aggregate, and including voting securities currently held, would equal or exceed 5 percent of any such class of voting securities.

(a) Name and address (city and state/country);

(b) Comerica Incorporated
Comerica Bank Tower
1717 Main Street
Dallas, Texas 75201

(c) Country of citizenship (if an individual) or country of incorporation (if a company);

Delaware U.S.A.

(d) Number of shares and percentage of each class of voting securities owned, controlled, or held with power to vote (listing separately options, warrants or other securities or rights), or in the case of a partnership, the proportionate interest.

3,000 shares of common stock 100%

(2) List any shareholder not listed in section 3(1) above that owned or controlled five percent or more of any class of voting securities in the holding company during the fiscal year for which the report is being filed. In addition, list each person or entity that held options, warrants or other securities or rights that could have been converted into or exercised for voting securities, which, in their aggregate, and including voting securities held, would have equaled or exceeded 5 percent of any such class of voting securities. For each shareholder list the following:

(a) Name and address (city and state/country):

None

(b) Country of citizenship (if an individual) or country of incorporation (if a company):

None

(c) Number of shares and percentage of each class of voting securities owned, controlled, or held with power to vote (listing separately options, warrants or other securities or rights), or in the case of a partnership, the proportionate interest.

None

Report Item 4: Insiders - Comerica Holdings Incorporated

List each principal securities holder, director, trustee, partner, executive officer, or person exercising similar functions of the holding company, regardless of title or compensation, as of the fiscal year end, showing the following:

(1) Name, city and state/country (do not include street address or social security number):

John D. Buchanan
Dallas, Texas U.S.A.

(2) Principal occupation, if other than with the holding company:

None

(3) Title or position, as of 12/31/18, with:

(a) the holding company:

Director

(b) all direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

Executive Vice President, Chief Legal Officer and Corporate Secretary - Comerica Incorporated
Executive Vice President, Chief Legal Officer and Corporate Secretary - Comerica Bank

(c) any other company in which the person is a director, trustee, partner, or executive officer:

None

(4) Percentage of each class of voting securities owned, controlled, or held with power to vote (including options, warrants or other securities or rights that can be converted into or exercised for voting securities) in:

(a) the holding company:

None

(b) direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company, if 25 percent or more of its outstanding voting securities or proportionate interest in a partnership are held. List the name of the company and the percentage of voting securities owned, controlled, or held with power to vote:

None

Report Item 4: Insiders - Comerica Holdings Incorporated

List each principal securities holder, director, trustee, partner, executive officer, or person exercising similar functions of the holding company, regardless of title or compensation, as of the fiscal year end, showing the following:

(1) Name, city and state/country (do not include street address or social security number):

Muneera S. Carr
Dallas, Texas U.S.A.

(2) Principal occupation, if other than with the holding company:

None

(3) Title or position, as of 12/31/18, with:

(a) the holding company:

Executive Vice President, Chief Financial Officer and Assistant Corporate Secretary

(b) all direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

Executive Vice President and Chief Financial Officer - Comerica Incorporated
Director, Executive Vice President and Chief Financial Officer-Comerica Bank
Director, Executive Vice President and Chief Financial Officer – Comerica Bank & Trust, National Association
Director - Comerica Assurance Ltd.
Director - Comerica Financial Incorporated
Director and Executive Vice President - Comerica Leasing Corporation
Director - Comerica Management Company
Director, Chairman and Executive Vice President - Comerica Properties Corporation

(c) any other company in which the person is a director, trustee, partner, or executive officer:

President – CarrVen Inc.

(4) Percentage of each class of voting securities owned, controlled, or held with power to vote (including options, warrants or other securities or rights that can be converted into or exercised for voting securities) in:

(a) the holding company:

None

(b) direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company, if 25 percent or more of its outstanding voting securities or proportionate interest in a partnership are held. List the name of the company and the percentage of voting securities owned, controlled, or held with power to vote:

None

Report Item 4: Insiders - Comerica Holdings Incorporated

List each principal securities holder, director, trustee, partner, executive officer, or person exercising similar functions of the holding company, regardless of title or compensation, as of the fiscal year end, showing the following:

(1) Name, city and state/country (do not include street address or social security number):

Curtis C. Farmer
Dallas, Texas U.S.A.

(2) Principal occupation, if other than with the holding company:

None

(3) Title or position, as of 12/31/18, with:

(a) the holding company:

President

(b) all direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

Director, Chairman, President & Chief Executive Officer - Comerica Bank & Trust, National Association
Director and President – Comerica Incorporated
Director and President – Comerica Bank

(c) any other company in which the person is a director, trustee, partner, or executive officer:

Trustee - Wake Forest University
Trustee - Boy Scouts of America, Circle 10 Council

(4) Percentage of each class of voting securities owned, controlled, or held with power to vote (including options, warrants or other securities or rights that can be converted into or exercised for voting securities) in:

(a) the holding company:

None

(b) direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company, if 25 percent or more of its outstanding voting securities or proportionate interest in a partnership are held. List the name of the company and the percentage of voting securities owned, controlled, or held with power to vote:

None

Report Item 4: Insiders - Comerica Holdings Incorporated

List each principal securities holder, director, trustee, partner, executive officer, or person exercising similar functions of the holding company, regardless of title or compensation, as of the fiscal year end, showing the following:

(1) Name, city and state/country (do not include street address or social security number):

James J. Herzog
Dallas, Texas U.S.A.

(2) Principal occupation, if other than with the holding company:

None

(3) Title or position, as of 12/31/18, with:

(a) the holding company:

Treasurer

(b) all direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

Executive Vice President and Treasurer - Comerica Incorporated Executive Vice President and Treasurer - Comerica Bank
Director, Executive Vice President and Treasurer - Comerica Capital Advisors Incorporated
Treasurer - Comerica Community Development Investment Fund II, LLC Treasurer - Comerica Leasing Corporation
Chief Financial Officer and Treasurer - Comerica Ventures Incorporated Treasurer - VRB Corp.
Treasurer – VRB Marketplace of Rochester Hills, LLC
Treasurer – VRB Comfort, LLC
Treasurer – VRB Red Oak, LLC
Treasurer - WAM Holdings, Inc.
Director, Executive Vice President and Member of Investment Committee - Comerica Assurance Ltd.
Treasurer - Comerica Charitable Foundation

(c) any other company in which the person is a director, trustee, partner, or executive officer:

None

(4) Percentage of each class of voting securities owned, controlled, or held with power to vote (including options, warrants or other securities or rights that can be converted into or exercised for voting securities) in:

(a) the holding company:

None

(b) direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company, if 25 percent or more of its outstanding voting securities or proportionate interest in a partnership are held. List the name of the company and the percentage of voting securities owned, controlled, or held with power to vote:

None

Report Item 4: Insiders - Comerica Holdings Incorporated

List each principal securities holder, director, trustee, partner, executive officer, or person exercising similar functions of the holding company, regardless of title or compensation, as of the fiscal year end, showing the following:

(1) Name, city and state/country (do not include street address or social security number):

Michael H. Michalak
Washington Township, Michigan U.S.A.

(2) Principal occupation, if other than with the holding company:

None

(3) Title or position, as of 12/31/18, with:

(a) the holding company:

Executive Vice President

(b) all direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

Executive Vice President and Chief Risk Officer - Comerica Incorporated
Executive Vice President and Chief Risk Officer - Comerica Bank
Director, Chairman and President - Comerica Financial Incorporated
Director and President – Comerica Properties Corporation
Executive Vice President – WAM Holdings, Inc.
Director – HCM Holdings Limited
Director – Comerica Charitable Foundation

(c) any other company in which the person is a director, trustee, partner, or executive officer:

None

(4) Percentage of each class of voting securities owned, controlled, or held with power to vote (including options, warrants or other securities or rights that can be converted into or exercised for voting securities) in:

(a) the holding company:

None

(b) direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company, if 25 percent or more of its outstanding voting securities or proportionate interest in a partnership are held. List the name of the company and the percentage of voting securities owned, controlled, or held with power to vote:

None

Report Item 4: Insiders - Comerica Holdings Incorporated

List each principal securities holder, director, trustee, partner, executive officer, or person exercising similar functions of the holding company, regardless of title or compensation, as of the fiscal year end, showing the following:

(1) Name, city and state/country (do not include street address or social security number):

Nicole V. Gersch
Heath, Texas U.S.A.

(2) Principal occupation, if other than with the holding company:

None

(3) Title or position, as of 12/31/18, with:

(a) the holding company:

Director and Secretary

(b) all direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

Corporate Secretary - Comerica Bank & Trust, National Association
Senior Vice President and Assistant Corporate Secretary - Comerica Incorporated
Senior Vice President and Assistant Corporate Secretary - Comerica Bank
Assistant Corporate Secretary - Comerica Capital Advisors Incorporated
Assistant Corporate Secretary - Comerica Charitable Foundation
Corporate Secretary - Comerica Community Development Investment Fund II, LLC
Director and Corporate Secretary - Comerica Financial Incorporated
Director and Assistant Corporate Secretary - Comerica Insurance Group, Inc.
Director and Assistant Corporate Secretary - Comerica Insurance Services, Inc.
Director and Assistant Corporate Secretary - Comerica Insurance Services of Texas Incorporated
Director and Assistant Corporate Secretary - Interstate Select Insurance Services, Inc.
Assistant Corporate Secretary - Comerica Investment Services, Inc.
Director and Corporate Secretary - Comerica Leasing Corporation
Director and Corporate Secretary - Comerica Management Company
Assistant Corporate Secretary - Comerica Properties Corporation
Assistant Corporate Secretary - Comerica Securities, Inc.
Assistant Corporate Secretary - Comerica Ventures Incorporated
Corporate Secretary - VRB Corp.
Corporate Secretary – VRB Marketplace of Rochester Hills, LLC

Corporate Secretary – VRB Comfort, LLC
Corporate Secretary – VRB Red Oak, LLC
Director and Corporate Secretary -WAM Holdings, Inc.
Corporate Secretary - Wilson, Kemp & Associates, Inc.
Corporate Secretary -World Asset Management, Inc.

(c) any other company in which the person is a director, trustee, partner, or executive officer:

None

(4) Percentage of each class of voting securities owned, controlled, or held with power to vote (including options, warrants or other securities or rights that can be converted into or exercised for voting securities) in:

(a) the holding company:

None

(b) direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company, if 25 percent or more of its outstanding voting securities or proportionate interest in a partnership are held. List the name of the company and the percentage of voting securities owned, controlled, or held with power to vote:

None

Report Item 4: Insiders - Comerica Holdings Incorporated

List each principal securities holder, director, trustee, partner, executive officer, or person exercising similar functions of the holding company, regardless of title or compensation, as of the fiscal year end, showing the following:

(1) Name, city and state/country (do not include street address or social security number):

Jennifer S. Perry
Dallas, Texas U.S.A.

(2) Principal occupation, if other than with the holding company:

None

(3) Title or position, as of 12/31/18, with:

(a) the holding company:

Assistant Corporate Secretary

(b) all direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

Assistant Corporate Secretary - Comerica Bank & Trust, National Association
Senior Vice President and Assistant Corporate Secretary - Comerica Incorporated
Senior Vice President and Assistant Corporate Secretary - Comerica Bank
Assistant Corporate Secretary - Comerica Capital Advisors Incorporated
Corporate Secretary - Comerica Charitable Foundation
Assistant Corporate Secretary - Comerica Community Development Investment Fund II, LLC
Assistant Corporate Secretary - Comerica Financial Incorporated
Assistant Corporate Secretary - Comerica Insurance Group, Inc.
Assistant Corporate Secretary - Comerica Insurance Services, Inc.
Assistant Corporate Secretary - Comerica Insurance Services of Texas Incorporated
Assistant Corporate Secretary - Comerica Investment Services, Inc.
Assistant Corporate Secretary - Comerica Leasing Corporation
Assistant Corporate Secretary - Comerica Management Company
Assistant Corporate Secretary - Comerica Properties Corporation
Secretary - Comerica Securities, Inc.
Assistant Corporate Secretary - Comerica Ventures Incorporated
Assistant Corporate Secretary - Interstate Select Insurance Services, Inc.
Director and Corporate Secretary - Silver Funding Corp.
Assistant Corporate Secretary - VRB Corp.
Assistant Corporate Secretary - WAM Holdings, Inc.
Assistant Corporate Secretary - World Asset Management, Inc.

Assistant Corporate Secretary - Wilson, Kemp & Associates, Inc.
Assistant Corporate Secretary – Comerica Assurance Ltd.

(c) any other company in which the person is a director, trustee, partner, or executive officer:

None

(4) Percentage of each class of voting securities owned, controlled, or held with power to vote (including options, warrants or other securities or rights that can be converted into or exercised for voting securities) in:

(a) the holding company:

None

(b) direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company, if 25 percent or more of its outstanding voting securities or proportionate interest in a partnership are held. List the name of the company and the percentage of voting securities owned, controlled, or held with power to vote:

Pine Point Consulting, LLC (spouse is 100% owner)

Report Item 4: Insiders - Comerica Holdings Incorporated

List each principal securities holder, director, trustee, partner, executive officer, or person exercising similar functions of the holding company, regardless of title or compensation, as of the fiscal year end, showing the following:

(1) Name, city and state/country (do not include street address or social security number):

Owen M. Scheurich
Dallas, Texas U.S.A.

(2) Principal occupation, if other than with the holding company:

None

(3) Title or position, as of 12/31/18, with:

(a) the holding company:

Assistant Corporate Secretary

(b) all direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

Assistant Corporate Secretary - Comerica Bank & Trust, National Association
Vice President and Assistant Corporate Secretary - Comerica Incorporated
Vice President and Assistant Corporate Secretary - Comerica Bank
Corporate Secretary - Comerica Capital Advisors Incorporated
Assistant Corporate Secretary - Comerica Financial Incorporated
Assistant Corporate Secretary - Comerica Insurance Group, Inc.
Assistant Corporate Secretary - Comerica Insurance Services, Inc.
Assistant Corporate Secretary - Comerica Insurance Services of Texas Incorporated
Assistant Corporate Secretary - Comerica Investment Services, Inc.
Assistant Corporate Secretary - Comerica Leasing Corporation
Assistant Corporate Secretary - Comerica Management Company
Assistant Corporate Secretary - Comerica Properties Corporation
Assistant Corporate Secretary - Comerica Securities, Inc.
Corporate Secretary - Comerica Ventures Incorporated
Assistant Corporate Secretary - Interstate Select Insurance Services, Inc.
Assistant Corporate Secretary - VRB Corp.
Assistant Corporate Secretary - WAM Holdings, Inc.
Assistant Corporate Secretary - World Asset Management, Inc.
Assistant Corporate Secretary - Wilson, Kemp & Associates, Inc.
Assistant Corporate Secretary – Comerica Assurance Ltd.

(c) any other company in which the person is a director, trustee, partner, or executive officer:

None

(4) Percentage of each class of voting securities owned, controlled, or held with power to vote (including options, warrants or other securities or rights that can be converted into or exercised for voting securities) in:

(a) the holding company:

None

(b) direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company, if 25 percent or more of its outstanding voting securities or proportionate interest in a partnership are held. List the name of the company and the percentage of voting securities owned, controlled, or held with power to vote:

None

Report Item 4: Insiders - Comerica Holdings Incorporated

List each principal securities holder, director, trustee, partner, executive officer, or person exercising similar functions of the holding company, regardless of title or compensation, as of the fiscal year end, showing the following:

(1) Name, city and state/country (do not include street address or social security number):

Whitney A. Kemerling
Ferndale, Michigan U.S.A.

(2) Principal occupation, if other than with the holding company:

None

(3) Title or position, as of 12/31/18, with:

(a) the holding company:

Assistant Corporate Secretary

(b) all direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

Assistant Corporate Secretary - Comerica Bank & Trust, National Association
Vice President and Assistant Corporate Secretary - Comerica Incorporated
Vice President and Assistant Corporate Secretary - Comerica Bank
Assistant Corporate Secretary - Comerica Financial Incorporated
Assistant Corporate Secretary - Comerica Insurance Group, Inc.
Assistant Corporate Secretary - Comerica Insurance Services, Inc.
Assistant Corporate Secretary - Comerica Insurance Services of Texas Incorporated
Assistant Corporate Secretary - Comerica Investment Services, Inc.
Assistant Corporate Secretary - Comerica Leasing Corporation
Assistant Corporate Secretary - Comerica Management Company
Assistant Corporate Secretary - Comerica Properties Corporation
Assistant Corporate Secretary - Comerica Securities, Inc.
Assistant Corporate Secretary - Interstate Select Insurance Services, Inc.
Assistant Corporate Secretary - VRB Corp.
Assistant Corporate Secretary - WAM Holdings, Inc.
Assistant Corporate Secretary - World Asset Management, Inc.
Assistant Corporate Secretary - Wilson, Kemp & Associates, Inc.

(c) any other company in which the person is a director, trustee, partner, or executive officer:

None

(4) percentage of each class of voting securities owned, controlled, or held with power to vote (including options, warrants or other securities or rights that can be converted into or exercised for voting securities) in:

(a) the holding company:

None

(b) direct and indirect subsidiaries including the name of the subsidiary(s)) of the holding company:

None

(c) any other company, if 25 percent or more of its outstanding voting securities or proportionate interest in a partnership are held. List the name of the company and the percentage of voting securities owned, controlled, or held with power to vote:

None

Report Item 4: Insiders - Comerica Holdings Incorporated

List each principal securities holder, director, trustee, partner, executive officer, or person exercising similar functions of the holding company, regardless of title or compensation, as of the fiscal year end, showing the following:

(1) Name, city and state/country (do not include street address or social security number):

Shirley J. Mansfield
Warren, Michigan U.S.A.

(2) Principal occupation, if other than with the holding company:

None

(3) Title or position, as of 12/31/18, with:

(a) the holding company:

Assistant Corporate Secretary

(b) all direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

Assistant Corporate Secretary - Comerica Bank & Trust, National Association
Vice President and Assistant Corporate Secretary – Comerica Incorporated
Vice President and Assistant Corporate Secretary - Comerica Bank
Assistant Corporate Secretary - Comerica Financial Incorporated
Assistant Corporate Secretary - Comerica Insurance Group, Inc.
Assistant Corporate Secretary - Comerica Insurance Services, Inc.
Assistant Corporate Secretary - Comerica Insurance Services of Texas Incorporated
Assistant Corporate Secretary - Comerica Investment Services, Inc.
Assistant Corporate Secretary - Comerica Leasing Corporation
Assistant Corporate Secretary - Comerica Management Company
Assistant Corporate Secretary - Comerica Properties Corporation
Assistant Corporate Secretary - Comerica Securities, Inc.
Assistant Corporate Secretary - Interstate Select Insurance Services, Inc.
Assistant Corporate Secretary - VRB Corp.
Assistant Corporate Secretary - WAM Holdings, Inc.
Assistant Corporate Secretary - World Asset Management, Inc.
Assistant Corporate Secretary - Wilson, Kemp & Associates, Inc.

(c) any other company in which the person is a director, trustee, partner, or executive officer:

None

(4) Percentage of each class of voting securities owned, controlled, or held with power to vote (including options, warrants or other securities or rights that can be converted into or exercised for voting securities) in:

(a) the holding company:

None

(b) direct and indirect subsidiaries (including the name of the subsidiary(s)) of the holding company:

None

(c) any other company, if 25 percent or more of its outstanding voting securities or proportionate interest in a partnership are held. List the name of the company and the percentage of voting securities owned, controlled, or held with power to vote:

None

EXHIBIT A

Annual Report of Holding Companies – FR Y-6

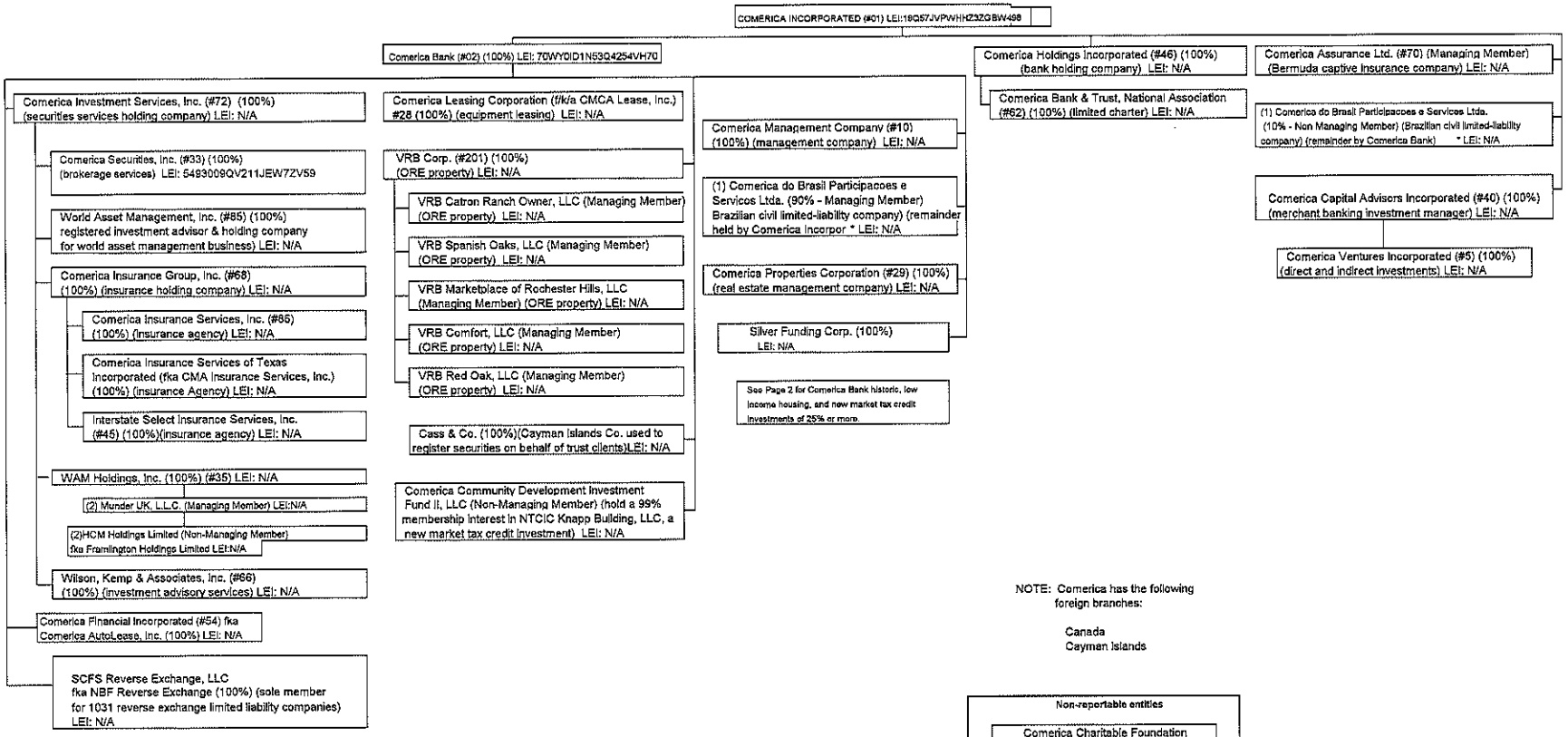
Comerica Incorporated

1717 Main Street, MC 6506

Dallas, Texas 75201

Report Item 2a: Organization Chart as of December 31, 2018

Exhibit A



NOTE: Comerica has the following foreign branches:

Canada
Cayman Islands

Non-reportable entities

Comerica Charitable Foundation (non-profit private foundation) LEI: N/A

Comerica Charitable Trust (501 (c)(3) public charity) LEI: N/A

These entities are non-reportable entities because they are non-profits and not considered subsidiaries of Comerica Incorporated or Comerica Bank.

#Denotes General Ledger Number
(1) Inactive representative office
(2) inactive
*In process of being dissolved

Historic Tax Credit, Low Income Housing Tax Credit and New Market Tax Credit Investments of 25% or more held directly by Comerica Bank

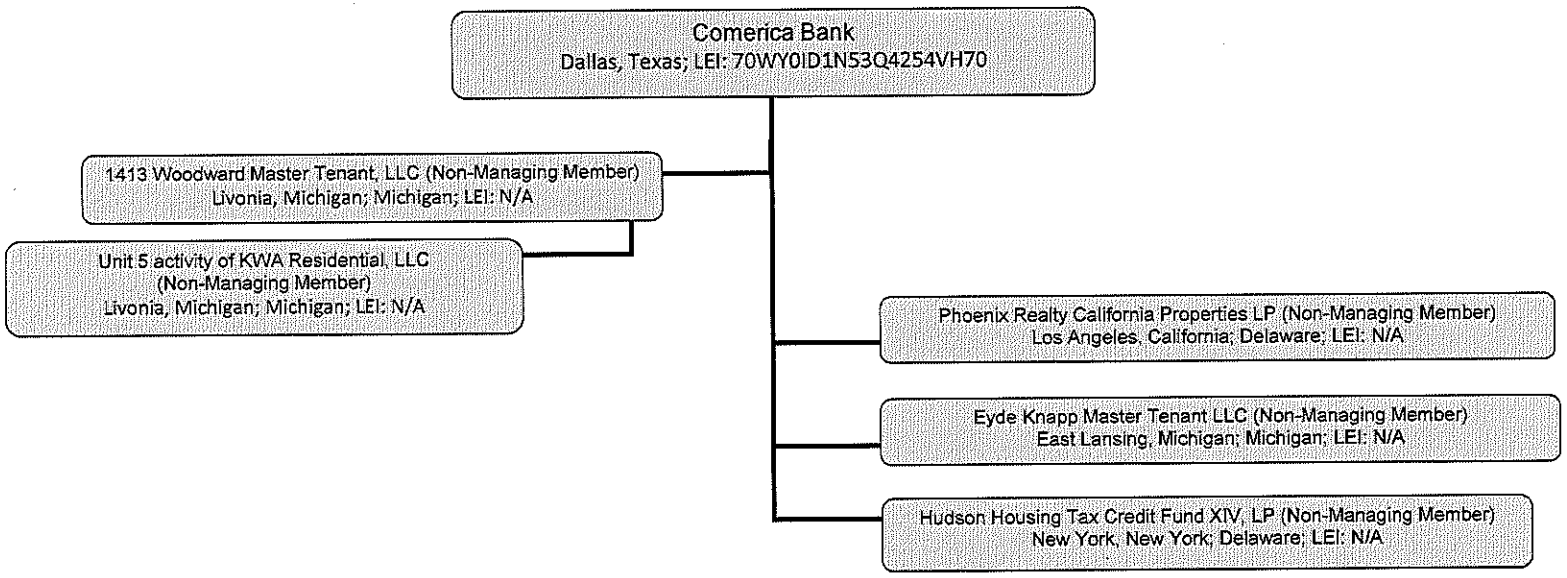


EXHIBIT B

Annual Report of Holding Companies – FR Y-6

Comerica Incorporated

1717 Main Street, MC 6506

Dallas, Texas 75201

Report Item 2a: Organization Chart as of December 31, 2018

EXHIBIT B

Subsidiaries of Registrant[1]

As of December 31, 2018

Name	State or Jurisdiction of Incorporation or Organization	City, State of Principal Business
Cass & Co.	Cayman Islands	Georgetown,Grand Cayman, Cayman Islands
Comerica Assurance Ltd.	Bermuda	Hamilton, Bermuda
Comerica Bank [5]	Texas	Dallas, Texas
Comerica Bank & Trust, National Association	United States	Ann Arbor, Michigan
Comerica Capital Advisors Incorporated	Delaware	Dallas, Texas
Comerica do Brasil Participacoes e Servicos Ltda.[3]	Brazil	Sao Paulo, Brazil
Comerica Community Development Investment Fund II, LLC	Delaware	Detroit, Michigan
Comerica Financial Incorporated	Michigan	Auburn Hills, Michigan
Comerica Holdings Incorporated	Delaware	Dallas, Texas
Comerica Insurance Group, Inc.	Michigan	Detroit, Michigan
Comerica Insurance Services, Inc.	Michigan	Bloomfield Hills, Michigan
Comerica Insurance Services of Texas Incorporated	Texas	Dallas, Texas
Comerica Investment Services, Inc.	Michigan	Detroit, Michigan
Comerica Leasing Corporation	Michigan	Detroit, Michigan
Comerica Management Company	Michigan	Detroit, Michigan
Comerica Properties Corporation	Michigan	Detroit, Michigan
Comerica Securities, Inc. [6]	Michigan	Dallas, Texas
Comerica Ventures Incorporated	California	Dallas, Texas
HCM Holdings Limited (fka Framlington Holdings Limited) (2)(4)	England and Wales	Dallas, Texas
Interstate Select Insurance Services, Inc.	California	Dallas, Texas
Munder UK, L.L.C.[2]	Delaware	Dallas, Texas
SCFS Reverse Exchange, LLC (holding company for 1031 reverse exchange limited liability companies)	Delaware	Detroit, Michigan
Silver Funding Corp.	Delaware	Dallas, Texas
VRB Comfort, LLC	Delaware	San Diego, California
VRB Corp.	Delaware	Detroit, Michigan
VRB Catron Ranch Owner, LLC	Delaware	Detroit, Michigan
VRB Marketplace of Rochester Hills, LLC	Delaware	Detroit, Michigan
VRB Red Oak, LLC	Delaware	San Diego, California

EXHIBIT B

Subsidiaries of Registrant[1]

As of December 31, 2018

Name	State or Jurisdiction of Incorporation or Organization	City, State of Principal Business
VRB Spanish Oaks, LLC	Delaware	Detroit, Michigan
WAM Holdings, Inc.	Delaware	Detroit, Michigan
Wilson, Kemp & Associates, Inc.	Michigan	Detroit, Michigan
World Asset Management, Inc.	Delaware	Birmingham, Michigan

[1]Registrant is Comerica Incorporated: State of Incorporation is Delaware; City, State of Principal Business is Dallas, Texas. Legal Entity Identifier for Comerica Incorporated: 19Q57JVPWHHZ3ZGBW498

[2]Inactive.

[3]Inactive representative office, in process of dissolution: 10% owned by Registrant and 90% by Comerica Bank, a 100% owned subsidiary of the Registrant.

[4]Forty nine percent (49%) indirectly held by Registrant: 49% held by Munder UK, L.L.C., a 100% owned subsidiary of the Registrant.

[5] Legal Entity Identifier for Comerica Bank: 70WY0ID1N53Q4254VH70

[6]Legal Entity Identifier for Comerica Securities, Inc.: 5493009QV211JEW7ZV59

None of the entities listed above have LEI codes, other than Comerica Incorporated, Comerica Bank and Comerica Securities, Inc.

2018

Comerica Incorporated Annual Report

Comerica®

COMERICA INCORPORATED

Founded in 1849, Comerica Incorporated (NYSE: CMA) is a financial services company headquartered in Dallas, Texas, strategically aligned by three business segments: The Business Bank, The Retail Bank and Wealth Management. Comerica focuses on relationships, and helping people and businesses be successful. In addition to Texas, Comerica Bank locations can be found in Arizona, California, Florida and Michigan, with select businesses operating in several other states, as well as in Canada and Mexico. As of December 31, 2018, Comerica had:

- $70.8 billion in assets
- $50.2 billion in loans
- $55.6 billion in deposits
- 436 banking centers
- 7,865 employees (FTE)

OUR MISSION

We will achieve balanced growth and profitability by delivering a higher level of banking that nurtures lifelong relationships with unwavering integrity and financial prudence.

OUR VISION

To become the highest performing, most respected and most desired bank in the markets we serve.

OUR CORE VALUES

Customer-centricity
Collaboration
Integrity
Excellence
Agility
Diversity
Involvement

OUR PROMISE

We will raise your expectations℠ of what a bank can be.

2018 Company Highlights

Honored by more than **10** top organizations for sustainability, employer of choice for minorities and innovation

OVER 150 applications migrated to the cloud to provide more secure, cost effective and efficient data storage

$25,000 given by Comerica to aid in disaster relief for those impacted by the California wildfires

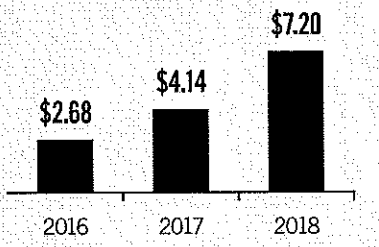
DONATE OVER $7.8 MILLION donated to charitable organizations via more than 1,500 grants/sponsorships

NEARLY 50,400 HOURS of volunteer time donated to nonprofits by Comerica colleagues

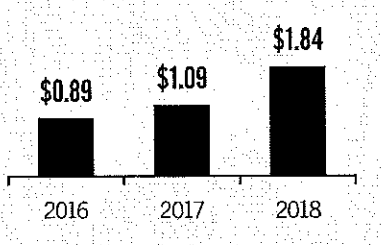
1.75% 2018 Return on Average Assets

FINANCIAL

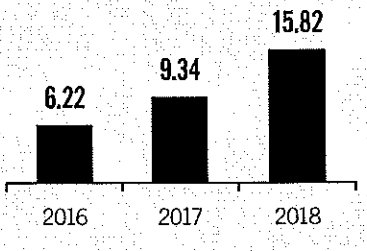
EARNINGS PER SHARE
(diluted per common share)



DIVIDENDS
(annual per share)



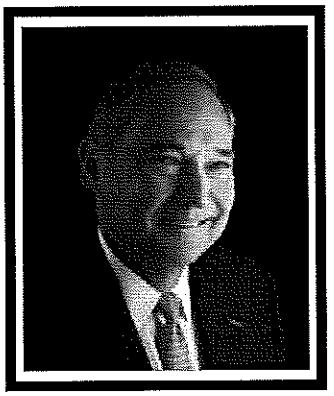
RETURN ON AVERAGE COMMON SHAREHOLDERS' EQUITY
(in percentage points)



$772 MILLION in green loans and commitments

734 financial education training events sponsored by Comerica, reaching over 49,900 low- and moderate-income individuals

53.56% 2018 efficiency ratio in percentage points



Ralph W. Babb Jr.
Chairman and Chief Executive Officer

To my fellow shareholders, 2018 was a year of definitive progress for Comerica. Once again, I'm pleased to report good news related to our strong financial performance and solid capital position. We gained ground on the momentum coming into the year, and we remained driven to deliver on the promise of raising expectations of what a bank can be. We found strength in our history of consistently connecting with customers, as well as rising to a higher level of banking. We continued investing in our communities, enhancing our technology to develop products that drive efficiency through automation, improving cybersecurity, and carefully controlling expenses.

Before reviewing the 2018 financial results, I would like to highlight a few key factors that contributed to our success.

GEAR UP SUCCESS

As a result of our discipline, we met one of Comerica's most important goals—the execution of our enterprise-wide initiative to help grow efficiency and revenue. We launched GEAR Up in July 2016 with an aggressive vision to transform our organization through over 20 separately identified work streams. We took a multifaceted approach to cutting costs, and, just as importantly, to enhance revenues. We reduced our workforce by nine percent while freeing up more time for our relationship managers, optimized real estate, streamlined operational processes, enhanced sales programs, and strategically outsourced select technology functions, while reducing system applications.

The benefits derived from GEAR Up will continue into 2019 and thereafter. We have achieved, and in many respects surpassed, the expectations that we laid out for GEAR Up when it was launched. This success is clearly evidenced in our efficiency and return metrics.

We drove substantial contributions to our bottom line and achieved double-digit returns on equity. Pre-tax income in 2018 included approximately $270 million of cumulative benefits. And, by the end of 2019, we expect to have met our goal to drive at least $305 million in additional pre-tax income.

Throughout the GEAR Up process, our executive team remained confident that we would meet the financial targets. We wish to acknowledge and thank our devoted colleagues for embracing change through their patience, flexibility, support, and resiliency during this time of transition.

REGULATORY RELIEF

While the financial services sector has seen an increase in regulatory oversight since the great recession, banks our size experienced some relief in 2018.

In June, the Economic Growth, Regulatory Relief and Consumer Protection Act was signed into law, a positive development for Comerica. In bipartisan support, Congress passed

the legislation allowing banks under $100 billion in assets immediate exemption from enhanced prudential standards.

Subsequently, the Federal Reserve announced Comerica is no longer subject to supervisory stress testing, including both the Dodd-Frank Act Stress Tests and the Comprehensive Capital Analysis and Review. Of course, we will continue to complete robust internal stress testing to help ensure we have sufficient capital and liquidity to withstand a variety of economic scenarios.

As a direct result of this reform, our board of directors is now able to more efficiently and effectively take capital actions with a focus on reducing our robust capital ratios to a level that is reflective of our business strategy and risk profile. Our goal is to move forward at a measured pace to reach a Common Equity Tier 1 (CET1) ratio of 9.5 to 10 percent by the end of 2019. We continue to give careful consideration to earnings generation, capital needs and market conditions as we determine the pace of share buybacks.

INTEREST RATE HIKES

Coming into 2018, Comerica's balance sheet continued to be well positioned for a rising rate environment. Our balance sheet is sensitive to movement in interest rates, since a majority of our revenue is derived from the interest we receive on floating rate loans. Therefore, as rates rise, our portfolio reprices quickly. We skillfully navigated the rising rate environment by continuing to carefully manage loan and deposit pricing. This resulted in a meaningful increase in our revenue.

In 2019, we expect to realize the full-year benefit of the rate increases that occurred in 2018. We remain well positioned for any future rate increases and have the ability to moderate some of our asset sensitivity by adding hedges over time, which should help maintain our revenue when rates eventually decline.

OUR 2018 FINANCIAL RESULTS

Growth in net interest income of 14 percent helped drive revenue to an all-time high. As just mentioned, this was primarily a result of our ability to manage loan and deposit pricing as rates rose throughout 2018. Aided by our GEAR Up initiatives, we were also able to increase customer-driven fee income, such as card, fiduciary and brokerage fees. This revenue growth, combined with tight expense control, which also benefitted from the execution of our GEAR Up initiatives, resulted in an efficiency ratio of under 54 percent for the year and 52 percent in the fourth quarter.

Credit quality remained strong. The provision for credit losses decreased $75 million, from a provision amount of $74 million, to a $1 million benefit in 2018. This reflected a 31 percent decline in criticized loans, which accounted for only 3 percent of total period-end loans. Net credit-related charge-offs were 11 basis points of average loans. We continued to maintain a healthy allowance for loan losses of 1.34 percent, and we remain vigilant, looking for any areas of stress in our loan portfolio.

Robust revenue, prudent expense control and strong credit quality resulted in a 24 percent increase in pretax income over 2017. In addition, earnings per share benefited from a lower tax rate and our active capital management. The decrease in the provision for income taxes resulted

from the impact of a lower statutory tax rate due to tax reform and $120 million decrease due to discrete tax items, partially offset by an increase in pre-tax income.

As far as capital management, as previously mentioned, we are focused on reducing our capital and have set a target of a CET1 ratio of 9.5 to 10 percent by the end of 2019. During 2018, we repurchased 14.8 million shares of common stock under our equity repurchase program. Additionally, we increased our total 2018 dividend 69 percent over 2017 to $1.84 per share and, subsequent to year-end, increased the quarterly dividend further by 7 cents to $0.67, payable April 1, 2019. Altogether, we returned $1.6 billion to shareholders in 2018, an increase of $903 million compared to 2017.

In summary, we achieved a 74 percent increase in earnings per share to $7.20. This resulted in substantially higher returns, with a return on equity of nearly 16 percent and a return on assets of 1.75 percent.

OUR TECH VISION

Throughout the year, we made great strides in advancing our technology strategy—TechVision2020—which emphasizes strengthening our core capabilities, while also preparing Comerica for the evolving needs of our marketplace.

We modernized our technology infrastructure through a variety of means, including the adoption of cloud computing to become more scalable, resilient and agile in the development and deployment of new solutions for both colleagues and customers. We also enhanced our information security program, deployed automation technologies to reduce manual processing and improve turnaround times for our customers, and expanded our data analytics capabilities to improve sales prospecting, new customer onboarding, and customer retention across multiple business units.

Going forward, the technology team remains committed to providing the right mix of digital capabilities to complement our traditional relationship-oriented banking model and enable us to effectively compete with anyone in our industry.

OUR BUSINESS SEGMENTS

We engage our customers and execute strategic goals across Comerica's three lines of business with a strong presence in Texas, California and Michigan, as well as operations in Arizona and Florida. Over the years, we've maintained balance between our markets, which should continue to help us achieve consistent and sustainable growth over time.

The *Business Bank* continues to capitalize on efficient and effective growth strategies. Since we launched the complete redesign of our lending process, we are seeing great progress in the acceleration of loan approvals and increased capacity for our relationship managers. The efficiencies of the redesign are allowing our team to spend more time in their markets, working with existing customers, while prospecting for new customers. The success of this initiative is apparent as our loan production in the Business Bank exceeded 2017, with some lines of business having record years.

Technology enhancements continue to be a consistent theme for our organization.

We are constantly improving our treasury management products and services, which assist our customers in being more successful. In addition, we are upgrading customer relationship management tools that provides our relationship managers easier access to all relevant customer interactions and information.

The *Retail Bank* continued to improve its offerings to customers with a keen focus on technology. Our customers asked for modern-day conveniences to make their banking experience more efficient. We listened. In 2018, we executed the successful rollout of *Zelle*® to help our customers send money person-to-person in a safe, fast and easy way. Our retail group will continue to deliver on opportunities to enhance the customer experience, while reducing risk.

Our banking center colleagues have spent a considerable amount of time planning the rollouts of a series of technology initiatives. We are upgrading the data capacity at the banking centers, followed by deployment of banking center Wi-Fi. These investments will allow for the distribution of tablets to our banking center colleagues—making them mobile, improving their experience and their ability to serve customers. Other investments include upgrading or replacing our ATMs and advance function Interactive Teller Machines. Retail has embarked on a multiyear digital transformation to deliver frictionless deposit account opening across all channels – banking centers, online and mobile.

In addition to technology, we remained on task for the optimization of our banking centers through relocations, refurbishments and business model transitions. We're also nearing the completion of the transformation of our Customer Contact Center. We've reorganized and advanced our customer facing technological capabilities.

We look forward to seeing the customer-centric concepts unfold, which will greatly support us in the future.

Wealth Management enables us to bring private banking, investment management and fiduciary services to our Business Bank and Retail Bank clients. Wealth's target customers include high net worth individuals, such as business owners, corporate executives, first generation wealth, foundations and institutions.

In 2018, we reimagined the Comerica Wealth Management experience with the goal of delivering enhanced client engagement, increasing client retention and accelerating client acquisition. Our premier brand, 1849 by Comerica Wealth Management, will launch in 2019. This new initiative will deliver the highest level of comprehensive solutions, personalized service, value-added perspectives, integrated advice and guidance, while providing exclusive relationship benefits to our top tier of individual clients and families. In addition, Wealth Management strengthened its investment platform by honing our overall investment philosophy. We've made enhancements to our investment management capabilities, including tailored, goal-based investment portfolios designed to balance risk and return, while providing greater tax management capabilities, options for socially-responsible investing, and improved rebalancing capabilities to ensure clients' portfolios stay in line with their stated objectives.

Comerica Securities added a new element to its investor platform that unlocks value for clients and advisors through its comprehensive planning and investing. This development gives advisors more time to implement plans. In keeping up with technology, Comerica Securities recently launched its mobile application, making it more convenient for clients to access and trade their brokerage accounts.

OUR CULTURE OF DIVERSITY AND INCLUSION

We stand on the principles of our core values. They shape our culture and reflect on the ideals for which Comerica was founded nearly 170 years ago. Diversity is among the seven values we uphold. Our unending commitment to the communities we serve is one of the driving forces behind our company's success. Our diversity drives professional growth, fosters more creative ideas in the workplace and encourages innovation.

In 2018, we are proud to report that two of our executives were honored by diversity organizations for being top leaders. Our Chief Financial Officer Muneera Carr was named to the Dallas Power 50 by the Texas Diversity Council; and Black Enterprise Magazine named Nathaniel Bennett, Comerica's Chief Diversity Officer, to its coveted 2018 Top Executives in Diversity list.

Additionally, we were recognized by various organizations and the media for being leaders in diversity nationwide. Comerica was among the top organizations honored by the Michigan Veterans Affairs Agency for being a Veteran-Friendly Employer. LATINA Style 50 Award named Comerica one of the top 50 organizations for providing Latinas career advancement for the ninth consecutive year. And for the fourth year in a row, we earned a perfect rating on the Human Rights Campaign Corporate Equality index, which earned us a designation for being a Best Place to Work for LGBTQ equality.

OUR DEDICATION TO THE COMMUNITY AND ENVIRONMENT

The health of the communities we serve is also vital to our growth. We enthusiastically engage with nonprofit organizations in our neighborhoods, so they may thrive and prosper. In 2018, we created value for our communities by distributing more than $7.8 million in charitable contributions. The monies allocated stretched into many areas, including those that needed emergency assistance. California is one of our key markets. The devastation of the 2018 wildfires spread throughout the Comerica family. Sadly, we had colleagues who lost homes and valuable possessions. We surrounded them with support as those affected began working through the recovery process. We also partnered with the American Red Cross to provide some financial relief for California wildfire victims statewide.

The spirit of volunteerism is another way we invest in our communities. Our colleagues logged nearly 50,400 volunteer hours during the year. In addition, we connected with our markets through annual events, financial education programs, and a host of other activities to support our corporate responsibility projects. Annually, we produce a comprehensive review of our environmental, social and governance programs which can be found on our website, comerica.com.

We are an organization that embraces corporate, social and environmental responsibility. This commitment was underscored by the recognitions Comerica received in 2018. We were listed on Barron's 100 Most Sustainable Companies in the United States and as one of America's 100 Most Just Companies by JUST Capital and Forbes. We also received a national award for engaging suppliers on sustainability. And, we were pleased to celebrate our tenth consecutive year of listing on the FTSE4Good Index Series. Comerica also supports a greening economy through more than $772 million in environmentally beneficial loans and commitments in 2018 to companies and projects in 13 different green loan categories.

OUR FOCUS FORWARD

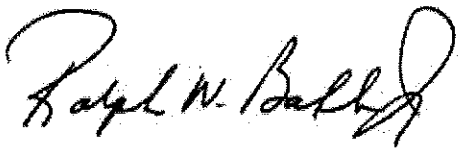
As we forge ahead, we have a steadfast goal of driving profitable growth for Comerica. We can approach 2019 and the years ahead with an indelible commitment to delivering more personalized financial services to our customers while providing increased value to our shareholders.

The new initiatives I previously outlined are underway to enable higher performance. There's great opportunity across many fronts. We are confident in our ability to sustain our steady progress.

We are a stronger organization today because of the earnest spirit of our colleagues who demonstrate their dedication daily. And, we are extremely proud of the efforts our teams have put forth to make 2018 one of the best years in Comerica's 170-year history.

Thank you for your continuing support and confidence.

Sincerely,



Ralph W. Babb Jr.
Chairman and Chief Executive Officer

BOARD OF DIRECTORS

Ralph W. Babb Jr.
Chairman and Chief Executive Officer
Comerica Incorporated and Comerica Bank

Michael E. Collins *(1) (3) (4)*
Chair and Senior Counselor, Blake Collins Group
Former Consultant, Federal Reserve Bank of Cleveland
Former Executive Vice President, Federal Reserve Bank of Philadelphia

Roger A. Cregg *(1) (2) (3)*
Former President and Chief Executive Officer
AV Homes, Inc.

T. Kevin DeNicola *(1) (3) (4)*
Former Chief Financial Officer
KiOR, Inc.

Curtis C. Farmer
President
Comerica Incorporated and Comerica Bank

Jacqueline P. Kane *(2)*
Retired Executive Vice President of
Human Resources and Corporate Affairs
The Clorox Company

Richard G. Lindner *(2) (4)*
Retired Senior Executive Vice President and
Chief Financial Officer
AT&T, Inc.

Barbara R. Smith *(2)*
Chairman, President and Chief Executive Officer
Commercial Metals Company

Robert S. Taubman *(4)*
Chairman, President and Chief Executive Officer
Taubman Centers, Inc. and The Taubman Company

Reginald M. Turner, Jr. *(1) (3) (4)*
Member
Clark Hill

Nina G. Vaca *(1) (3) (4)*
Chairman and Chief Executive Officer
Pinnacle Technical Resources, Inc. and Vaca Industries Inc.

Michael G. Van de Ven *(2)*
Chief Operating Officer
Southwest Airlines Co.

(1) Audit Committee
(2) Governance, Compensation and Nominating Committee
(3) Qualified Legal Compliance Committee
(4) Enterprise Risk Committee

SENIOR LEADERSHIP TEAM

Ralph W. Babb Jr.
Chairman and Chief Executive Officer
Comerica Incorporated and Comerica Bank

Curtis C. Farmer
President, Comerica Incorporated and Comerica Bank

Muneera S. Carr
Executive Vice President and Chief Financial Officer

John D. Buchanan
Executive Vice President, Chief Legal Officer/General Counsel

Megan D. Burkhart
Executive Vice President and Chief Human Resources Officer

Peter W. Guilfoile
Executive Vice President and Chief Credit Officer

Christine M. Moore
Executive Vice President and General Auditor

Jay K. Oberg
Executive Vice President and Chief Risk Officer

Paul R. Obermeyer
Executive Vice President, Enterprise Technology and Operations

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K
Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
For the fiscal year ended
December 31, 2018
Commission file number 1-10706

COMERICA INCORPORATED
(Exact Name of Registrant as Specified in Its Charter)

Delaware	**38-1998421**
(State or Other Jurisdiction of Incorporation)	(IRS Employer Identification Number)

Comerica Bank Tower
1717 Main Street, MC 6404
Dallas, Texas 75201
(Address of Principal Executive Offices) (Zip Code)

(214) 462-6831
(Registrant's Telephone Number, Including Area Code)

Securities registered pursuant to Section 12(b) of the Exchange Act:

- Common Stock, $5 par value

These securities are registered on the New York Stock Exchange.

Securities registered pursuant to Section 12(g) of the Exchange Act:
None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☒	Accelerated filer ☐
Non-accelerated filer ☐	Smaller reporting company ☐
	Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

At June 29, 2018 (the last business day of the registrant's most recently completed second fiscal quarter), the registrant's common stock, $5 par value, held by non-affiliates had an aggregate market value of approximately $15.3 billion based on the closing price on the New York Stock Exchange on that date of $90.92 per share. For purposes of this Form 10-K only, it has been assumed that all common shares Comerica's Trust Department holds for Comerica's employee plans, and all common shares the registrant's directors and executive officers hold, are shares held by affiliates.

At February 8, 2019, the registrant had outstanding 159,000,514 shares of its common stock, $5 par value.

Documents Incorporated by Reference:
Part III: Items 10-14—Proxy Statement for the Annual Meeting of Shareholders to be held April 23, 2019.

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PART I

Item 1. Business.

GENERAL

Comerica Incorporated ("Comerica") is a financial services company, incorporated under the laws of the State of Delaware, and headquartered in Dallas, Texas. Based on total assets as reported in the most recently filed Consolidated Financial Statements for Bank Holding Companies (FR Y-9C), it was among the 25 largest commercial United States ("U.S.") financial holding companies. Comerica was formed in 1973 to acquire the outstanding common stock of Comerica Bank, which at such time was a Michigan banking corporation and one of Michigan's oldest banks (formerly Comerica Bank-Detroit). On October 31, 2007, Comerica Bank, a Michigan banking corporation, was merged with and into Comerica Bank, a Texas banking association ("Comerica Bank"). As of December 31, 2018, Comerica owned directly or indirectly all the outstanding common stock of 2 active banking and 29 non-banking subsidiaries. At December 31, 2018, Comerica had total assets of approximately $70.8 billion, total deposits of approximately $55.6 billion, total loans (net of unearned income) of approximately $50.2 billion and shareholders' equity of approximately $7.5 billion.

Comerica has strategically aligned its operations into three major business segments: the Business Bank, the Retail Bank, and Wealth Management. In addition to the three major business segments, Finance is also reported as a segment.

Comerica operates in three primary geographic markets - Texas, California, and Michigan, as well as in Arizona and Florida, with select businesses operating in several other states, and in Canada and Mexico.

We provide information about the net interest income and noninterest income we received from our various classes of products and services: (1) under the caption, "Analysis of Net Interest Income" on page F-6 of the Financial Section of this report; (2) under the caption "Net Interest Income" on page F-7 of the Financial Section of this report; and (3) under the caption "Noninterest Income" on pages F-8 through F-9 of the Financial Section of this report.

COMPETITION

The financial services business is highly competitive. Comerica and its subsidiaries mainly compete in their three primary geographic markets of Texas, California and Michigan, as well as in the states of Arizona and Florida. They also compete in broader, national geographic markets, as well as markets in Mexico and Canada. They are subject to competition with respect to various products and services, including, without limitation, loans and lines of credit, deposits, cash management, capital market products, international trade finance, letters of credit, foreign exchange management services, loan syndication services, consumer lending, consumer deposit gathering, mortgage loan origination, consumer products, fiduciary services, private banking, retirement services, investment management and advisory services, investment banking services, brokerage services, the sale of annuity products, and the sale of life, disability and long-term care insurance products.

Comerica competes in terms of products and pricing with large national and regional financial institutions and with smaller financial institutions. Some of Comerica's larger competitors, including certain nationwide banks that have a significant presence in Comerica's market area, may make available to their customers a broader array of product, pricing and structure alternatives and, due to their asset size, may more easily absorb credit losses in a larger overall portfolio. Some of Comerica's competitors (larger or smaller) may have more liberal lending policies and processes. Increasingly, Comerica competes with other companies based on financial technology and capabilities, such as mobile banking applications and funds transfer. Further, Comerica's banking competitors may be subject to a significantly different or reduced degree of regulation due to their asset size or types of products offered. They may also have the ability to more efficiently utilize resources to comply with regulations or may be able to more effectively absorb the costs of regulations into their existing cost structure. Comerica believes that the level of competition in all geographic markets will continue to increase in the future.

In addition to banks, Comerica's banking subsidiaries also face competition from other financial intermediaries, including savings and loan associations, consumer finance companies, leasing companies, venture capital funds, credit unions, investment banks, insurance companies and securities firms. Competition among providers of financial products and services continues to increase as technology advances have lowered the barriers to entry for financial technology companies, with customers having the opportunity to select from a growing variety of traditional and nontraditional alternatives, including crowdfunding, digital wallets and money transfer services. The ability of non-banking financial institutions to provide services previously limited to commercial banks has intensified competition. Because non-banking financial institutions are not subject to many of the same regulatory restrictions as banks and bank holding companies, they can often operate with greater flexibility and lower cost structures.

In addition, the industry continues to consolidate, which affects competition by eliminating some regional and local institutions, while strengthening the franchises of acquirers.

SUPERVISION AND REGULATION

Banks, bank holding companies, and financial institutions are highly regulated at both the state and federal level. Comerica is subject to supervision and regulation at the federal level by the Board of Governors of the Federal Reserve System ("FRB") under the Bank Holding Company Act of 1956, as amended. Comerica Bank is chartered by the State of Texas and at the state level is supervised and regulated by the Texas Department of Banking under the Texas Finance Code. Comerica Bank has elected to be a member of the Federal Reserve System under the Federal Reserve Act and, consequently, is supervised and regulated by the Federal Reserve Bank of Dallas. Comerica Bank & Trust, National Association is chartered under federal law and is subject to supervision and regulation by the Office of the Comptroller of the Currency ("OCC") under the National Bank Act. Comerica Bank & Trust, National Association, by virtue of being a national bank, is also a member of the Federal Reserve System. The deposits of Comerica Bank and Comerica Bank & Trust, National Association are insured by the Deposit Insurance Fund ("DIF") of the Federal Deposit Insurance Corporation ("FDIC") to the extent provided by law, and therefore Comerica Bank and Comerica Bank & Trust, National Association are each also subject to regulation and examination by the FDIC. Certain transactions executed by Comerica Bank are also subject to regulation by the U.S. Commodity Futures Trading Commission ("CFTC"). The Department of Labor ("DOL") regulates financial institutions providing services to plans governed by the Employee Retirement Income Security Act of 1974. Comerica Bank's Canada branch is supervised by the Office of the Superintendent of Financial Institutions and its Mexico representative office is supervised by the Banco de México.

The FRB supervises non-banking activities conducted by companies directly and indirectly owned by Comerica. In addition, Comerica's non-banking subsidiaries are subject to supervision and regulation by various state, federal and self-regulatory agencies, including, but not limited to, the Financial Industry Regulatory Authority, Inc. ("FINRA"), the Department of Licensing and Regulatory Affairs of the State of Michigan and the Municipal Securities Rulemaking Board ("MSRB") (in the case of Comerica Securities, Inc.); the Department of Insurance and Financial Services of the State of Michigan (in the case of Comerica Insurance Services, Inc.); the DOL (in the case of Comerica Securities, Inc. and Comerica Insurance Services, Inc.); and the Securities and Exchange Commission ("SEC") (in the case of Comerica Securities, Inc. and World Asset Management, Inc.).

Both the scope of the laws and regulations and intensity of supervision to which Comerica's business is subject have increased over the past decade in response to the financial crisis as well as other factors such as technological and market changes. Many of these changes have occurred as a result of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act") and its implementing regulations, most of which are now in place. In 2018, with the passage of the Economic Growth, Regulatory Relief and Consumer Protection Act ("EGRRCPA"), as described below, there has been some recalibration of the post-financial crisis framework; however, Comerica's business remains subject to extensive regulation and supervision.

Comerica is also subject to the disclosure and regulatory requirements of the Securities Act of 1933, as amended, and the Securities Exchange Act of 1934, as amended, both as administered by the SEC, as well as the rules of the New York Stock Exchange.

Described below are material elements of selected laws and regulations applicable to Comerica and its subsidiaries. The descriptions are not intended to be complete and are qualified in their entirety by reference to the full text of the statutes and regulations described. Changes in applicable law or regulation, and in their application by regulatory agencies, cannot be predicted, but they may have a material effect on the business of Comerica and its subsidiaries.

Economic Growth, Regulatory Relief and Consumer Protection Act

On May 24, 2018, EGRRCPA was signed into law. Among other regulatory changes, EGRRCPA amends various sections of the Dodd-Frank Act, including section 165 of Dodd-Frank Act, which was revised to raise the asset thresholds for determining the application of enhanced prudential standards for bank holding companies. Under EGRRCPA bank holding companies with less than $100 billion of consolidated assets, including Comerica, were immediately exempted from all of the enhanced prudential standards, except risk committee requirements, which now apply to publicly-traded bank holding companies with $50 billion or more of consolidated assets, including Comerica. As a result, Comerica is no longer subject to Dodd-Frank Act supervisory and company-run stress testing, required to file a resolution plan under Section 165(d) of the Dodd-Frank Act or subject to internal liquidity stress testing and buffer requirements. In addition, Comerica is no longer required to pay the supervision and regulation fee assessment under the Dodd-Frank Act.

On July 6, 2018, the FRB released a statement that for bank holding companies with between $50 billion and $100 billion in total consolidated assets, including Comerica, the FRB would take no action to require such bank holding companies to comply with the Comprehensive Capital Analysis and Review ("CCAR") process or the Liquidity Coverage Ratio. On October 31, 2018, the FRB proposed rules that would revise its regulations to raise the asset thresholds for these requirements so that bank holding companies with less than $100 billion in total consolidated assets would be exempt.

Also on July 6, 2018, the federal banking regulators issued an interagency statement that banks with less than $100 billion in total consolidated assets, including Comerica Bank, would not be required to comply with company-run stress testing requirements until November 25, 2019, at which time such banks will become exempt from company-run stress testing requirements

under the EGRRCPA. In addition, the federal banking regulators have each issued proposed rules that would revise their stress testing regulations consistent with the EGRRCPA.

Requirements for Approval of Activities and Acquisitions

The Gramm-Leach-Bliley Act expanded the activities in which a bank holding company registered as a financial holding company can engage. Comerica became a financial holding company in 2000. As a financial holding company, Comerica may affiliate with securities firms and insurance companies, and engage in activities that are financial in nature or incidental or complementary to activities that are financial in nature. Activities that are "financial in nature" include, but are not limited to: securities underwriting; securities dealing and market making; sponsoring mutual funds and investment companies (subject to regulatory requirements described below); insurance underwriting and agency; merchant banking; and activities that the FRB determines, in consultation with the Secretary of the United States Treasury, to be financial in nature or incidental to a financial activity. "Complementary activities" are activities that the FRB determines upon application to be complementary to a financial activity and that do not pose a substantial risk to the safety or soundness of depository institutions or the financial system generally.

In order to maintain its status as a financial holding company, Comerica and each of its depository institution subsidiaries must each remain "well capitalized" and "well managed," and Comerica, Comerica Bank and Comerica Bank & Trust, National Association are each "well capitalized" and "well managed" under FRB standards. If Comerica or any subsidiary bank of Comerica were to cease being "well capitalized" or "well managed" under applicable regulatory standards, the FRB could place limitations on Comerica's ability to conduct the broader financial activities permissible for financial holding companies or impose limitations or conditions on the conduct or activities of Comerica or its affiliates. If the deficiencies persisted, the FRB could order Comerica to divest any subsidiary bank or to cease engaging in any activities permissible for financial holding companies that are not permissible for bank holding companies, or Comerica could elect to conform its non-banking activities to those permissible for a bank holding company that is not also a financial holding company.

In addition, the Community Reinvestment Act of 1977 ("CRA") requires U.S. banks to help serve the credit needs of their communities. Comerica Bank's current rating under the CRA is "satisfactory." If any subsidiary bank of Comerica were to receive a rating under the CRA of less than "satisfactory," Comerica would be prohibited from engaging in certain activities.

Federal and state laws impose notice and approval requirements for mergers and acquisitions of other depository institutions or bank holding companies. In many cases, no FRB approval is required for Comerica to acquire a company engaged in activities that are financial in nature or incidental to activities that are financial in nature, as determined by the FRB. Prior approval is required before Comerica may acquire the beneficial ownership or control of more than 5% of any class of voting shares or substantially all of the assets of a bank holding company (including a financial holding company) or a bank. In considering applications for approval of acquisitions, the banking regulators may take several factors into account, including whether Comerica and its subsidiaries are well capitalized and well managed, are in compliance with anti-money laundering laws and regulations, or have CRA ratings of less than "satisfactory."

Acquisitions of Ownership of Comerica

Acquisitions of Comerica's voting stock above certain thresholds are subject to prior regulatory notice or approval under federal banking laws, including the Bank Holding Company Act of 1956 and the Change in Bank Control Act of 1978. Under the Change in Bank Control Act, a person or entity generally must provide prior notice to the FRB before acquiring the power to vote 10% or more of Comerica's outstanding common stock. Investors should be aware of these requirements when acquiring shares of Comerica's stock.

Capital and Liquidity

Comerica and its bank subsidiaries are subject to risk-based capital requirements and guidelines imposed by the FRB and/or the OCC. In calculating risk-based capital requirements, a depository institution's or holding company's assets and certain specified off-balance sheet commitments are assigned to various risk categories defined by the FRB, each weighted differently based on the level of credit risk that is ascribed to such assets or commitments, based on counterparty type and asset class. A depository institution's or holding company's capital is divided into three tiers: Common Equity Tier 1 ("CET1"), additional Tier 1, and Tier 2. CET1 capital predominantly includes common shareholders' equity, less certain deductions for goodwill, intangible assets and deferred tax assets that arise from net operating losses and tax credit carry-forwards, if any. Additional Tier 1 capital primarily includes any outstanding noncumulative perpetual preferred stock and related surplus. Comerica has also made the election to permanently exclude accumulated other comprehensive income related to debt securities, cash flow hedges, and defined benefit postretirement plans from CET1 capital. Tier 2 capital primarily includes qualifying subordinated debt and qualifying allowance for credit losses. The ultimate treatment for certain specific deductions and adjustments is yet to be determined pending the finalization of a proposal by banking regulators to simplify certain aspects of the capital rules. In addition, in December 2018, the federal banking regulators adopted rules that would permit bank holding companies and banks to phase in, for regulatory capital purposes, the day-one impact of the new current expected credit loss ("CECL") accounting rule on retained earnings over a period of three years. More information is set forth in the "Capital" section located on pages F-18 through F-20.

Entities that engage in trading activities that exceed specified levels, also are required to maintain capital to account for market risk. Market risk includes changes in the market value of trading account, foreign exchange, and commodity positions, whether resulting from broad market movements (such as changes in the general level of interest rates, equity prices, foreign exchange rates, or commodity prices) or from position specific factors. From time to time, Comerica's trading activities may exceed specified regulatory levels, in which case Comerica adjusts its risk-weighted assets to account for market risk as required.

Comerica and its bank subsidiaries, like other bank holding companies and banks, currently are required to maintain a minimum CET1 capital ratio, minimum Tier 1 capital ratio and minimum total capital ratio equal to at least 4.5 percent, 6 percent and 8 percent of their total risk-weighted assets (including certain off-balance-sheet items, such as standby letters of credit), respectively. In 2018, Comerica and its bank subsidiaries were also required to maintain a minimum capital conservation buffer of 1.875 percent in order to avoid restrictions on capital distributions and discretionary bonuses. The minimum required capital conservation buffer increased to 2.5 percent as of January 1, 2019. Comerica and its bank subsidiaries are also required to maintain a minimum "leverage ratio" (Tier 1 capital to non-risk-adjusted average total assets) of 4 percent.

To be well capitalized, Comerica's bank subsidiaries are required to maintain a CET1 capital ratio, Tier 1 capital ratio, total capital ratio and a leverage ratio equal to at least 6.5 percent, 8.0 percent, 10.0 percent and 5.0 percent, respectively. The FRB has not yet revised the minimum requirements for bank holding companies to be considered well capitalized to reflect the higher capital requirements imposed under the current capital rules. For purposes of the FRB's Regulation Y, including determining whether a bank holding company meets the requirements to be a financial holding company, bank holding companies, such as Comerica, must maintain a Tier 1 capital ratio of at least 6.0 percent and a total capital ratio of at least 10.0 percent to be well capitalized. If the FRB were to apply the same or a very similar minimum requirement to be considered well capitalized to bank holding companies as that applicable to Comerica's bank subsidiaries, Comerica's capital ratios as of December 31, 2018 would exceed such revised minimum requirements. The FRB may require bank holding companies, including Comerica, to maintain capital ratios substantially in excess of mandated minimum levels, depending upon general economic conditions and a bank holding company's particular condition, risk profile and growth plans.

Failure to be well capitalized or to meet minimum capital requirements could result in certain mandatory and possible additional discretionary actions by regulators, including restrictions on Comerica's or its bank subsidiaries' ability to pay dividends or otherwise distribute capital or to receive regulatory approval of applications, or other restrictions on growth.

At December 31, 2018, Comerica met all of its minimum risk-based capital ratio and leverage ratio requirements plus the applicable countercyclical conservation buffer and the applicable well capitalized requirements, as shown in the table below:

(dollar amounts in millions)	Comerica Incorporated (Consolidated)	Comerica Bank
December 31, 2018		
CET1 capital (minimum $3.0 billion (Consolidated))	**$ 7,470**	**$ 7,229**
Tier 1 capital (minimum $4.0 billion (Consolidated))	**7,470**	**7,229**
Total capital (minimum $5.4 billion (Consolidated))	**8,855**	**8,433**
Risk-weighted assets	**67,047**	**66,857**
Adjusted average assets (fourth quarter)	**71,070**	**70,905**
CET1 capital to risk-weighted assets (minimum 4.5%)	**11.14%**	**10.81%**
Tier 1 capital to risk-weighted assets (minimum 6.0%)	**11.14**	**10.81**
Total capital to risk-weighted assets (minimum 8.0%)	**13.21**	**12.61**
Tier 1 capital to average assets (minimum 4.0%)	**10.51**	**10.20**
Capital conservation buffer	**5.14**	**4.61**
December 31, 2017		
CET1 capital (minimum $3.0 billion (Consolidated))	$ 7,773	$ 7,121
Tier 1 capital (minimum $4.0 billion (Consolidated))	7,773	7,121
Total capital (minimum $5.3 billion (Consolidated))	9,211	8,378
Risk-weighted assets	66,575	66,447
Adjusted average assets (fourth quarter)	71,372	71,181
CET1 capital to risk-weighted assets (minimum 4.5%)	11.68%	10.72%
Tier 1 capital to risk-weighted assets (minimum 6.0%)	11.68	10.72
Total capital to risk-weighted assets (minimum 8.0%)	13.84	12.61
Tier 1 capital to average assets (minimum 4.0%)	10.89	10.00
Capital conservation buffer	5.68	4.61

Comerica was previously required to comply with the modified Liquidity Coverage Ratio and would have been required to comply with the proposed Net Stable Funding Ratio. However, as discussed above, the FRB has stated that it will take no action to require bank holding companies with less than $100 billion in total consolidated assets, including Comerica, to comply with

the modified Liquidity Coverage Ratio. In addition, the banking regulators proposed a rule on October 31, 2018, that would raise the asset threshold for the proposed Net Stable Funding Ratio rule to apply to firms with more than $100 billion in total consolidated assets, and therefore, Comerica would not be required to comply with this rule as currently proposed.

Additional information on the calculation of Comerica's and its bank subsidiaries' CET1 capital, Tier 1 capital, total capital and risk-weighted assets is set forth in the "Capital" section located on pages F-18 through F-20 of the Financial Section of this report and Note 20 of the Notes to Consolidated Financial Statements located on pages F-92 through F-93 of the Financial Section of this report.

Annual Capital Plans and Stress Tests

Comerica was previously subject to the FRB's annual CCAR process, including the requirement to submit an annual capital plan to the FRB for non-objection. However, as discussed above, the FRB has stated that it will take no action to require bank holding companies with less than $100 billion in total consolidated assets, including Comerica, to comply with the requirements of the CCAR process, and on October 31, 2018, the FRB proposed rules that would revise its regulations to raise the asset thresholds for these requirements such that bank holding companies with less than $100 billion in total consolidated assets would be exempt.

Comerica and Comerica Bank were also previously subject to Dodd-Frank Act stress testing requirements. As discussed above, as a bank holding company with less than $100 billion in total consolidated assets Comerica was immediately exempted from Dodd-Frank Act supervisory and company-run stress testing requirements by the EGRRCPA, and Comerica Bank, as a bank with less than $100 billion in total consolidated assets, will be exempt from company-run stress testing requirements under the EGRRCPA on November 25, 2019, and will not be required to comply with them during the intervening period. The federal banking regulators have proposed rules that would revise their respective regulations to raise the asset thresholds for these requirements such that bank holding companies and banks with less than $100 billion in total consolidated assets would be exempt.

Federal Deposit Insurance Corporation Improvement Act

The Federal Deposit Insurance Corporation Improvement Act ("FDICIA") requires, among other things, the federal banking agencies to take "prompt corrective action" with respect to depository institutions that do not meet certain minimum capital requirements. FDICIA establishes five capital tiers: "well capitalized," "adequately capitalized," "undercapitalized," "significantly undercapitalized" and "critically undercapitalized." An institution that fails to remain well capitalized becomes subject to a series of restrictions that increase in severity as its capital condition weakens. Such restrictions may include a prohibition on capital distributions, restrictions on asset growth or restrictions on the ability to receive regulatory approval of applications. The FDICIA also provides for enhanced supervisory authority over undercapitalized institutions, including authority for the appointment of a conservator or receiver for the institution.

As of December 31, 2018, each of Comerica's bank subsidiaries' capital ratios exceeded those required for an institution to be considered "well capitalized" under these regulations.

As an additional means to identify problems in the financial management of depository institutions, FDICIA requires federal bank regulatory agencies to establish certain non-capital-based safety and soundness standards for institutions any such agency supervises. The standards relate generally to, among others, earnings, liquidity, operations and management, asset quality, various risk and management exposures (e.g., credit, operational, market, interest rate, etc.) and executive compensation. The agencies are authorized to take action against institutions that fail to meet such standards.

FDICIA also contains a variety of other provisions that may affect the operations of depository institutions including reporting requirements, regulatory standards for real estate lending, "truth in savings" provisions, the requirement that a depository institution give 90 days prior notice to customers and regulatory authorities before closing any branch, and a prohibition on the acceptance or renewal of brokered deposits by depository institutions that are not well capitalized or are adequately capitalized and have not received a waiver from the FDIC.

Dividends

Comerica is a legal entity separate and distinct from its banking and other subsidiaries. Since Comerica's consolidated net income and liquidity consists largely of net income of and dividends received from Comerica's bank subsidiaries, Comerica's ability to pay dividends and repurchase shares depends upon its receipt of dividends from these subsidiaries. There are statutory and regulatory requirements applicable to the payment of dividends by subsidiary banks to Comerica, as well as by Comerica to its shareholders. Certain, but not all, of these requirements are discussed below. No assurances can be given that Comerica's bank subsidiaries will, in any circumstances, pay dividends to Comerica.

Comerica Bank and Comerica Bank & Trust, National Association are required by federal law to obtain the prior approval of the FRB and/or the OCC, as the case may be, for the declaration and payment of dividends, if the total of all dividends declared by the board of directors of such bank in any calendar year will exceed the total of (i) such bank's retained net income (as defined and interpreted by regulation) for that year plus (ii) the retained net income (as defined and interpreted by regulation) for the

preceding two years, less any required transfers to surplus or to fund the retirement of preferred stock. At January 1, 2019, Comerica's subsidiary banks could declare aggregate dividends of approximately $108 million from retained net profits of the preceding two years. Comerica's subsidiary banks declared dividends of $1.1 billion in 2018, $907 million in 2017 and $545 million in 2016.

Comerica and its bank subsidiaries must maintain the applicable CET1 capital conservation buffer to avoid becoming subject to restrictions on capital distributions, including dividends. The capital conservation buffer is currently at its fully phased-in level of 2.5%.

Furthermore, federal regulatory agencies can prohibit a bank or bank holding company from paying dividends under circumstances in which such payment could be deemed an unsafe and unsound banking practice. Under the FDICIA "prompt corrective action" regime discussed above, which applies to each of Comerica Bank and Comerica Bank & Trust, National Association, a bank is specifically prohibited from paying dividends to its parent company if payment would result in the bank becoming "undercapitalized." In addition, Comerica Bank is also subject to limitations under Texas state law regarding the amount of earnings that may be paid out as dividends to Comerica, and requires prior approval for payments of dividends that exceed certain levels.

FRB policy provides that a bank holding company should not pay dividends unless (1) the bank holding company's net income over the last four quarters (net of dividends paid) is sufficient to fully fund the dividends, (2) the prospective rate of earnings retention appears consistent with the capital needs, asset quality and overall financial condition of the bank holding company and its subsidiaries and (3) the bank holding company will continue to meet minimum required capital adequacy ratios. The policy also provides that a bank holding company should inform the FRB reasonably in advance of declaring or paying a dividend that exceeds earnings for the period for which the dividend is being paid or that could result in a material adverse change to the bank holding company's capital structure. Bank holding companies also are required to consult with the FRB before redeeming or repurchasing capital instruments (including common stock), or materially increasing dividends.

Transactions with Affiliates

Federal banking laws and regulations impose qualitative standards and quantitative limitations upon certain transactions between a bank and its affiliates, including between Comerica and its nonbank subsidiaries, on the one hand, and Comerica's affiliate insured depository institutions, on the other. For example, Section 23A of the Federal Reserve Act limits the aggregate outstanding amount of any insured depository institution's loans and other "covered transactions" with any particular nonbank affiliate (including financial subsidiaries) to no more than 10% of the institution's total capital and limits the aggregate outstanding amount of any insured depository institution's covered transactions with all of its nonbank affiliates to no more than 20% of its total capital. "Covered transactions" are defined by statute to include (i) a loan or extension of credit, (ii) a purchase of securities issued by an affiliate, (iii) a purchase of assets (unless otherwise exempted by the FRB) from the affiliate, (iv) the acceptance of securities issued by the affiliate as collateral for a loan, (v) the issuance of a guarantee, acceptance or letter of credit on behalf of an affiliate and (vi) securities borrowing or lending transactions and derivative transactions with an affiliate, to the extent that either causes a bank or its affiliate to have credit exposure to the securities borrowing/lending or derivative counterparty. Section 23A of the Federal Reserve Act also generally requires that an insured depository institution's loans to its nonbank affiliates be, at a minimum, 100% secured, and Section 23B of the Federal Reserve Act generally requires that an insured depository institution's transactions with its nonbank affiliates be on terms and under circumstances that are substantially the same or at least as favorable as those prevailing for comparable transactions with nonaffiliates. Federal banking laws also place similar restrictions on loans and other extensions of credit by FDIC-insured banks, such as Comerica Bank and Comerica Bank & Trust, National Association, and their subsidiaries to their directors, executive officers and principal shareholders.

Data Privacy and Cybersecurity Regulation

Comerica is subject to many U.S. federal, U.S. state and international laws and regulations governing consumer data privacy protection, which require, among other things, maintaining policies and procedures to protect the non-public confidential information of customers and employees. The privacy provisions of the Gramm-Leach-Bliley Act generally prohibit financial institutions, including Comerica and its subsidiaries, from disclosing nonpublic personal financial information of consumer customers to third parties for certain purposes (primarily marketing) unless customers have the opportunity to "opt out" of the disclosure. Other laws and regulations, at the international, federal and state levels, limit Comerica's ability to share certain information with affiliates and non-affiliates for marketing and/or non-marketing purposes, or to contact customers with marketing offers. The Gramm-Leach-Bliley Act also requires banks to implement a comprehensive information security program that includes administrative, technical and physical safeguards to ensure the security and confidentiality of customer records and information. Because we have a limited presence in New York, we are subject to certain requirements of the New York Department of Financial Service's Cybersecurity Requirements for Financial Services Companies, which include maintaining a cybersecurity program and policies and breach notification requirements.

In October 2016, the federal banking regulators issued an advance notice of proposed rulemaking regarding enhanced cyber risk management standards, which would apply to a wide range of large financial institutions, including Comerica, and their third-party service providers. The proposed standards would expand existing cybersecurity regulations and guidance to focus on

cyber risk governance and management; management of internal and external dependencies; and incident response, cyber resilience and situational awareness. In addition, the proposal contemplates more stringent standards for institutions with systems that are critical to the financial sector. Comerica is monitoring the development of this rule.

Data privacy and data protection are areas of increasing state legislative focus. For example, in June of 2018, the Governor of California signed into law the California Consumer Privacy Act of 2018 (the "CCPA"). The CCPA, which becomes effective on January 1, 2020, applies to for-profit businesses that conduct business in California and meet certain revenue or data collection thresholds. The CCPA will give consumers the right to request disclosure of information collected about them, and whether that information has been sold or shared with others, the right to request deletion of personal information (subject to certain exceptions), the right to opt out of the sale of the consumer's personal information, and the right not to be discriminated against for exercising these rights. The CCPA contains several exemptions, including an exemption applicable to information that is collected, processed, sold or disclosed pursuant to the Gramm-Leach-Bliley Act. The California Attorney General has not yet proposed or adopted regulations implementing the CCPA, and the California State Legislature has amended the Act since its passage. Comerica has a physical footprint in California and will be required to comply with the CCPA. In addition, similar laws may be adopted by other states where Comerica does business. The impact of the CCPA on Comerica's business is yet to be determined. The federal government may also pass data privacy or data protection legislation.

Like other lenders, Comerica Bank and other of Comerica's subsidiaries use credit bureau data in their underwriting activities. Use of such data is regulated under the Fair Credit Reporting Act ("FCRA"), and the FCRA also regulates reporting information to credit bureaus, prescreening individuals for credit offers, sharing of information between affiliates, and using affiliate data for marketing purposes. Similar state laws may impose additional requirements on Comerica and its subsidiaries.

FDIC Insurance Assessments

The DIF provides deposit insurance coverage for certain deposits up to $250,000 per depositor in each deposit account category. Comerica's subsidiary banks are subject to FDIC deposit insurance assessments to maintain the DIF. The FDIC imposes a risk-based deposit premium assessment system, where the assessment rates for an insured depository institution are determined by an assessment rate calculator, which is based on a number of elements to measure the risk each institution poses to the DIF. The assessment rate is applied to total average assets less tangible equity. Under the current system, premiums are assessed quarterly and could increase if, for example, criticized loans and/or other higher risk assets increase or balance sheet liquidity decreases. For 2018, Comerica's FDIC insurance expense totaled $42 million, including the DIF surcharge that was in place from mid-2016 until September 30, 2018. For 2019, management expects a reduction in deposit insurance assessments of $16 million as a result of the elimination of the DIF surcharge.

Anti-Money Laundering Regulations

The Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act ("USA PATRIOT Act") of 2001 and its implementing regulations require insured depository institutions, broker-dealers, and certain other financial institutions to have policies, procedures, and controls to detect, prevent, and report money laundering and terrorist financing. The USA PATRIOT Act and its regulations also provide for information sharing, subject to conditions, between federal law enforcement agencies and financial institutions, as well as among financial institutions, for counter-terrorism purposes. Federal banking regulators are required, when reviewing bank holding company acquisition and bank merger applications, to take into account the effectiveness of the anti-money laundering activities of the applicants. To comply with these obligations, Comerica and its various operating units have implemented appropriate internal practices, procedures, and controls.

Office of Foreign Assets Control Regulation

The Office of Foreign Assets Control ("OFAC") is responsible for administering economic sanctions that affect transactions with designated foreign countries, nationals and others, as defined by various Executive Orders and Acts of Congress. OFAC-administered sanctions take many different forms. For example, sanctions may include: (1) restrictions on trade with or investment in a sanctioned country, including prohibitions against direct or indirect imports from and exports to a sanctioned country and prohibitions on U.S. persons engaging in financial transactions relating to, making investments in, or providing investment-related advice or assistance to, a sanctioned country; and (2) a blocking of assets in which the government or "specially designated nationals" of the sanctioned country have an interest, by prohibiting transfers of property subject to U.S. jurisdiction (including property in the possession or control of U.S. persons). OFAC also publishes lists of persons, organizations, and countries suspected of aiding, harboring or engaging in terrorist acts, known as Specially Designated Nationals and Blocked Persons. Blocked assets (e.g., property and bank deposits) cannot be paid out, withdrawn, set off or transferred in any manner without a license from OFAC. Failure to comply with these sanctions could have serious legal and reputational consequences.

Interstate Banking and Branching

The Interstate Banking and Branching Efficiency Act (the "Interstate Act"), as amended by the Dodd-Frank Act, permits a bank holding company, with FRB approval, to acquire banking institutions located in states other than the bank holding company's home state without regard to whether the transaction is prohibited under state law, but subject to any state requirement that the bank has been organized and operating for a minimum period of time, not to exceed five years, and the requirement that the bank holding company, prior to and following the proposed acquisition, control no more than 10 percent of the total amount of deposits of insured depository institutions in the U.S. and no more than 30 percent of such deposits in that state (or such amount as established by state law if such amount is lower than 30 percent). The Interstate Act, as amended, also authorizes banks to operate branch offices outside their home states by merging with out-of-state banks, purchasing branches in other states and by establishing de novo branches in other states, subject to various conditions. In the case of purchasing branches in a state in which it does not already have banking operations, de novo interstate branching is permissible if under the law of the state in which the branch is to be located, a state bank chartered by that state would be permitted to establish the branch. A bank holding company or bank must be well capitalized and well managed in order to take advantage of these interstate banking and branching provisions.

Comerica has consolidated the majority of its banking business into one bank, Comerica Bank, with banking centers in Texas, Arizona, California, Florida and Michigan, as well as Canada.

Source of Strength and Cross-Guarantee Requirements

Federal law and FRB regulations require that bank holding companies serve as a source of strength to each subsidiary bank and commit resources to support each subsidiary bank. This support may be required at times when a bank holding company may not be able to provide such support without adversely affecting its ability to meet other obligations. The FRB may require a bank holding company to make capital injections into a troubled subsidiary bank and may charge the bank holding company with engaging in unsafe and unsound practices if the bank holding company fails to commit resources to such a subsidiary bank or if it undertakes actions that the FRB believes might jeopardize the bank holding company's ability to commit resources to such subsidiary bank. Under these requirements, Comerica may in the future be required to provide financial assistance to its subsidiary banks should they experience financial distress. Capital loans by Comerica to its subsidiary banks would be subordinate in right of payment to deposits and certain other debts of the subsidiary banks. In the event of Comerica's bankruptcy, any commitment by Comerica to a federal bank regulatory agency to maintain the capital of its subsidiary banks would be assumed by the bankruptcy trustee and entitled to a priority of payment.

Similarly, under the cross-guarantee provisions of the Federal Deposit Insurance Act, in the event of a loss suffered or anticipated by the FDIC (either as a result of the failure of a banking subsidiary or related to FDIC assistance provided to such a subsidiary in danger of failure), the other banking subsidiaries may be assessed for the FDIC's loss, subject to certain exceptions. An FDIC cross-guarantee claim against a depository institution is superior in right of payment to claims of the holding company and its affiliates against such depository institution.

Supervisory and Enforcement Powers of Federal and State Banking Agencies

The FRB and other federal and state banking agencies have broad supervisory and enforcement powers, including, without limitation, and as prescribed to each agency by applicable law, the power to conduct examinations and investigations, impose nonpublic supervisory agreements, issue cease and desist orders, terminate deposit insurance, impose substantial fines and other civil penalties and appoint a conservator or receiver. Failure to comply with applicable laws or regulations could subject Comerica or its banking subsidiaries, as well as officers and directors of these organizations, to administrative sanctions and potentially substantial civil and criminal penalties. Bank regulators regularly examine the operations of bank holding companies and banks, and the results of these examinations, as well as certain supervisory and enforcement actions, are confidential and may not be made public.

Resolution Plans

Before the enactment of EGRRCPA, Comerica was required to prepare and submit a resolution plan to the FRB and FDIC. As discussed above, pursuant to EGRRCPA, Comerica is now exempt from this requirement as a bank holding company with less than $100 billion in total consolidated assets.

EGRRCPA did not change the FDIC's rules that require depository institutions with $50 billion or more of total consolidated assets, including Comerica Bank, to periodically file a separate resolution plan. The FDIC's Chairman, however, has stated that the FDIC intends to release an advanced notice of proposed rulemaking with respect to the FDIC's bank resolution plan requirements meant to better tailor bank resolution plans to a firm's size, complexity and risk profile.

Incentive-Based Compensation

Comerica is subject to guidance issued by the FRB, OCC and FDIC intended to ensure that the incentive compensation policies of banking organizations do not undermine the safety and soundness of such organizations by encouraging excessive risk-taking. The guidance, which covers senior executives as well as other employees who, either individually or as part of a group,

have the ability to expose the banking organization to material amounts of risk, is based upon the key principles that a banking organization's incentive compensation arrangements (i) should provide employees incentives that appropriately balance risk and financial results in a manner that does not encourage employees to expose their organizations to imprudent risk; (ii) should be compatible with effective controls and risk-management; and (iii) should be supported by strong corporate governance, including active and effective oversight by the organization's board of directors. Banking organizations are expected to review regularly their incentive compensation arrangements based on these three principles. Where there are deficiencies in the incentive compensation arrangements, they should be promptly addressed. Enforcement actions may be taken against a banking organization if its incentive compensation arrangements, or related risk-management control or governance processes, pose a risk to the organization's safety and soundness, particularly if the organization is not taking prompt and effective measures to correct the deficiencies. Similar to other large banking organizations, Comerica has been subject to a continuing review of incentive compensation policies and practices by representatives of the FRB, the Federal Reserve Bank of Dallas and the Texas Department of Banking since 2011. As part of that review, Comerica has undertaken a thorough analysis of all the incentive compensation programs throughout the organization, the individuals covered by each plan and the risks inherent in each plan's design and implementation. Comerica has determined that risks arising from employee compensation plans are not reasonably likely to have a material adverse effect on Comerica. It is Comerica's intent to continue to evolve its incentive compensation processes going forward by monitoring regulations and best practices for sound incentive compensation.

In 2016, the FRB, OCC and several other federal financial regulators revised and re-proposed rules to implement Section 956 of the Dodd-Frank Act. Section 956 directed regulators to jointly prescribe regulations or guidelines prohibiting incentive-based payment arrangements, or any feature of any such arrangement, at covered financial institutions that encourage inappropriate risks by providing excessive compensation or that could lead to a material financial loss. This proposal supplements the final guidance issued by the banking agencies in June 2010. Consistent with the Dodd-Frank Act, the proposed rule would impose heightened standards for institutions with $50 billion or more in total consolidated assets, which includes Comerica. For these larger institutions, the proposed rule would require the deferral of at least 40 percent of incentive-based payments for designated executives and significant risk-takers who individually have the ability to expose the institution to possible losses that are substantial in relation to the institution's size, capital or overall risk tolerance. Moreover, incentive-based compensation of these individuals would be subject to potential clawback for seven years following vesting. Further, the rule imposes enhanced risk management controls and governance and internal policy and procedure requirements with respect to incentive compensation. Comerica is monitoring the development of this rule.

The Volcker Rule

Comerica is prohibited under the Volcker Rule from (1) engaging in short-term proprietary trading for its own account and (2) having certain ownership interests in and relationships with hedge funds or private equity funds ("Covered Funds"). The Volcker Rule regulations contain exemptions for market-making, hedging, underwriting and trading in U.S. government and agency obligations, and also permit certain ownership interests in certain types of Covered Funds to be retained. They also permit the offering and sponsoring of Covered Funds under certain conditions. The Volcker Rule regulations impose significant compliance and reporting obligations on banking entities.

Comerica has put in place the compliance programs currently required by the Volcker Rule and has either divested or received extensions for any holdings in Covered Funds. Additional information on Comerica's portfolio of indirect (through funds) private equity and venture capital investments, which includes the Covered Funds, is set forth in Note 1 of the Notes to Consolidated Financial Statements located on page F-49 of the Financial Section of this report.

In May 2018, the five federal agencies with rulemaking authority with respect to the Volcker Rule released a proposal to revise the Volcker Rule. The proposal would tailor the Volcker Rule's compliance requirements to the amount of a firm's trading activity, revise the definition of trading account, clarify certain key provisions in the Volcker Rule, and modify the information companies are required to provide the federal agencies. Comerica is following the development of this proposed rule.

Derivative Transactions

As a state member bank, Comerica Bank may engage in derivative transactions, as permitted by applicable Texas and federal law. Title VII of the Dodd-Frank Act contains a comprehensive framework for over-the-counter ("OTC") derivatives transactions. Even though many of the requirements do not impact Comerica directly, since Comerica Bank does not meet the definition of swap dealer or "major swap participant," Comerica continues to review and evaluate the extent to which such requirements impact its business indirectly. On November 5, 2018, the CFTC issued a final rule that sets the permanent aggregate gross notional amount threshold for the *de minimis* exception from the definition of swap dealer at $8 billion in swap dealing activity entered into by a person over the preceding 12 months. Comerica's swap dealing activities are currently below this threshold.

The initial margin requirements for non-centrally cleared swaps and security-based swaps will be effective for Comerica's swap and security-based swap counterparties that are swap dealers on September 1, 2020, at which time such counterparties will be required to collect initial margin from Comerica. The initial margin requirements were issued for the purpose of ensuring safety

and soundness of swap trading in light of the risk to the financial system associated with non-cleared swaps activity. Comerica is currently working toward meeting compliance with the initial margin requirements.

Consumer Financial Protection Bureau and Certain Recent Consumer Finance Regulations

Comerica is subject to regulation by the Consumer Financial Protection Bureau ("CFPB"), which has a broad rule-making authority for a wide range of consumer protection laws that apply to all banks and savings institutions and possesses examination and enforcement authority over all banks and savings institutions with more than $10 billion in assets, including Comerica Bank, and their depositary affliates.

Comerica is also subject to certain state consumer protection laws, and under the Dodd-Frank Act, state attorneys general and other state officials are empowered to enforce certain federal consumer protection laws and regulations. In recent years, state authorities have increased their focus on and enforcement of consumer protection rules. These federal and state consumer protection laws apply to a broad range of Comerica's activities and to various aspects of its business and include laws relating to interest rates, fair lending, disclosures of credit terms and estimated transaction costs to consumer borrowers, debt collection practices, the use of and the provision of information to consumer reporting agencies, and the prohibition of unfair, deceptive or abusive acts or practices in connection with the offer, sale or provision of consumer financial products and services.

The CFPB has issued final rules changing the reporting requirements for lenders under the Home Mortgage Disclosure Act. The new rules expand the range of transactions subject to these requirements to include most securitized residential mortgage loans and credit lines. The rules also increase the overall amount of data required to be collected and submitted, including additional data points about the applicable loans and expanded data about the borrowers. Comerica began collecting the expanded data on January 1, 2018.

Flood Insurance Rules

Comerica continues to monitor the development and implementation of the private flood insurance requirements. To date, the joint agencies have yet to issue a final rule with respect to this remaining requirement. All other flood insurance requirements subject to the Final Rule - Loans in Areas Having Special Flood Hazards, including the escrow of premium and fees for certain real estate loans, are now effective and have been implemented by Comerica.

UNDERWRITING APPROACH

The loan portfolio is a primary source of profitability and risk, so proper loan underwriting is critical to Comerica's long-term financial success. Comerica extends credit to businesses, individuals and public entities based on sound lending principles and consistent with prudent banking practice. During the loan underwriting process, a qualitative and quantitative analysis of potential credit facilities is performed, and the credit risks associated with each relationship are evaluated. Important factors considered as part of the underwriting process for new loans and loan renewals include:

- People: Including the competence, integrity and succession planning of customers.
- Purpose: The legal, logical and productive purposes of the credit facility.
- Payment: Including the source, timing and probability of payment.
- Protection: Including obtaining alternative sources of repayment, securing the loan, as appropriate, with collateral and/or third-party guarantees and ensuring appropriate legal documentation is obtained.
- Perspective: The risk/reward relationship and pricing elements (cost of funds; servicing costs; time value of money; credit risk).

Comerica prices credit facilities to reflect risk, the related costs and the expected return, while maintaining competitiveness with other financial institutions. Loans with variable and fixed rates are underwritten to achieve expected risk-adjusted returns on the credit facilities and for the full relationship including the borrower's ability to repay the principal and interest based on such rates.

Credit Approval and Monitoring

Approval of new loan exposure and oversight and monitoring of Comerica's loan portfolio is the joint responsibility of the Credit Risk Management and Decisioning department and the Credit Underwriting department (collectively referred to as "Credit"), plus the business units ("Line'). Credit assists the Line with underwriting by providing objective financial analysis, including an assessment of the borrower's business model, balance sheet, cash flow and collateral. The approval of new loan exposure is the joint responsibility of Credit Risk Management and Decisioning and the Line. Each commercial borrower relationship is assigned an internal risk rating by Credit Risk Management and Decisioning. Further, Credit updates the assigned internal risk rating as new information becomes available as a result of periodic reviews of credit quality, a change in borrower performance or approval of new loan exposure. The goal of the internal risk rating framework is to support Comerica's risk management capability, including its ability to identify and manage changes in the credit risk profile of its portfolio, predict future

losses and price the loans appropriately for risk. Finally, the Line and Credit (including its Portfolio Risk Analytics department) work together to insure the overall credit risk within the loan portfolio is consistent with the bank's Credit Risk Appetite.

Credit Policy

Comerica maintains a comprehensive set of credit policies. Comerica's credit policies provide individual relationship managers, as well as loan committees, approval authorities based on its internal risk-rating system and establish maximum exposure limits based on risk ratings and Comerica's legal lending limit. Credit, in conjunction with the Line, monitors compliance with the credit policies and modifies the existing policies as necessary. New or modified policies/guidelines require approval by the Strategic Credit Committee, chaired by Comerica's Chief Credit Officer and comprised of senior credit, market and risk management executives.

Commercial Loan Portfolio

Commercial loans are underwritten using a comprehensive analysis of the borrower's operations. The underwriting process includes an analysis of some or all of the factors listed below:

- The borrower's business model.
- Periodic review of financial statements including financial statements audited by an independent certified public accountant when appropriate.
- The proforma financial condition including financial projections.
- The borrower's sources and uses of funds.
- The borrower's debt service capacity.
- The guarantor's financial strength.
- A comprehensive review of the quality and value of collateral, including independent third-party appraisals of machinery and equipment and commercial real estate, as appropriate, to determine the advance rates.
- Physical inspection of collateral and audits of receivables, as appropriate.

For additional information specific to our Energy loan portfolio, please see the caption, "Energy Lending" on page F-28 of the Financial Section of this report.

Commercial Real Estate (CRE) Loan Portfolio

Comerica's CRE loan portfolio consists of real estate construction and commercial mortgage loans and includes loans to real estate developers and investors and loans secured by owner-occupied real estate. Comerica's CRE loan underwriting policies are consistent with the approach described above and provide maximum loan-to-value ratios that limit the size of a loan to a maximum percentage of the value of the real estate collateral securing the loan. The loan-to-value percentage varies by the type of collateral and is limited by advance rates established by our regulators. Our loan-to-value limitations are, in certain cases, more restrictive than those required by regulators and are influenced by other risk factors such as the financial strength of the borrower or guarantor, the equity provided to the project and the viability of the project itself. CRE loans generally require cash equity. CRE loans are normally originated with full recourse or limited recourse to all principals and owners. There are limitations to the size of a single project loan and to the aggregate dollar exposure to a single guarantor.

Consumer and Residential Mortgage Loan Portfolios

Comerica's consumer and residential mortgage loan underwriting includes an assessment of each borrower's personal financial condition, including a review of credit reports and related FICO scores (a type of credit score used to assess an applicant's credit risk) and verification of income and assets, as applicable. After origination, internal risk ratings are assigned based on payment status and product type.

Comerica does not originate subprime loans. Although a standard industry definition for subprime loans (including subprime mortgage loans) does not exist, Comerica defines subprime loans as specific product offerings for higher risk borrowers, including individuals with one or a combination of high credit risk factors. These credit factors include low FICO scores, poor patterns of payment history, high debt-to-income ratios and elevated loan-to-value. Comerica generally considers subprime FICO scores to be those below 620 on a secured basis (excluding loans with cash or near-cash collateral and adequate income to make payments) and below 660 for unsecured loans. Residential mortgage loans retained in the portfolio are largely relationship based. The remaining loans are typically eligible to be sold on the secondary market. Adjustable-rate loans are limited to standard conventional loan programs.

EMPLOYEES

As of December 31, 2018, Comerica and its subsidiaries had 7,573 full-time and 478 part-time employees.

AVAILABLE INFORMATION

Comerica maintains an Internet website at *www.comerica.com* where the Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and all amendments to those reports are available without charge, as soon as reasonably practicable after those reports are filed with or furnished to the SEC. The Code of Business Conduct and Ethics for Employees, the Code of Business Conduct and Ethics for Members of the Board of Directors and the Senior Financial Officer Code of Ethics adopted by Comerica are also available on the Internet website and are available in print to any shareholder who requests them. Such requests should be made in writing to the Corporate Secretary at Comerica Incorporated, Comerica Bank Tower, 1717 Main Street, MC 6404, Dallas, Texas 75201.

In addition, pursuant to regulations adopted by the FRB, Comerica makes additional regulatory capital-related disclosures. Under these regulations, Comerica satisfies a portion of these requirements through postings on its website, and Comerica has done so and expects to continue to do so without also providing disclosure of this information through filings with the SEC.

Where we have included web addresses in this report, such as our web address and the web address of the SEC, we have included those web addresses as inactive textual references only. Except as specifically incorporated by reference into this report, information on those websites is not part hereof.

Item 1A. Risk Factors.

This report includes forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995. In addition, Comerica may make other written and oral communications from time to time that contain such statements. All statements regarding Comerica's expected financial position, strategies and growth prospects and general economic conditions Comerica expects to exist in the future are forward-looking statements. The words, "anticipates," "believes," "contemplates," "feels," "expects," "estimates," "seeks," "strives," "plans," "intends," "outlook," "forecast," "position," "target," "mission," "assume," "achievable," "potential," "strategy," "goal," "aspiration," "opportunity," "initiative," "outcome," "continue," "remain," "maintain," "on track," "trend," "objective," "looks forward," "projects," "models" and variations of such words and similar expressions, or future or conditional verbs such as "will," "would," "should," "could," "might," "can," "may" or similar expressions, as they relate to Comerica or its management, are intended to identify forward-looking statements.

Comerica cautions that forward-looking statements are subject to numerous assumptions, risks and uncertainties, which change over time. Forward-looking statements speak only as of the date the statement is made, and Comerica does not undertake to update forward-looking statements to reflect facts, circumstances, assumptions or events that occur after the date the forward-looking statements are made. Actual results could differ materially from those anticipated in forward-looking statements and future results could differ materially from historical performance.

In addition to factors mentioned elsewhere in this report or previously disclosed in Comerica's SEC reports (accessible on the SEC's website at *www.sec.gov* or on Comerica's website at *www.comerica.com*), the factors contained below, among others, could cause actual results to differ materially from forward-looking statements, and future results could differ materially from historical performance.

- **General political, economic or industry conditions, either domestically or internationally, may be less favorable than expected.**

  Local, domestic, and international events including economic, financial market, political and industry specific conditions affect the financial services industry, directly and indirectly. The economic environment and market conditions in which Comerica operates continue to be uncertain. Financial market volatility increased through the fourth quarter of 2018. Also, economic growth in the rest of the world appears to be slowing, notably in China and in Europe. Changes to U.S. trade policy and reactions to changes by U.S. trading partners have also increased stress on many U.S. businesses. Most U.S. economic indicators continue to be positive. However, some have shown signs of weakness through the end of 2018. This includes residential investment, which has cooled as mortgage rates have increased. Conditions related to inflation, recession, unemployment, volatile interest rates, international conflicts, changes in trade policies and other factors, such as real estate values, energy prices, state and local municipal budget deficits, government spending and the U.S. national debt, outside of our control may, directly and indirectly, adversely affect Comerica.

- **Governmental monetary and fiscal policies may adversely affect the financial services industry, and therefore impact Comerica's financial condition and results of operations.**

  Monetary and fiscal policies of various governmental and regulatory agencies, in particular the FRB, affect the financial services industry, directly and indirectly. The FRB regulates the supply of money and credit in the U.S. and its monetary and fiscal policies determine in a large part Comerica's cost of funds for lending and investing and the return that can be earned on such loans and investments. Changes in such policies, including changes in interest rates, such as recent increases in the federal funds rate, or changes in the FRB's balance sheet, such as the FRB's continuing balance sheet reduction, will influence the origination of loans, the value of investments, the generation of deposits and the rates received

on loans and investment securities and paid on deposits. Changes in monetary and fiscal policies are beyond Comerica's control and difficult to predict. Comerica's financial condition and results of operations could be materially adversely impacted by changes in governmental monetary and fiscal policies.

- **Comerica's operational or security systems or infrastructure, or those of third parties, could fail or be breached, which could disrupt Comerica's business and adversely impact Comerica's results of operations, liquidity and financial condition, as well as cause legal or reputational harm.**

  The potential for operational risk exposure exists throughout Comerica's business and, as a result of its interactions with, and reliance on, third parties, is not limited to Comerica's own internal operational functions. Comerica's operations rely on the secure processing, storage and transmission of confidential and other information on its technology systems and networks. These networks are subject to infrastructure failures, ongoing system maintenance and upgrades and planned network outages. The increased use of mobile and cloud technologies can heighten these and other operational risks. Any failure, interruption or breach in security of these systems could result in failures or disruptions in Comerica's customer relationship management, general ledger, deposit, loan and other systems.

  Comerica relies on its employees and third parties in its day-to-day and ongoing operations, who may, as a result of human error, misconduct, malfeasance or failure, or breach of Comerica's or of third-party systems or infrastructure, expose Comerica to risk. For example, Comerica's ability to conduct business may be adversely affected by any significant disruptions to Comerica or to third parties with whom Comerica interacts or upon whom it relies. Although Comerica has programs in place related to business continuity, disaster recovery and information security to maintain the confidentiality, integrity and availability of its systems, business applications and customer information, such disruptions may still give rise to interruptions in service to customers and loss or liability to Comerica, including loss of customer data. In addition, Comerica's ability to implement backup systems and other safeguards with respect to third-party systems is more limited than with respect to its own systems.

  Comerica's financial, accounting, data processing, backup or other operating or security systems and infrastructure may fail to operate properly or become disabled or damaged as a result of a number of factors, including events that are wholly or partially beyond its control, which could adversely affect its ability to process transactions or provide services. Such events may include sudden increases in customer transaction volume and/or customer activity; electrical, telecommunications or other major physical infrastructure outages; natural disasters such as earthquakes, tornadoes, hurricanes and floods; disease pandemics; cyber attacks; and events arising from local or larger scale political or social matters, including wars and terrorist acts.

  The occurrence of any failure or interruption in Comerica's operations or information systems, or any security breach, could cause reputational damage, jeopardize the confidentiality of customer information, result in a loss of customer business, subject Comerica to regulatory intervention or expose it to civil litigation and financial loss or liability, any of which could have a material adverse effect on Comerica.

- **Comerica relies on other companies to provide certain key components of its delivery systems, and certain failures could materially adversely affect operations.**

  Comerica faces the risk of operational disruption, failure or capacity constraints due to its dependency on third party vendors for components of its delivery systems. Third party vendors provide certain key components of Comerica's delivery systems, such as cloud-based computing, networking and storage services, payment processing services, recording and monitoring services, internet connections and network access, clearing agency services and card processing services, and additionally will be providing trust processing services starting in 2019. While Comerica conducts due diligence prior to engaging with third party vendors and performs ongoing monitoring of vendor controls, it does not control their operations. Further, while Comerica's vendor management policies and practices are designed to comply with current regulations, these policies and practices cannot eliminate this risk. In this context, any vendor failure to properly deliver these services could adversely affect Comerica's business operations, and result in financial loss, reputational harm, and/or regulatory action.

- **Comerica faces security risks, including denial of service attacks, hacking, social engineering attacks targeting Comerica's colleagues and customers, malware intrusion or data corruption attempts, and identity theft that could result in the disclosure of confidential information, adversely affect its business or reputation, and create significant legal and financial exposure.**

  Comerica's computer systems and network infrastructure and those of third parties, on which Comerica is highly dependent, are subject to security risks and could be susceptible to cyber attacks, such as denial of service attacks, hacking, terrorist activities or identity theft. Comerica's business relies on the secure processing, transmission, storage and retrieval of confidential, proprietary and other information in its computer and data management systems and networks, and in the computer and data management systems and networks of third parties. In addition, to access Comerica's network,

products and services, its customers and other third parties may use personal mobile devices or computing devices that are outside of its network environment and are subject to their own cybersecurity risks.

Cyber attacks could include computer viruses, malicious or destructive code, phishing attacks, denial of service or information, ransomware, improper access by employees or vendors, attacks on personal email of employees, ransom demands to not expose security vulnerabilities in Comerica's systems or the systems of third parties, or other security breaches, and could result in the destruction or exfiltration of data and systems. As cyber threats continue to evolve, Comerica may be required to expend significant additional resources to continue to modify or enhance its protective measures or to investigate and remediate any information security vulnerabilities or incidents. Despite efforts to ensure the integrity of Comerica's systems and implement controls, processes, policies and other protective measures, Comerica may not be able to anticipate all security breaches, nor may it be able to implement guaranteed preventive measures against such security breaches. Cyber threats are rapidly evolving and Comerica may not be able to anticipate or prevent all such attacks and could be held liable for any security breach or loss.

Although Comerica has programs in place related to business continuity, disaster recovery and information security to maintain the confidentiality, integrity, and availability of its systems, business applications and customer information, such disruptions may still give rise to interruptions in service to customers and loss or liability to Comerica, including loss of customer data. Like other financial services firms, Comerica and its third party providers continue to be the subject of cyber attacks. Although to this date Comerica has not experienced any material losses or other material consequences related to cyber attacks, future cyber attacks could be more disruptive and damaging, and Comerica may not be able to anticipate or prevent all such attacks. Further, cyber attacks may not be detected in a timely manner.

Cyber attacks or other information or security breaches, whether directed at Comerica or third parties, may result in a material loss or have material consequences. Furthermore, the public perception that a cyber attack on Comerica's systems has been successful, whether or not this perception is correct, may damage its reputation with customers and third parties with whom it does business. Hacking of personal information and identity theft risks, in particular, could cause serious reputational harm. A successful penetration or circumvention of system security could cause Comerica serious negative consequences, including loss of customers and business opportunities, costs associated with maintaining business relationships after an attack or breach; significant business disruption to Comerica's operations and business, misappropriation, exposure, or destruction of its confidential information, intellectual property, funds, and/or those of its customers; or damage to Comerica's or Comerica's customers' and/or third parties' computers or systems, and could result in a violation of applicable privacy laws and other laws, litigation exposure, regulatory fines, penalties or intervention, loss of confidence in Comerica's security measures, reputational damage, reimbursement or other compensatory costs, additional compliance costs, and could adversely impact its results of operations, liquidity and financial condition. In addition, Comerica may not have adequate insurance coverage to compensate for losses from a cybersecurity event.

- **Proposed revenue enhancements and efficiency improvements may not be achieved.**

In July 2016, Comerica announced its efficiency and revenue program, GEAR Up (the "program") and initial financial targets. Several initiatives continue to be implemented within the program. There may be changes in the scope or assumptions underlying the program, delays in the anticipated timing of activities related to the program and higher than expected or unanticipated costs to implement them, and some benefits may not be fully achieved. As well, even if the program is successful, many factors can influence the amount of core noninterest expenses, some of which are not wholly in our control, including changing regulations, benefits and health care costs, technology and cybersecurity investments, outside processing expenses and litigation.

Furthermore, the implementation of the program may have unintended impacts on Comerica's ability to attract and retain business, customers and employees, and could result in disruptions to systems, processes, controls and procedures. Any revenue enhancement ideas may not be successful in the marketplace. Accordingly, Comerica's results of operations and profitability may be negatively impacted, making it less competitive and potentially causing a loss of market share. Additionally, Comerica's future performance is subject to the various risks inherent to its business and operations.

- **Comerica must maintain adequate sources of funding and liquidity to meet regulatory expectations, support its operations and fund outstanding liabilities.**

Comerica's liquidity and ability to fund and run its business could be materially adversely affected by a variety of conditions and factors, including financial and credit market disruptions and volatility, a lack of market or customer confidence in financial markets in general, or deposit competition as interest rates increase, which may result in a loss of customer deposits or outflows of cash or collateral and/or adversely affect Comerica's ability to access capital markets on favorable terms.

Other conditions and factors that could materially adversely affect Comerica's liquidity and funding include a lack of market or customer confidence in, or negative news about, Comerica or the financial services industry generally which also may result in a loss of deposits and/or negatively affect Comerica's ability to access the capital markets; the loss of customer deposits to alternative investments; counterparty availability; interest rate fluctuations; general economic conditions; and the legal, regulatory, accounting and tax environments governing Comerica's funding transactions. Many of the above conditions and factors may be caused by events over which Comerica has little or no control. There can be no assurance that significant disruption and volatility in the financial markets will not occur in the future. Further, Comerica's customers may be adversely impacted by such conditions, which could have a negative impact on Comerica's business, financial condition and results of operations.

Further, if Comerica is unable to continue to fund assets through customer bank deposits or access funding sources on favorable terms, or if Comerica suffers an increase in borrowing costs or otherwise fails to manage liquidity effectively, Comerica's liquidity, operating margins, financial condition and results of operations may be materially adversely affected.

- **Compliance with stringent capital requirements may adversely affect Comerica.**

  Comerica is required to satisfy stringent regulatory capital standards, as set forth in the "Supervision and Regulation" section of this report. These requirements, and any other new laws or regulations related to capital and liquidity, could adversely affect Comerica's ability to pay dividends or make equity repurchases, or could require Comerica to reduce business levels or to raise capital, including in ways that may adversely affect its results of operations or financial condition and/or existing shareholders. Maintaining higher levels of capital may reduce Comerica's profitability and otherwise adversely affect its business, financial condition, or results of operations.

- **Declines in the businesses or industries of Comerica's customers could cause increased credit losses or decreased loan balances, which could adversely affect Comerica.**

  Comerica's business customer base consists, in part, of customers in volatile businesses and industries such as the energy industry, the automotive production industry and the real estate business. These industries are sensitive to global economic conditions, supply chain factors and/or commodities prices. Any decline in one of those customers' businesses or industries could cause increased credit losses, which in turn could adversely affect Comerica. Further, any decline in these businesses or industries could cause decreased borrowings, either due to reduced demand or reductions in the borrowing base available for each customer loan.

  For more information regarding certain of Comerica's lines of business, please see "Concentration of Credit Risk," "Commercial Real Estate Lending," "Residential Real Estate Lending" and "Energy Lending" on pages F-26 through F-28 of the Financial Section of this report.

- **Unfavorable developments concerning credit quality could adversely affect Comerica's financial results.**

  Although Comerica regularly reviews credit exposure related to its customers and various industry sectors in which it has business relationships, default risk may arise from events or circumstances that are difficult to detect or foresee. Under such circumstances, Comerica could experience an increase in the level of provision for credit losses, nonperforming assets, net charge-offs and reserve for credit losses, which could adversely affect Comerica's financial results.

- **Changes in regulation or oversight may have a material adverse impact on Comerica's operations.**

  Comerica is subject to extensive regulation, supervision and examination by the U.S. Treasury, the Texas Department of Banking, the FDIC, the FRB, the OCC, the SEC, FINRA, DOL, MSRB and other regulatory bodies. Such regulation and supervision governs and limits the activities in which Comerica may engage. Regulatory authorities have extensive discretion in their supervisory and enforcement activities, including the imposition of restrictions on Comerica's operations and ability to make acquisitions, investigations and limitations related to Comerica's securities, the classification of Comerica's assets and determination of the level of Comerica's allowance for loan losses. Any change in such regulation and oversight, whether in the form of regulatory policy, regulations, legislation or supervisory action, may have a material adverse impact on Comerica's business, financial condition or results of operations. The impact of any future legislation or regulatory actions may adversely affect Comerica's businesses or operations.

- **Cybersecurity and data privacy are areas of heightened legislative and regulatory focus.**

  As cybersecurity and data privacy risks for banking organizations and the broader financial system have significantly increased in recent years, cybersecurity and data privacy issues have become the subject of increasing legislative and regulatory focus. The federal bank regulatory agencies have proposed enhanced cyber risk management standards, which would apply to a wide range of large financial institutions and their third-party service providers, including Comerica and its bank subsidiaries, and would focus on cyber risk governance and management, management of internal and external dependencies, and incident response, cyber resilience and situational awareness. Several states have also proposed or adopted cybersecurity legislation and regulations, which require, among other things, notification to affected individuals

when there has been a security breach of their personal data. For more information regarding cybersecurity regulation, refer to the "Supervision and Regulation" section of this report.

Comerica receives, maintains and stores non-public personal information of Comerica's customers and counterparties, including, but not limited to, personally identifiable information and personal financial information. The sharing, use, disclosure and protection of this information are governed by federal and state law. Both personally identifiable information and personal financial information is increasingly subject to legislation and regulation, the intent of which is to protect the privacy of personal information that is collected and handled. For example, in June of 2018, the Governor of California signed into law the CCPA. The CCPA, which becomes effective on January 1, 2020, applies to for-profit businesses that conduct business in California and meet certain revenue or data collection thresholds, including Comerica. For more information regarding data privacy regulation, refer to the "Supervision and Regulation" section of this report.

Comerica may become subject to new legislation or regulation concerning cybersecurity or the privacy of personally identifiable information and personal financial information or of any other information Comerica may store or maintain. Comerica could be adversely affected if new legislation or regulations are adopted or if existing legislation or regulations are modified such that Comerica is required to alter its systems or require changes to its business practices or privacy policies. If cybersecurity, data privacy, data protection, data transfer or data retention laws are implemented, interpreted or applied in a manner inconsistent with Comerica's current practices, it may be subject to fines, litigation or regulatory enforcement actions or ordered to change its business practices, policies or systems in a manner that adversely impacts Comerica's operating results.

- **Fluctuations in interest rates and their impact on deposit pricing could adversely affect Comerica's net interest income and balance sheet.**

The operations of financial institutions such as Comerica are dependent to a large degree on net interest income, which is the difference between interest income from loans and investments and interest expense on deposits and borrowings. Prevailing economic conditions and the trade, fiscal and monetary policies of the federal government and various regulatory agencies all affect market rates of interest and the availability and cost of credit, which in turn significantly affect financial institutions' net interest income and the market value of its investment securities. For a discussion of Comerica's interest rate sensitivity, please see, "Market and Liquidity Risk" beginning on page F-29 of the Financial Section of this report.

While recent interest rate rises have benefited Comerica's net interest income, higher interest rates can also lead to fewer loan originations, lower returns on investment securities and increased competition for deposits. In particular, Comerica's funding costs may continue to increase if it raises deposit rates to avoid losing customer deposits, or if it loses customer deposits and must rely on more expensive sources of funding. Higher funding costs will reduce Comerica's net interest margin and net interest income.

Volatility in interest rates can also result in disintermediation, which is the flow of funds away from financial institutions into direct investments, such as federal government and corporate securities and other investment vehicles, which, because of the absence of federal insurance premiums and reserve requirements, generally pay higher rates of return than financial institutions. Comerica's financial results could be materially adversely impacted by changes in financial market conditions.

- **Interest rates on Comerica's outstanding financial instruments might be subject to change based on developments related to LIBOR, which could adversely affect its revenue, expenses, and the value of those financial instruments.**

On July 27, 2017, the United Kingdom's Financial Conduct Authority, which regulates LIBOR, publicly announced that it intends to stop persuading or compelling banks to submit LIBOR rates after 2021. It is expected that a transition away from the widespread use of LIBOR to alternative rates will occur over the course of the next several years. While there is no consensus on what rate or rates may become accepted alternatives to LIBOR, the Alternative Reference Rates Committee, a steering committee comprised of U.S. financial market participants, selected and the Federal Reserve Bank of New York started in May 2018 to publish the Secured Overnight Finance Rate ("SOFR") as an alternative to LIBOR. SOFR is a broad measure of the cost of borrowing cash in the overnight U.S. treasury repo market. At this time, it is impossible to predict whether the SOFR or another reference rate will become an accepted alternative to LIBOR.

Comerica's loan composition at December 31, 2018 was 62 percent 30-day LIBOR, 13 percent other LIBOR (primarily 60-day), 16 percent prime and 9 percent fixed rate. The market transition away from LIBOR to an alternative reference rate, including SOFR, is complex and could have a range of adverse effects on our business, financial condition and results of operations. In particular, any such transition could:

  - adversely affect the interest rates paid or received on, and the revenue and expenses associate with, Comerica's floating rate obligations, loans, deposits, derivatives, and other financial instruments tied to LIBOR rates, or other securities or financial arrangements given LIBOR's role in determining market interest rates globally;

- adversely affect the value of Comerica's floating rate obligations, loans, deposits, derivatives, and other financial instruments tied to LIBOR rates, or other securities or financial arrangements given LIBOR's role in determining market interest rates globally;

- prompt inquiries or other actions from regulators in respect of Comerica's preparation and readiness for the replacement of LIBOR with an alternative reference rate;

- result in disputes, litigation or other actions with counterparties regarding the interpretation and enforceability of certain fallback language in LIBOR-based securities; and

- require the transition to or development of appropriate systems and analytics to effectively transition Comerica's risk management processes from LIBOR-based products to those based on the applicable alternative pricing benchmark, such as SOFR.

The manner and impact of this transition, as well as the effect of these developments on Comerica's funding costs, loan and investment and trading securities portfolios, asset-liability management, and business, is uncertain.

- **Reduction in our credit ratings could adversely affect Comerica and/or the holders of its securities.**

Rating agencies regularly evaluate Comerica, and their ratings are based on a number of factors, including Comerica's financial strength as well as factors not entirely within its control, including conditions affecting the financial services industry generally. There can be no assurance that Comerica will maintain its current ratings. In February 2016, Standard & Poor's downgraded Comerica's long-term senior credit ratings one notch to BBB+ and Comerica Bank's long and short-term credit ratings one notch to A- and A-2, respectively. While recent credit rating actions have had little to no detrimental impact on Comerica's profitability, borrowing costs, or ability to access the capital markets, future downgrades to Comerica's or its subsidiaries' credit ratings could adversely affect Comerica's profitability, borrowing costs, or ability to access the capital markets or otherwise have a negative effect on Comerica's results of operations or financial condition. If such a reduction placed Comerica's or its subsidiaries' credit ratings below investment grade, it could also create obligations or liabilities under the terms of existing arrangements that could increase Comerica's costs under such arrangements. Additionally, a downgrade of the credit rating of any particular security issued by Comerica or its subsidiaries could negatively affect the ability of the holders of that security to sell the securities and the prices at which any such securities may be sold.

- **Damage to Comerica's reputation could damage its businesses.**

Reputational risk is an increasing concern for businesses as customers are interested in doing business with companies they admire and trust. Such risks include compliance issues, operational challenges, or a strategic, high profile event. Comerica's business is based on the trust of its customers, communities, and entire value chain, which makes managing reputational risk extremely important. News or other publicity that impairs Comerica's reputation, or the reputation of the financial services industry generally, can therefore cause significant harm to Comerica's business and prospects. Further, adverse publicity or negative information posted on social media websites regarding Comerica, whether or not true, may result in harm to Comerica's prospects.

- **Comerica may not be able to utilize technology to efficiently and effectively develop, market, and deliver new products and services to its customers.**

The financial services industry experiences rapid technological change with regular introductions of new technology-driven products and services. The ability to access and use technology is an increasingly important competitive factor in the financial services industry, and having the right technology is a critically important component to customer satisfaction. As well, the efficient and effective utilization of technology enables financial institutions to reduce costs. Comerica's future success depends, in part, upon its ability to address the needs of its customers by using technology to market and deliver products and services that will satisfy customer demands, meet regulatory requirements, and create additional efficiencies in Comerica's operations. Comerica may not be able to effectively develop new technology-driven products and services or be successful in marketing or supporting these products and services to its customers, which could have a material adverse impact on Comerica's financial condition and results of operations.

- **Competitive product and pricing pressures within Comerica's markets may change.**

Comerica operates in a very competitive environment, which is characterized by competition from a number of other financial institutions in each market in which it operates. Comerica competes in terms of products and pricing with large national and regional financial institutions and with smaller financial institutions. Some of Comerica's larger competitors, including certain nationwide banks that have a significant presence in Comerica's market area, may make available to their customers a broader array of product, pricing and structure alternatives and, due to their asset size, may more easily absorb credit losses in a larger overall portfolio. Some of Comerica's competitors (larger or smaller) may have more

liberal lending policies and processes. Increasingly, Comerica competes with other companies based on financial technology and capabilities, such as mobile banking applications and funds transfer.

Additionally, the financial services industry is subject to extensive regulation. For more information, see the "Supervision and Regulation" section of this report. Such regulations may require significant additional investments in technology, personnel or other resources or place limitations on the ability of financial institutions, including Comerica, to engage in certain activities. Comerica's competitors may be subject to a significantly different or reduced degree of regulation due to their asset size or types of products offered. They may also have the ability to more efficiently utilize resources to comply with regulations or may be able to more effectively absorb the costs of regulations into their existing cost structure.

In addition to banks, Comerica's banking subsidiaries also face competition from other financial intermediaries, including savings and loan associations, consumer finance companies, leasing companies, venture capital funds, credit unions, investment banks, insurance companies and securities firms. Competition among providers of financial products and services continues to increase as technology advances have lowered the barriers to entry for financial technology companies, with customers having the opportunity to select from a growing variety of traditional and nontraditional alternatives, including crowdfunding, digital wallets and money transfer services. The ability of non-banking financial institutions to provide services previously limited to commercial banks has intensified competition. Because non-banking financial institutions are not subject to many of the same regulatory restrictions as banks and bank holding companies, they can often operate with greater flexibility and lower cost structures.

If Comerica is unable to compete effectively in products and pricing in its markets, business could decline, which could have a material adverse effect on Comerica's business, financial condition or results of operations.

- **The soundness of other financial institutions could adversely affect Comerica.**

  Comerica's ability to engage in routine funding transactions could be adversely affected by the actions and commercial soundness of other financial institutions. Financial services institutions are interrelated as a result of trading, clearing, counterparty or other relationships. Comerica has exposure to many different industries and counterparties, and it routinely executes transactions with counterparties in the financial industry, including brokers and dealers, commercial banks, investment banks, mutual and hedge funds, and other institutional clients. As a result, defaults by, or even rumors or questions about, one or more financial services institutions, or the financial services industry generally, have led, and may further lead, to market-wide liquidity problems and could lead to losses or defaults by us or by other institutions. Many of these transactions could expose Comerica to credit risk in the event of default of its counterparty or client. In addition, Comerica's credit risk may be impacted when the collateral held by it cannot be realized or is liquidated at prices not sufficient to recover the full amount of the financial instrument exposure due to Comerica. There is no assurance that any such losses would not adversely affect, possibly materially, Comerica.

- **The introduction, implementation, withdrawal, success and timing of business initiatives and strategies may be less successful or may be different than anticipated, which could adversely affect Comerica's business.**

  Comerica makes certain projections and develops plans and strategies for its banking and financial products. If Comerica does not accurately determine demand for its banking and financial product needs, it could result in Comerica incurring significant expenses without the anticipated increases in revenue, which could result in a material adverse effect on its business.

- **Changes in customer behavior may adversely impact Comerica's business, financial condition and results of operations.**

  Comerica uses a variety of financial tools, models and other methods to anticipate customer behavior as a part of its strategic planning and to meet certain regulatory requirements. Individual, economic, political, industry-specific conditions and other factors outside of Comerica's control, such as fuel prices, energy costs, tariffs, real estate values or other factors that affect customer income levels, could alter predicted customer borrowing, repayment, investment and deposit practices. Such a change in these practices could materially adversely affect Comerica's ability to anticipate business needs and meet regulatory requirements.

  Recently, there have been discussions regarding potential changes to U.S. trade policies, legislation, treaties and tariffs, including trade policies and tariffs affecting China, the European Union, Canada and Mexico and retaliatory tariffs by such countries. Tariffs and retaliatory tariffs have been imposed, and additional tariffs and retaliatory tariffs have been proposed. Also, on October 1, 2018, the United States, Canada and Mexico agreed to a new trade deal, the United States-Mexico-Canada Agreement ("USMCA"), to replace the North American Free Trade Agreement. The USMCA is subject to congressional approval and various components of the USMCA are not effective until 2020. These and any other changes in tariffs, retaliatory tariffs or other trade restrictions on products and materials that Comerica's customers import or export could cause the prices of their products to increase, which could reduce demand for such products, or reduce

customer margins, and adversely impact their revenues, financial results and ability to service debt; in turn, this could adversely affect Comerica's financial condition and results of operations.

Further, difficult economic conditions may negatively affect consumer confidence levels. A decrease in consumer confidence levels would likely aggravate the adverse effects of these difficult market conditions on Comerica, Comerica's customers and others in the financial institutions industry.

- **Management's ability to maintain and expand customer relationships may differ from expectations.**

The financial services industry is very competitive. Comerica not only vies for business opportunities with new customers, but also competes to maintain and expand the relationships it has with its existing customers. While management believes that it can continue to grow many of these relationships, Comerica will continue to experience pressures to maintain these relationships as its competitors attempt to capture its customers. Failure to create new customer relationships and to maintain and expand existing customer relationships to the extent anticipated may adversely impact Comerica's earnings.

- **Methods of reducing risk exposures might not be effective.**

Instruments, systems and strategies used to hedge or otherwise manage exposure to various types of credit, market, liquidity, operational, compliance, financial reporting and strategic risks could be less effective than anticipated. As a result, Comerica may not be able to effectively mitigate its risk exposures in particular market environments or against particular types of risk, which could have a material adverse impact on Comerica's business, financial condition or results of operations.

For more information regarding risk management, please see "Risk Management" on pages F-21 through F-34 of the Financial Section of this report.

- **Catastrophic events, including, but not limited to, hurricanes, tornadoes, earthquakes, fires, droughts and floods, may adversely affect the general economy, financial and capital markets, specific industries, and Comerica.**

Comerica has significant operations and a significant customer base in California, Texas, Florida and other regions where natural and other disasters may occur. These regions are known for being vulnerable to natural disasters and other risks, such as tornadoes, hurricanes, earthquakes, fires, droughts and floods, the nature and severity of which may be impacted by climate change. These types of natural catastrophic events have at times disrupted the local economies, Comerica's business and customers, and have caused physical damage to Comerica's property in these regions. In addition, catastrophic events occurring in other regions of the world may have an impact on Comerica's customers and in turn, on Comerica. Comerica's business continuity and disaster recovery plans may not be successful upon the occurrence of one of these scenarios, and a significant catastrophic event anywhere in the world could materially adversely affect Comerica's operating results.

- **Tax regulations could be subject to potential legislative, administrative or judicial changes or interpretations.**

Federal income tax treatment of corporations may be clarified and/or modified by legislative, administrative or judicial changes or interpretations at any time. Any such changes could adversely affect Comerica, either directly, or indirectly as a result of effects on Comerica's customers. For example, the tax reform bill enacted on December 22, 2017 has had, and is expected to continue to have, far-reaching and significant effects on Comerica, its customers and the U.S. economy, including commercial customer borrowings due to the increase in cash flows as a result of the reduction in the corporate statutory tax rate.

- **Any future strategic acquisitions or divestitures may present certain risks to Comerica's business and operations.**

Difficulties in capitalizing on the opportunities presented by a future acquisition may prevent Comerica from fully achieving the expected benefits from the acquisition, or may cause the achievement of such expectations to take longer to realize than expected.

Further, the assimilation of the acquired entity's customers and markets could result in higher than expected deposit attrition, loss of key employees, disruption of Comerica's businesses or the businesses of the acquired entity or otherwise adversely affect Comerica's ability to maintain relationships with customers and employees or achieve the anticipated benefits of the acquisition. These matters could have an adverse effect on Comerica for an undetermined period. Comerica will be subject to similar risks and difficulties in connection with any future decisions to downsize, sell or close units or otherwise change the business mix of Comerica.

- **Management's ability to retain key officers and employees may change.**

Comerica's future operating results depend substantially upon the continued service of its executive officers and key personnel. Comerica's future operating results also depend in significant part upon its ability to attract and retain qualified management, financial, technical, marketing, sales and support personnel. Competition for qualified personnel is intense,

and Comerica cannot ensure success in attracting or retaining qualified personnel. There may be only a limited number of persons with the requisite skills to serve in these positions, and it may be increasingly difficult for Comerica to hire personnel over time.

Further, Comerica's ability to retain key officers and employees may be impacted by legislation and regulation affecting the financial services industry. In 2016, the FRB, OCC and several other federal financial regulators revised and re-proposed rules to implement Section 956 of the Dodd-Frank Act. Section 956 directed regulators to jointly prescribe regulations or guidelines prohibiting incentive-based payment arrangements, or any feature of any such arrangement, at covered financial institutions that encourage inappropriate risks by providing excessive compensation or that could lead to a material financial loss. Consistent with the Dodd-Frank Act, the proposed rule would impose heightened standards for institutions with $50 billion or more in total consolidated assets, which includes Comerica. For these larger institutions, the proposed rule would require the deferral of at least 40 percent of incentive-based payments for designated executives and significant risk-takers who individually have the ability to expose the institution to possible losses that are substantial in relation to the institution's size, capital or overall risk tolerance. Moreover, incentive-based compensation of these individuals would be subject to potential clawback for seven years following vesting. Further, the rule imposes enhanced risk management controls and governance and internal policy and procedure requirements with respect to incentive compensation. Accordingly, Comerica may be at a disadvantage to offer competitive compensation compared to other financial institutions (as referenced above) or companies in other industries, which may not be subject to the same requirements.

Comerica's business, financial condition or results of operations could be materially adversely affected by the loss of any of its key employees, or Comerica's inability to attract and retain skilled employees.

- **Legal and regulatory proceedings and related matters with respect to the financial services industry, including those directly involving Comerica and its subsidiaries, could adversely affect Comerica or the financial services industry in general.**

Comerica has been, and may in the future be, subject to various legal and regulatory proceedings. It is inherently difficult to assess the outcome of these matters, and there can be no assurance that Comerica will prevail in any proceeding or litigation. Any such matter could result in substantial cost and diversion of Comerica's efforts, which by itself could have a material adverse effect on Comerica's financial condition and operating results. Further, adverse determinations in such matters could result in fines or actions by Comerica's regulators that could materially adversely affect Comerica's business, financial condition or results of operations.

Comerica establishes reserves for legal claims when payments associated with the claims become probable and the costs can be reasonably estimated. Comerica may still incur legal costs for a matter even if it has not established a reserve. In addition, due to the inherent subjectivity of the assessments and unpredictability of the outcome of legal proceedings, the actual cost of resolving a legal claim may be substantially higher than any amounts reserved for that matter. The ultimate resolution of a pending legal proceeding, depending on the remedy sought and granted, could adversely affect Comerica's results of operations and financial condition.

- **Comerica may incur losses due to fraud.**

Fraudulent activity can take many forms and has escalated as more tools for accessing financial services emerge, such as real-time payments. Fraud schemes are broad and continuously evolving. Examples include but are not limited to: debit card/credit card fraud, check fraud, mechanical devices attached to ATM machines, social engineering and phishing attacks to obtain personal information, impersonation of our clients through the use of falsified or stolen credentials, employee fraud, information theft and other malfeasance. Increased deployment of technologies, such as chip card technology, defray and reduce aspects of fraud; however, criminals are turning to other sources to steal personally identifiable information in order to impersonate the consumer to commit fraud. Many of these data compromises have been widely reported in the media. Further, as a result of the increased sophistication of fraud activity, Comerica continues to invest in systems, resources, and controls to detect and prevent fraud. This will result in continued ongoing investments in the future.

- **Terrorist activities or other hostilities may adversely affect the general economy, financial and capital markets, specific industries, and Comerica.**

Terrorist attacks or other hostilities may disrupt Comerica's operations or those of its customers. In addition, these events have had and may continue to have an adverse impact on the U.S. and world economy in general and consumer confidence and spending in particular, which could harm Comerica's operations. Any of these events could increase volatility in the U.S. and world financial markets, which could harm Comerica's stock price and may limit the capital resources available to Comerica and its customers. This could have a material adverse impact on Comerica's operating results, revenues and costs and may result in increased volatility in the market price of Comerica's common stock.

- **Changes in accounting standards could materially impact Comerica's financial statements.**

  From time to time accounting standards setters change the financial accounting and reporting standards that govern the preparation of Comerica's financial statements. These changes can be difficult to predict and can materially impact how Comerica records and reports its financial condition and results of operations. In some cases, Comerica could be required to apply a new or revised standard retroactively, resulting in changes to previously reported financial results, or a cumulative charge to retained earnings. In particular, the Financial Accounting Standards Board ("FASB") has issued a new accounting standard, CECL, for the recognition and measurement of credit losses for loans and debt securities. The new standard will be effective for Comerica in the first quarter 2020. The anticipated change in loan loss reserves due to CECL is currently unknown and is dependent upon many factors that are yet to be determined, such as the economic environment at adoption and any future FASB clarifications. Comerica anticipates that CECL will have an impact on its loan loss reserves and retained earnings, as well as how it manages its capital.

- **Comerica's accounting policies and processes are critical to the reporting of financial condition and results of operations. They require management to make estimates about matters that are uncertain.**

  Accounting policies and processes are fundamental to how Comerica records and reports its financial condition and results of operations. Management must exercise judgment in selecting and applying many of these accounting policies and processes so they comply with U.S. Generally Accepted Accounting Principles ("GAAP"). In some cases, management must select the accounting policy or method to apply from two or more alternatives, any of which may be reasonable under the circumstances, yet may result in the Company reporting materially different results than would have been reported under a different alternative.

  Management has identified certain accounting policies as being critical because they require management's judgment to make difficult, subjective or complex judgments about matters that are uncertain. Materially different amounts could be reported under different conditions or using different assumptions or estimates. Comerica has established detailed policies and control procedures that are intended to ensure these critical accounting estimates and judgments are well controlled and applied consistently. In addition, the policies and procedures are intended to ensure that the process for changing methodologies occurs in an appropriate manner. Because of the uncertainty surrounding management's judgments and the estimates pertaining to these matters, Comerica cannot guarantee that it will not be required to adjust accounting policies or restate prior period financial statements. See "Critical Accounting Policies" on pages F-35 through F-37 of the Financial Section of this report and Note 1 of the Notes to Consolidated Financial Statements located on pages F-46 through F-58 of the Financial Section of this report.

- **Controls and procedures may not prevent or detect all errors or acts of fraud.**

  Controls and procedures are designed to provide reasonable assurance that information required to be disclosed in reports Comerica files or submits under the Exchange Act is accurately accumulated and communicated to management, and recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures or internal controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met, due to certain inherent limitations. These limitations include the realities that judgments in decision making can be faulty, that alternative reasoned judgments can be drawn, that breakdowns can occur because of an error or mistake, or that controls may be fraudulently circumvented. Accordingly, because of the inherent limitations in control systems, misstatements due to error or fraud may occur and not be detected.

- **Comerica's stock price can be volatile.**

  Stock price volatility may make it more difficult for shareholders to resell their common stock when they want and at prices they find attractive. Comerica's stock price can fluctuate significantly in response to a variety of factors including, among other things:

  - Actual or anticipated variations in quarterly results of operations.
  - Recommendations or projections by securities analysts.
  - Operating and stock price performance of other companies that investors deem comparable to Comerica.
  - News reports relating to trends, concerns and other issues in the financial services industry.
  - Perceptions in the marketplace regarding Comerica and/or its competitors.
  - New technology used, or services offered, by competitors.
  - Significant acquisitions or business combinations, strategic partnerships, joint ventures or capital commitments by or involving Comerica or its competitors.
  - Changes in dividends and capital returns.
  - Changes in government regulations.
  - Cyclical fluctuations.

- Geopolitical conditions such as acts or threats of terrorism or military conflicts.
- Activity by short sellers and changing government restrictions on such activity.

General market fluctuations, including real or anticipated changes in the strength of the economy; industry factors and general economic and political conditions and events, such as economic slowdowns or recessions; interest rate changes, oil price volatility or credit loss trends, among other factors, could also cause Comerica's stock price to decrease regardless of operating results.

For the above and other reasons, the market price of Comerica's securities may not accurately reflect the underlying value of the securities, and investors should consider this before relying on the market prices of Comerica's securities when making an investment decision.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

The executive offices of Comerica are located in the Comerica Bank Tower, 1717 Main Street, Dallas, Texas 75201. Comerica Bank occupies six floors of the building, plus additional space on the building's lower level. Comerica does not own the Comerica Bank Tower space, but has naming rights to the building and leases the space from an unaffiliated third party. The lease for such space used by Comerica and its subsidiaries extends through September 2028. Comerica's Michigan headquarters are located in a 10-story building in the central business district of Detroit, Michigan at 411 W. Lafayette, Detroit, Michigan 48226. Such building is owned by Comerica Bank. As of December 31, 2018, Comerica, through its banking affiliates, operated at a total of 550 locations. This includes banking centers, trust services locations, and/or loan production or other financial services offices, primarily in the States of Texas, Michigan, California, Florida and Arizona. Of the 550 locations, 221 were owned and 329 were leased. As of December 31, 2018, affiliates also operated from leased spaces in Denver, Colorado; Wilmington, Delaware; Oakbrook Terrace, Illinois; Boston, Massachusetts; Minneapolis, Minnesota; Morristown, New Jersey; New York, New York; Rocky Mount, North Carolina; Memphis, Tennessee; McLean, Virginia; Bellevue, Washington; Monterrey, Mexico; Toronto, Ontario, Canada and Windsor, Ontario, Canada. Comerica and its subsidiaries own, among other properties, a check processing center in Livonia, Michigan, and three buildings in Auburn Hills, Michigan, used mainly for lending functions and operations.

Item 3. Legal Proceedings.

Please see Note 21 of the Notes to Consolidated Financial Statements located on pages F-93 through F-94 of the Financial Section of this report.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

Market Information, Holders of Common Stock and Dividends

The common stock of Comerica Incorporated is traded on the New York Stock Exchange (NYSE Trading Symbol: CMA). At February 8, 2019, there were approximately 8,844 record holders of Comerica's common stock.

On January 22, 2019, Comerica's Board of Directors approved a dividend of $0.67 per common share payable on April 1, 2019 to shareholders of record on March 15, 2019. Subject to approval of the Board of Directors and applicable regulatory requirements, Comerica expects to continue its policy of paying regular cash dividends on a quarterly basis. A discussion of Comerica's dividend restrictions is set forth in Note 20 of the Notes to Consolidated Financial Statements located on pages F-92 through F-93 of the Financial Section of this report, in the "Capital" section on pages F-18 through F-20 of the Financial Section of this report and in the "Supervision and Regulation" section of this report.

Performance Graph

Our performance graph is available under the caption "Performance Graph" on page F-2 of the Financial Section of this report.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

Authorization to repurchase up to an additional 10 million shares of Comerica Incorporated outstanding common stock was announced by the Board on July 24, 2018. As of December 31, 2018, a total of 65.2 million shares have been authorized for repurchase under the equity repurchase program since its inception in 2010. There is no expiration date for Comerica's equity repurchase program.

Previously, Comerica's equity repurchase program also covered the repurchase of up to 14.1 million warrants (12.1 million share-equivalents). All unexercised warrants expired according to their terms in the quarter ended December 31, 2018.

In January 2019, the Board also authorized the repurchase of up to 15 million additional shares of Comerica Incorporated outstanding common stock.

The following table summarizes Comerica's equity repurchase activity for the year ended December 31, 2018.

(shares in thousands)	Total Number of Shares and Warrants Purchased as Part of Publicly Announced Repurchase Plans or Programs (a)	Remaining Repurchase Authorization (b)	Total Number of Shares Purchased (c)	Average Price Paid Per Share
Total first quarter 2018	1,565	8,714	1,674	$ 95.16
Total second quarter 2018	1,755	6,952	1,759	96.32
Total third quarter 2018	5,137	11,706 (d)	5,143	97.32
October 2018	4,701	6,987	4,703	79.17
November 2018	—	6,346	—	—
December 2018	1,615	4,707	1,615	79.16
Total fourth quarter 2018	6,316	4,707	6,318	79.16
Total 2018	14,773	4,707	14,894	$ 89.26

(a) The Corporation made no repurchases of warrants under the repurchase program during the year ended December 31, 2018. Upon exercise of a warrant, the number of shares with a value equal to the aggregate exercise price is withheld from an exercising warrant holder as payment (known as a "net exercise provision"). During the year ended December 31, 2018, the Corporation withheld the equivalent of approximately 309,000 shares to cover an aggregate of $9 million in exercise price and issued approximately 585,000 shares to the exercising warrant holders. Shares withheld in connection with the net exercise provision are not included in the total number of shares or warrants purchased in the above table. All unexercised warrants expired in the fourth quarter.

(b) Maximum number of shares and warrants that may yet be purchased under the publicly announced plans or programs. In January 2019, the Board rescinded its warrant repurchase authorization following the expiration of all unexercised warrants.

(c) Includes approximately 121,000 shares (including 2,000 shares in the quarter ended December 31, 2018) purchased pursuant to deferred compensation plans and shares purchased from employees to pay for taxes related to restricted stock vesting under the terms of an employee share-based compensation plan during the year ended December 31, 2018. These transactions are not considered part of the Corporation's repurchase program.

(d) Includes July 24, 2018 equity repurchase authorization for an additional 10 million shares.

Item 6. Selected Financial Data.

Reference is made to the caption "Selected Financial Data" on page F-3 of the Financial Section of this report.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Reference is made to the sections entitled "2018 Overview and 2019 Outlook," "Results of Operations," "Strategic Lines of Business," "Balance Sheet and Capital Funds Analysis," "Risk Management," "Critical Accounting Policies," "Supplemental Financial Data" and "Forward-Looking Statements" on pages F-4 through F-40 of the Financial Section of this report.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Reference is made to the subheadings entitled "Market and Liquidity Risk," "Operational Risk," "Compliance Risk" and "Strategic Risk" on pages F-29 through F-34 of the Financial Section of this report.

Item 8. Financial Statements and Supplementary Data.

Reference is made to the sections entitled "Consolidated Balance Sheets," "Consolidated Statements of Income," "Consolidated Statements of Comprehensive Income," "Consolidated Statements of Changes in Shareholders' Equity," "Consolidated Statements of Cash Flows," "Notes to Consolidated Financial Statements," "Report of Management," "Reports of Independent Registered Public Accounting Firm," and "Historical Review" on pages F-41 through F-109 of the Financial Section of this report.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

None.

Item 9A. Controls and Procedures.

Disclosure Controls and Procedures

As required by Rule 13a-15(b) of the Exchange Act, management, including the Chief Executive Officer and Chief Financial Officer, conducted an evaluation as of the end of the period covered by this Annual Report on Form 10-K, of the effectiveness of our disclosure controls and procedures as defined in Exchange Act Rule 13a-15(e). Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that Comerica's disclosure controls and procedures were effective as of the end of the period covered by this Annual Report on Form 10-K.

Internal Control over Financial Reporting

Management's annual report on internal control over financial reporting and the related attestation report of Comerica's registered public accounting firm are included on pages F-104 and F-105 in the Financial Section of this report.

As required by Rule 13a-15(d) of the Exchange Act, management, including the Chief Executive Officer and Chief Financial Officer, conducted an evaluation of our internal control over financial reporting to determine whether any changes occurred during the last quarter of the fiscal year covered by this Annual Report on Form 10-K that have materially affected, or are reasonably likely to materially affect, Comerica's internal control over financial reporting. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that there has been no such change during the last quarter of the fiscal year covered by this Annual Report on Form 10-K that has materially affected, or is reasonably likely to materially affect, Comerica's internal control over financial reporting.

Item 9B. Other Information.

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

Comerica has a Senior Financial Officer Code of Ethics that applies to the Chief Executive Officer, the Chief Financial Officer, the Chief Accounting Officer and the Treasurer. The Senior Financial Officer Code of Ethics is available on Comerica's website at *www.comerica.com.* If any substantive amendments are made to the Senior Financial Officer Code of Ethics or if Comerica grants any waiver, including any implicit waiver, from a provision of the Senior Financial Officer Code of Ethics to the Chief Executive Officer, the Chief Financial Officer, the Chief Accounting Officer or the Treasurer, we will disclose the nature of such amendment or waiver on our website.

The remainder of the response to this item will be included under the sections captioned "Information About Nominees," "Committees and Meetings of Directors," "Executive Officers" and "Section 16(a) Beneficial Ownership Reporting Compliance" of Comerica's definitive Proxy Statement relating to the Annual Meeting of Shareholders to be held on April 23, 2019, which sections are hereby incorporated by reference.

Item 11. Executive Compensation.

The response to this item will be included under the sections captioned "Compensation Committee Interlocks and Insider Participation," "Compensation Discussion and Analysis," "Compensation of Directors," "Governance, Compensation and Nominating Committee Report," "2018 Summary Compensation Table," "2018 Grants of Plan-Based Awards," "Outstanding Equity Awards at Fiscal Year-End 2018," "2018 Option Exercises and Stock Vested," "Pension Benefits at Fiscal Year-End 2018," "2018 Nonqualified Deferred Compensation," "Potential Payments upon Termination or Change of Control at Fiscal Year-End 2018" and "Pay Ratio Disclosure" of Comerica's definitive Proxy Statement relating to the Annual Meeting of Shareholders to be held on April 23, 2019, which sections are hereby incorporated by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The response to this item will be included under the sections captioned "Security Ownership of Certain Beneficial Owners," "Security Ownership of Management" and "Securities Authorized for Issuance Under Equity Compensation Plans" of Comerica's definitive Proxy Statement relating to the Annual Meeting of Shareholders to be held on April 23, 2019, which sections are hereby incorporated by reference.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

The response to this item will be included under the sections captioned "Director Independence," "Transactions with Related Persons," and "Information about Nominees" of Comerica's definitive Proxy Statement relating to the Annual Meeting of Shareholders to be held on April 23, 2019, which sections are hereby incorporated by reference.

Item 14. Principal Accountant Fees and Services.

The response to this item will be included under the section captioned "Independent Registered Public Accounting Firm" of Comerica's definitive Proxy Statement relating to the Annual Meeting of Shareholders to be held on April 23, 2019, which section is hereby incorporated by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules

The following documents are filed as a part of this report:

1. Financial Statements: The financial statements that are filed as part of this report are included in the Financial Section on pages F-41 through F-106.

2. All of the schedules for which provision is made in the applicable accounting regulations of the SEC are either not required under the related instruction, the required information is contained elsewhere in the Form 10-K, or the schedules are inapplicable and therefore have been omitted.

3. Exhibits:

3.1	Restated Certificate of Incorporation of Comerica Incorporated (filed as Exhibit 3.2 to Registrant's Current Report on Form 8-K dated August 4, 2010, and incorporated herein by reference).
3.2	Certificate of Amendment to Restated Certificate of Incorporation of Comerica Incorporated (filed as Exhibit 3.2 to Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2011, and incorporated herein by reference).
3.3	Amended and Restated Bylaws of Comerica Incorporated (filed as Exhibit 3.3 to Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2011, and incorporated herein by reference).
4	[Reference is made to Exhibits 3.1, 3.2 and 3.3 in respect of instruments defining the rights of security holders. In accordance with Regulation S-K Item No. 601(b)(4)(iii), the Registrant is not filing copies of instruments defining the rights of holders of long-term debt because none of those instruments authorizes debt in excess of 10% of the total assets of the Registrant and its subsidiaries on a consolidated basis. The Registrant hereby agrees to furnish a copy of any such instrument to the SEC upon request.]
9	(not applicable)
10.1†	Comerica Incorporated 2018 Long-Term Incentive Plan (filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K dated April 24, 2018, and incorporated herein by reference).
10.1A†	Form of Standard Comerica Incorporated Restricted Stock Unit Agreement (cliff vesting) under the Comerica Incorporated 2018 Long-Term Incentive Plan (filed as Exhibit 10.2 to Registrant's Current Report on Form 8-K dated April 24, 2018, and incorporated herein by reference).
10.1B†	Form of Standard Comerica Incorporated Restricted Stock Unit Agreement (non-cliff vesting) under the Comerica Incorporated 2018 Long-Term Incentive Plan (filed as Exhibit 10.3 to Registrant's Current Report on Form 8-K dated April 24, 2018, and incorporated herein by reference).
10.1C†	Form of Standard Comerica Incorporated Non-Qualified Stock Option Agreement under the Comerica Incorporated 2018 Long-Term Incentive Plan (filed as Exhibit 10.4 to Registrant's Current Report on Form 8-K dated April 24, 2018, and incorporated herein by reference).
10.1D†	Form of Standard Comerica Incorporated Senior Executive Long-Term Performance Restricted Stock Unit Award Agreement under the Comerica Incorporated 2018 Long-Term Incentive Plan (filed as Exhibit 10.5 to Registrant's Current Report on Form 8-K dated April 24, 2018, and incorporated herein by reference).
10.1E†	Form of Standard Comerica Incorporated Restricted Stock Agreement (cliff vesting) under the Comerica Incorporated 2018 Long-Term Incentive Plan (filed as Exhibit 10.6 to Registrant's Current Report on Form 8-K dated April 24, 2018, and incorporated herein by reference).
10.1F†	Form of Standard Comerica Incorporated Restricted Stock Agreement (non-cliff vesting) under the Comerica Incorporated 2018 Long-Term Incentive Plan (filed as Exhibit 10.7 to Registrant's Current Report on Form 8-K dated April 24, 2018, and incorporated herein by reference).
10.1G†	Form of Standard Comerica Incorporated Senior Executive Long-Term Performance Restricted Stock Unit Award Agreement under the Comerica Incorporated 2018 Long-Term Incentive Plan (2019 version).
10.2†	Comerica Incorporated 2006 Amended and Restated Long-Term Incentive Plan (filed as Exhibit 10.1 to Registrant's Annual Report on Form 10-K for the year ended December 31, 2016, and incorporated herein by reference).
10.2A†	Form of Standard Comerica Incorporated Non-Qualified Stock Option Agreement under the Comerica Incorporated Amended and Restated 2006 Long-Term Incentive Plan (filed as Exhibit 10.7 to Registrant's Annual Report on Form 10-K for the year ended December 31, 2006, and incorporated herein by reference).

10.2B† Form of Standard Comerica Incorporated Non-Qualified Stock Option Agreement under the Comerica Incorporated Amended and Restated 2006 Long-Term Incentive Plan (2011 version) (filed as Exhibit 10.44 to Registrant's Annual Report on Form 10-K for the year ended December 31, 2010, and incorporated herein by reference).

10.2C† Form of Standard Comerica Incorporated Non-Qualified Stock Option Agreement under the Comerica Incorporated Amended and Restated 2006 Long-Term Incentive Plan (2012 version) (filed as Exhibit 10.1C to Registrant's Annual Report on Form 10-K for the year ended December 31, 2011, and incorporated herein by reference).

10.2D† Form of Standard Comerica Incorporated Non-Qualified Stock Option Agreement under the Comerica Incorporated Amended and Restated 2006 Long-Term Incentive Plan (2014 version) (filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K dated January 21, 2014, and incorporated herein by reference).

10.2E† Form of Standard Comerica Incorporated Non-Qualified Stock Option Agreement under the Comerica Incorporated Amended and Restated 2006 Long-Term Incentive Plan (2014 version 2) (filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K dated July 22, 2014, and incorporated herein by reference).

10.2F† Form of Standard Comerica Incorporated Non-Qualified Stock Option Agreement under the Comerica Incorporated Amended and Restated 2006 Long-Term Incentive Plan (2015 version) (filed as Exhibit 10.2 to Registrant's Current Report on Form 8-K dated November 10, 2015, and incorporated herein by reference).

10.2G† Form of Standard Comerica Incorporated Non-Qualified Stock Option Agreement under the Comerica Incorporated Amended and Restated 2006 Long-Term Incentive Plan (2017 version) (filed as Exhibit 10.1G to Registrant's Annual Report on Form 10-K for the year ended December 31, 2016, and incorporated herein by reference).

10.2H† Form of Standard Comerica Incorporated Restricted Stock Award Agreement (non-cliff vesting) under the Amended and Restated Comerica Incorporated 2006 Long-Term Incentive Plan (2012 version) (filed as Exhibit 10.1F to Registrant's Annual Report on Form 10-K for the year ended December 31, 2011, and incorporated herein by reference).

10.2I† Form of Standard Comerica Incorporated Restricted Stock Award Agreement (non-cliff vesting) under the Amended and Restated Comerica Incorporated 2006 Long-Term Incentive Plan (2014 version) (filed as Exhibit 10.2 to Registrant's Current Report on Form 8-K dated January 21, 2014, and incorporated herein by reference).

10.2J† Form of Standard Comerica Incorporated Restricted Stock Award Agreement (non-cliff vesting) under the Amended and Restated Comerica Incorporated 2006 Long-Term Incentive Plan (2014 version 2) (filed as Exhibit 10.2 to Registrant's Current Report on Form 8-K dated July 22, 2014, and incorporated herein by reference).

10.2K† Form of Standard Comerica Incorporated Restricted Stock Award Agreement (non-cliff vesting) under the Amended and Restated Comerica Incorporated 2006 Long-Term Incentive Plan (2017 version) (filed as Exhibit 10.1M to Registrant's Annual Report on Form 10-K for the year ended December 31, 2016, and incorporated herein by reference).

10.2L† Form of Standard Comerica Incorporated Restricted Stock Award Agreement (cliff vesting) under the Comerica Incorporated 2006 Amended and Restated Long-Term Incentive Plan (2012 version) (filed as Exhibit 10.1I to Registrant's Annual Report on Form 10-K for the year ended December 31, 2011, and incorporated herein by reference).

10.2M† Form of Standard Comerica Incorporated Restricted Stock Award Agreement (cliff vesting) under the Comerica Incorporated 2006 Amended and Restated Long-Term Incentive Plan (2017 version) (filed as Exhibit 10.1Q to Registrant's Annual Report on Form 10-K for the year ended December 31, 2016, and incorporated herein by reference).

10.2N† Form of Standard Comerica Incorporated Restricted Stock Unit Agreement under the Amended and Restated Comerica Incorporated 2006 Long-Term Incentive Plan (2011 version) (filed as Exhibit 10.47 to Registrant's Annual Report on Form 10-K for the year ended December 31, 2010, and incorporated herein by reference).

10.2O† Form of Standard Comerica Incorporated Restricted Stock Unit Award Agreement under the Amended and Restated Comerica Incorporated 2006 Long-Term Incentive Plan (2018 version - non-cliff vesting) (filed as Exhibit 10.2 to Registrant's Current Report on Form 8-K dated November 8, 2017, and incorporated herein by reference).

10.2P† Form of Standard Comerica Incorporated Restricted Stock Unit Award Agreement under the Amended and Restated Comerica Incorporated 2006 Long-Term Incentive Plan (2018 version - cliff vesting) (filed as Exhibit 10.3 to Registrant's Current Report on Form 8-K dated November 8, 2017, and incorporated herein by reference).

10.2Q† Form of Standard Comerica Incorporated Senior Executive Long-Term Performance Restricted Stock Unit Award Agreement under the Amended and Restated Comerica Incorporated 2006 Long-Term Incentive Plan (filed as Exhibit 10.3 to Registrant's Current Report on Form 8-K dated January 21, 2014, and incorporated herein by reference).

10.2R† Form of Standard Comerica Incorporated Senior Executive Long-Term Performance Restricted Stock Unit Award Agreement under the Amended and Restated Comerica Incorporated 2006 Long-Term Incentive Plan (2014 version 2) (filed as Exhibit 10.3 to Registrant's Current Report on Form 8-K dated July 22, 2014, and incorporated herein by reference).

10.2S† Form of Standard Comerica Incorporated Senior Executive Long-Term Performance Restricted Stock Unit Award Agreement under the Amended and Restated Comerica Incorporated 2006 Long-Term Incentive Plan (2015 version) (filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K dated November 10, 2015, and incorporated herein by reference).

10.2T† Form of Standard Comerica Incorporated Senior Executive Long-Term Performance Restricted Stock Unit Award Agreement under the Amended and Restated Comerica Incorporated 2006 Long-Term Incentive Plan (2017 version) (filed as Exhibit 10.1 to Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017, and incorporated herein by reference).

10.2U† Form of Standard Comerica Incorporated Senior Executive Long-Term Performance Restricted Stock Unit Award Agreement under the Amended and Restated Comerica Incorporated 2006 Long-Term Incentive Plan (2018 version) (filed as Exhibit 10.1Y to Registrant's Annual Report on Form 10-K for the year ended December 31, 2017, and incorporated herein by reference).

10.3† Amended and Restated Sterling Bancshares, Inc. 2003 Stock Incentive and Compensation Plan effective April 30, 2007 (filed as Exhibit 10.1 to Sterling Bancshares, Inc.'s Current Report on Form 8-K dated August 14, 2007 (File No. 000-20750), and incorporated herein by reference).

10.4† Comerica Incorporated Amended and Restated Employee Stock Purchase Plan (amended and restated October 22, 2013) (filed as Exhibit 10.5 to Registrant's Annual Report on Form 10-K for the year ended December 31, 2013, and incorporated herein by reference).

10.5† Comerica Incorporated 2016 Management Incentive Plan (filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K dated May 2, 2016, and incorporated herein by reference).

10.6† Form of Standard Comerica Incorporated No Sale Agreement under the Comerica Incorporated Amended and Restated Management Incentive Plan (filed as Exhibit 10.5 to Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2004, and incorporated herein by reference).

10.7† Supplemental Retirement Income Account Plan (formerly known as the Amended and Restated Benefit Equalization Plan for Employees of Comerica Incorporated) (amended and restated October 13, 2016, with amendments effective January 1, 2017) (filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K dated January 24, 2017, and incorporated herein by reference).

10.8† 1999 Comerica Incorporated Amended and Restated Deferred Compensation Plan (amended and restated on July 26, 2011) (filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K dated July 26, 2011, and incorporated herein by reference).

10.9† 1999 Comerica Incorporated Amended and Restated Common Stock Deferred Incentive Award Plan (amended and restated on July 26, 2011) (filed as Exhibit 10.2 to Registrant's Current Report on Form 8-K dated July 26, 2011, and incorporated herein by reference).

10.10† Sterling Bancshares, Inc. Deferred Compensation Plan (as Amended and Restated) (filed as Exhibit 4.4 to Registrant's Registration Statement on Form S-8 dated July 28, 2011 (Registration No. 333-175857) and incorporated herein by reference).

10.11† Amended and Restated Comerica Incorporated Non-Employee Director Fee Deferral Plan (amended and restated on January 27, 2015) (filed as Exhibit 10.13 to Registrant's Annual Report on Form 10-K for the year ended December 31, 2014, and incorporated herein by reference).

10.12† Amended and Restated Comerica Incorporated Common Stock Non-Employee Director Fee Deferral Plan (amended and restated on January 27, 2015) (filed as Exhibit 10.14 to Registrant's Annual Report on Form 10-K for the year ended December 31, 2014, and incorporated herein by reference).

10.13† Comerica Incorporated Amended and Restated Incentive Plan for Non-Employee Directors (amended and restated effective May 15, 2014) (filed as Exhibit 10.3 to Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015, and incorporated herein by reference).

10.13A† Form of Standard Comerica Incorporated Non-Employee Director Restricted Stock Unit Agreement under the Comerica Incorporated Amended and Restated Incentive Plan for Non-Employee Directors (filed as Exhibit 10.2 to Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2005, and incorporated herein by reference).

10.13B† Form of Standard Comerica Incorporated Non-Employee Director Restricted Stock Unit Agreement under the Comerica Incorporated Amended and Restated Incentive Plan for Non-Employee Directors (Version 2) (filed as Exhibit 10.6 to Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2006, and incorporated herein by reference).

10.13C† Form of Standard Comerica Incorporated Non-Employee Director Restricted Stock Unit Agreement under the Comerica Incorporated Amended and Restated Incentive Plan for Non-Employee Directors (Version 2.5) (filed as Exhibit 10.48 to Registrant's Annual Report on Form 10-K for the year ended December 31, 2010, and incorporated herein by reference).

10.13D† Form of Standard Comerica Incorporated Non-Employee Director Restricted Stock Unit Agreement under the Comerica Incorporated Amended and Restated Incentive Plan for Non-Employee Directors (Version 3) (filed as Exhibit 10.1 to Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2009, and incorporated herein by reference).

10.13E† Form of Standard Comerica Incorporated Non-Employee Director Restricted Stock Unit Agreement under the Comerica Incorporated Amended and Restated Incentive Plan for Non-Employee Directors (Version 4) (filed as Exhibit 10.4 to Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2011, and incorporated herein by reference).

10.14† 2015 Comerica Incorporated Incentive Plan for Non-Employee Directors (filed as Exhibit 10.4 to Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015, and incorporated herein by reference).

10.14A† Form of Standard Comerica Incorporated Non-Employee Director Restricted Stock Unit Agreement under the 2015 Comerica Incorporated Incentive Plan for Non-Employee Directors (filed as Exhibit 10.1 to Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015, and incorporated herein by reference).

10.15† Form of Indemnification Agreement between Comerica Incorporated and certain of its directors and officers (filed as Exhibit 10.6 to Registrant's Annual Report on Form 10-K for the year ended December 31, 2002, and incorporated herein by reference).

10.16† Supplemental Benefit Agreement with Eugene A. Miller (filed as Exhibit 10.1 to Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2002, and incorporated herein by reference).

10.17† Supplemental Pension and Retiree Medical Agreement with Ralph W. Babb Jr. (filed as Exhibit 10.2 to Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 1998, and incorporated herein by reference).

10.18A† Restrictive Covenants and General Release Agreement by and between Jon W. Bilstrom and Comerica Incorporated dated July 21, 2016 (filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K dated July 27, 2016, and incorporated herein by reference).

10.18B† Restrictive Covenants and General Release Agreement by and between J. Patrick Faubion and Comerica Incorporated dated December 11, 2016 (filed as Exhibit 10.19C to Registrant's Annual Report on Form 10-K for the year ended December 31, 2016, and incorporated herein by reference).

10.18C† Restrictive Covenants and General Release Agreement by and between David E. Duprey and Comerica Incorporated dated February 5, 2018 (filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K dated February 8, 2018, and incorporated herein by reference).

10.18D† Restrictive Covenants and General Release Agreement by and between Michael H. Michalak and Comerica Incorporated dated January 8, 2019 (filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K dated January 11, 2019, and incorporated herein by reference).

10.19† Form of Change of Control Employment Agreement (BE4 and Higher Version without gross-up or window period-current) (filed as Exhibit 10.10 to Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, and incorporated herein by reference).

10.19A† Schedule of Named Executive Officers Party to Change of Control Employment Agreement (BE4 and Higher Version without gross-up or window period-current).

10.20† Form of Change of Control Employment Agreement (BE4 and Higher Version without gross-up or window period-2015 version) (filed as Exhibit 10.2 to Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015, and incorporated herein by reference).

10.20A† Schedule of Named Executive Officers Party to Change of Control Employment Agreement (BE4 and Higher Version without gross-up or window period-2015 version).

10.21† Form of Change of Control Employment Agreement (BE4 and Higher Version) (filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K dated November 18, 2008, and incorporated herein by reference).

10.21A†	Schedule of Named Executive Officers Party to Change of Control Employment Agreement (BE4 and Higher Version).
10.22†	Form of Change of Control Employment Agreement (BE4 and Higher Version without gross-up or window period-2009 version) (filed as Exhibit 10.42 to Registrant's Annual Report on Form 10-K for the year ended December 31, 2009, and incorporated herein by reference).
10.23†	Form of Change of Control Employment Agreement (BE2-BE3 Version) (filed as Exhibit 10.2 to Registrant's Current Report on Form 8-K dated November 18, 2008, and incorporated herein by reference).
10.23A†	Schedule of Named Executive Officers Party to Change of Control Employment Agreement (BE2-BE3 Version).
13	(not applicable)
14	(not applicable)
16	(not applicable)
18	(not applicable)
21	Subsidiaries of Registrant.
23.1	Consent of Ernst & Young LLP.
24	(not applicable)
31.1	Chairman and CEO Rule 13a-14(a)/15d-14(a) Certification of Periodic Report (pursuant to Section 302 of the Sarbanes-Oxley Act of 2002).
31.2	Executive Vice President and CFO Rule 13a-14(a)/15d-14(a) Certification of Periodic Report (pursuant to Section 302 of the Sarbanes-Oxley Act of 2002).
32	Section 1350 Certification of Periodic Report (pursuant to Section 906 of the Sarbanes-Oxley Act of 2002).
33	(not applicable)
34	(not applicable)
35	(not applicable)
95	(not applicable)
99	(not applicable)
101	Financial statements from Annual Report on Form 10-K of the Registrant for the year ended December 31, 2018, formatted in Extensible Business Reporting Language: (i) the Consolidated Balance Sheets, (ii) the Consolidated Statements of Income, (iii) the Consolidated Statements of Changes in Shareholders' Equity, (iv) the Consolidated Statements of Cash Flows and (v) the Notes to Consolidated Financial Statements.
†	Management contract or compensatory plan or arrangement.
	File No. for all filings under Exchange Act, unless otherwise noted: 1-10706.

Item 16. Form 10-K Summary

Not applicable.

FINANCIAL REVIEW AND REPORTS

Comerica Incorporated and Subsidiaries

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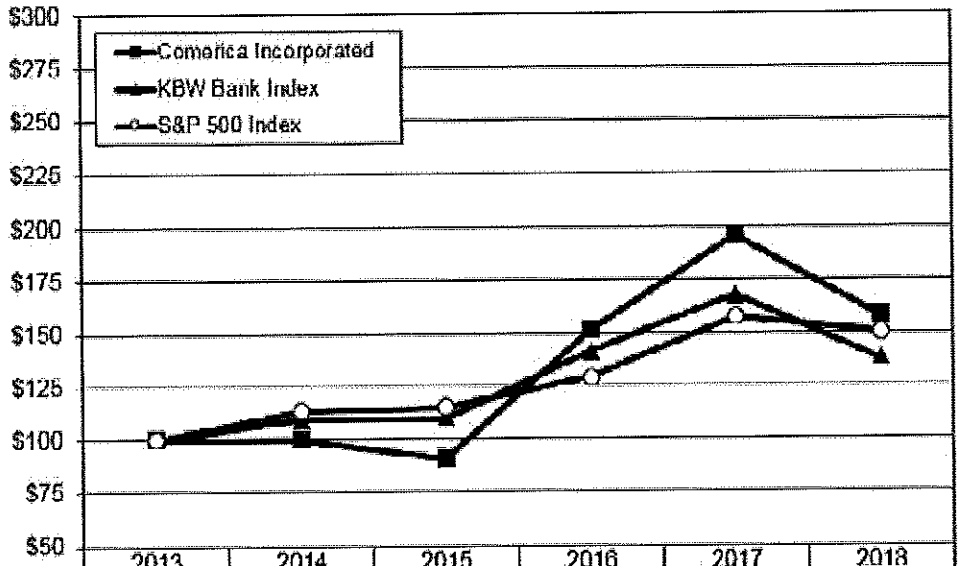
PERFORMANCE GRAPH

The graph shown below compares the total returns (assuming reinvestment of dividends) of Comerica Incorporated common stock, the S&P 500 Index, and the KBW Bank Index. The graph assumes $100 invested in Comerica Incorporated common stock (returns based on stock prices per the NYSE) and each of the indices on December 31, 2013 and the reinvestment of all dividends during the periods presented.

Comparison of Five Year Cumulative Total Return
Among Comerica Incorporated, KBW Bank Index, and S&P 500 Index
(Assumes $100 Invested on 12/31/13 and Reinvestment of Dividends)



	2013	2014	2015	2016	2017	2018
Comerica Incorporated	100	100	91	151	195	158
KBW Bank Index	100	109	110	141	167	138
S&P 500 Index	100	114	115	129	157	150

The performance shown on the graph is not necessarily indicative of future performance.

SELECTED FINANCIAL DATA

(dollar amounts in millions, except per share data)

Years Ended December 31	2018		2017		2016		2015		2014
EARNINGS SUMMARY									
Net interest income	$ 2,352		$ 2,061		$ 1,797		$ 1,689		$ 1,655
Provision for credit losses	(1)		74		248		147		27
Noninterest income	976	(a)	1,107		1,051		1,035	(b)	857
Noninterest expenses	1,794	(a), (c)	1,860	(c)	1,930	(c)	1,827	(b)	1,615
Provision for income taxes	300		491	(d)	193		229		277
Net income	1,235		743		477		521		593
Net income attributable to common shares	1,227		738		473		515		586
PER SHARE OF COMMON STOCK									
Diluted earnings per common share	$ 7.20		$ 4.14		$ 2.68		$ 2.84		$ 3.16
Cash dividends declared	1.84		1.09		0.89		0.83		0.79
Common shareholders' equity	46.89		46.07		44.47		43.03		41.35
Tangible common equity (e)	42.89		42.34		40.79		39.33		37.72
Market value	68.69		86.81		68.11		41.83		46.84
Average diluted shares (in millions)	171		178		177		181		185
YEAR-END BALANCES									
Total assets	$ 70,818		$ 71,567		$ 72,978		$ 71,877		$ 69,186
Total earning assets	65,513		65,880		67,518		66,687		63,788
Total loans	50,163		49,173		49,088		49,084		48,593
Total deposits	55,561		57,903		58,985		59,853		57,486
Total medium- and long-term debt	6,463		4,622		5,160		3,058		2,675
Total common shareholders' equity	7,507		7,963		7,796		7,560		7,402
AVERAGE BALANCES									
Total assets	$ 70,724		$ 71,452		$ 71,743		$ 70,247		$ 66,336
Total earning assets	65,410		66,300		66,545		65,129		61,560
Total loans	48,766		48,558		48,996		48,628		46,588
Total deposits	55,935		57,258		57,741		58,326		54,784
Total medium- and long-term debt	5,842		4,969		4,917		2,905		2,963
Total common shareholders' equity	7,809		7,952		7,674		7,534		7,373
CREDIT QUALITY									
Total allowance for credit losses	$ 701		$ 754		$ 771		$ 679		$ 635
Total nonperforming loans	229		410		590		379		290
Foreclosed property	1		5		17		12		10
Total nonperforming assets	230		415		607		391		300
Net credit-related charge-offs	51		92		157		101		25
Net credit-related charge-offs as a percentage of average total loans	0.11%		0.19%		0.32%		0.21%		0.05%
Allowance for loan losses as a percentage of total period-end loans	1.34		1.45		1.49		1.29		1.22
Allowance for loan losses as a multiple of total nonperforming loans	2.9x		1.7x		1.2x		1.7x		2.1x
RATIOS									
Net interest margin	3.58%		3.11%		2.71%		2.60%		2.69%
Return on average assets	1.75		1.04		0.67		0.74		0.89
Return on average common shareholders' equity	15.82		9.34		6.22		6.91		8.05
Dividend payout ratio	25.17		25.77		32.48		28.33		24.09
Average common shareholders' equity as a percentage of average assets	11.04		11.13		10.70		10.73		11.11
Common equity tier 1 capital as a percentage of risk-weighted assets (f)	11.14		11.68		11.09		10.54		n/a
Tier 1 capital as a percentage of risk-weighted assets (f)	11.14		11.68		11.09		10.54		10.50
Common equity ratio	10.60		11.13		10.68		10.52		10.70
Tangible common equity as a percentage of tangible assets (e)	9.78		10.32		9.89		9.70		9.85

(a) Effective January 1, 2018, adoption of Topic 606 resulted in a change in presentation which records certain costs in the same category as the associated revenues. The effect of this change was to reduce noninterest income and expenses by $145 million for the year ended December 31, 2018.

(b) Effective January 1, 2015, contractual changes to a card program resulted in a change to the accounting presentation of the related revenues and expenses. The effect of this change was an increase of $177 million in 2015 to both noninterest income and noninterest expenses. Amounts prior to 2015 reflect revenues from this card program net of related noninterest expenses.

(c) Noninterest expenses included restructuring charges of $53 million, $45 million and $93 million in 2018, 2017 and 2016, respectively.

(d) The provision for income taxes for 2017 was impacted by a $107 million charge to adjust deferred taxes as a result of the enactment of the Tax Cuts and Jobs Act.

(e) See Supplemental Financial Data section for reconcilements of non-GAAP financial measures.

(f) Ratios calculated based on the risk-based capital requirements in effect at the time. The U.S. implementation of the Basel III regulatory capital framework became effective on January 1, 2015, with transitional provisions.

n/a - not applicable.

2018 OVERVIEW AND 2019 OUTLOOK

Comerica Incorporated (the Corporation) is a financial holding company headquartered in Dallas, Texas. The Corporation's major business segments are the Business Bank, the Retail Bank and Wealth Management. The core businesses are tailored to each of the Corporation's three primary geographic markets: Michigan, California and Texas. Information about the activities of the Corporation's business segments is provided in Note 23 to the consolidated financial statements.

As a financial institution, the Corporation's principal activity is lending to and accepting deposits from businesses and individuals. The primary source of revenue is net interest income, which is principally derived from the difference between interest earned on loans and investment securities and interest paid on deposits and other funding sources. The Corporation also provides other products and services that meet the financial needs of customers which generate noninterest income, the Corporation's secondary source of revenue. Growth in loans, deposits and noninterest income is affected by many factors, including economic conditions in the markets the Corporation serves, the financial requirements and economic health of customers, and the ability to add new customers and/or increase the number of products used by current customers. Success in providing products and services depends on the financial needs of customers and the types of products desired.

The accounting and reporting policies of the Corporation and its subsidiaries conform to generally accepted accounting principles (GAAP) in the United States (U.S.). The Corporation's consolidated financial statements are prepared based on the application of accounting policies, the most significant of which are described in Note 1 to the consolidated financial statements. The most critical of these significant accounting policies are discussed in the "Critical Accounting Policies" section of this financial review.

OVERVIEW

- Net income was $1.2 billion in 2018, an increase of $492 million, or 66 percent, compared to $743 million in 2017. Net income per diluted common share was $7.20 in 2018 compared to $4.14 in 2017, an increase of 74 percent.
- Average loans were $48.8 billion in 2018, an increase of $208 million compared to 2017. The increase in average loans primarily reflected increases in Technology and Life Sciences as well as National Dealer Services, partially offset by decreases in Corporate Banking and Energy.
- Average deposits decreased $1.3 billion, or 2 percent, to $55.9 billion in 2018, with the largest decrease in general Middle Market driven by a $925 million decline in Municipalities. The decrease in average deposits reflected a decrease of $1.8 billion, or 6 percent, in average noninterest-bearing deposits, partially offset by an increase of $449 million, or 2 percent, in average interest-bearing deposits.
- Net interest income was $2.4 billion in 2018, an increase of $291 million, or 14 percent, compared to 2017, and the net interest margin increased 47 basis points in 2018 to 3.58 percent, from 3.11 percent in 2017. Both increases were primarily driven by the net benefit from higher short-term rates.
- The provision for credit losses decreased $75 million to a $1 million benefit in 2018, reflecting a $683 million decline in total criticized loans and a $41 million decrease in net credit-related charge-offs.
- Noninterest income decreased $131 million to $976 million in 2018, reflecting a $118 million decrease due to a presentation change resulting from the adoption of a new accounting standard[1] and a $20 million loss related to repositioning the securities portfolio in 2018.
- Noninterest expenses decreased $66 million to $1.8 billion in 2018, reflecting a $118 million decrease due to a presentation change resulting from the adoption of a new accounting standard[1], partially offset by an increase in salaries and benefits expense, mostly due to higher incentive compensation tied to performance.
- The provision for income taxes decreased $191 million to $300 million in 2018. The decrease primarily reflected the impact of the 14-percentage-point decrease in the statutory federal tax rate in 2018 and a $120 million decrease due to discrete tax items, partially offset by an increase in pre-tax income.
- The Corporation repurchased 14.8 million shares of common stock during 2018 under the equity repurchase program and increased the cash dividend 69 percent to $1.84 per share. All together, $1.6 billion was returned to shareholders in 2018, an increase of $903 million, or 125 percent, compared to 2017.

[1]Effective January 1, 2018, the Corporation adopted Accounting Standards Codification ("ASC") Topic 606, "Revenue from Contracts with Customers," as a result, revenue from certain products is now presented net of costs. For further information, refer to Note 1 to the consolidated financial statements.

GROWTH IN EFFICIENCY AND REVENUE INITIATIVE

Since the GEAR Up initiative was launched in 2016, the Corporation consolidated 38 banking centers, implemented a new retirement program resulting in a significant reduction in retirement plan expense and reduced the number of full-time equivalent employees by over 900. Other expense reduction efforts included rationalizing and modernizing technology (including optimizing infrastructure platforms, process optimization and migrating certain applications to cloud-based systems), as well as consolidating office and operations space. Additionally, the Corporation completed a plan for an end-to-end credit redesign, which streamlines the credit process and increases the capacity of relationship managers to service clients. Revenue improvements were achieved through product enhancements, enhanced sales tools and training and improved customer analytics to drive opportunities. The impact of increases in short-term rates and the execution of GEAR Up initiatives helped lower the efficiency ratio to 53.6 percent for 2018, compared to 58.6 percent for 2017. Return on equity for 2018 increased to 15.8 percent, compared to 9.3 percent for 2017.

Restructuring activities were completed, resulting in cumulative pre-tax restructuring charges of $191 million from inception through December 31, 2018. For additional information regarding restructuring charges, refer to Note 22 to the consolidated financial statements.

2019 OUTLOOK

For full-year 2019 compared to full-year 2018, management expects the following, assuming a continuation of the current economic and rate environment:

- Growth in average loans of 2 percent to 4 percent, reflecting increases in most lines of business.
- Decline in average deposits of 1 percent to 2 percent from a decrease in non-interest-bearing deposits.
- Growth in net interest income of 4 percent to 5 percent from the full-year net benefit of higher interest rates ($130 million to $150 million), growth in average loans and repositioning the securities portfolio, partially offset by higher average debt and lower interest recoveries.
- Provision for credit losses of 15 basis points to 25 basis points and net charge-offs to remain low.
- Noninterest income higher by 2 percent to 3 percent, benefiting from growth in card fees and fiduciary income, partially offset by lower service charges on deposit accounts and lower derivative income.
- Noninterest expenses lower by 3 percent, reflecting the end of restructuring charges from the GEAR Up initiatives ($53 million in full-year 2018), FDIC insurance expense lower by $16 million from the discontinuance of the surcharge, as well as lower compensation and pension expense, partially offset by higher outside processing expenses in line with growing revenue, technology expenditures and typical inflationary pressures.
    - Noninterest expenses excluding restructuring expenses expected to be stable.
    - Lower compensation driven by executive incentive compensation, partially offset by merit increases.
- Income tax expense to be approximately 23 percent of pre-tax income, excluding any tax impact from employee stock transactions.
    - Full-year 2018 included discrete tax benefits of $48 million.
- Common equity Tier 1 capital ratio target of 9.5 percent to 10 percent through continued return of excess capital.

RESULTS OF OPERATIONS

The following provides a comparative discussion of the Corporation's consolidated results of operations for 2018 compared to 2017. A comparative discussion of results for 2017 compared to 2016 is provided at the end of this section. For a discussion of the Critical Accounting Policies that affect the consolidated results of operations, see the "Critical Accounting Policies" section of this financial review.

ANALYSIS OF NET INTEREST INCOME

(dollar amounts in millions)

Years Ended December 31	2018			2017			2016		
	Average Balance	Interest	Average Rate	Average Balance	Interest	Average Rate	Average Balance	Interest	Average Rate
Commercial loans	$ 30,534	$ 1,416	4.64%	$ 30,415	$ 1,162	3.82%	$ 31,062	$ 1,008	3.25%
Real estate construction loans	3,155	164	5.21	2,958	124	4.18	2,508	91	3.63
Commercial mortgage loans	9,131	429	4.69	9,005	358	3.97	8,981	314	3.49
Lease financing	470	18	3.82	509	13	2.63	684	18	2.64
International loans	1,021	51	4.97	1,157	47	4.07	1,367	50	3.63
Residential mortgage loans	1,983	75	3.77	1,989	74	3.70	1,894	71	3.76
Consumer loans	2,472	109	4.41	2,525	94	3.70	2,500	83	3.32
Total loans (a)	48,766	2,262	4.64	48,558	1,872	3.85	48,996	1,635	3.34
Mortgage-backed securities	9,099	214	2.28	9,330	202	2.17	9,356	203	2.19
Other investment securities	2,711	51	1.86	2,877	48	1.66	2,992	44	1.51
Total investment securities	11,810	265	2.19	12,207	250	2.05	12,348	247	2.02
Interest-bearing deposits with banks	4,700	91	1.94	5,443	60	1.09	5,099	26	0.51
Other short-term investments	134	1	0.96	92	—	0.64	102	1	0.61
Total earning assets	65,410	2,619	3.99	66,300	2,182	3.29	66,545	1,909	2.88
Cash and due from banks	1,135			1,209			1,146		
Allowance for loan losses	(695)			(728)			(730)		
Accrued income and other assets	4,874			4,671			4,782		
Total assets	$ 70,724			$ 71,452			$ 71,743		
Money market and interest-bearing checking deposits	$ 22,378	111	0.50	$ 21,585	33	0.15	$ 22,744	27	0.11
Savings deposits	2,199	1	0.04	2,133	—	0.02	2,013	—	0.02
Customer certificates of deposit	2,092	10	0.46	2,471	9	0.36	3,200	13	0.40
Foreign office time deposits (b)	25	—	1.19	56	—	0.64	33	—	0.35
Total interest-bearing deposits	26,694	122	0.46	26,245	42	0.16	27,990	40	0.14
Short-term borrowings	62	1	1.90	277	3	1.14	138	—	0.45
Medium- and long-term debt	5,842	144	2.42	4,969	76	1.51	4,917	72	1.45
Total interest-bearing sources	32,598	267	0.82	31,491	121	0.38	33,045	112	0.34
Noninterest-bearing deposits	29,241			31,013			29,751		
Accrued expenses and other liabilities	1,076			996			1,273		
Total shareholders' equity	7,809			7,952			7,674		
Total liabilities and shareholders' equity	$ 70,724			$ 71,452			$ 71,743		
Net interest income/rate spread		$ 2,352	3.17		$ 2,061	2.91		$ 1,797	2.54
Impact of net noninterest-bearing sources of funds			0.41			0.20			0.17
Net interest margin (as a percentage of average earning assets)			3.58%			3.11%			2.71%

(a) Nonaccrual loans are included in average balances reported and in the calculation of average rates.

(b) Includes substantially all deposits by foreign depositors; deposits are primarily in excess of $100,000.

RATE/VOLUME ANALYSIS

(in millions)

Years Ended December 31	2018/2017			2017/2016		
	Increase Due to Rate	Increase (Decrease) Due to Volume (a)	Net Increase (Decrease)	Increase (Decrease) Due to Rate	Increase (Decrease) Due to Volume (a)	Net Increase (Decrease)
Interest Income:						
Commercial loans	$ 248	$ 6	$ 254	$ 179	$ (25)	$ 154
Real estate construction loans	30	10	40	14	19	33
Commercial mortgage loans	65	6	71	43	1	44
Lease financing	6	(1)	5	—	(5)	(5)
International loans	11	(7)	4	6	(9)	(3)
Residential mortgage loans	1	—	1	(1)	4	3
Consumer loans	17	(2)	15	10	1	11
Total loans	378	12	390	251	(14)	237
Mortgage-backed securities	12	—	12	(1)	—	(1)
Other investment securities	5	(2)	3	5	(1)	4
Total investment securities	17	(2)	15	4	(1)	3
Interest-bearing deposits with banks	46	(15)	31	30	4	34
Other short-term investments	1	—	1	—	(1)	(1)
Total interest income	442	(5)	437	285	(12)	273
Interest Expense:						
Money market and interest-bearing checking deposits	74	4	78	8	(2)	6
Savings deposits	1	—	1	—	—	—
Customer certificates of deposit	3	(2)	1	(1)	(3)	(4)
Total interest-bearing deposits	78	2	80	7	(5)	2
Short-term borrowings	2	(4)	(2)	1	2	3
Medium- and long-term debt	50	18	68	23	(19)	4
Total interest expense	130	16	146	31	(22)	9
Net interest income	$ 312	$ (21)	$ 291	$ 254	$ 10	$ 264

(a) Rate/volume variances are allocated to variances due to volume.

NET INTEREST INCOME

Net interest income is the difference between interest earned on assets and interest paid on liabilities. Gains and losses related to risk management interest rate swaps that convert fixed rate debt to a floating rate and qualify as hedges are included with the interest expense of the hedged item. Refer to the Analysis of Net Interest Income and the Rate/Volume Analysis tables above for an analysis of net interest income for the years ended December 31, 2018, 2017 and 2016 and details of the components of the change in net interest income for 2018 compared to 2017 and 2017 compared to 2016.

Net interest income was $2.4 billion in 2018, an increase of $291 million compared to 2017. The increase in net interest income primarily reflected the net benefit from higher short-term rates. Average earning assets decreased $890 million, primarily reflecting decreases of $743 million in interest-bearing deposits with banks and $397 million in average investment securities, primarily due to unrealized losses, partially offset by a $208 million increase in average loans.

The net interest margin increased 47 basis points in 2018 to 3.58 percent, from 3.11 percent in 2017, primarily reflecting the net benefit from higher short-term rates.

The Corporation utilizes various asset and liability management strategies to manage net interest income exposure to interest rate risk. Refer to the "Market and Liquidity Risk" section of this financial review for additional information regarding the Corporation's asset and liability management policies and the "Balance Sheet and Capital Funds Analysis" section for further discussion on changes in earning assets and interest-bearing liabilities.

PROVISION FOR CREDIT LOSSES

The provision for credit losses was a benefit of $1 million in 2018, compared to a provision of $74 million in 2017. The provision for credit losses includes both the provision for loan losses and the provision for credit losses on lending-related commitments.

The provision for loan losses is recorded to maintain the allowance for loan losses at the level deemed appropriate by the Corporation to cover probable credit losses inherent in the portfolio. The provision for loan losses was $11 million in 2018, a decrease of $62 million compared to $73 million in 2017, primarily resulting from improved credit quality in most lines of business, reflected by lower net loan charge-offs and criticized loans. Net loan charge-offs in 2018 decreased $41 million to $51 million, or 0.11 percent of average total loans, compared to $92 million, or 0.19 percent, in 2017. The decrease primarily reflected lower charge-offs in Energy, Technology and Life Sciences as well as Corporate Banking. Criticized loans decreased $683 million to $1.5 billion in 2018.

The provision for credit losses on lending-related commitments is recorded to maintain reserves at the level deemed appropriate by the Corporation to cover probable credit losses inherent in lending-related commitments. The provision for credit losses on lending-related commitments was a benefit of $12 million in 2018, a decrease of $13 million compared to a provision of $1 million in 2017. The increase in the provision benefit primarily reflected a decrease in commercial commitments, primarily in Energy. There were no lending-related commitment charge-offs in 2018 and 2017.

For further discussion of the allowance for loan losses and the allowance for credit losses on lending-related commitments, including the methodology used in the determination of the allowances and an analysis of the changes in the allowances, refer to Note 1 to the consolidated financial statements and the "Credit Risk" section of this financial review.

PRESENTATION CHANGES

Noninterest income and noninterest expenses for 2018 reflect certain presentation changes resulting from the adoption of ASC Topic 606, "Revenue from Contracts with Customers," (Topic 606), effective January 1, 2018. These changes primarily impacted card fees and service charges on deposit accounts in noninterest income, fully offset by the impact to outside processing fee expense in noninterest expenses. See Note 1 to the consolidated financial statements for further details on the adoption of Topic 606. The table below summarizes the proforma effects to 2017.

(in millions)

Year Ended December 31, 2017	Reported Amounts	Proforma Effects	Proforma Amounts (a)
Card fees	$ 333	$ (113)	$ 220
Service charges on deposit accounts	227	(5)	222
Total noninterest income	1,107	(118)	989
Outside processing fee expense	366	(118)	248
Total noninterest expenses	1,860	(118)	1,742

(a) The Corporation believes proforma noninterest income and noninterest expenses (each a non-GAAP measure) provide a greater understanding of ongoing operations and enhances comparability of results with 2017.

NONINTEREST INCOME

(in millions)

Years Ended December 31	2018	2017	2016
Card fees	$ 244	$ 333	$ 303
Service charges on deposit accounts	211	227	219
Fiduciary income	206	198	190
Commercial lending fees	85	85	89
Foreign exchange income	47	45	42
Letter of credit fees	40	45	50
Bank-owned life insurance	39	43	42
Brokerage fees	27	23	19
Net securities losses	(19)	—	—
Other noninterest income (a)	96	108	97
Total noninterest income	$ 976	$ 1,107	$ 1,051

(a) The table below provides further details on certain categories included in other noninterest income.

Noninterest income decreased $131 million to $976 million in 2018, compared to $1.1 billion in 2017. The change in noninterest income included the Topic 606 proforma reduction of $118 million to 2017, a $20 million loss due to the repositioning of the securities portfolio and a $10 million reduction in deferred compensation asset returns (offset in noninterest expenses). Excluding these items, noninterest income increased $17 million in 2018. The increase was primarily due to increases in card fees (proforma) and fiduciary income, partly offset by a decrease in service charges on deposit accounts (proforma). For further information about the investment securities portfolio, refer to "Balance Sheet and Capital Funds Analysis" section in this financial review.

Card fees consist primarily of interchange and other fee income earned on government card, commercial card, debit/ Automated Teller Machine (ATM) card and merchant payment processing services. Card fees increased $24 million (proforma), or 11 percent, to $244 million in 2018, compared to $220 million (proforma) in 2017. The increase in 2018 was primarily due to volume-driven increases in merchant payment processing services and government card programs.

Service charges on deposit accounts consist primarily of charges on retail and business accounts, including fees for treasury management services. Service charges on deposit accounts decreased $11 million (proforma), or 5 percent, to $211 million in 2018, compared to $222 million (proforma) in 2017. The decrease in service charges on deposit accounts included higher earnings credit allowances provided on customer deposit balances due to increases in short-term interest rates.

Fiduciary income consists of fees and commissions from asset management, custody, recordkeeping, investment advisory and other services provided primarily to personal and institutional trust customers. These fees are based on services provided, assets under management and assets under administration. Fluctuations in the market values of the underlying assets managed or administered, which include both equity and fixed income securities, and net asset flows within client accounts impact fiduciary income. Fiduciary income increased $8 million, or 4 percent, to $206 million in 2018, compared to $198 million in 2017. The increase in 2018 was primarily driven by the favorable impact on fees from average market value increases and net positive asset flows for trust as well as investment advisory services.

Other noninterest income decreased $12 million, or 11 percent, to $96 million in 2018, compared to $108 million in 2017, driven by a $10 million decrease in deferred compensation asset returns (offset in noninterest expenses) and smaller changes in various categories as illustrated in the following table.

(in millions)

Years Ended December 31	2018	2017	2016
Customer derivative income	$ 26	$ 26	$ 27
Insurance commissions	10	8	10
Investment banking fees	9	9	7
Securities trading income	8	8	6
Income from principal investing and warrants	4	6	7
Risk management hedge ineffectiveness	—	1	(2)
Deferred compensation asset returns (a)	(2)	8	3
All other noninterest income	41	42	39
Other noninterest income	$ 96	$ 108	$ 97

(a) Compensation deferred by the Corporation's officers and directors is invested based on investment selections of the officers and directors. Income earned on these assets is reported in noninterest income and the offsetting change in deferred compensation plan liabilities is reported in salaries and benefits expense.

NONINTEREST EXPENSES

(in millions)

Years Ended December 31	2018	2017	2016
Salaries and benefits expense	$ 1,009	$ 961 (a)	$ 989 (a)
Outside processing fee expense	255	366	336
Net occupancy expense	152	154	157
Software expense	125	126	119
Restructuring charges	53	45	93
Equipment expense	48	45	53
FDIC insurance expense	42	51	54
Advertising expense	30	28	21
Other noninterest expenses	80	84 (a)	108 (a)
Total noninterest expenses	$ 1,794	$ 1,860	$ 1,930

(a) Prior period amounts restated to reflect the adoption of Accounting Standard Update (ASU) 2017-07, "Compensation - Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost," effective January 1, 2018. For further information, refer to Note 1 to the consolidated financial statements.

Noninterest expenses decreased $66 million to $1.8 billion in 2018, compared to 2017. The change in noninterest expenses included the Topic 606 proforma reduction of $118 million to 2017 and an $8 million increase in restructuring charges. Excluding these items, noninterest expenses increased $44 million in 2018 primarily due to increases in salaries and benefits expense as well as outside processing fee expense (proforma), partly offset by decreases in FDIC insurance expense and other noninterest expenses.

Salaries and benefits expense increased $48 million, or 5 percent, to $1.0 billion in 2018, compared to $961 million in 2017. The increase in salaries and benefits expense was driven by higher share-based and executive incentive compensation tied

to financial performance as well as merit increases and technology-related labor costs, partially offset by decreases in workforce and deferred compensation expense (offset in noninterest income).

Outside processing fee expense increased $7 million (proforma), or 3 percent, to $255 million in 2018, compared to $248 million (proforma) in 2017, primarily due to expenses tied to revenue-generating activities, including government card programs and merchant payment processing services, partially offset by $3 million of reduced expenses due to the wind down of a retirement savings program in 2018.

Restructuring charges associated with the implementation of the GEAR Up initiative increased $8 million, or 18 percent, to $53 million in 2018, compared to $45 million in 2017, including increases of $11 million in technology costs and $2 million in facilities costs, partially offset by a $5 million decrease in other restructuring costs such as professional and legal fees as well as contract termination fees. For further information about restructuring charges, refer to Note 22 to the consolidated financial statements.

FDIC insurance expense decreased $9 million, or 17 percent, to $42 million in 2018, compared to $51 million in 2017, primarily due to the completion of FDIC surcharges in third quarter 2018 as well as lower risk-based assessment rates.

Other noninterest expenses decreased $4 million, or 4 percent, to $80 million in 2018, compared to $84 million in 2017, driven by decreases of $6 million in operational losses and $5 million in state business taxes, partially offset by $6 million of net gains recognized on sales of assets in 2017 that did not repeat. The decrease in state business taxes was due to tax refunds obtained in 2018.

INCOME TAXES AND RELATED ITEMS

The provision for income taxes was $300 million in 2018, compared to $491 million in 2017. The $191 million decrease in the provision for income taxes in 2018, compared to 2017, primarily reflected the impact of a 14-percentage-point decrease in federal statutory tax rate in 2018 resulting from the Tax Cuts and Jobs Act and a $120 million decrease in discrete tax items, from a $72 million charge in 2017 to a benefit of $48 million in 2018, partially offset by the tax effect of a $301 million increase in pre-tax income. The discrete tax charge in 2017 was primarily due to a $107 million adjustment to deferred taxes resulting from the Tax Cuts and Jobs Act, partially offset by tax benefits of $35 million from employee stock transactions. The discrete tax benefit in 2018 primarily resulted from a review of certain tax capitalization and recovery positions related to software and fixed assets included in the 2017 tax return and tax benefits of $23 million from employee stock transactions.

Net deferred tax assets were $166 million at December 31, 2018, compared to $141 million at December 31, 2017. Refer to Note 18 to the consolidated financial statements for information about the components of net deferred tax assets. Deferred tax assets of $302 million were evaluated for realization and it was determined that a valuation allowance of $3 million related to state net operating loss carryforwards was needed at both December 31, 2018 and 2017. These conclusions were based on available evidence of projected future reversals of existing taxable temporary differences, assumptions made regarding future events and, when applicable, state loss carryback capacity.

2017 RESULTS OF OPERATIONS COMPARED TO 2016

Net interest income was $2.1 billion in 2017, an increase of $264 million compared to 2016. The increase in net interest income primarily reflected the net benefit from higher short-term rates and elevated interest recoveries, partially offset by one fewer day in 2017. Average earning assets decreased $245 million, primarily reflecting decreases of $438 million in average loans and $141 million in average investment securities, partially offset by an increase of $344 million in interest-bearing deposits with banks.

The net interest margin increased 40 basis points in 2017 to 3.11 percent, primarily reflecting the net benefit from higher rates. The "Analysis of Net Interest Income" and "Rate/Volume Analysis" tables under the "Net Interest Income" subheading in this section above provide an analysis of net interest income for 2017 and 2016 and details the components of the change in net interest income for 2017 compared to 2016.

The provision for credit losses, which includes both the provision for loan losses and the provision for credit losses on lending-related commitments, was $74 million in 2017, a decrease of $174 million compared to 2016. Net loan charge-offs in 2017 decreased $54 million to $92 million, or 0.19 percent of average total loans, primarily reflecting lower Energy charge-offs. There were no lending-related commitment charge-offs in 2017, compared to $11 million in 2016, primarily reflecting improved credit quality.

Noninterest income increased $56 million, or 5 percent, to $1.1 billion in 2017 compared to 2016, partially driven by the GEAR Up initiative. Card fees increased $30 million, or 10 percent, to $333 million in 2017, primarily due to volume-driven increases from merchant payment processing services, including new customers, and government card programs. Service charges on deposit accounts increased $8 million, or 4 percent, to $227 million in 2017, primarily reflecting an increase in commercial service charges. Fiduciary income increased $8 million, or 5 percent, to $198 million in 2017, primarily driven by the favorable impact on fees from market value increases and net asset inflows. Other noninterest income increased $11 million, or 11 percent, to $108 million in 2017, driven by small changes in various categories of other noninterest income. Refer to the table provided

under the "Noninterest Income" subheading previously in this section for details of certain categories included in other noninterest income.

Noninterest expenses decreased $70 million to $1.9 billion in 2017, compared to 2016. Excluding restructuring charges related to the GEAR Up initiative, noninterest expenses decreased $22 million in 2017. Salaries and benefits expense decreased $28 million, or 3 percent, to $961 million in 2017, primarily driven by the GEAR Up initiative, partially offset by an increase in performance-based incentive compensation and a one-time bonus of $1,000 to approximately 4,500 non-officer employees, as well as the impact of merit increases. Outside processing fee expense increased $30 million, or 9 percent, to $366 million in 2017, primarily tied to revenue-generating activities, including expenses related to increases in merchant payment processing services and government card programs, as well as increases in other outsourced services. Restructuring charges associated with the implementation of the GEAR Up initiative decreased $48 million to $45 million in 2017, including decreases of $42 million in employee costs, $19 million in other restructuring costs and $13 million in facilities costs, partially offset by an increase of $26 million in technology costs. Equipment expense decreased $8 million, or 15 percent, to $45 million in 2017, primarily driven by favorable price renegotiations and a reduction in equipment depreciation expense, in part reflecting careful management of fully depreciated assets. Software expense increased $7 million, or 6 percent, to $126 million in 2017, primarily reflecting continued investment in the Corporation's technology infrastructure. Advertising expense increased $7 million to $28 million in 2017, primarily due to increased marketing expenses tied to new initiatives as well as an increase in sponsorship expenses.

The provision for income taxes increased $298 million to $491 million in 2017, primarily due to an increase in pre-tax income of $564 million and the $107 million charge to adjust deferred taxes resulting from the Tax Cuts and Jobs Act, partially offset by a $35 million tax benefit from employee stock transactions.

STRATEGIC LINES OF BUSINESS

The Corporation has strategically aligned its operations into three major business segments: the Business Bank, the Retail Bank and Wealth Management. These business segments are differentiated based upon the type of customer and the related products and services provided. In addition to the three major business segments, the Finance Division is also reported as a segment. The Other category includes items not directly associated with these business segments or the Finance segment. The performance of the business segments is not comparable with the Corporation's consolidated results and is not necessarily comparable with similar information for any other financial institution. Additionally, because of the interrelationships of the various segments, the information presented is not indicative of how the segments would perform if they operated as independent entities. Market segment results are also provided for the Corporation's three primary geographic markets: Michigan, California and Texas. In addition to the three primary geographic markets, Other Markets is also reported as a market segment. Note 23 to the consolidated financial statements describes the Corporation's segment reporting methodology as well as the business activities of each business segment and presents financial results of these business segments for the years ended December 31, 2018, 2017 and 2016.

The Corporation's management accounting system assigns balance sheet and income statement items to each segment using certain methodologies, which are regularly reviewed and refined. These methodologies may be modified as the management accounting system is enhanced and changes occur in the organizational structure and/or product lines. During 2018, the Small Business component was reclassified from Retail Bank to Business Bank. Results in all periods presented have been adjusted to reflect the change in organizational structure.

Net interest income for each segment reflects the interest income generated by earning assets less interest expense on interest-bearing liabilities plus the net impact from associated internal funds transfer pricing (FTP). The FTP methodology allocates credits to each business segment for deposits and other funds provided as well as charges for loans and other assets being funded. FTP crediting rates on deposits and other funds provided reflect the long-term value of deposits and other funding sources based on their implied maturities. FTP charge rates for funding loans and other assets reflect a matched cost of funds based on the pricing and duration characteristics of the assets. Therefore, net interest income for each segment primarily reflects the volume and associated FTP impacts of loan and deposit levels. Business segments that generate deposits benefited from higher FTP crediting rates on deposits during 2018 compared to the prior year. As overall market rates increased, FTP charges for funding loans increased for asset-generating business segments in the year ended December 31, 2018 compared to the prior year.

The following sections present a summary of the performance of each of the Corporation's business and market segments for the year ended December 31, 2018 compared to the same period in the prior year. The proforma effect of Topic 606 to the year ended December 31, 2017, reducing both noninterest income and noninterest expenses by $118 million, primarily impacted the Business Bank and Other Markets segments.

BUSINESS SEGMENTS

The following table presents net income (loss) by business segment.

(dollar amounts in millions)

Years Ended December 31	2018		2017		2016	
Business Bank	$ 1,024	85%	$ 755	90%	$ 613	99%
Retail Bank	65	5	(6)	(1)	(61)	(10)
Wealth Management	121	10	87	11	68	11
	1,210	100%	836	100%	620	100%
Finance	(1)		(23)		(146)	
Other (a)	26		(70)		3	
Total	$ 1,235		$ 743		$ 477	

(a) Primarily reflected discrete tax items, including a benefit of $48 million in 2018 and a net charge of $72 million in 2017.

The Business Bank's net income increased $269 million to $1.0 billion. Average loans increased $377 million and average deposits decreased $1.9 billion. Net interest income increased $100 million to $1.6 billion. An increase in loan income of $355 million was partially offset by a $41 million increase in deposit costs and a $215 million increase in allocated net FTP charges. The FTP allocation reflected increases in funding charges and crediting rates on deposits as a result of higher short-term rates. The provision for credit losses decreased $63 million to $6 million, primarily reflecting improved credit quality in most lines of business. Net credit-related charge-offs decreased $44 million to $52 million, with most of the decreases in Energy, Technology and Life Sciences as well as Corporate Banking. Including the Topic 606 proforma reduction of $105 million to the prior year, noninterest income increased $13 million and noninterest expenses increased $34 million. Noninterest income benefited from a $22 million increase in card fees (proforma) and smaller increases in other noninterest income categories, partially offset by decreases of $9 million in service charges on deposit accounts (proforma) and $5 million in letter of credit fees. Noninterest expenses reflected increases of $12 million in salaries and benefits expense, $11 million in outside processing fee expense (proforma), $8 million in allocated corporate overhead and smaller increases in other categories of noninterest expenses, partially

offset by an $8 million decrease in FDIC insurance expense. Additionally, noninterest expenses in 2017 included $6 million in net gains recognized on sales of assets that did not repeat.

The Retail Bank's net income increased $71 million to $65 million. Average loans and deposits were stable. Net interest income increased $95 million to $548 million. Increases of $98 million in allocated net FTP credits and $14 million in loan income were partially offset by a $16 million increase in deposit costs. The FTP allocation primarily reflected an increase in crediting rates on deposits as a result of higher short-term rates. The provision for credit losses decreased $3 million to a benefit of $1 million. Including the Topic 606 proforma reduction of $12 million to the prior year, noninterest income decreased $6 million and noninterest expenses decreased $1 million. Noninterest income was primarily impacted by a decrease of $6 million due to the wind down of a retirement savings program and a $2 million decline in service charges on deposit accounts (proforma), partially offset by a $2 million increase in card fees (proforma). The decrease in noninterest expenses primarily reflected decreases of $6 million in outside processing fee expense (proforma), including a $3 million decrease resulting from the wind down of a retirement savings program in 2018, and $4 million in FDIC insurance expense as well as smaller decreases in other categories of noninterest expenses, mostly offset by increases of $9 million in salaries and benefits expense and $4 million in restructuring charges.

Wealth Management's net income increased $34 million to $121 million. Net interest income increased $12 million to $181 million, primarily reflecting an increase in crediting rates on deposits as a result of higher short-term rates. The provision for credit losses decreased $4 million to a benefit of $3 million. Net credit-related recoveries decreased $4 million to $1 million in 2018. Noninterest income increased $11 million to $266 million, primarily reflecting increases of $7 million in fiduciary income and $3 million in brokerage fees. Noninterest expenses increased $8 million to $293 million, primarily reflecting a $5 million increase in salaries and benefits expense and smaller increases in other categories of noninterest expenses.

The net loss in the Finance segment decreased $22 million to $1 million, primarily reflecting an increase in net FTP revenue as a result of higher rates charged to the business segments under the Corporation's internal FTP methodology, partially offset by a $15 million loss, net of tax, due to repositioning the securities portfolio.

MARKET SEGMENTS

The following table presents net income (loss) by market segment.

(dollar amounts in millions)

Years Ended December 31	**2018**		**2017**		**2016**	
Michigan	**$ 326**	**27%**	$ 247	30%	$ 210	33%
California	**375**	**31**	229	27	246	40
Texas	**229**	**19**	175	21	(39)	(6)
Other Markets	**280**	**23**	185	22	203	33
	1,210	**100%**	836	100%	620	100%
Finance & Other (a)	**25**		(93)		(143)	
Total	**$ 1,235**		$ 743		$ 477	

(a) Primarily reflected discrete tax items, including a benefit of $48 million in 2018 and a net charge of $72 million in 2017.

The Michigan market's net income increased $79 million to $326 million. Average loans decreased $146 million and average deposits decreased $1.1 billion. Net interest income increased $70 million to $727 million. An increase in loan income of $95 million was partially offset by a $23 million increase in deposit costs and a $1 million increase in allocated net FTP charges. The FTP allocation reflected an increase in funding charges mostly offset by increases in crediting rates on deposits as a result of higher short-term rates. The provision for credit losses increased $22 million to $30 million, primarily reflecting an increase in general Middle Market. Net credit-related charge-offs increased $8 million to $7 million, primarily reflecting an increase in general Middle Market. Including the Topic 606 proforma reduction of $13 million to the prior year, noninterest income decreased $15 million and noninterest expenses increased $1 million. The decrease in noninterest income reflected decreases of $9 million in fiduciary income, $6 million in service charges on deposit accounts (proforma) and smaller decreases in several other categories, partially offset by a $3 million increase in card fees (proforma). Noninterest expenses were impacted by an $8 million increase in salaries and benefits expense, $6 million of net gains recognized in 2017 on sales of assets that did not repeat and smaller increases in other categories of noninterest expenses, mostly offset by a $14 million decrease in allocated corporate overhead.

The California market's net income increased $146 million to $375 million. Average loans increased $275 million and average deposits decreased $569 million. Net interest income increased $77 million to $788 million. An increase in loan income of $158 million was partially offset by a $23 million increase in deposit costs and a $58 million increase in allocated net FTP charges. The FTP allocation reflected increases in funding charges and in crediting rates on deposits as a result of higher short-term rates. The provision for credit losses decreased $73 million to $31 million, primarily reflecting improved credit quality in most lines of business. Net credit-related charge-offs decreased $6 million to $27 million, with the largest decrease in Corporate Banking. Including the Topic 606 proforma reduction of $7 million to the prior year, noninterest income was unchanged and noninterest expenses increased $27 million. Noninterest income was impacted by a $4 million increase in card fees (proforma)

and smaller increases in other categories of noninterest income, offset by decreases of $3 million each in service charges on deposit accounts (proforma) and letter of credit fees. Noninterest expenses reflected increases of $13 million in allocated corporate overhead, $6 million in salaries and benefits expense, $4 million each in outside processing fee expense (proforma) and restructuring charges as well as smaller increases in other categories of noninterest expenses, partially offset by a $4 million decrease in FDIC insurance expense. Additionally, the increase in noninterest expenses reflected the impact of a $3 million benefit in 2017 due to a favorable litigation-related settlement.

The Texas market's net income increased $54 million to $229 million. Average loans decreased $148 million and average deposits decreased $632 million. Net interest income increased $24 million to $475 million. An increase in loan income of $68 million was partially offset by increases of $5 million in deposit costs and $40 million in allocated net FTP charges. The FTP allocation reflected increases in funding charges and in crediting rates on deposits as a result of higher short-term rates. The provision for credit losses was impacted by a $19 million decrease in provision benefit to $53 million, primarily due to improved credit quality and a large decrease in Energy loans in 2017. Net credit-related charge-offs decreased $34 million to $12 million, primarily reflecting decreases in Energy and general Middle Market. Including the Topic 606 proforma reduction of $6 million to the prior year, noninterest income increased $5 million and noninterest expenses decreased $4 million. Noninterest income was primarily impacted by a $3 million increase in card fees (proforma). The decline in noninterest expenses primarily reflected decreases of $4 million in allocated corporate overhead and $3 million in FDIC insurance expense, partially offset by a $2 million increase in outside processing fee expense (proforma).

Other Markets' net income increased $95 million to $280 million. Average loans increased $227 million and average deposits increased $267 million. Net interest income increased $36 million to $352 million. An increase in loan income of $70 million was partially offset by a $13 million increase in deposit costs and a $21 million increase in allocated net FTP charges. The FTP allocation reflected an increase in funding charges as well as increases in crediting rates on deposits as a result of higher short-term rates. The provision for credit losses decreased $39 million to a $6 million benefit, with most of the decreases in Corporate Banking, Small Business as well as Technology and Life Sciences. Net credit-related charge-offs decreased $9 million to $5 million, primarily reflecting decreases in Technology and Life Sciences as well as Small Business. Including the Topic 606 proforma reduction of $92 million to the prior year, noninterest income increased $28 million and noninterest expenses increased $18 million. Noninterest income was primarily impacted by increases of $15 million in fiduciary income and $13 million in card fees (proforma). Noninterest expenses primarily reflected increases of $11 million in salaries and benefits expense and $10 million in allocated corporate overhead, partially offset by a $4 million decrease in outside processing fee expense (proforma).

Net income for the Finance & Other category increased $118 million to $25 million, primarily reflecting the $120 million change in discrete tax items and an increase in FTP revenue as a result of higher rates charged to the market segments under the Corporation's internal FTP methodology, partially offset by a $15 million loss, net of tax, due to repositioning the securities portfolio.

The following table lists the Corporation's banking centers by geographic market segment.

December 31	2018	2017	2016
Michigan	193	194	209
Texas	122	122	127
California	96	97	97
Other Markets:			
Arizona	17	17	17
Florida	7	7	7
Canada	1	1	1
Total Other Markets	25	25	25
Total	436	438	458

BALANCE SHEET AND CAPITAL FUNDS ANALYSIS

ANALYSIS OF INVESTMENT SECURITIES AND LOANS

(in millions)

December 31	2018		2017	2016	2015	2014
Investment securities available-for-sale:						
U.S. Treasury and other U.S. government agency securities	**$ 2,727**		$ 2,727	$ 2,779	$ 2,763	$ 526
Residential mortgage-backed securities (a)	**9,318**	(b)	8,124	7,872	7,545	7,274
State and municipal securities	**—**		5	7	9	23
Corporate debt securities	**—**		—	—	1	51
Equity and other non-debt securities	**—**		82	129	201	242
Total investment securities available-for-sale	**12,045**		10,938	10,787	10,519	8,116
Investment securities held to maturity:						
Residential mortgage-backed securities (a)	**—**	(b)	1,266	1,582	1,981	1,935
Total investment securities	**$ 12,045**		$ 12,204	$ 12,369	$ 12,500	$ 10,051
Commercial loans	**$ 31,976**		$ 31,060	$ 30,994	$ 31,659	$ 31,520
Real estate construction loans	**3,077**		2,961	2,869	2,001	1,955
Commercial mortgage loans	**9,106**		9,159	8,931	8,977	8,604
Lease financing	**507**		468	572	724	805
International loans:						
Banks and other financial institutions	**—**		4	2	—	31
Commercial and industrial	**1,013**		979	1,256	1,368	1,465
Total international loans	**1,013**		983	1,258	1,368	1,496
Residential mortgage loans	**1,970**		1,988	1,942	1,870	1,831
Consumer loans:						
Home equity	**1,765**		1,816	1,800	1,720	1,658
Other consumer	**749**		738	722	765	724
Total consumer loans	**2,514**		2,554	2,522	2,485	2,382
Total loans	**$ 50,163**		$ 49,173	$ 49,088	$ 49,084	$ 48,593

(a) Issued and/or guaranteed by U.S. government agencies or U.S. government-sponsored enterprises.

(b) Effective with the adoption of ASU 2017-12 "Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities" on January 1, 2018, the Corporation transferred residential mortgage-backed securities with a book value of approximately $1.3 billion from held-to-maturity to available-for-sale.

EARNING ASSETS

Loans

On a period-end basis, total loans increased $990 million to $50.2 billion at December 31, 2018 compared to $49.2 billion at December 31, 2017. Average total loans increased $208 million to $48.8 billion in 2018, compared to $48.6 billion in 2017. The following tables provide information about the changes in the Corporation's average loan portfolio in 2018, compared to 2017.

(dollar amounts in millions) Years Ended December 31	2018	2017	Change	Percent Change
By Business Line:				
General Middle Market	$ 11,800	$ 11,873	$ (73)	(1)%
National Dealer Services	7,294	6,953	341	5
Energy	1,868	2,075	(207)	(10)
Technology and Life Sciences	3,808	3,281	527	16
Environmental Services	1,099	924	175	19
Entertainment	731	659	72	11
Total Middle Market	26,600	25,765	835	3
Corporate Banking	4,337	4,682	(345)	(7)
Mortgage Banker Finance	1,716	1,768	(52)	(3)
Commercial Real Estate	5,287	5,230	57	1
Small Business	3,678	3,796	(118)	(3)
Total Business Bank	41,618	41,241	377	1
Total Retail Bank	2,067	2,061	6	—
Total Wealth Management	5,081	5,256	(175)	(3)
Total loans	$ 48,766	$ 48,558	$ 208	— %
By Loan Type:				
Commercial	$ 30,534	$ 30,415	$ 119	— %
Real estate construction loans	3,155	2,958	197	7
Commercial mortgage loans	9,131	9,005	126	1
Lease financing	470	509	(39)	(8)
International loans	1,021	1,157	(136)	(12)
Residential mortgage loans	1,983	1,989	(6)	—
Consumer loans:				
Home equity	1,749	1,794	(45)	(3)
Other consumer	723	731	(8)	(1)
Total consumer loans	2,472	2,525	(53)	(2)
Total loans	$ 48,766	$ 48,558	$ 208	— %
By Geographic Market:				
Michigan	$ 12,531	$ 12,677	$ (146)	(1)%
California	18,283	18,008	275	2
Texas	9,821	9,969	(148)	(1)
Other Markets	8,131	7,904	227	3
Total loans	$ 48,766	$ 48,558	$ 208	— %

Middle Market business lines generally serve customers with annual revenue between $20 million and $500 million. Within the Middle Markets business lines, the largest changes were due to Technology and Life Sciences as well as National Dealer Services, partially offset by Energy. Technology and Life Sciences serves two segments: (1) private equity and venture capital firms, referred to as equity fund services, and (2) companies that are typically owned by venture-capital firms, where significant equity is invested to create products and build companies around new intellectual property. The $527 million increase in average Technology and Life Sciences loans primarily reflected growth in the equity fund services business. National Dealer Services provides floor plan inventory financing and commercial mortgages to auto dealerships. The $341 million increase in average National Dealer Services loans largely reflected the expansion of new and existing relationships. Customers in the Energy business line are primarily engaged in the oil and gas businesses. The $207 million decrease in average Energy loans primarily reflected Energy customers taking actions to adjust their cash flow and reduce their bank debt, including selling assets and raising capital, as well as improved operations. For more information on Energy loans, refer to "Energy Lending" in the "Risk Management" section of this financial review.

Corporate Banking generally serves customers with revenue over $500 million. The $345 million decrease in average Corporate Banking loans reflected continued pricing and credit discipline as well as an elevated number of customers taking advantage of favorable valuations to sell their businesses.

Investment Securities

(dollar amounts in millions)	Maturity (a)										Weighted Average Maturity
	Within 1 Year		1 - 5 Years		5 - 10 Years		After 10 Years		Total		
December 31, 2018	**Amount**	**Yield**	**Amount**	**Yield**	**Amount**	**Yield**	**Amount**	**Yield**	**Amount**	**Yield**	**Years**
U.S. Treasury and other U.S. government agency securities	$ 100	1.42%	$ 2,627	2.34%	$ —	—%	$ —	—%	$ 2,727	2.30%	2.3
Residential mortgage-backed securities (b)	—	—	15	2.70	1,502	2.43	7,801	2.36	9,318	2.37	19.7
Total investment securities	$ 100	1.42%	$ 2,642	2.34%	$ 1,502	2.43%	$ 7,801	2.36%	$ 12,045	2.35%	15.8

(a) Based on final contractual maturity.
(b) Issued and/or guaranteed by U.S. government agencies or U.S. government-sponsored enterprises.

Investment securities decreased $159 million to $12.0 billion at December 31, 2018, from $12.2 billion at December 31, 2017, including a $57 million increase in net unrealized losses. Net unrealized losses on investment securities available-for-sale were $180 million at December 31, 2018, compared to net unrealized losses of $123 million at December 31, 2017. At December 31, 2018, the weighted-average expected life of the Corporation's residential mortgage-backed securities portfolio was approximately 3.5 years. On an average basis, investment securities decreased $397 million to $11.8 billion in 2018, compared to $12.2 billion in 2017. The decrease was primarily due to an increase in net unrealized losses.

At the end of the third quarter 2018, the Corporation repositioned $1.3 billion of treasury securities by purchasing securities yielding approximately $4 million in additional interest per quarter. The loss taken on the securities sold ($15 million, net of tax) was offset by discrete tax benefits resulting from actions taken related to the Tax Cuts and Jobs Act.

Interest-Bearing Deposits with Banks and Other Short-Term Investments

Interest-bearing deposits with banks primarily include deposits with the Federal Reserve Bank (FRB) and also include deposits with banks in developed countries or international banking facilities of foreign banks located in the United States. Interest-bearing deposits with banks are mostly used to manage liquidity requirements of the Corporation. Interest-bearing deposits with banks decreased $1.2 billion to $3.2 billion at December 31, 2018. On an average basis, interest-bearing deposits with banks decreased $743 million to $4.7 billion in 2018, compared to $5.4 billion in 2017.

Other short-term investments include federal funds sold, trading securities, money market investments and loans held-for-sale. Substantially all trading securities are deferred compensation plan assets. Loans held-for-sale typically represent residential mortgage loans originated with management's intention to sell and, from time to time, other loans that are transferred to held-for-sale. Other short-term investments increased $38 million to $134 million at December 31, 2018. On an average basis, other short-term investments increased $42 million to $134 million in 2018.

DEPOSITS AND BORROWED FUNDS

At December 31, 2018, total deposits were $55.6 billion, a decrease of $2.3 billion, or 4 percent, compared to $57.9 billion at December 31, 2017, reflecting a decrease of $3.4 billion, or 11 percent, in noninterest-bearing deposits, partially offset by an increase of $1.0 billion, or 4 percent, in interest-bearing deposits. The Corporation's average deposits and borrowed funds balances are detailed in the following table.

(dollar amounts in millions) **Years Ended December 31**	**2018**	**2017**	**Change**	**Percent Change**
Noninterest-bearing deposits	$ **29,241**	$ 31,013	$ (1,772)	(6)%
Money market and interest-bearing checking deposits	**22,378**	21,585	793	4
Savings deposits	**2,199**	2,133	66	3
Customer certificates of deposit	**2,092**	2,471	(379)	(15)
Foreign office time deposits	**25**	56	(31)	(56)
Total deposits	$ **55,935**	$ 57,258	$ (1,323)	(2)%
Short-term borrowings	$ **62**	$ 277	$ (215)	(78)%
Medium- and long-term debt	**5,842**	4,969	873	18
Total borrowed funds	$ **5,904**	$ 5,246	$ 658	13 %

Average deposits decreased $1.3 billion, or 2 percent, to $55.9 billion in 2018, compared to $57.3 billion in 2017, reflecting a decrease of $1.8 billion, or 6 percent, in noninterest-bearing deposits, partially offset by an increase of $449 million, or 2 percent, in interest-bearing deposits. The decrease is primarily due to more efficient cash management by customers. The largest decreases

were reflected in general Middle Market (driven by a $925 million decline in Municipalities), Commercial Real Estate ($598 million) and Corporate Banking ($454 million), partially offset by increases in Finance ($699 million) and Technology and Life Sciences ($418 million). By market, average deposits decreased in Michigan ($1.1 billion), Texas ($632 million) and in California ($569 million), partially offset by increases in Finance and Other ($662 million) and Other Markets ($267 million).

Short-term borrowings totaled $44 million at December 31, 2018, an increase of $34 million compared to $10 million at December 31, 2017. Short-term borrowings primarily include federal funds purchased, short-term FHLB advances and securities sold under agreements to repurchase. Average short-term borrowings decreased $215 million, to $62 million in 2018, compared to $277 million in 2017.

Total medium- and long-term debt at December 31, 2018 increased $1.8 billion to $6.5 billion, compared to $4.6 billion at December 31, 2017. The increase in medium- and long-term debt reflected a $1.0 billion increase in long-term FHLB advances during the first quarter 2018 and an issuance of $850 million in medium-term notes during the third quarter 2018. The Corporation uses medium- and long-term debt, which includes long-term FHLB advances as well as medium-term and subordinated notes, to provide funding to support earning assets, liquidity and regulatory capital. Average medium- and long-term debt increased $873 million, or 18 percent, to $5.8 billion in 2018, compared to $5.0 billion in 2017.

On February 1, 2019, the Corporation issued $350 million of 4.00% senior notes maturing in 2029, swapped to floating rate at 30-day LIBOR plus 129 basis points. Proceeds will be used for general corporate purposes, which may include working capital, investments in or advances to existing or future subsidiaries, and repurchases, maturities and redemptions of other outstanding securities. Pending such use, the net proceeds will be invested for the short term.

Further information on medium- and long-term debt is provided in Note 12 to the consolidated financial statements.

CAPITAL

Total shareholders' equity decreased $456 million to $7.5 billion at December 31, 2018, compared to $8.0 billion at December 31, 2017. The following table presents a summary of changes in total shareholders' equity in 2018.

(in millions)		
Balance at January 1, 2018		$ 7,963
Cumulative effect of change in accounting principles		15
Net income		1,235
Cash dividends declared on common stock		(309)
Purchase of common stock		(1,329)
Other comprehensive loss:		
Investment securities available-for-sale	$ (38)	
Defined benefit and other postretirement plans	(121)	
Total other comprehensive loss		(159)
Issuance of common stock under employee stock plans		43
Share-based compensation		48
Balance at December 31, 2018		$ 7,507

Further information about other comprehensive loss is provided in the Consolidated Statements of Comprehensive Income and Note 14 to the consolidated financial statements.

In July 2018, the Board of Governors of the Federal Reserve System issued a statement announcing that, consistent with the recently enacted Economic Growth, Regulatory Relief and Consumer Protection Act (EGRRCPA), bank holding companies with less than $100 billion in total assets are no longer subject to certain regulations and reporting requirements, such as Dodd-Frank Act stress testing, Comprehensive Capital Analysis and Review (CCAR) and the Liquidity Coverage Ratio, effective immediately. EGRRCPA also revised the definition of High Volatility Commercial Real Estate (HVCRE) exposure for regulatory capital calculations. The Corporation adopted the revised HVCRE definition effective September 30, 2018. The resulting change in regulatory capital ratios was not significant.

The Corporation expects to return excess capital to shareholders with a target of reaching a common equity Tier 1 capital ratio of 9.5 percent to 10 percent by the end of 2019. The timing and ultimate amount of future distributions will be subject to various factors including financial performance, capital position and market conditions.

During 2018, the Corporation repurchased 14.8 million shares for a total $1.3 billion. This included $149 million in the first quarter and $169 million in the second quarter repurchased under the Corporation's 2017 capital plan. The Board of Directors (the Board) approved the repurchase of $500 million in each of the third and fourth quarters of 2018. The Corporation facilitated the third and fourth quarter repurchases through an accelerated share repurchase program due to volume and timing execution constraints.

In January 2019, the Board authorized the repurchase of up to an additional 15 million shares of Comerica Incorporated outstanding common stock. This action is in addition to the 4.7 million shares remaining at December 31, 2018 under the Board's prior authorizations for the equity repurchase program. The number of shares ultimately repurchased during 2019 will depend on many factors, including capital needs of the Corporation and market conditions. Additionally, repurchases of common stock under the authorization may include open market purchases, privately negotiated transactions or accelerated repurchase programs. There is no expiration date for the Corporation's share repurchase program.

The Board approved a 4-cent increase in the quarterly dividend to $0.34 per share in April 2018 and further increased the divided 26 cents to $0.60 per share in July 2018. In January 2019, the Board approved a 7-cent increase in the quarterly dividend to $0.67 per share, effective for the dividend payable on April 1, 2019.

The following table summarizes the Corporation's equity repurchase activity for the year ended December 31, 2018.

(shares in thousands)	Total Number of Shares and Warrants Purchased as Part of Publicly Announced Repurchase Plans or Programs (a)	Remaining Repurchase Authorization (b)		Total Number of Shares Purchased (c)	Average Price Paid Per Share
First quarter 2018	1,565	8,714		1,674	$ 95.16
Second quarter 2018	1,755	6,952		1,759	96.32
Third quarter 2018	5,137	11,706	(d)	5,143	97.32
Fourth quarter 2018	6,316	4,707		6,318	79.16
Total 2018	14,773	4,707		14,894	$ 89.26

(a) The Corporation made no repurchases of warrants under the repurchase program during the year ended December 31, 2018. Upon exercise of a warrant, the number of shares with a value equal to the aggregate exercise price is withheld from an exercising warrant holder as payment (known as a "net exercise provision"). During the year ended December 31, 2018, the Corporation withheld the equivalent of approximately 309,000 shares to cover an aggregate of $9 million in exercise price and issued approximately 585,000 shares to the exercising warrant holders. Shares withheld in connection with the net exercise provision are not included in the total number of shares or warrants purchased in the above table. All unexercised warrants expired in fourth quarter 2018.

(b) Maximum number of shares and warrants that may yet be purchased under the publicly announced plans or programs. In January 2019, the Board rescinded its warrant repurchase authorization following the expiration of all unexercised warrants.

(c) Includes approximately 121,000 shares purchased pursuant to deferred compensation plans and shares purchased from employees to pay for taxes related to restricted stock vesting under the terms of an employee share-based compensation plan during the year ended December 31, 2018. These transactions are not considered part of the Corporation's repurchase program.

(d) Includes July 24, 2018 equity repurchase authorization for an additional 10 million shares.

The U.S. adoption of the Basel III regulatory capital framework (Basel III) became effective for the Corporation on January 1, 2015. Basel III included a more stringent definition of capital and introduced a common equity Tier 1 (CET1) capital requirement; set forth two comprehensive methodologies for calculating risk-weighted assets (RWA), a standardized approach and an advanced approach; introduced two capital buffers, a conservation buffer and a countercyclical buffer (applicable to advanced approach entities); established a supplemental leverage ratio (applicable to advanced approach entities); and set out minimum capital ratios and overall capital adequacy standards. The capital conservation buffer is being phased in and will be fully implemented on January 1, 2019.

Under Basel III, CET1 capital predominantly includes common shareholders' equity, less certain deductions for goodwill, intangible assets and deferred tax assets that arise from net operating losses and tax credit carry-forwards. Additionally, the Corporation has elected to permanently exclude capital in accumulated other comprehensive income (AOCI) related to debt and equity securities classified as available-for-sale as well as for defined benefit postretirement plans from CET1, an option available to standardized approach entities under Basel III. Tier 1 capital incrementally includes noncumulative perpetual preferred stock. Tier 2 capital includes Tier 1 capital as well as subordinated debt qualifying as Tier 2 and qualifying allowance for credit losses. The ultimate treatment for certain specific deductions and adjustments is yet to be determined pending the finalization of a proposal by banking regulators to simplify certain aspects of the capital rules. In addition, in December 2018, the federal banking regulators adopted rules that would permit bank holding companies and banks to phase in, for regulatory capital purposes, the day-one impact of the new current expected credit loss accounting rule on retained earnings over a period of three years. The Corporation does not expect the proposed rule to have a significant impact on its capital ratios.

The Corporation computes RWA using the standardized approach. Under the standardized approach, RWA is generally based on supervisory risk-weightings which vary by counterparty type and asset class. Under the Basel III standardized approach, capital is required for credit risk RWA, to cover the risk of unexpected losses due to failure of a customer or counterparty to meet its financial obligations in accordance with contractual terms; and if trading assets and liabilities exceed certain thresholds, capital is also required for market risk RWA, to cover the risk of losses due to adverse market movements or from position-specific factors.

The following table presents the minimum ratios required to be considered "adequately capitalized."

Common equity tier 1 capital to risk-weighted assets	4.500%
Tier 1 capital to risk-weighted assets	6.000
Total capital to risk-weighted assets	8.000
Capital conservation buffer (a)	1.875
Tier 1 capital to adjusted average assets (leverage ratio)	4.000

(a) In addition to the minimum risk-based capital requirements, the Corporation is required to maintain a minimum capital conservation buffer in the form of common equity, in order to avoid restrictions on capital distributions and discretionary bonuses. The required amount of the capital conservation buffer is being phased in and ultimately increases to 2.5% on January 1, 2019. The capital conservation buffer indicated above is as of December 31, 2018.

The Corporation's capital ratios exceeded minimum regulatory requirements as follows:

	December 31, 2018		December 31, 2017	
(dollar amounts in millions)	**Capital/Assets**	**Ratio**	**Capital/Assets**	**Ratio**
Common equity tier 1 and tier 1 risk-based	**$ 7,470**	**11.14%**	$ 7,773	11.68%
Total risk-based	**8,855**	**13.21**	9,211	13.84
Leverage	**7,470**	**10.51**	7,773	10.89
Common equity	**7,507**	**10.60**	7,963	11.13
Tangible common equity (a)	**6,866**	**9.78**	7,320	10.32
Risk-weighted assets	**67,047**		66,575	

(a) See Supplemental Financial Data section for reconcilements of non-GAAP financial measures.

At December 31, 2018, the Corporation and its U.S. banking subsidiaries exceeded the capital ratios required for an institution to be considered "well capitalized" by the standards developed under the Federal Deposit Insurance Corporation Improvement Act of 1991. Refer to Note 20 to the consolidated financial statements for further discussion of regulatory capital requirements and capital ratio calculations.

RISK MANAGEMENT

The Corporation assumes various types of risk as a result of conducting business in the normal course. The Corporation's enterprise risk framework provides a process for identifying, measuring, controlling and managing these risks. This framework incorporates a risk assessment process, a collection of risk committees that manage the Corporation's major risk elements, and a risk appetite statement that outlines the levels and types of risks the Corporation accepts. The Corporation continuously enhances its enterprise risk framework with additional processes, tools and systems designed to not only provide management with deeper insight into the various existing and emerging risks in accordance with its appetite for risk, but also to improve the Corporation's ability to control those risks and ensure that appropriate consideration is received for the risks taken.

The Corporation's front line employees, the first line of defense, are responsible for the day-to-day management of risks including the identification, assessment, measurement and control of risks encountered as a part of the normal course of business. Risks are further monitored, measured and controlled by the second line of defense, comprised of specialized risk managers for each of the major risk categories who provide oversight, effective challenge and guidance for the risk management activities of the organization. The majority of these risk managers reside in the Enterprise Risk Division. The Enterprise Risk Division, led by the Chief Risk Officer, is responsible for designing and managing the Corporation's enterprise risk framework and ensures effective risk management oversight. Risk management committees serve as a point of review and escalation for those risks which may have risk interdependencies or where risk levels may be nearing the limits outlined in the Corporation's risk appetite statement. These committees comprise senior and executive management that represent views from both the lines of business and risk management. Internal Audit, the third line of defense, monitors and assesses the overall effectiveness of the risk management framework on an ongoing basis and provides an independent assessment of the Corporation's ability to manage and control risk to management and the Audit Committee of the Board.

The Enterprise-Wide Risk Management Committee, chaired by the Chief Risk Officer, is established by the Enterprise Risk Committee of the Board, and is responsible for governance over the risk management framework, providing oversight in managing the Corporation's aggregate risk position and reporting on the comprehensive portfolio of risks as well as the potential impact these risks can have on the Corporation's risk profile and resulting capital level. Capital is the common denominator of risk. The Enterprise-Wide Risk Management Committee is principally composed of senior officers and executives representing the different risk areas and business units who are appointed by the Chairman and Chief Executive Officer of the Corporation.

The Board's Enterprise Risk Committee meets quarterly and is chartered to assist the Board in promoting the best interests of the Corporation by overseeing policies, procedures and risk practices relating to enterprise-wide risk and ensuring compliance with bank regulatory obligations. Members of the Enterprise Risk Committee are selected such that the committee comprises individuals whose experiences and qualifications can lead to broad and informed views on risk matters facing the Corporation and the financial services industry. These include, but are not limited to, existing and emerging risk matters related to credit, market, liquidity, operational, compliance and strategic conditions. A comprehensive risk report is submitted to the Enterprise Risk Committee each quarter providing management's view of the Corporation's aggregate risk position.

Further discussion and analyses of each major risk area are included in the following sub-sections of the Risk Management section in this financial review.

CREDIT RISK

Credit risk represents the risk of loss due to failure of a customer or counterparty to meet its financial obligations in accordance with contractual terms. The governance structure is administered through the Strategic Credit Committee. The Strategic Credit Committee is chaired by the Chief Credit Officer and approves recommendations to address credit risk matters through credit policy, credit risk management practices and required credit risk actions. The Strategic Credit Committee also ensures a comprehensive reporting of credit risk levels and trends, including exception levels, along with identification and mitigation of emerging risks. In order to facilitate the corporate credit risk management process, various other corporate functions provide the resources for the Strategic Credit Committee to carry out its responsibilities. The Corporation manages credit risk through underwriting and periodically reviewing and approving its credit exposures using approved credit policies and guidelines. Additionally, the Corporation manages credit risk through loan portfolio diversification, limiting exposure to any single industry, customer or guarantor, and selling participations and/or syndicating credit exposures above those levels it deems prudent to third parties.

The Credit Division manages credit policy and provides the resources to manage the line of business transactional credit risk, assuring that all exposure is risk rated according to the requirements of the credit risk rating policy and providing business segment reporting support as necessary. The Enterprise Risk Division provides credible and well-documented challenge of overall portfolio credit risk, and other credit-related attributes of the Corporation's loan portfolios, with a particular emphasis on all attendant modeled results. The Corporation's Asset Quality Review function, a division of Internal Audit, audits the accuracy of internal risk ratings that are assigned by the lending and credit groups. The Special Assets Group is responsible for managing the recovery process on distressed or defaulted loans and loan sales.

Portfolio Risk Analytics, within the Credit Division, provides comprehensive reporting on portfolio credit risk levels and trends, continuous assessment and verification of risk rating models, quarterly calculation of the allowance for loan losses and the allowance for credit losses on lending-related commitments, and calculation of economic credit risk capital.

ANALYSIS OF THE ALLOWANCE FOR LOAN LOSSES

(dollar amounts in millions)

Years Ended December 31	2018	2017	2016	2015	2014
Balance at beginning of year	$ 712	$ 730	$ 634	$ 594	$ 598
Loan charge-offs:					
Commercial	95	133	181	139	59
Commercial mortgage	3	3	3	3	22
Lease financing	—	1	—	1	—
International	1	6	23	14	6
Residential mortgage	—	—	—	1	2
Consumer	4	6	7	10	13
Total loan charge-offs	103	149	214	168	102
Recoveries:					
Commercial	44	37	43	33	34
Real estate construction	—	1	—	1	4
Commercial mortgage	2	9	20	21	28
Lease financing	—	—	—	—	2
International	1	3	—	—	—
Residential mortgage	1	1	1	2	4
Consumer	4	6	4	11	5
Total recoveries	52	57	68	68	77
Net loan charge-offs	51	92	146	100	25
Provision for loan losses	11	73	241	142	22
Foreign currency translation adjustment	(1)	1	1	(2)	(1)
Balance at end of year	$ 671	$ 712	$ 730	$ 634	$ 594
Net loan charge-offs during the year as a percentage of average loans outstanding during the year	0.11%	0.19%	0.30%	0.21%	0.05%

Allowance for Credit Losses

The allowance for credit losses includes both the allowance for loan losses and the allowance for credit losses on lending-related commitments. The allowance for loan losses represents management's assessment of probable, estimable losses inherent in the Corporation's loan portfolio. The allowance for credit losses on lending-related commitments, included in accrued expenses and other liabilities on the Consolidated Balance Sheets, provides for probable losses inherent in lending-related commitments, including unused commitments to extend credit and standby letters of credit. Refer to Note 1 to the consolidated financial statements for a discussion of the methodology used in the determination of the allowance for credit losses.

An analysis of the coverage of the allowance for loan losses is provided in the following table.

Years Ended December 31	2018	2017	2016
Allowance for loan losses as a percentage of total loans at end of year	1.34%	1.45%	1.49%
Allowance for loan losses as a multiple of total nonperforming loans at end of year	2.9x	1.7x	1.2x
Allowance for loan losses as a multiple of total net loan charge-offs for the year	13.1x	7.7x	5.0x

The allowance for loan losses was $671 million at December 31, 2018, compared to $712 million at December 31, 2017, a decrease of $41 million, or 6 percent. The decrease in the allowance for loan losses reflected continued improvement in credit quality of the portfolio, including a $683 million decline in criticized loans and a $41 million decline in net loan charge-offs.

ALLOCATION OF THE ALLOWANCE FOR LOAN LOSSES

(dollar amounts in millions) December 31	2018 Allocated Allowance	2018 Allowance Ratio (a)	2018 % (b)	2017 Allocated Allowance	2017 % (b)	2016 Allocated Allowance	2016 % (b)	2015 Allocated Allowance	2015 % (b)	2014 Allocated Allowance	2014 % (b)
Business loans											
Commercial	$ 492	1.54%	64%	$ 521	63%	$ 547	63%	$ 448	65%	$ 379	65%
Real estate construction	19	0.62	6	19	6	21	6	12	4	20	4
Commercial mortgage	99	1.08	18	91	19	93	18	93	18	120	18
Lease financing	4	0.70	1	12	1	5	1	3	1	2	1
International	13	1.31	2	18	2	16	3	23	3	13	3
Total business loans	627	1.37	91	661	91	682	91	579	91	534	91
Retail loans											
Residential mortgage	9	0.43	4	13	4	11	4	14	4	14	4
Consumer	35	1.40	5	38	5	37	5	41	5	46	5
Total retail loans	44	0.97	9	51	9	48	9	55	9	60	9
Total loans	$ 671	1.34%	100%	$ 712	100%	$ 730	100%	$ 634	100%	$ 594	100%

(a) Allocated allowance as a percentage of related loans outstanding.
(b) Loans outstanding as a percentage of total loans.

The allowance for credit losses on lending-related commitments includes specific allowances, based on individual evaluations of certain letters of credit in a manner consistent with business loans, and allowances based on the pool of the remaining letters of credit and all unused commitments to extend credit within each internal risk rating.

The allowance for credit losses on lending-related commitments was $30 million at December 31, 2018 compared to $42 million at December 31, 2017. An analysis of changes in the allowance for credit losses on lending-related commitments is presented below.

(dollar amounts in millions) Years Ended December 31	2018	2017	2016	2015	2014
Balance at beginning of year	$ 42	$ 41	$ 45	$ 41	$ 36
Charge-offs on lending-related commitments (a)	—	—	(11)	(1)	—
Provision for credit losses on lending-related commitments	(12)	1	7	5	5
Balance at end of year	$ 30	$ 42	$ 41	$ 45	$ 41

(a) Charge-offs result from the sale of unfunded lending-related commitments.

For additional information regarding the allowance for credit losses, refer to the "Critical Accounting Policies" section of this financial review and Notes 1 and 4 to the consolidated financial statements.

Nonperforming Assets

Nonperforming assets include loans on nonaccrual status, troubled debt restructured loans (TDRs) which have been renegotiated to less than the original contractual rates (reduced-rate loans) and foreclosed property. TDRs include performing and nonperforming loans. Nonperforming TDRs are either on nonaccrual or reduced-rate status.

SUMMARY OF NONPERFORMING ASSETS AND PAST DUE LOANS

(dollar amounts in millions)

December 31	2018	2017	2016	2015	2014
Nonaccrual loans:					
Business loans:					
Commercial	$ 141	$ 309	$ 445	$ 238	$ 109
Real estate construction	—	—	—	1	2
Commercial mortgage	20	31	46	60	95
Lease financing	2	4	6	6	—
International	3	6	14	8	—
Total nonaccrual business loans	166	350	511	313	206
Retail loans:					
Residential mortgage	36	31	39	27	36
Consumer:					
Home equity	19	21	28	27	30
Other consumer	—	—	4	—	1
Total consumer	19	21	32	27	31
Total nonaccrual retail loans	55	52	71	54	67
Total nonaccrual loans	221	402	582	367	273
Reduced-rate loans	8	8	8	12	17
Total nonperforming loans	229	410	590	379	290
Foreclosed property	1	5	17	12	10
Total nonperforming assets	$ 230	$ 415	$ 607	$ 391	$ 300
Gross interest income that would have been recorded had the nonaccrual and reduced-rate loans performed in accordance with original terms	$ 19	$ 31	$ 38	$ 27	$ 25
Interest income recognized	4	7	6	5	6
Nonperforming loans as a percentage of total loans	0.46%	0.83%	1.20%	0.77%	0.60%
Loans past due 90 days or more and still accruing	$ 16	$ 35	$ 19	$ 17	$ 5
Loans past due 90 days or more and still accruing as a percentage of total loans	0.03%	0.07%	0.04%	0.03%	0.01%

Nonperforming assets decreased $185 million to $230 million at December 31, 2018, from $415 million at December 31, 2017. The decrease in nonperforming assets primarily reflected a $168 million decrease in nonaccrual commercial loans, with the largest decreases in general Middle Market, Energy and Corporate Banking. Nonperforming assets were 0.46 percent of total loans and foreclosed property at December 31, 2018, compared to 0.84 percent at December 31, 2017.

The following table presents a summary of TDRs at December 31, 2018 and 2017.

(in millions)

December 31	2018	2017
Nonperforming TDRs:		
Nonaccrual TDRs	$ 73	$ 182
Reduced-rate TDRs	8	8
Total nonperforming TDRs	81	190
Performing TDRs (a)	101	123
Total TDRs	$ 182	$ 313

(a) *TDRs that do not include a reduction in the original contractual interest rate which are performing in accordance with their modified terms.*

At December 31, 2018, nonaccrual and performing TDRs included $38 million and $46 million of Energy loans, respectively, compared to $82 million and $43 million, respectively at December 31, 2017.

The following table presents a summary of changes in nonaccrual loans.

(in millions)

Years Ended December 31	2018	2017
Balance at beginning of period	$ 402	$ 582
Loans transferred to nonaccrual (a)	197	297
Nonaccrual loan gross charge-offs	(103)	(149)
Loans transferred to accrual status (a)	(6)	—
Nonaccrual loans sold	(39)	(40)
Payments/other (b)	(230)	(288)
Balance at end of period	$ 221	$ 402

(a) Based on an analysis of nonaccrual loans with book balances greater than $2 million.
(b) Includes net changes related to nonaccrual loans with balances less than $2 million, payments on nonaccrual loans with book balances greater than $2 million and transfers of nonaccrual loans to foreclosed property.

There were 32 borrowers with balances greater than $2 million transferred to nonaccrual status in 2018, a decrease of 6 when compared to 38 in 2017.

The following table presents the composition of nonaccrual loans by balance and the related number of borrowers at December 31, 2018 and 2017.

	2018		2017	
(dollar amounts in millions)	Number of Borrowers	Balance	Number of Borrowers	Balance
Under $2 million	799	$ 78	939	$ 85
$2 million - $5 million	14	41	16	47
$5 million - $10 million	10	69	12	93
$10 million - $25 million	2	33	8	130
Greater than $25 million	—	—	1	47
Total	825	$ 221	976	$ 402

The following table presents a summary of nonaccrual loans at December 31, 2018 and loans transferred to nonaccrual and net loan charge-offs for the year ended December 31, 2018, based on North American Industry Classification System (NAICS) categories.

	December 31, 2018		Year Ended December 31, 2018			
(dollar amounts in millions)			Loans Transferred to Nonaccrual (a)		Net Loan Charge-Offs (Recoveries)	
Industry Category	Nonaccrual Loans					
Mining, Quarrying and Oil & Gas Extraction	$ 50	23%	$ 30	15%	$ 9	16%
Residential Mortgage	36	16	10	5	—	—
Manufacturing	33	15	91	45	19	37
Health Care & Social Assistance	18	8	14	7	(1)	(1)
Services	14	6	19	10	10	20
Contractors	13	6	—	—	(2)	(3)
Real Estate & Home Builders	8	4	3	2	2	4
Wholesale Trade	7	3	19	10	13	25
Information & Communication	5	2	5	3	1	2
Other (b)	37	17	6	3	—	—
Total	$ 221	100%	$ 197	100%	$ 51	100%

(a) Based on an analysis of nonaccrual loans with book balances greater than $2 million.
(b) Consumer, excluding residential mortgage and certain personal purpose nonaccrual loans and net charge-offs, is included in the Other category.

Loans past due 90 days or more and still accruing interest generally represent loans that are well collateralized and in the process of collection. Loans past due 90 days or more decreased $19 million to $16 million at December 31, 2018, compared to $35 million at December 31, 2017. Loans past due 30-89 days decreased $169 million to $133 million at December 31, 2018, compared to $302 million at December 31, 2017. An aging analysis of loans included in Note 4 to the consolidated financial statements provides further information about the balances comprising past due loans.

The following table presents a summary of total criticized loans. The Corporation's criticized list is consistent with the Special Mention, Substandard and Doubtful categories defined by regulatory authorities. Criticized loans with balances of $2 million or more on nonaccrual status or loans with balances of $1 million or more whose terms have been modified in a TDR are individually subjected to quarterly credit quality reviews, and the Corporation may establish specific allowances for such loans. A table of loans by credit quality indicator included in Note 4 to the consolidated financial statements provides further information about the balances comprising total criticized loans.

(dollar amounts in millions)

December 31	2018	2017
Total criticized loans	$ 1,548	$ 2,231
As a percentage of total loans	3.1%	4.5%

The $683 million decrease in criticized loans in the year ended December 31, 2018 included decreases of $303 million in Energy and $159 million in general Middle Market.

The following table presents a summary of changes in foreclosed property.

(in millions)

Years Ended December 31	2018	2017
Balance at beginning of period	$ 5	$ 17
Acquired in foreclosure	3	8
Write-downs	—	(1)
Foreclosed property sold (a)	(7)	(19)
Balance at end of period	$ 1	$ 5
(a) Net gain on foreclosed property sold	*$ 1*	*$ 3*

For further information regarding the Corporation's nonperforming assets policies and impaired loans, refer to Note 1 and Note 4 to the consolidated financial statements.

Concentration of Credit Risk

Concentrations of credit risk may exist when a number of borrowers are engaged in similar activities, or activities in the same geographic region, and have similar economic characteristics that would cause them to be similarly impacted by changes in economic or other conditions. The Corporation has a concentration of credit risk with the automotive industry. All other industry concentrations, as defined by management, individually represented less than 10 percent of total loans at December 31, 2018.

The following table presents a summary of loans outstanding to companies related to the automotive industry.

	2018		2017	
(in millions) December 31	Loans Outstanding	Percent of Total Loans	Loans Outstanding	Percent of Total Loans
Production:				
Domestic	$ 946		$ 1,007	
Foreign	385		337	
Total production	1,331	2.7%	1,344	2.7%
Dealer:				
Floor plan	4,678		4,359	
Other	3,419		3,233	
Total dealer	8,097	16.1%	7,592	15.5%
Total automotive	$ 9,428	18.8%	$ 8,936	18.2%

Substantially all dealer loans are in the National Dealer Services business line. Loans in the National Dealer Services business line primarily include floor plan financing and other loans to automotive dealerships. Floor plan loans, included in commercial loans in the Consolidated Balance Sheets, totaled $4.7 billion at December 31, 2018, an increase of $319 million compared to $4.4 billion at December 31, 2017. At December 31, 2018 other loans in the National Dealer Services business line totaled $3.4 billion, including $2.0 billion of owner-occupied commercial real estate mortgage loans, compared to $3.2 billion, including $1.9 billion of owner-occupied commercial real estate mortgage loans, at December 31, 2017. Automotive lending also includes loans to borrowers involved with automotive production, primarily Tier 1 and Tier 2 suppliers. Loans to borrowers involved with automotive production totaled $1.3 billion at both December 31, 2018 and 2017.

Dealer loans, as shown in the table above, totaled $8.1 billion at December 31, 2018, of which $4.7 billion, or 60 percent, were to foreign franchises, and $2.3 billion, or 29 percent, were to domestic franchises. Other dealer loans, totaling $844 million,

or 11 percent, at December 31, 2018, include obligations where a primary franchise was indeterminable, such as loans to large public dealership consolidators and rental car, leasing, heavy truck and recreation vehicle companies.

There were $4 million of nonaccrual loans to automotive borrowers at December 31, 2018 and none at December 31, 2017. There was $5 million of automotive net loan charge-offs in 2018 and none in 2017.

For further information regarding significant group concentrations of credit risk, refer to Note 5 to the consolidated financial statements.

Commercial Real Estate Lending

At December 31, 2018, the Corporation's commercial real estate portfolio represented 24 percent of total loans. The following table summarizes the Corporation's commercial real estate loan portfolio by loan category.

(in millions) December 31	2018	2017
Real estate construction loans:		
Commercial Real Estate business line (a)	$ 2,687	$ 2,630
Other business lines (b)	390	331
Total real estate construction loans	$ 3,077	$ 2,961
Commercial mortgage loans:		
Commercial Real Estate business line (a)	$ 1,743	$ 1,831
Other business lines (b)	7,363	7,328
Total commercial mortgage loans	$ 9,106	$ 9,159

(a) Primarily loans to real estate developers.

(b) Primarily loans secured by owner-occupied real estate.

The Corporation limits risk inherent in its commercial real estate lending activities by monitoring borrowers directly involved in the commercial real estate markets and adhering to conservative policies on loan-to-value ratios for such loans. Commercial real estate loans, consisting of real estate construction and commercial mortgage loans, totaled $12.2 billion at December 31, 2018, of which $4.4 billion, or 36 percent, were to borrowers in the Commercial Real Estate business line, which includes loans to real estate developers, an increase of $63 million compared to December 31, 2017. The remaining $7.8 billion, or 64 percent, of commercial real estate loans in other business lines consisted primarily of owner-occupied commercial mortgages, which bear credit characteristics similar to non-commercial real estate business loans.

The real estate construction loan portfolio primarily contains loans made to long-time customers with satisfactory completion experience. Credit quality in the real estate construction loan portfolio was strong, with criticized loans of $31 million and $4 million at December 31, 2018 and 2017, respectively. There were no net charge-offs in 2018 and net recoveries of $1 million in 2017.

Commercial mortgage loans are loans where the primary collateral is a lien on any real property and are primarily loans secured by owner occupied real estate. Real property is generally considered primary collateral if the value of that collateral represents more than 50 percent of the commitment at loan approval. Loans in the commercial mortgage portfolio generally mature within three to five years. Criticized commercial mortgage loans in the Commercial Real Estate business line totaled $61 million and $72 million at December 31, 2018 and December 31, 2017, respectively. In other business lines, $206 million and $229 million of commercial mortgage loans were criticized at December 31, 2018 and 2017, respectively. Commercial mortgage loan net charge-offs were $1 million in 2018, compared to net recoveries of $6 million in 2017.

Residential Real Estate Lending

At December 31, 2018, residential real estate loans represented 7 percent of total loans. The following table summarizes the Corporation's residential mortgage and home equity loan portfolios by geographic market.

	2018				2017			
(dollar amounts in millions) December 31	Residential Mortgage Loans	% of Total	Home Equity Loans	% of Total	Residential Mortgage Loans	% of Total	Home Equity Loans	% of Total
Geographic market:								
Michigan	$ 406	21%	$ 650	37%	$ 387	19%	$ 705	39%
California	993	50	710	40	1,023	52	718	40
Texas	310	16	346	20	297	15	335	18
Other Markets	261	13	59	3	281	14	58	3
Total	$ 1,970	100%	$ 1,765	100%	$ 1,988	100%	$ 1,816	100%

Residential real estate loans, which consist of traditional residential mortgages and home equity loans and lines of credit, totaled $3.7 billion at December 31, 2018. The residential real estate portfolio is principally located within the Corporation's primary geographic markets. Substantially all residential real estate loans past due 90 days or more are placed on nonaccrual status, and substantially all junior lien home equity loans that are current or less than 90 days past due are placed on nonaccrual status if full collection of the senior position is in doubt. At no later than 180 days past due, such loans are charged off to current appraised values less costs to sell.

Residential mortgages totaled $2.0 billion at December 31, 2018, and were primarily larger, variable-rate mortgages originated and retained for certain private banking relationship customers. Of the $2.0 billion of residential mortgage loans outstanding, $36 million were on nonaccrual status at December 31, 2018. The home equity portfolio totaled $1.8 billion at December 31, 2018, of which $1.6 billion was outstanding under primarily variable-rate, interest-only home equity lines of credit, $123 million were in amortizing status and $36 million were closed-end home equity loans. Of the $1.8 billion of home equity loans outstanding, $19 million were on nonaccrual status at December 31, 2018. A majority of the home equity portfolio was secured by junior liens at December 31, 2018.

Energy Lending

The Corporation has a portfolio of Energy loans that are included primarily in commercial loans in the Consolidated Balance Sheets. Customers in the Corporation's Energy business line (approximately 170 relationships) are engaged in three segments of the oil and gas business: exploration and production (E&P), midstream and energy services. E&P generally includes such activities as searching for potential oil and gas fields, drilling exploratory wells and operating active wells. Commitments to E&P borrowers are generally subject to semi-annual borrowing base re-determinations based on a variety of factors including updated prices (reflecting market and competitive conditions), energy reserve levels and the impact of hedging. The midstream sector is generally involved in the transportation, storage and marketing of crude and/or refined oil and gas products. The Corporation's energy services customers provide products and services primarily to the E&P segment.

The following table summarizes information about the Corporation's portfolio of Energy loans.

(dollar amounts in millions)	2018				2017			
December 31	**Outstandings**		**Nonaccrual**	**Criticized (a)**	**Outstandings**		**Nonaccrual**	**Criticized (a)**
Exploration and production (E&P)	$ 1,771	82%	$ 46	$ 143	$ 1,346	73%	$ 94	$ 376
Midstream	298	14	—	43	295	16	—	37
Services	94	4	2	19	195	11	14	95
Total Energy business line	$ 2,163	100%	$ 48	$ 205	$ 1,836	100%	$ 108	$ 508
As a percentage of total Energy loans			2%	9%			6%	28%

(a) Includes nonaccrual loans.

Loans in the Energy business line increased $327 million, or 18 percent, to $2.2 billion at December 31, 2018, compared to $1.8 billion at December 31, 2017, or approximately 4 percent of total loans at both December 31, 2018 and 2017. Total exposure, including unused commitments to extend credit and letters of credit, was $4.5 billion and $4.0 billion at December 31, 2018 and December 31, 2017, respectively.

The Corporation's allowance methodology considers the various risk elements within the loan portfolio. When merited, the Corporation may incorporate a qualitative reserve component for Energy loans. There were $6 million and $25 million in net credit-related charge-offs in the Energy business line for the years ended December 31, 2018 and 2017, respectively.

Leveraged Loans

Certain loans in the Corporation's commercial portfolio are considered leveraged transactions. These loans are typically used for mergers, acquisitions, business recapitalizations, refinancing and equity buyouts. To help mitigate the risk associated with these loans, the Corporation focuses on middle market companies with highly capable management teams, strong sponsors and solid track records of financial performance. Industries prone to cyclical downturns and acquisitions with a high degree of integration risk are generally avoided. Other considerations include the sufficiency of collateral, the level of balance sheet leverage and the adequacy of financial covenants. During the underwriting process, cash flows are stress tested to evaluate the borrowers' abilities to handle economic downturns and an increase in interest rates.

The FDIC defines higher-risk commercial and industrial (HR C&I) loans for assessment purposes as loans generally with leverage of four times total debt to earnings before interest, taxes and depreciation (EBITDA) as well as three times senior debt to EBITDA, excluding certain collateralized loans. HR C&I loans were $2.5 billion and $2.7 billion at December 31, 2018 and 2017, respectively. Criticized loans within the HR C&I loan portfolio were $147 million and $284 million at December 31, 2018 and 2017, respectively. Charge-offs of HR C&I loans totaled $15 million in 2018 and $9 million in 2017.

International Exposure

International assets are subject to general risks inherent in the conduct of business in countries, including economic uncertainties and each foreign government's regulations. Risk management practices minimize the risk inherent in international lending arrangements. These practices include structuring bilateral agreements or participating in bank facilities, which secure repayment from sources external to the borrower's country. Accordingly, such international outstandings are excluded from the cross-border risk of that country.

There were no countries with cross-border outstandings exceeding one percent of total assets at December 31, 2018, 2017 and 2016. Further, none exceeded 0.75 percent of total assets at December 31, 2018 and 2017. Mexico, with cross-border outstandings of $650 million (0.89 percent of total assets) at December 31, 2016 was the only country with outstandings between 0.75 and one percent of total assets at December 31, 2016. The Corporation's international strategy is to focus on international companies doing business in North America, with an emphasis on the Corporation's primary geographic markets.

MARKET AND LIQUIDITY RISK

Market risk represents the risk of loss due to adverse movements in market rates or prices, including interest rates, foreign exchange rates, commodity prices and equity prices. Liquidity risk represents the failure to meet financial obligations coming due, resulting from an inability to liquidate assets or obtain adequate funding, and the inability to easily unwind or offset specific exposures without significant changes in pricing, due to inadequate market depth or market disruptions.

The Asset and Liability Policy Committee (ALCO) of the Corporation establishes and monitors compliance with the policies and risk limits pertaining to market and liquidity risk management activities. ALCO meets regularly to discuss and review market and liquidity risk management strategies, and consists of executive and senior management from various areas of the Corporation, including treasury, finance, economics, lending, deposit gathering and risk management. Corporate Treasury mitigates market and liquidity risk under the direction of ALCO through the actions it takes to manage the Corporation's market, liquidity and capital positions.

In addition to assessing liquidity risk on a consolidated basis, Corporate Treasury also monitors the parent company's liquidity and has established limits for the minimum number of months into the future in which the parent company can meet existing and forecasted obligations without the support of additional dividends from subsidiaries. ALCO's liquidity policy requires the parent company to maintain sufficient liquidity to meet expected capital and debt obligations with a target of 24 months but no less than 18 months.

Corporate Treasury and the Enterprise Risk Division support ALCO in measuring, monitoring and managing interest rate risk as well as all other market risks. Key activities encompass: (i) providing information and analyses of the Corporation's balance sheet structure and measurement of interest rate and all other market risks; (ii) monitoring and reporting of the Corporation's positions relative to established policy limits and guidelines; (iii) developing and presenting analyses and strategies to adjust risk positions; (iv) reviewing and presenting policies and authorizations for approval; and (v) monitoring of industry trends and analytical tools to be used in the management of interest rate and all other market and liquidity risks.

Interest Rate Risk

Net interest income is the primary source of revenue for the Corporation. Interest rate risk arises in the normal course of business due to differences in the repricing and cash flow characteristics of assets and liabilities, primarily through the Corporation's core business activities of extending loans and acquiring deposits. The Corporation's balance sheet is predominantly characterized by floating-rate loans funded by core deposits. The Corporation's loan composition at December 31, 2018 was 62 percent 30-day LIBOR, 13 percent other LIBOR (primarily 60-day), 16 percent prime and 9 percent fixed rate. This creates sensitivity to interest rate movements due to the imbalance between the floating-rate loan portfolio and more slowly repricing deposit products. In addition, the growth and/or contraction in the Corporation's loans and deposits may lead to changes in sensitivity to interest rate movements in the absence of mitigating actions. Examples of such actions are purchasing fixed-rate investment securities, which provide liquidity to the balance sheet and act to mitigate the inherent interest sensitivity, as well as hedging with interest rate swaps and options. The Corporation actively manages its exposure to interest rate risk, with the principal objective of optimizing net interest income and the economic value of equity while operating within acceptable limits established for interest rate risk and maintaining adequate levels of funding and liquidity.

Since no single measurement system satisfies all management objectives, a combination of techniques is used to manage interest rate risk. These techniques examine the impact of interest rate risk on net interest income and the economic value of equity under a variety of alternative scenarios, including changes in the level, slope and shape of the yield curve utilizing multiple simulation analyses. Simulation analyses produce only estimates of net interest income as the assumptions used are inherently uncertain. Actual results may differ from simulated results due to many factors, including, but not limited to, the timing, magnitude and frequency of changes in interest rates, market conditions, regulatory impacts and management strategies.

Sensitivity of Net Interest Income to Changes in Interest Rates

The analysis of the impact of changes in interest rates on net interest income under various interest rate scenarios is management's principal risk management technique. Management models a base case net interest income under an unchanged interest rate environment. Existing derivative instruments entered into for risk management purposes are included in the analysis, but no additional hedging is forecasted. These derivative instruments currently comprise interest rate swaps that convert fixed-rate long-term debt to variable rates. This base case net interest income is then compared against interest rate scenarios in which rates rise or decline in a linear, non-parallel fashion from the base case over 12 months. The first scenario presents a 200 basis-point increase in short-term rates, resulting in an average increase in short-term interest rates of 100 basis points over the period (+200 scenario). The second scenario presents a 200 basis-point decrease in short-term interest rates (but not to less than zero percent).

Each scenario includes assumptions such as loan growth, investment security prepayment levels, depositor behavior, yield curve changes, loan and deposit pricing, and overall balance sheet mix and growth. In this low rate environment, depositors have maintained a higher level of liquidity and their historical behavior may be less indicative of future trends. As a result, the +200 scenario reflects a greater decrease in deposits than we have experienced historically as rates begin to rise. Changes in actual economic activity may result in a materially different interest rate environment as well as a balance sheet structure that is different from the changes management included in its simulation analysis.

The table below, as of December 31, 2018 and 2017, displays the estimated impact on net interest income during the next 12 months by relating the base case scenario results to those from the rising and declining rate scenarios described above.

(in millions)	Estimated Annual Change			
	2018		2017	
December 31	**Amount**	**%**	**Amount**	**%**
Change in Interest Rates:				
Rising 200 basis points	**$ 142**	**6%**	$ 197	9%
Declining 200 basis points	**(313)**	**(12)**	(283)	(13)

Sensitivity to rising rates decreased from December 31, 2017 to December 31, 2018, due to changes in balance sheet composition and interest-bearing deposit pricing assumptions. The December 31, 2017 risk to declining interest rates is impacted by the assumed floor on interest rates of zero percent and therefore simulates a decline of 150 basis points, while the December 31, 2018 sensitivity reflects a decline of 200 basis points due to higher short-term rates.

Sensitivity of Economic Value of Equity to Changes in Interest Rates

In addition to the simulation analysis on net interest income, an economic value of equity analysis provides an alternative view of the interest rate risk position. The economic value of equity is the difference between the estimate of the economic value of the Corporation's financial assets, liabilities and off-balance sheet instruments, derived through discounting cash flows based on actual rates at the end of the period, and the estimated economic value after applying the estimated impact of rate movements. The Corporation primarily monitors the percentage change on the base case economic value of equity. The economic value of equity analysis is based on an immediate parallel 200 basis point increase. The declining interest rate scenarios are based on decreases of 200 basis points and 150 basis points in interest rates at December 31, 2018 and 2017, respectively.

The table below, as of December 31, 2018 and 2017, displays the estimated impact on the economic value of equity from the interest rate scenario described above.

(in millions)	2018		2017	
December 31	**Amount**	**%**	**Amount**	**%**
Change in Interest Rates:				
Rising 200 basis points	**$ 711**	**6%**	$ 1,188	9%
Declining 200 basis points	**(2,769)**	**(21)**	(2,635)	(20)

The sensitivity of the economic value of equity to a 200 basis point parallel increase in rates declined between December 31, 2017 and December 31, 2018 due to an increase in the modeled base case economic value of equity, which was driven by changes in balance sheet composition. The percentage change in sensitivity of the economic value of equity to a parallel decrease in rates to zero during the same period was stable.

LOAN MATURITIES AND INTEREST RATE SENSITIVITY

(in millions) December 31, 2018	Loans Maturing: Within One Year (a)	After One But Within Five Years	After Five Years	Total
Commercial loans	$ 15,175	$ 15,706	$ 1,095	$ 31,976
Real estate construction loans	1,408	1,589	80	3,077
Commercial mortgage loans	1,653	4,793	2,660	9,106
International loans	456	543	14	1,013
Total	$ 18,692	$ 22,631	$ 3,849	$ 45,172
Sensitivity of loans to changes in interest rates:				
Predetermined (fixed) interest rates	$ 711	$ 2,397	$ 570	$ 3,678
Floating interest rates	17,981	20,234	3,279	41,494
Total	$ 18,692	$ 22,631	$ 3,849	$ 45,172

(a) Includes demand loans, loans having no stated repayment schedule or maturity and overdrafts.

The Corporation uses investment securities and derivative instruments as asset and liability management tools with the overall objective of managing the volatility of net interest income from changes in interest rates. These tools assist management in achieving the desired interest rate risk management objectives. Activity related to derivative instruments currently involves interest rate swaps effectively converting fixed-rate medium- and long-term debt to a floating rate.

Risk Management Derivative Instruments

(in millions) Risk Management Notional Activity	Interest Rate Contracts	Foreign Exchange Contracts	Totals
Balance at January 1, 2017	$ 2,275	$ 717	$ 2,992
Additions	—	12,004	12,004
Maturities/amortizations	(500)	(12,071)	(12,571)
Balance at December 31, 2017	$ 1,775	$ 650	$ 2,425
Additions	**850**	**10,095**	**10,945**
Maturities/amortizations	—	**(10,443)**	**(10,443)**
Balance at December 31, 2018	**$ 2,625**	**$ 302**	**$ 2,927**

The notional amount of risk management interest rate swaps totaled $2.6 billion at December 31, 2018, and $1.8 billion at December 31, 2017, all under fair value hedging strategies, converting fixed-rate medium- and long-term debt to a floating rate. The fair value of risk management interest rate swaps was a net unrealized loss of $2 million at both December 31, 2018 and 2017. Risk management interest rate swaps generated $7 million and $32 million of net interest income for the years ended December 31, 2018 and 2017, respectively.

In addition to interest rate swaps, the Corporation employs various other types of derivative instruments as offsetting positions to mitigate exposures to foreign currency risks associated with specific assets and liabilities (e.g., customer loans or deposits denominated in foreign currencies). Such instruments may include foreign exchange spot and forward contracts as well as foreign exchange swap agreements.

Further information regarding risk management derivative instruments is provided in Note 8 to the consolidated financial statements.

Customer-Initiated and Other Derivative Instruments

(in millions) Customer-Initiated and Other Notional Activity	Interest Rate Contracts	Energy Derivative Contracts	Foreign Exchange Contracts	Totals
Balance at January 1, 2017	$ 13,323	$ 2,227	$ 1,509	$ 17,059
Additions	4,377	1,539	47,456	53,372
Maturities/amortizations	(2,096)	(1,681)	(46,987)	(50,764)
Terminations	(1,215)	(238)	(94)	(1,547)
Balance at December 31, 2017	$ 14,389	$ 1,847	$ 1,884	$ 18,120
Additions	**4,245**	**2,287**	**50,220**	**56,752**
Maturities/amortizations	**(2,195)**	**(1,481)**	**(50,639)**	**(54,315)**
Terminations	**(1,554)**	**(3)**	**(370)**	**(1,927)**
Balance at December 31, 2018	**$ 14,885**	**$ 2,650**	**$ 1,095**	**$ 18,630**

The Corporation sells and purchases interest rate caps and floors and enters into foreign exchange contracts, interest rate swaps and energy derivative contracts to accommodate the needs of customers requesting such services. Changes in the fair value of customer-initiated and other derivatives are recognized in earnings as they occur. To limit the market risk of these activities, the Corporation generally takes offsetting positions with dealers. The notional amounts of offsetting positions are included in the table above. Customer-initiated and other notional activity represented 86 percent and 88 percent of total interest rate, energy and foreign exchange contracts at December 31, 2018 and 2017, respectively.

Further information regarding customer-initiated and other derivative instruments is provided in Note 8 to the consolidated financial statements.

Liquidity Risk and Off-Balance Sheet Arrangements

Liquidity is the ability to meet financial obligations through the maturity or sale of existing assets or the acquisition of additional funds. Various financial obligations, including contractual obligations and commercial commitments, may require future cash payments by the Corporation. Certain obligations are recognized on the Consolidated Balance Sheets, while others are off-balance sheet under U.S. generally accepted accounting principles.

The following contractual obligations table summarizes the Corporation's noncancelable contractual obligations and future required minimum payments. Refer to Notes 6, 9, 10, 11, 12, and 18 to the consolidated financial statements for further information regarding these contractual obligations.

Contractual Obligations

	Minimum Payments Due by Period				
(in millions) **December 31, 2018**	**Total**	**Less than 1 Year**	**1-3 Years**	**3-5 Years**	**More than 5 Years**
Deposits without a stated maturity (a)	$ 53,422	$ 53,422			
Certificates of deposit and other deposits with a stated maturity (a)	2,139	1,614	472	28	25
Short-term borrowings (a)	44	44	—	—	—
Medium- and long-term debt (a)	6,425	350	675	850	4,550
Operating leases	377	67	109	74	127
Commitments to fund low income housing partnerships	165	101	45	5	14
Other long-term obligations (b)	348	87	83	38	140
Total contractual obligations	$ 62,920	$ 55,685	$ 1,384	$ 995	$ 4,856
Medium- and long-term debt (parent company only) (a) (c)	$ 1,450	$ 350	$ —	$ 850	$ 250

(a) Deposits and borrowings exclude accrued interest.
(b) Includes unrecognized tax benefits.
(c) Parent company only amounts are included in the medium- and long-term debt minimum payments above.

In addition to contractual obligations, other commercial commitments of the Corporation impact liquidity. These include unused commitments to extend credit, standby letters of credit and financial guarantees, and commercial letters of credit. The following table summarizes the Corporation's commercial commitments and expected expiration dates by period.

Commercial Commitments

	Expected Expiration Dates by Period				
(in millions) **December 31, 2018**	**Total**	**Less than 1 Year**	**1-3 Years**	**3-5 Years**	**More than 5 Years**
Unused commitments to extend credit	$ 27,267	$ 7,878	$ 8,733	$ 7,860	$ 2,796
Standby letters of credit and financial guarantees	3,244	2,791	268	119	66
Commercial letters of credit	39	37	—	2	—
Total commercial commitments	$ 30,550	$ 10,706	$ 9,001	$ 7,981	$ 2,862

Since many of these commitments expire without being drawn upon, and each customer must continue to meet the conditions established in the contract, the total amount of these commercial commitments does not necessarily represent the future cash requirements of the Corporation. Refer to the "Other Market Risks" section below and Note 8 to the consolidated financial statements for a further discussion of these commercial commitments.

Wholesale Funding

The Corporation may access the purchased funds market when necessary, which includes a variety of funding sources. Capacity for incremental purchased funds at December 31, 2018 included short-term FHLB advances, the ability to purchase federal funds, sell securities under agreements to repurchase, as well as issue deposits through brokers. Purchased funds increased

to $52 million at December 31, 2018, compared to $25 million at December 31, 2017. At December 31, 2018, the Bank had pledged loans totaling $22.8 billion which provided for up to $18.9 billion of available collateralized borrowing with the FRB.

The Bank is a member of the FHLB of Dallas, Texas, which provides short- and long-term funding to its members through advances collateralized by real estate-related assets. Actual borrowing capacity is contingent on the amount of collateral available to be pledged to the FHLB. At December 31, 2018, $15.7 billion of real estate-related loans were pledged to the FHLB as blanket collateral for current and potential future borrowings. The Corporation had $3.8 billion of outstanding borrowings maturing between 2026 and 2028 and capacity for potential future borrowings of approximately $5.0 billion.

Additionally, the Bank had the ability to issue up to $14.0 billion of debt at December 31, 2018 under an existing $15.0 billion note program which allows the issuance of debt with maturities between three months and 30 years. The Corporation also maintains a shelf registration statement with the Securities and Exchange Commission from which it may issue debt and equity securities.

The ability of the Corporation and the Bank to raise funds at competitive rates is impacted by rating agencies' views of the credit quality, liquidity, capital and earnings of the Corporation and the Bank. As of December 31, 2018, the three major rating agencies had assigned the following ratings to long-term senior unsecured obligations of the Corporation and the Bank. A security rating is not a recommendation to buy, sell, or hold securities and may be subject to revision or withdrawal at any time by the assigning rating agency. Each rating should be evaluated independently of any other rating.

	Comerica Incorporated		Comerica Bank	
December 31, 2018	Rating	Outlook	Rating	Outlook
Standard and Poor's	BBB+	Stable	A-	Stable
Moody's Investors Service	A3	Stable	A3	Stable
Fitch Ratings	A	Stable	A	Stable

The Corporation satisfies liquidity needs with either liquid assets or various funding sources. Liquid assets totaled $16.3 billion at December 31, 2018, compared to $17.4 billion at December 31, 2017. Liquid assets include cash and due from banks, federal funds sold, interest-bearing deposits with banks, other short-term investments and unencumbered investment securities.

The Corporation performs monthly liquidity stress testing to evaluate its ability to meet funding needs in hypothetical stressed environments. Such environments cover a series of broad events, distinguished in terms of duration and severity. The evaluation as of December 31, 2018 projected that sufficient sources of liquidity were available under each series of events.

Other Market Risks

Market risk related to the Corporation's trading instruments is not significant, as trading activities are limited. Certain components of the Corporation's noninterest income, primarily fiduciary income, are at risk to fluctuations in the market values of underlying assets, particularly equity and debt securities. Other components of noninterest income, primarily brokerage fees, are at risk to changes in the volume of market activity.

OPERATIONAL RISK

Operational risk represents the risk of loss resulting from inadequate or failed internal processes, people and systems, including cybersecurity, or from external events. The definition does not include strategic or reputational risks. Although operational losses are experienced by all companies and are routinely incurred in business operations, the Corporation recognizes the need to identify and control operational losses and seeks to limit losses to a level deemed appropriate by management, as outlined in the Corporation's risk appetite statement. The appropriate risk level is determined through consideration of the nature of the Corporation's business and the environment in which it operates, in combination with the impact from, and the possible impact on, other risks faced by the Corporation. Operational risk is mitigated through a system of internal controls that are designed to keep operating risks at appropriate levels. The Operational Risk Management Committee monitors risk management techniques and systems. The Corporation has developed a framework that includes a centralized operational risk management function and business/support unit risk liaisons responsible for managing operational risk specific to the respective business lines.

COMPLIANCE RISK

Compliance risk represents the risk of regulatory sanctions or financial loss resulting from the Corporation's failure to comply with regulations and standards of good banking practice. The impact of such risks is highly interdependent with strategic risk, as the reputational impact from compliance breaches can be severe. Activities which may expose the Corporation to compliance risk include, but are not limited to, those dealing with the prevention of money laundering, privacy and data protection, community reinvestment initiatives, fair lending, consumer protection, employment and tax matters, over-the-counter derivative activities and other activities regulated by the Dodd-Frank Wall Street Reform and Consumer Protection Act.

The Enterprise-Wide Compliance Committee, comprising senior and executive business unit managers, as well as managers responsible for compliance, audit and overall risk, oversees compliance risk. This enterprise-wide approach provides a

consistent view of compliance across the organization. The Enterprise-Wide Compliance Committee also ensures that appropriate actions are implemented in business units to mitigate risk to an acceptable level.

STRATEGIC RISK

Strategic risk represents the risk of loss due to impairment of reputation, failure to fully develop and execute business plans, failure to assess current and new opportunities in business, markets and products, failure to determine appropriate consideration for risks accepted, and any other event not identified in the defined risk categories of credit, market and liquidity, operational or compliance risks. Mitigation of the various risk elements that represent strategic risk is achieved through various metrics and initiatives to help the Corporation better understand, measure and report on such risks.

CRITICAL ACCOUNTING POLICIES

The Corporation's consolidated financial statements are prepared based on the application of accounting policies, the most significant of which are described in Note 1. These policies require numerous estimates and strategic or economic assumptions, which may prove inaccurate or subject to variations. Changes in underlying factors, assumptions or estimates could have a material impact on the Corporation's future financial condition and results of operations. At December 31, 2018, the most critical of these significant accounting policies were the policies related to the allowance for credit losses, fair value measurement, goodwill, pension plan accounting and income taxes. These policies were reviewed with the Audit Committee of the Corporation's Board of Directors and are discussed more fully below.

ALLOWANCE FOR CREDIT LOSSES

The allowance for credit losses, which includes both the allowance for loan losses and the allowance for credit losses on lending-related commitments, is calculated with the objective of maintaining a reserve sufficient to absorb estimated probable losses. Management's determination of the appropriateness of the allowance is based on periodic evaluations of the loan portfolio, lending-related commitments and other relevant factors. This evaluation is inherently subjective as it requires numerous estimates, including the loss content for internal risk ratings, collateral values, the amounts and timing of expected future cash flows, and for lending-related commitments, estimates of the probability of draw on unused commitments. In addition, management exercises judgment to adjust or supplement modeled estimates for factors not otherwise fully accounted for, such as the risks and uncertainties observed in current market conditions, portfolio developments and other imprecision factors.

In determining the allowance for credit losses, the Corporation individually evaluates certain impaired loans, applies standard reserve factors to pools of homogeneous loans and lending-related commitments and incorporates qualitative adjustments. Standard loss factors, applied to the majority of the Corporation's loan portfolio and lending-related commitments, are based on estimates of probabilities of default for individual risk ratings over the loss emergence period and loss given default. Loss emergence periods are used to determine the most appropriate default horizon associated with the calculation of probabilities of default. Changes to one or more of the estimates used to develop standard loss factors, or the use of different estimates, would result in a different estimated allowance for credit losses. To illustrate, if recent loss experience dictated that the estimated standard loss factors would be changed by five percent of the estimate across all loan risk ratings, the allowance for loan losses as of December 31, 2018 would change by approximately $23 million.

Because standard loss factors are applied to pools of loans based on the Corporation's internal risk rating system, loss estimates are highly dependent on the accuracy of the risk rating assigned to each loan. The inherent imprecision in the risk rating system resulting from inaccuracy in assigning and/or entering risk ratings in the loan accounting system is monitored by the Corporation's asset quality review function and incorporated in a qualitative adjustment. The Corporation may also include qualitative adjustments intended to capture the impact of certain other uncertainties that exist but are not yet reflected in the standard reserve factors. These qualitative adjustments are based on management's analysis of factors such as portfolios where recent historical losses exceed expected losses or known recent events are expected to alter risk ratings once evidence is acquired, observable macroeconomic metrics, including consideration of regional metrics within the Corporation's footprint, and a qualitative assessment of the lending environment, including underwriting standards, current economic and political conditions, and other factors affecting credit quality. Qualitative reserves at December 31, 2018 primarily included components for portfolios where recent loss trends were in excess of estimated losses based on overall portfolio standard loss factors, model imprecision and changes in market conditions compared to the conditions that existed at the date of the most recent annual update to standard reserve factors.

For further discussion of the methodology used in the determination of the allowance for credit losses, refer to Note 1 to the consolidated financial statements. To the extent actual outcomes differ from management estimates, additional provision for credit losses may be required that would adversely impact earnings in future periods. The allowance is assigned to business segments and any earnings impact resulting from actual outcomes differing from management estimates would primarily affect the Business Bank segment.

FAIR VALUE MEASUREMENT

Investment securities available-for-sale, derivatives and deferred compensation plan assets and associated liabilities are recorded at fair value on a recurring basis. Additionally, from time to time, other assets and liabilities may be recorded at fair value on a nonrecurring basis, such as impaired loans that have been reduced based on the fair value of the underlying collateral, other real estate (primarily foreclosed property), nonmarketable equity securities and certain other assets and liabilities. These nonrecurring fair value adjustments typically involve write-downs of individual assets or application of lower of cost or fair value accounting.

Fair value is an estimate of the exchange price that would be received to sell an asset or paid to transfer a liability in an orderly transaction (i.e., not a forced transaction, such as a liquidation or distressed sale) between market participants at the measurement date and is based on the assumptions market participants would use when pricing an asset or liability. Fair value measurement and disclosure guidance establishes a three-level hierarchy for disclosure of assets and liabilities recorded at fair

value. Notes 1 and 2 to the consolidated financial statements includes information about the fair value hierarchy, the extent to which fair value is used to measure assets and liabilities and the valuation methodologies and key inputs used.

At December 31, 2018, assets and liabilities measured using observable inputs that are classified as Level 1 or Level 2 represented 99.6 percent and 100 percent of total assets and liabilities recorded at fair value, respectively. Valuations generated from model-based techniques that use at least one significant assumption not observable in the market are considered Level 3 and reflect estimates of assumptions market participants would use in pricing the asset or liability.

GOODWILL

Goodwill is initially recorded as the excess of the purchase price over the fair value of net assets acquired in a business combination and is subsequently evaluated for impairment. Goodwill impairment testing is performed annually (unless management determines an interim test is necessary) at the reporting unit level, equivalent to a business segment or one level below. The Corporation has three reporting units: the Business Bank, the Retail Bank and Wealth Management. At December 31, 2018 and 2017, goodwill totaled $635 million, including $473 million allocated to the Business Bank, $101 million allocated to the Retail Bank and $61 million allocated to Wealth Management.

The annual test of goodwill impairment was performed as of the beginning of the third quarter 2018. The Corporation may elect to perform a quantitative impairment analysis, or first conduct a qualitative analysis to determine if a quantitative analysis is necessary. The Corporation first assessed qualitative factors to determine whether it was more likely than not that the fair value of any reporting unit was less than its carrying amount, including goodwill. Qualitative factors included economic conditions, industry and market considerations, cost factors, overall financial performance, regulatory developments and performance of the Corporation's stock, among other events and circumstances. At the conclusion of the qualitative assessment in the third quarter 2018, the Corporation determined that it was more likely than not that the fair value of each reporting unit exceeded its carrying value.

Subsequent to the date of the annual impairment test, the Corporation reorganized certain reporting structures. As a result, Small Business, formerly a component of the Retail Bank, became a component of the Business Bank. Accordingly, the Corporation reallocated $93 million of goodwill from the Retail Bank to Business Bank. The Corporation subsequently performed an additional qualitative impairment analysis and again determined that it was more likely than not that the fair value of each reporting unit exceeded it carrying value and that performing a quantitative impairment test was not necessary.

Qualitative factors considered in the analysis of each reporting unit incorporated current economic and market conditions, including the recent Federal Reserve announcements and the impact of legislative and regulatory changes, to the extent known. However, further weakening in the economic environment, such as adverse changes in interest rates, a decline in the performance of the reporting units or other factors could cause the fair value of one or more of the reporting units to fall below their carrying value, resulting in a goodwill impairment charge. Additionally, new legislative or regulatory changes not anticipated in management's expectations may cause the fair value of one or more of the reporting units to fall below the carrying value, resulting in a goodwill impairment charge. Any impairment charge would not affect the Corporation's regulatory capital ratios, tangible common equity ratio or liquidity position.

PENSION PLAN ACCOUNTING

The Corporation has a qualified and non-qualified defined benefit pension plan. Effective January 1, 2017, benefits are calculated using a cash balance formula based on years of service, age, compensation and an interest credit based on the 30-year Treasury rate. Participants under age 60 as of December 31, 2016 are eligible to receive a frozen final average pay benefit in addition to amounts earned under the cash balance formula. Participants age 60 or older as of December 31, 2016 continue to be eligible for a final average pay benefit. The Corporation makes assumptions concerning future events that will determine the amount and timing of required benefit payments, funding requirements and defined benefit pension expense. The major assumptions are the discount rate used in determining the current benefit obligation, the long-term rate of return expected on plan assets, mix of assets within the portfolio, the form of payment election and the projected mortality rate.

The discount rate is determined by matching the expected cash flows of the pension plans to a portfolio of high quality corporate bonds as of the measurement date, December 31. The long-term rate of return expected on plan assets is set after considering both long-term returns in the general market and long-term returns experienced by the assets in the plan. The current target asset allocation model for the plans is provided in Note 17 to the consolidated financial statements. The expected returns on these various asset categories are blended to derive one long-term return assumption. The assets are invested in certain collective investment funds, common stocks, U.S. Treasury and other U.S. government agency securities, and corporate and municipal bonds and notes. The form of payment election assumption is based on market experience. Mortality rate assumptions are based on mortality tables published by third-parties such as the Society of Actuaries (SOA), considering other available information including historical data as well as studies and publications from reputable sources.

The Corporation reviews its pension plan assumptions on an annual basis with its actuarial consultants to determine if the assumptions are reasonable and adjusts the assumptions to reflect changes in future expectations. The assumptions used to calculate 2019 defined benefit plan pension expense (benefit) were as follows:

Discount rate	4.37%
Long-term rate of return on plan assets	6.50%
Lump sum payment election rate:	
Participants before January 1, 2017	50%
All other participants	80%
Mortality table:	
Base table (a)	RP-2018
Mortality improvement scale (a)	MP-2018

(a) Issued by the Society of Actuaries in October 2018.

Defined benefit plan expense is expected to decrease $9 million to a benefit of approximately $27 million in 2019, compared to a benefit of $18 million in 2018. This includes service cost expense of $34 million and a benefit from other components of $61 million.

Changing the 2019 discount rate and long-term rate of return by 25 basis points would impact defined benefit expense in 2019 by $7.1 million and $6.4 million, respectively.

Due to the long-term nature of pension plan assumptions, actual results may differ significantly from the actuarial-based estimates. Differences resulting in actuarial gains or losses are required to be recorded in shareholders' equity as part of accumulated other comprehensive loss and amortized to defined benefit pension expense in future years. Refer to Note 17 to the consolidated financial statements for further information.

INCOME TAXES

The calculation of the Corporation's income tax provision and tax-related accruals is complex and requires the use of estimates and judgments. The provision for income taxes is the sum of income taxes due for the current year and deferred taxes. Deferred taxes arise from temporary differences between the income tax basis and financial accounting basis of assets and liabilities. Accrued taxes represent the net estimated amount due to or to be received from taxing jurisdictions, currently or in the future, and are included in accrued income and other assets or accrued expenses and other liabilities on the Consolidated Balance Sheets. The Corporation assesses the relative risks and merits of tax positions for various transactions after considering statutes, regulations, judicial precedent and other available information and maintains tax accruals consistent with these assessments. The Corporation is subject to audit by taxing authorities that could question and/or challenge the tax positions taken by the Corporation.

Included in net deferred taxes are deferred tax assets. Deferred tax assets are evaluated for realization based on available evidence of projected future reversals of existing taxable temporary differences, assumptions made regarding future events and, when applicable, state loss carryback capacity. A valuation allowance is provided when it is more-likely-than-not that some portion of the deferred tax asset will not be realized. In December 2017, the Tax Cuts and Jobs Act (the "Act") was signed into law, resulting in the reduction of the federal tax rate from 35 percent to 21 percent. This resulted in a $107 million charge to adjust deferred taxes as a result of the decline in the federal tax rate in 2017, with an $8 million downward revision to the estimated impact recorded in 2018 for a total remeasurement of the Corporation's deferred tax balance of $99 million.

Changes in the estimate of accrued taxes occur due to changes in tax law, interpretations of existing tax laws, new judicial or regulatory guidance, and the status of examinations conducted by taxing authorities that impact the relative risks and merits of tax positions taken by the Corporation. These changes, when they occur, impact the estimate of accrued taxes and could be significant to the operating results of the Corporation. For further information on tax accruals and related risks, see Note 18 to the consolidated financial statements.

SUPPLEMENTAL FINANCIAL DATA

The following table provides a reconciliation of non-GAAP financial measures used in this financial review with financial measures defined by GAAP.

(dollar amounts in millions)

December 31	2018	2017	2016	2015	2014
Tangible Common Equity Ratio:					
Common shareholders' equity	$ 7,507	$ 7,963	$ 7,796	$ 7,560	$ 7,402
Less:					
Goodwill	635	635	635	635	635
Other intangible assets	6	8	10	14	15
Tangible common equity	$ 6,866	$ 7,320	$ 7,151	$ 6,911	$ 6,752
Total assets	$ 70,818	$ 71,567	$ 72,978	$ 71,877	$ 69,186
Less:					
Goodwill	635	635	635	635	635
Other intangible assets	6	8	10	14	15
Tangible assets	$ 70,177	$ 70,924	$ 72,333	$ 71,228	$ 68,536
Common equity ratio	10.60%	11.13%	10.68%	10.52%	10.70%
Tangible common equity ratio	9.78	10.32	9.89	9.70	9.85
Tangible Common Equity per Share of Common Stock:					
Common shareholders' equity	$ 7,507	$ 7,963	$ 7,796	$ 7,560	$ 7,402
Tangible common equity	6,866	7,320	7,151	6,911	6,752
Shares of common stock outstanding (in millions)	160	173	175	176	179
Common shareholders' equity per share of common stock	$ 46.89	$ 46.07	$ 44.47	$ 43.03	$ 41.35
Tangible common equity per share of common stock	42.89	42.34	40.79	39.33	37.72

The tangible common equity ratio removes the effect of intangible assets from capital and total assets. Tangible common equity per share of common stock removes the effect of intangible assets from common shareholders equity per share of common stock. The Corporation believes these measurements are meaningful measures of capital adequacy used by investors, regulators, management and others to evaluate the adequacy of common equity and to compare against other companies in the industry.

FORWARD-LOOKING STATEMENTS

This report includes forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995. In addition, the Corporation may make other written and oral communications from time to time that contain such statements. All statements regarding the Corporation's expected financial position, strategies and growth prospects, including the GEAR Up initiative, and general economic conditions expected to exist in the future are forward-looking statements. The words, "anticipates," "believes," "contemplates," "feels," "expects," "estimates," "seeks," "strives," "plans," "intends," "outlook," "forecast," "position," "target," "mission," "assume," "achievable," "potential," "strategy," "goal," "aspiration," "opportunity," "initiative," "outcome," "continue," "remain," "maintain," "on track," "trend," "objective," "looks forward," "projects," "models" and variations of such words and similar expressions, or future or conditional verbs such as "will," "would," "should," "could," "might," "can," "may" or similar expressions, as they relate to the Corporation or its management, are intended to identify forward-looking statements. The Corporation cautions that forward-looking statements are subject to numerous assumptions, risks and uncertainties, which change over time. Forward-looking statements speak only as of the date the statement is made, and the Corporation does not undertake to update forward-looking statements to reflect facts, circumstances, assumptions or events that occur after the date the forward-looking statements are made. Actual results could differ materially from those anticipated in forward-looking statements and future results could differ materially from historical performance.

In addition to factors mentioned elsewhere in this report or previously disclosed in the Corporation's SEC reports (accessible on the SEC's website at www.sec.gov or on the Corporation's website at www.comerica.com), actual results could differ materially from forward-looking statements and future results could differ materially from historical performance due to a variety of reasons, including but not limited to, the following factors:

- general political, economic or industry conditions, either domestically or internationally, may be less favorable than expected;
- governmental monetary and fiscal policies may adversely affect the financial services industry, and therefore impact the Corporation's financial condition and results of operations;
- the Corporation's operational or security systems or infrastructure, or those of third parties, could fail or be breached;
- the Corporation relies on other companies to provide certain key components of its delivery systems, and certain failures could materially adversely affect operations;
- security risks, including denial of service attacks, hacking, social engineering attacks targeting the Corporation's colleagues and customers, malware intrusion or data corruption attempts, and identity theft, could result in the disclosure of confidential information;
- proposed revenue enhancements and efficiency improvements under the GEAR Up initiative may not be achieved;
- the Corporation must maintain adequate sources of funding and liquidity to meet regulatory expectations, support its operations and fund outstanding liabilities;
- compliance with more stringent capital requirements may adversely affect the Corporation;
- declines in the businesses or industries of the Corporation's customers could cause increased credit losses or decreased loan balances, which could adversely affect the Corporation;
- unfavorable developments concerning credit quality could adversely affect the Corporation's financial results;
- changes in regulation or oversight may have a material adverse impact on the Corporation's operations;
- cybersecurity and data privacy are areas of heightened legislative and regulatory focus;
- fluctuations in interest rates and their impact on deposit pricing could adversely affect the Corporation's net interest income and balance sheet;
- developments impacting LIBOR and other interest rate benchmarks could adversely affect the Corporation;
- reduction in the Corporation's credit ratings could adversely affect the Corporation and/or the holders of its securities;
- damage to the Corporation's reputation could damage its businesses;
- the Corporation may not be able to utilize technology to develop, market and deliver new products and services to its customers;
- competitive product and pricing pressures within the Corporation's markets may change;
- the soundness of other financial institutions could adversely affect the Corporation;
- the introduction, implementation, withdrawal, success and timing of business initiatives and strategies may be less successful or may be different than anticipated, which could adversely affect the Corporation's business;
- changes in customer behavior may adversely impact the Corporation's business, financial condition and results of operations;
- management's ability to maintain and expand customer relationships may differ from expectations;
- methods of reducing risk exposures might not be effective;
- catastrophic events, including, but not limited to, hurricanes, tornadoes, earthquakes, fires, droughts and floods, may adversely affect the general economy, financial and capital markets, specific industries, and the Corporation;
- the impacts of future legislative, administrative or judicial changes or interpretations to tax regulations are unknown;
- any future strategic acquisitions or divestitures may present certain risks to the Corporation's business and operations;
- management's ability to retain key officers and employees may change;
- legal and regulatory proceedings and related financial services industry matters, including those directly involving the Corporation and its subsidiaries, could adversely affect the Corporation or the financial services industry in general;
- the Corporation may incur losses due to fraud;
- terrorist activities or other hostilities could cause adverse effects;

- changes in accounting standards could materially impact the Corporation's financial statements;
- the Corporation's accounting policies and processes are critical to the reporting of financial condition and results of operations and require management to make estimates about matters that are uncertain;
- controls and procedures may fail to prevent or detect all errors or acts of fraud; and
- the Corporation's stock price can be volatile.

CONSOLIDATED BALANCE SHEETS
Comerica Incorporated and Subsidiaries

(in millions, except share data)

December 31	2018	2017
ASSETS		
Cash and due from banks	$ 1,390	$ 1,438
Interest-bearing deposits with banks	3,171	4,407
Other short-term investments	134	96
Investment securities available-for-sale	12,045	10,938
Investment securities held-to-maturity	—	1,266
Commercial loans	31,976	31,060
Real estate construction loans	3,077	2,961
Commercial mortgage loans	9,106	9,159
Lease financing	507	468
International loans	1,013	983
Residential mortgage loans	1,970	1,988
Consumer loans	2,514	2,554
Total loans	50,163	49,173
Less allowance for loan losses	(671)	(712)
Net loans	49,492	48,461
Premises and equipment	475	466
Accrued income and other assets	4,111	4,495
Total assets	$ 70,818	$ 71,567
LIABILITIES AND SHAREHOLDERS' EQUITY		
Noninterest-bearing deposits	$ 28,690	$ 32,071
Money market and interest-bearing checking deposits	22,560	21,500
Savings deposits	2,172	2,152
Customer certificates of deposit	2,131	2,165
Foreign office time deposits	8	15
Total interest-bearing deposits	26,871	25,832
Total deposits	55,561	57,903
Short-term borrowings	44	10
Accrued expenses and other liabilities	1,243	1,069
Medium- and long-term debt	6,463	4,622
Total liabilities	63,311	63,604
Common stock - $5 par value:		
Authorized - 325,000,000 shares		
Issued - 228,164,824 shares	1,141	1,141
Capital surplus	2,148	2,122
Accumulated other comprehensive loss	(609)	(451)
Retained earnings	8,781	7,887
Less cost of common stock in treasury - 68,081,176 shares at 12/31/18 and 55,306,483 shares at 12/31/17	(3,954)	(2,736)
Total shareholders' equity	7,507	7,963
Total liabilities and shareholders' equity	$ 70,818	$ 71,567

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF INCOME
Comerica Incorporated and Subsidiaries

(in millions)

Years Ended December 31	2018	2017	2016
INTEREST INCOME			
Interest and fees on loans	$ 2,262	$ 1,872	$ 1,635
Interest on investment securities	265	250	247
Interest on short-term investments	92	60	27
Total interest income	2,619	2,182	1,909
INTEREST EXPENSE			
Interest on deposits	122	42	40
Interest on short-term borrowings	1	3	—
Interest on medium- and long-term debt	144	76	72
Total interest expense	267	121	112
Net interest income	2,352	2,061	1,797
Provision for credit losses	(1)	74	248
Net interest income after provision for credit losses	2,353	1,987	1,549
NONINTEREST INCOME			
Card fees	244	333	303
Service charges on deposit accounts	211	227	219
Fiduciary income	206	198	190
Commercial lending fees	85	85	89
Foreign exchange income	47	45	42
Letter of credit fees	40	45	50
Bank-owned life insurance	39	43	42
Brokerage fees	27	23	19
Net securities losses	(19)	—	—
Other noninterest income	96	108	97
Total noninterest income	976	1,107	1,051
NONINTEREST EXPENSES			
Salaries and benefits expense	1,009	961	989
Outside processing fee expense	255	366	336
Net occupancy expense	152	154	157
Software expense	125	126	119
Restructuring charges	53	45	93
Equipment expense	48	45	53
FDIC insurance expense	42	51	54
Advertising expense	30	28	21
Other noninterest expenses	80	84	108
Total noninterest expenses	1,794	1,860	1,930
Income before income taxes	1,535	1,234	670
Provision for income taxes	300	491	193
NET INCOME	1,235	743	477
Less income allocated to participating securities	8	5	4
Net income attributable to common shares	$ 1,227	$ 738	$ 473
Earnings per common share:			
Basic	$ 7.31	$ 4.23	$ 2.74
Diluted	7.20	4.14	2.68
Cash dividends declared on common stock	309	193	154
Cash dividends declared per common share	1.84	1.09	0.89

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
Comerica Incorporated and Subsidiaries

(in millions)

Years Ended December 31	2018	2017	2016
NET INCOME	**$ 1,235**	$ 743	$ 477
OTHER COMPREHENSIVE (LOSS) INCOME			
Unrealized losses on investment securities:			
Net unrealized holding losses arising during the period	**(69)**	(81)	(70)
Less:			
Reclassification adjustment for net securities losses included in net income	**(20)**	—	—
Net losses realized as a yield adjustment in interest on investment securities	**—**	(3)	(3)
Change in net unrealized losses before income taxes	**(49)**	(78)	(67)
Defined benefit pension and other postretirement plans adjustment:			
Actuarial (loss) gain arising during the period	**(191)**	72	(134)
Prior service credit arising during the period	**—**	—	234
Adjustments for amounts recognized as components of net periodic benefit cost:			
Amortization of actuarial net loss	**61**	51	46
Amortization of prior service credit	**(27)**	(27)	(7)
Change in defined benefit pension and other postretirement plans adjustment before income taxes	**(157)**	96	139
Total other comprehensive (loss) income before income taxes	**(206)**	18	72
(Benefit) provision for income taxes	**(47)**	(1)	26
Total other comprehensive (loss) income, net of tax	**(159)**	19	46
COMPREHENSIVE INCOME	**$ 1,076**	$ 762	$ 523

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY
Comerica Incorporated and Subsidiaries

(in millions, except per share data)	Common Stock Shares Outstanding	Common Stock Amount	Capital Surplus	Accumulated Other Comprehensive Loss	Retained Earnings	Treasury Stock	Total Shareholders' Equity
BALANCE AT DECEMBER 31, 2015	175.7	$ 1,141	$ 2,173	$ (429)	$ 7,084	$ (2,409)	$ 7,560
Net income	—	—	—	—	477	—	477
Other comprehensive income, net of tax	—	—	—	46	—	—	46
Cash dividends declared on common stock ($0.89 per share)	—	—	—	—	(154)	—	(154)
Purchase of common stock	(6.8)	—	—	—	—	(310)	(310)
Net issuance of common stock under employee stock plans	4.1	—	(15)	—	(27)	185	143
Net issuance of common stock for warrants	2.3	—	(57)	—	(49)	106	—
Share-based compensation	—	—	34	—	—	—	34
BALANCE AT DECEMBER 31, 2016	175.3	1,141	2,135	(383)	7,331	(2,428)	7,796
Cumulative effect of change in accounting principle	—	—	3	—	(2)	—	1
Net income	—	—	—	—	743	—	743
Other comprehensive income, net of tax	—	—	—	19	—	—	19
Cash dividends declared on common stock ($1.09 per share)	—	—	—	—	(193)	—	(193)
Purchase of common stock	(7.5)	—	—	—	—	(544)	(544)
Net issuance of common stock under employee stock plans	3.3	—	(24)	—	(26)	152	102
Net issuance of common stock for warrants	1.8	—	(30)	—	(53)	83	—
Share-based compensation	—	—	39	—	—	—	39
Reclassification of certain deferred tax effects	—	—	—	(87)	87	—	—
Other	—	—	(1)	—	—	1	—
BALANCE AT DECEMBER 31, 2017	172.9	1,141	2,122	(451)	7,887	(2,736)	7,963
Cumulative effect of change in accounting principles	—	—	—	1	14	—	15
Net income	—	—	—	—	1,235	—	1,235
Other comprehensive loss, net of tax	—	—	—	(159)	—	—	(159)
Cash dividends declared on common stock ($1.84 per share)	—	—	—	—	(309)	—	(309)
Purchase of common stock	(14.9)	—	(3)	—	—	(1,326)	(1,329)
Net issuance of common stock under employee stock plans	1.5	—	(9)	—	(23)	75	43
Net issuance of common stock for warrants	0.6	—	(10)	—	(23)	33	—
Share-based compensation	—	—	48	—	—	—	48
BALANCE AT DECEMBER 31, 2018	160.1	$ 1,141	$ 2,148	$ (609)	$ 8,781	$ (3,954)	$ 7,507

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS
Comerica Incorporated and Subsidiaries

(in millions) Years Ended December 31	2018	2017	2016
OPERATING ACTIVITIES			
Net income	$ 1,235	$ 743	$ 477
Adjustments to reconcile net income to net cash provided by operating activities:			
Provision for credit losses	(1)	74	248
Provision (benefit) for deferred income taxes	24	79	(51)
Depreciation and amortization	120	121	121
Net periodic defined benefit (credit) cost	(18)	(18)	6
Share-based compensation expense	48	39	34
Net amortization of securities	3	6	8
Accretion of loan purchase discount	(1)	(3)	(4)
Net securities losses	19	—	—
Net gains on sales of foreclosed property	(1)	(3)	(4)
Net change in:			
Accrued income receivable	(45)	(33)	(20)
Accrued expenses payable	49	41	37
Other, net	184	39	(366)
Net cash provided by operating activities	1,616	1,085	486
INVESTING ACTIVITIES			
Investment securities available-for-sale:			
Maturities and redemptions	1,781	1,615	1,699
Sales	1,256	1,259	—
Purchases	(3,032)	(3,112)	(2,045)
Investment securities held-to-maturity:			
Maturities and redemptions	—	319	402
Net change in loans	(1,045)	(175)	(136)
Proceeds from sales of foreclosed property	8	22	20
Net increase in premises and equipment	(90)	(69)	(95)
Federal Home Loan Bank stock:			
Purchases	(41)	(42)	(115)
Redemptions	—	42	—
Proceeds from bank-owned life insurance settlements	9	18	16
Other, net	(2)	3	—
Net cash used in investing activities	(1,156)	(120)	(254)
FINANCING ACTIVITIES			
Net change in:			
Deposits	(2,082)	(1,180)	(998)
Short-term borrowings	34	(15)	2
Medium- and long-term debt:			
Maturities and redemptions	—	(500)	(650)
Issuances and advances	1,850	—	2,800
Terminations	—	(16)	—
Common stock:			
Repurchases	(1,338)	(560)	(320)
Cash dividends paid	(263)	(180)	(152)
Issuances under employee stock plans	52	118	157
Other, net	3	(5)	—
Net cash (used in) provided by financing activities	(1,744)	(2,338)	839
Net (decrease) increase in cash and cash equivalents	(1,284)	(1,373)	1,071
Cash and cash equivalents at beginning of period	5,845	7,218	6,147
Cash and cash equivalents at end of period	$ 4,561	$ 5,845	$ 7,218
Interest paid	$ 261	$ 122	$ 111
Income taxes paid	200	336	151
Noncash investing and financing activities:			
Loans transferred to other real estate	3	8	21
Loans transferred from held-to-sale to portfolio	—	—	17
Securities transferred from held-to-maturity to available-for-sale	1,266	—	—
Securities transferred from available-for-sale to equity securities	81	—	—

See notes to consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Comerica Incorporated and Subsidiaries

NOTE 1 - BASIS OF PRESENTATION AND ACCOUNTING POLICIES

Organization

Comerica Incorporated (the Corporation) is a registered financial holding company headquartered in Dallas, Texas. The Corporation's major business segments are the Business Bank, the Retail Bank and Wealth Management. The Corporation operates in three primary geographic markets: Michigan, California and Texas. For further discussion of each business segment and primary geographic market, refer to Note 23. The Corporation and its banking subsidiaries are regulated at both the state and federal levels.

The accounting and reporting policies of the Corporation conform to United States (U.S.) generally accepted accounting principles (GAAP). The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect reported amounts and disclosures. Actual results could differ from these estimates. Certain amounts in the financial statements for prior years have been reclassified to conform to the current financial statement presentation.

The following summarizes the significant accounting policies of the Corporation applied in the preparation of the accompanying consolidated financial statements.

Principles of Consolidation

The consolidated financial statements include the accounts of the Corporation and the accounts of those subsidiaries that are majority owned and in which the Corporation has a controlling financial interest. The Corporation consolidates entities not determined to be variable interest entities (VIEs) when it holds a controlling financial interest and uses the cost or equity method when it holds less than a controlling financial interest. In consolidation, all significant intercompany accounts and transactions are eliminated. The results of operations of companies acquired are included from the date of acquisition.

The Corporation holds investments in certain legal entities that are considered VIEs. In general, a VIE is an entity that either (1) has an insufficient amount of equity to carry out its principal activities without additional subordinated financial support, (2) has a group of equity owners that are unable to make significant decisions about its activities, or (3) has a group of equity owners that do not have the obligation to absorb losses or the right to receive returns generated by its operations. If any of these characteristics are present, the entity is subject to a variable interests consolidation model, and consolidation is based on variable interests, not on voting interests. Variable interests are defined as contractual ownership or other money interests in an entity that change with fluctuations in the entity's net asset value. The primary beneficiary is required to consolidate the VIE. The primary beneficiary is defined as the party that has both the power to direct the activities of the VIE that most significantly impact the entity's economic performance and the obligation to absorb losses or the right to receive benefits that could be significant to the VIE. The maximum potential exposure to losses relative to investments in VIEs is generally limited to the sum of the outstanding book basis and unfunded commitments for future investments.

The Corporation evaluates its investments in VIEs, both at inception and when there is a change in circumstances that requires reconsideration, to determine if the Corporation is the primary beneficiary and consolidation is required. The Corporation accounts for unconsolidated VIEs using either the proportional, cost or equity method. These investments comprise investments in community development projects which generate tax credits to their investors and are included in accrued income and other assets on the Consolidated Balance Sheets.

The proportional method is used for investments in affordable housing projects that qualify for the low-income housing tax credit (LIHTC). The equity method is used for other investments where the Corporation has the ability to exercise significant influence over the entity's operation and financial policies. Other unconsolidated equity investments that do not meet the criteria to be accounted for under the equity method are accounted for under the cost method. Amortization and other write-downs of LIHTC investments are presented on a net basis as a component of the provision for income taxes, while income, amortization and write-downs from cost and equity method investments are recorded in other noninterest income on the Consolidated Statements of Income.

Assets held in an agency or fiduciary capacity are not assets of the Corporation and are not included in the consolidated financial statements.

See Note 9 for additional information about the Corporation's involvement with VIEs.

Fair Value Measurements

The Corporation utilizes fair value measurements to record fair value adjustments to certain assets and liabilities and to determine fair value disclosures. The determination of fair values of financial instruments often requires the use of estimates. In cases where quoted market values in an active market are not available, the Corporation uses present value techniques and other valuation methods to estimate the fair values of its financial instruments. These valuation methods require considerable judgment and the resulting estimates of fair value can be significantly affected by the assumptions made and methods used.

Fair value is an estimate of the exchange price that would be received to sell an asset or paid to transfer a liability in an orderly transaction (i.e., not a forced transaction, such as a liquidation or distressed sale) between market participants at the measurement date. Fair value is based on the assumptions market participants would use when pricing an asset or liability.

Investment securities available-for-sale, derivatives, deferred compensation plans, and equity securities with readily determinable fair values (primarily money market mutual funds) are recorded at fair value on a recurring basis. Additionally, from time to time, the Corporation may be required to record other assets and liabilities at fair value on a nonrecurring basis, such as impaired loans, other real estate (primarily foreclosed property), nonmarketable equity securities and certain other assets and liabilities. These nonrecurring fair value adjustments typically involve write-downs of individual assets or application of lower of cost or fair value accounting.

Fair value measurements and disclosures guidance establishes a three-level fair value hierarchy based on the markets in which the assets and liabilities are traded and the reliability of the assumptions used to determine fair value. The fair value hierarchy gives the highest priority to quoted prices in active markets and the lowest priority to unobservable data. Fair value measurements are separately disclosed by level within the fair value hierarchy. For assets and liabilities recorded at fair value, it is the Corporation's policy to maximize the use of observable inputs and minimize the use of unobservable inputs when developing fair value measurements.

Level 1	Valuation is based upon quoted prices for identical instruments traded in active markets.
Level 2	Valuation is based upon quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are less active, and model-based valuation techniques for which all significant assumptions are observable in the market.
Level 3	Valuation is generated from model-based techniques that use at least one significant assumption not observable in the market. These unobservable assumptions reflect estimates of assumptions that market participants would use in pricing the asset or liability. Valuation techniques include use of option pricing models, discounted cash flow models and similar techniques.

The Corporation generally utilizes third-party pricing services to value Level 1 and Level 2 securities. Management reviews the methodologies and assumptions used by the third-party pricing services and evaluates the values provided, principally by comparison with other available market quotes for similar instruments and/or analysis based on internal models using available third-party market data. The Corporation may occasionally adjust certain values provided by the third-party pricing service when management believes, as the result of its review, that the adjusted price most appropriately reflects the fair value of the particular security.

Fair value measurements for assets and liabilities where limited or no observable market data exists are based primarily upon estimates, often calculated based on the economic and competitive environment, the characteristics of the asset or liability and other factors. Therefore, the results cannot be determined with precision and may not be realized in an actual sale or immediate settlement of the asset or liability. Additionally, there may be inherent weaknesses in any calculation technique, and changes in the underlying assumptions used, including discount rates and estimates of future cash flows, could significantly affect the results of current or future values.

Following are descriptions of the valuation methodologies and key inputs used to measure financial assets and liabilities recorded at fair value, as well as a description of the methods and significant assumptions used to estimate fair value disclosures for financial instruments not recorded at fair value in their entirety on a recurring basis. The descriptions include an indication of the level of the fair value hierarchy in which the assets or liabilities are classified. Transfers of assets or liabilities between levels of the fair value hierarchy are recognized at the beginning of the reporting period, when applicable.

Cash and due from banks, federal funds sold and interest-bearing deposits with banks

Due to their short-term nature, the carrying amount of these instruments approximates the estimated fair value. As such, the Corporation classifies the estimated fair value of these instruments as Level 1.

Deferred compensation plan assets and liabilities as well as equity securities with a readily determinable fair value

The Corporation holds a portfolio of equity securities, as well as assets held related to employee deferred compensation plans. Securities and associated deferred compensation plan liabilities are recorded at fair value on a recurring basis and included in other short-term investments and accrued expenses and other liabilities, respectively, on the Consolidated Balance Sheets. Level 1 securities include assets related to employee deferred compensation plans, which are invested in mutual funds, U.S. Treasury securities that are traded by dealers or brokers in active over-the-counter markets and other securities traded on an active exchange, such as the New York Stock Exchange. Deferred compensation plan liabilities represent the fair value of the obligation to the employee, which corresponds to the fair value of the invested assets. Level 2 securities include municipal bonds and residential

mortgage-backed securities issued by U.S. government-sponsored entities and corporate debt securities. The methods used to value equity securities and deferred compensation plan assets are the same as the methods used to value investment securities, discussed below.

Investment securities

Investment securities available-for-sale are recorded at fair value on a recurring basis. The Corporation discloses estimated fair values of investment securities held-to-maturity, which is determined in the same manner as investment securities available-for-sale. Level 1 securities include those traded on an active exchange, such as the New York Stock Exchange, U.S. Treasury securities that are traded by dealers or brokers in active over-the-counter markets and money market funds. Level 2 securities include residential mortgage-backed securities issued by U.S. government agencies and U.S. government-sponsored entities and corporate debt securities. The fair value of Level 2 securities is determined using quoted prices of securities with similar characteristics, or pricing models based on observable market data inputs, primarily interest rates, spreads and prepayment information.

Securities classified as Level 3 represent securities in less liquid markets requiring significant management assumptions when determining fair value. Auction-rate securities comprise Level 3 investment securities available-for-sale. The Corporate Treasury department, with appropriate oversight and approval provided by senior management, is responsible for the valuation of auction-rate securities. Valuation results, including an analysis of changes to the valuation methodology, are provided to senior management for review on a quarterly basis.

Loans held-for-sale

Loans held-for-sale, included in other short-term investments on the Consolidated Balance Sheets, are recorded at the lower of cost or fair value. Loans held-for-sale may be carried at fair value on a nonrecurring basis when fair value is less than cost. The fair value is based on what secondary markets are currently offering for portfolios with similar characteristics. As such, the Corporation classifies both loans held-for-sale subjected to nonrecurring fair value adjustments and the estimated fair value of loans held-for sale as Level 2.

Loans

The Corporation does not record loans at fair value on a recurring basis. However, the Corporation may establish a specific allowance for an impaired loan based on the fair value of the underlying collateral. Such loan values are reported as nonrecurring fair value measurements. Collateral values supporting individually evaluated impaired loans are evaluated quarterly. When management determines that the fair value of the collateral requires additional adjustments, either as a result of non-current appraisal value or when there is no observable market price, the Corporation classifies the impaired loan as Level 3. The Special Assets Group is responsible for performing quarterly credit quality reviews for all impaired loans as part of the quarterly allowance for loan losses process overseen by the Chief Credit Officer, during which valuation adjustments to updated collateral values are determined.

The Corporation discloses fair value estimates for loans. The estimated fair value is determined based on characteristics such as loan category, repricing features and remaining maturity, and includes prepayment and credit loss estimates. Fair values are estimated using a discounted cash flow model that employs discount rates that reflects current pricing for loans with similar maturity and risk characteristics, including credit characteristics, and the cost of equity for the portfolio at the balance sheet date. The rates take into account the expected yield curve, as well as an adjustment for prepayment risk, when applicable. The Corporation classifies the estimated fair value of loans held for investment as Level 3.

Customers' liability on acceptances outstanding and acceptances outstanding

Customers' liability on acceptances outstanding is included in accrued income and other assets and acceptances outstanding are included in accrued expenses and other liabilities on the Consolidated Balance Sheets. Due to their short-term nature, the carrying amount of these instruments approximates the estimated fair value. As such, the Corporation classifies the estimated fair value of these instruments as Level 1.

Derivative assets and derivative liabilities

Derivative instruments held or issued for risk management or customer-initiated activities are traded in over-the-counter markets where quoted market prices are not readily available. Fair value for over-the-counter derivative instruments is measured on a recurring basis using internally developed models that use primarily market observable inputs, such as yield curves and option volatilities. The Corporation manages credit risk on its derivative positions based on whether the derivatives are being settled through a clearinghouse or bilaterally with each counterparty. For derivative positions settled on a counterparty-by-counterparty basis, the Corporation calculates credit valuation adjustments, included in the fair value of these instruments, on the basis of its relationships at the counterparty portfolio/master netting agreement level. These credit valuation adjustments are determined by applying a credit spread for the counterparty or the Corporation, as appropriate, to the total expected exposure of the derivative after considering collateral and other master netting arrangements. These adjustments, which are considered Level 3 inputs, are

based on estimates of current credit spreads to evaluate the likelihood of default. When credit valuation adjustments are significant to the overall fair value of a derivative, the Corporation classifies the over-the-counter derivative valuation in Level 3 of the fair value hierarchy; otherwise, over-the-counter derivative valuations are classified in Level 2.

Nonmarketable equity securities

The Corporation has a portfolio of indirect (through funds) private equity and venture capital investments with a carrying value of $6 million and unfunded commitments of less than $1 million, at December 31, 2018. The investments are accounted for either on the cost or equity method and are individually reviewed for impairment on a quarterly basis by comparing the carrying value to the estimated fair value. These investments may be carried at fair value on a nonrecurring basis when they are deemed to be impaired and written down to fair value. Where there is not a readily determinable fair value, the Corporation estimates fair value for indirect private equity and venture capital investments based on the net asset value, as reported by the fund.

The Corporation also holds restricted equity investments, primarily Federal Home Loan Bank (FHLB) and Federal Reserve Bank (FRB) stock. Restricted equity securities are not readily marketable and are recorded at cost (par value) in accrued income and other assets on the Consolidated Balance Sheets and evaluated for impairment based on the ultimate recoverability of the par value. No significant observable market data for these instruments is available. The Corporation considers the profitability and asset quality of the issuer, dividend payment history and recent redemption experience and believes its investments in FHLB and FRB stock are ultimately recoverable at par. Therefore, the carrying amount for these restricted equity investments approximates fair value. The Corporation classifies the estimated fair value of such investments as Level 1. The Corporation's investment in FHLB stock totaled $163 million and $122 million at December 31, 2018 and 2017, respectively, and its investment in FRB stock totaled $85 million at both December 31, 2018 and 2017.

Other real estate

Other real estate is included in accrued income and other assets on the Consolidated Balance Sheets and includes primarily foreclosed property. Foreclosed property is initially recorded at fair value, less costs to sell, at the date of legal title transfer to the Corporation, establishing a new cost basis. Subsequently, foreclosed property is carried at the lower of cost or fair value, less costs to sell. Other real estate may be carried at fair value on a nonrecurring basis when fair value is less than cost. Fair value is based upon independent market prices, appraised value or management's estimate of the value of the property. The Special Assets Group obtains updated independent market prices and appraised values, as required by state regulation or deemed necessary based on market conditions, and determines if additional write-downs are necessary. On a quarterly basis, senior management reviews all other real estate and determines whether the carrying values are reasonable, based on the length of time elapsed since receipt of independent market price or appraised value and current market conditions. When management determines that the fair value of other real estate requires additional adjustments, either as a result of a non-current appraisal or when there is no observable market price, the Corporation classifies the other real estate as Level 3.

Deposit liabilities

The estimated fair value of checking, savings and certain money market deposit accounts is represented by the amounts payable on demand. The estimated fair value of term deposits is calculated by discounting the scheduled cash flows using the period-end rates offered on these instruments. As such, the Corporation classifies the estimated fair value of deposit liabilities as Level 2.

Short-term borrowings

The carrying amount of federal funds purchased, securities sold under agreements to repurchase and other short-term borrowings approximates the estimated fair value. As such, the Corporation classifies the estimated fair value of short-term borrowings as Level 1.

Medium- and long-term debt

The estimated fair value of the Corporation's medium- and long-term debt is based on quoted market values when available. If quoted market values are not available, the estimated fair value is based on the market values of debt with similar characteristics. The Corporation classifies the estimated fair value of medium- and long-term debt as Level 2.

Credit-related financial instruments

Credit-related financial instruments include unused commitments to extend credit and letters of credit. These instruments generate ongoing fees which are recognized over the term of the commitment. In situations where credit losses are probable, the Corporation records an allowance. The carrying value of these instruments included in accrued expenses and other liabilities on the Consolidated Balance Sheets, which includes the carrying value of the deferred fees plus the related allowance, approximates the estimated fair value. The Corporation classifies the estimated fair value of credit-related financial instruments as Level 3.

For further information about fair value measurements refer to Note 2.

Other Short-Term Investments

Other short-term investments include deferred compensation plan assets, equity securities with a readily determinable fair value and loans held-for-sale.

Deferred compensation plan assets and equity securities are carried at fair value. Realized and unrealized gains or losses are included in other noninterest income on the Consolidated Statements of Income.

Loans held-for-sale, typically residential mortgages originated with the intent to sell and occasionally may include other loans transferred to held-for-sale, are carried at the lower of cost or fair value. Fair value is determined in the aggregate for each portfolio. Changes in fair value and gains or losses upon sale are included in other noninterest income on the Consolidated Statements of Income.

Investment Securities

Debt securities not held for trading purposes are classified as available-for-sale or held-to-maturity. Securities available-for-sale are recorded at fair value, with unrealized gains and losses, net of income taxes, reported as a separate component of other comprehensive income (OCI). Interest income is recognized using the interest method. Securities for which management has the intent and ability to hold to maturity are classified as held-to-maturity and recorded at amortized cost.

Securities transferred from available-for-sale to held-to-maturity are reclassified at fair value on the date of transfer. The net unrealized gain (loss) at the date of transfer is included in historical cost and amortized over the remaining life of the related securities as a yield adjustment consistent with the amortization of the net unrealized gain (loss) included in accumulated other comprehensive loss on the same securities, resulting in no impact to net income.

The Corporation adopted ASU No. 2017-12, "Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities" (ASU 2017-12), effective January 1, 2018. As part of the adoption, the Corporation made a transition election to reclassify the portfolio of held-to-maturity securities to available-for-sale in January 2018 as the securities are eligible to be hedged. This resulted in the recognition of additional unrealized losses of $11 million at the date of transfer. For further information on ASU 2017-12, refer to the "Derivatives Instruments and Hedging Activities" policy in this Note.

Debt securities are reviewed quarterly for possible other-than-temporary impairment (OTTI). In determining whether OTTI exists for debt securities in an unrealized loss position, the Corporation assesses the likelihood of selling the security prior to the recovery of its amortized cost basis. If the Corporation intends to sell the debt security or it is more likely than not that the Corporation will be required to sell the debt security prior to the recovery of its amortized cost basis, the debt security is written down to fair value, and the full amount of any impairment charge is recorded as a loss in net securities losses in the Consolidated Statements of Income. If the Corporation does not intend to sell the debt security and it is more likely than not that the Corporation will not be required to sell the debt security prior to recovery of its amortized cost basis, only the credit component of any impairment of a debt security is recognized as a loss in net securities losses on the Consolidated Statements of Income, with the remaining impairment recorded in OCI.

Gains or losses on the sale of securities are computed based on the adjusted cost of the specific security sold.

Effective January 1, 2018, the Corporation adopted the provisions of Accounting Standards Update (ASU) No. 2016-01, "Financial Instruments - Overall (Subtopic 825-10): Recognition of Financial Assets and Financial Liabilities," (ASU 2016-01). ASU 2016-01 requires equity investments, other than equity method investments, to be measured at fair value with changes in fair value recognized in net income. As a result, equity securities with readily determinable fair value were reclassified from investment securities available-for-sale to other short-term investments. At adoption, an immaterial amount of cumulative net unrealized losses on equity securities previously recognized in accumulated other comprehensive income (AOCI) was reclassified to the opening balance of retained earnings, included in cumulative effect of change in accounting principles in the accompanying Consolidated Statements of Changes in Shareholders' Equity.

For further information on investment securities, refer to Note 3.

Loans

Loans and leases originated and held for investment are recorded at the principal balance outstanding, net of unearned income, charge-offs and unamortized deferred fees and costs. Interest income is recognized on loans and leases using the interest method.

The Corporation assesses all loan modifications to determine whether a restructuring constitutes a troubled debt restructuring (TDR). A restructuring is considered a TDR when a borrower is experiencing financial difficulty and the Corporation grants a concession to the borrower. TDRs on accrual status at the original contractual rate of interest are considered performing.

Nonperforming TDRs include TDRs on nonaccrual status and loans which have been renegotiated to less than the original contractual rates (reduced-rate loans). All TDRs are considered impaired loans.

Loan Origination Fees and Costs

Substantially all loan origination fees and costs are deferred and amortized to net interest income over the life of the related loan or over the commitment period as a yield adjustment. Net deferred income on originated loans, including unearned income and unamortized costs, fees, premiums and discounts, totaled $115 million and $113 million at December 31, 2018 and 2017, respectively.

Loan fees on unused commitments and net origination fees related to loans sold are recognized in noninterest income.

Allowance for Credit Losses

The allowance for credit losses includes both the allowance for loan losses and the allowance for credit losses on lending-related commitments.

The Corporation disaggregates the loan portfolio into segments for purposes of determining the allowance for credit losses. These segments are based on the level at which the Corporation develops, documents and applies a systematic methodology to determine the allowance for credit losses. The Corporation's portfolio segments are business loans and retail loans. Business loans include the commercial, real estate construction, commercial mortgage, lease financing and international loan portfolios. Retail loans consist of traditional residential mortgage, home equity and other consumer loans.

For further information on the Allowance for Credit Losses, refer to Note 4.

Allowance for Loan Losses

The allowance for loan losses represents management's assessment of probable, estimable losses inherent in the Corporation's loan portfolio. The allowance for loan losses includes specific allowances, based on individual evaluations of certain loans, and allowances for homogeneous pools of loans with similar risk characteristics.

The Corporation individually evaluates certain impaired loans on a quarterly basis and establishes specific allowances for such loans, if required. A loan is considered impaired when it is probable that interest or principal payments will not be made in accordance with the contractual terms of the loan agreement. Consistent with this definition, all loans for which the accrual of interest has been discontinued (nonaccrual loans) are considered impaired. The Corporation individually evaluates nonaccrual loans with book balances of $2 million or more and loans whose terms have been modified in a TDR with book balances of $1 million or more. The threshold for individual evaluation is revised on an infrequent basis, generally when economic circumstances change significantly. Specific allowances for impaired loans are estimated using one of several methods, including the estimated fair value of underlying collateral, observable market value of similar debt or discounted expected future cash flows. Collateral values supporting individually evaluated impaired loans are evaluated quarterly. At least annually, appraisals are obtained or appraisal assumptions are updated, unless conditions dictate increased frequency. The Corporation may reduce the collateral value based upon the age of the appraisal and adverse developments in market conditions.

Loans which do not meet the criteria to be evaluated individually are evaluated in homogeneous pools of loans with similar risk characteristics. Business loans are assigned to pools based on the Corporation's internal risk rating system. Internal risk ratings are assigned to each business loan at the time of approval and are subjected to subsequent periodic reviews by the Corporation's senior management, generally at least annually or more frequently upon the occurrence of a circumstance that affects the credit risk of the loan. For business loans not individually evaluated, losses inherent to the pool are estimated by applying standard reserve factors to outstanding principal balances. Standard reserve factors are based on estimated probabilities of default for each internal risk rating, set to a default horizon based on an estimated loss emergence period, and loss given default. These factors are evaluated quarterly and updated annually, unless economic conditions necessitate a change, giving consideration to count-based borrower risk rating migration experience and trends, recent charge-off experience, current economic conditions and trends, changes in collateral values of properties securing loans, and trends with respect to past due and nonaccrual amounts.

The allowance for business loans not individually evaluated also includes qualitative adjustments to bring the allowance to the level management believes is appropriate based on factors that have not otherwise been fully accounted for, including adjustments for (i) risk factors that have not been fully addressed in internal risk ratings, (ii) imprecision in the risk rating system resulting from inaccuracy in assigning and/or entering risk ratings in the loan accounting system, (iii) market conditions and (iv) model imprecision. Risk factors that have not been fully addressed in internal risk ratings may include portfolios where recent historical losses exceed expected losses or known recent events are expected to alter risk ratings once evidence is acquired, portfolios where a certain level of concentration introduces added risk, or changes in the level and quality of experience held by lending management. An additional allowance for risk rating errors is calculated based on the results of risk rating accuracy assessments performed on samples of business loans conducted by the Corporation's asset quality review function, a function independent of

the lending and credit groups responsible for assigning the initial internal risk rating at the time of approval. Qualitative adjustments for market conditions are determined based on an established framework. The determination of the appropriate adjustment is based on management's analysis of observable macroeconomic metrics, including consideration of regional metrics within the Corporation's footprint, internal credit risk movement and a qualitative assessment of the lending environment, including underwriting standards, current economic and political conditions, and other factors affecting credit quality. Management recognizes the sensitivity of various assumptions made in the quantitative modeling of expected losses and may adjust reserves depending upon the level of uncertainty that currently exists in one or more assumption.

The allowance for retail loans not individually evaluated is determined by applying estimated loss rates to various pools of loans within the portfolios with similar risk characteristics. Estimated loss rates for all pools are updated quarterly, incorporating quantitative and qualitative factors such as recent charge-off experience, current economic conditions and trends, changes in collateral values of properties securing loans (using index-based estimates), and trends with respect to past due and nonaccrual amounts.

The total allowance for loan losses is sufficient to absorb incurred losses inherent in the total portfolio. Unanticipated economic events, including political, economic and regulatory instability in countries where the Corporation has loans, could cause changes in the credit characteristics of the portfolio and result in an unanticipated increase in the allowance. Significant increases in current portfolio exposures, as well as the inclusion of additional industry-specific portfolio exposures in the allowance, could also increase the amount of the allowance. Any of these events, or some combination thereof, may result in the need for additional provision for credit losses in order to maintain an allowance that complies with credit risk and accounting policies.

Loans deemed uncollectible are charged off and deducted from the allowance. Recoveries on loans previously charged off are added to the allowance.

Allowance for Credit Losses on Lending-Related Commitments

The allowance for credit losses on lending-related commitments provides for probable losses inherent in lending-related commitments, including unused commitments to extend credit and letters of credit. The allowance for credit losses on lending-related commitments includes allowances based on homogeneous pools of letters of credit and unused commitments to extend credit within each internal risk rating. A probability of draw estimate is applied to the commitment amount, and the result is multiplied by standard reserve factors consistent with business loans. In general, the probability of draw for letters of credit is considered certain for all letters of credit supporting loans and for letters of credit assigned an internal risk rating generally consistent with regulatory defined substandard or doubtful. Other letters of credit and all unfunded commitments have a lower probability of draw. The allowance for credit losses on lending-related commitments is included in accrued expenses and other liabilities on the Consolidated Balance Sheets, with the corresponding charge reflected in the provision for credit losses on the Consolidated Statements of Income.

Nonperforming Assets

Nonperforming assets consist of nonaccrual loans, reduced-rate loans and foreclosed property.

A loan is considered past due when the contractually required principal or interest payment is not received by the specified due date or, for certain loans, when a scheduled monthly payment is past due and unpaid for 30 days or more. Business loans are generally placed on nonaccrual status when management determines full collection of principal or interest is unlikely or when principal or interest payments are 90 days past due, unless the loan is fully collateralized and in the process of collection. The past-due status of a business loan is one of many indicative factors considered in determining the collectability of the credit. The primary driver of when the principal amount of a business loan should be fully or partially charged-off is based on a qualitative assessment of the recoverability of the principal amount from collateral and other cash flow sources. Residential mortgage and home equity loans are generally placed on nonaccrual status once they become 90 days past due and are charged off to current appraised values less costs to sell no later than 180 days past due. In addition, junior lien home equity loans less than 90 days past due are placed on nonaccrual status if they have underlying risk characteristics that place full collection of the loan in doubt, such as when the related senior lien position is identified as seriously delinquent. Residential mortgage and consumer loans in bankruptcy for which the court has discharged the borrower's obligation and the borrower has not reaffirmed the debt are placed on nonaccrual status and written down to estimated collateral value, without regard to the actual payment status of the loan, and are classified as TDRs. All other consumer loans are generally placed on nonaccrual status at 90 days past due and are charged off at no later than 120 days past due, or earlier if deemed uncollectible.

At the time a loan is placed on nonaccrual status, interest previously accrued but not collected is charged against current income. Principal and interest payments received on such loans are generally first applied as a reduction of principal. Income on nonaccrual loans is then recognized only to the extent that cash is received after principal has been fully repaid or future collection of principal is probable. Generally, a loan may be returned to accrual status when all delinquent principal and interest have been

received and the Corporation expects repayment of the remaining contractual principal and interest, or when the loan or debt security is both well secured and in the process of collection.

Foreclosed property (primarily real estate) is initially recorded at fair value, less costs to sell, at the date of legal title transfer to the Corporation and subsequently carried at the lower of cost or fair value, less estimated costs to sell. Loans are reclassified to foreclosed property upon obtaining legal title to the collateral. Independent appraisals are obtained to substantiate the fair value of foreclosed property at the time of foreclosure and updated at least annually or upon evidence of deterioration in the property's value. At the time of foreclosure, the adjustment for the difference between the related loan balance and fair value (less estimated costs to sell) of the property acquired is charged or credited to the allowance for loan losses. Subsequent write-downs, operating expenses and losses upon sale, if any, are charged to noninterest expenses. Foreclosed property is included in accrued income and other assets on the Consolidated Balance Sheets.

Premises and Equipment

Premises and equipment are stated at cost, less accumulated depreciation and amortization. Depreciation, computed using the straight-line method, is charged to operations over the estimated useful lives of the assets. Estimated useful lives are generally 3 years to 33 years for premises that the Corporation owns and 3 years to 8 years for furniture and equipment. Leasehold improvements are generally amortized over the terms of their respective leases or 10 years, whichever is shorter.

Software

Capitalized software is stated at cost, less accumulated amortization. Capitalized software includes purchased software, capitalizable application development costs associated with internally-developed software and cloud computing arrangements, including an in-substance software license. Amortization, computed on the straight-line method, is charged to operations over the estimated useful life of the software, generally 5 years. Capitalized software is included in accrued income and other assets on the Consolidated Balance Sheets.

Goodwill and Core Deposit Intangibles

Goodwill, included in accrued income and other assets on the Consolidated Balance Sheets, is initially recorded as the excess of the purchase price over the fair value of net assets acquired in a business combination and is subsequently evaluated at least annually for impairment. Goodwill impairment testing is performed at the reporting unit level, equivalent to a business segment or one level below. The Corporation has three reporting units: the Business Bank, the Retail Bank and Wealth Management.

The Corporation performs its annual evaluation of goodwill impairment in the third quarter of each year and on an interim basis if events or changes in circumstances between annual tests suggest additional testing may be warranted to determine if goodwill might be impaired. The goodwill impairment test is a two-step test. The first step of the goodwill impairment test compares the estimated fair value of identified reporting units with their carrying amount, including goodwill. If the estimated fair value of the reporting unit is less than the carrying value, the second step must be performed to determine the implied fair value of the reporting unit's goodwill and the amount of goodwill impairment, if any. The implied fair value of goodwill is determined as if the reporting unit were being acquired in a business combination. If the implied fair value of goodwill exceeds the goodwill assigned to the reporting unit, there is no impairment. If the goodwill assigned to a reporting unit exceeds the implied fair value of goodwill, an impairment charge would be recorded for the excess.

The Corporation may choose to perform a qualitative assessment to determine whether the first step of the impairment test should be performed in future periods if certain factors indicate that impairment is unlikely. Factors which could be considered in the assessment of the likelihood of impairment include macroeconomic conditions, industry and market considerations, stock performance of the Corporation and its peers, financial performance, events affecting the Corporation as a whole or its reporting units individually and previous results of goodwill impairment tests.

Core deposit intangibles are amortized on an accelerated basis, based on the estimated period the economic benefits are expected to be received. Core deposit intangibles are reviewed for impairment when events or changes in circumstances indicate that their carrying amounts may not be recoverable. Impairment for a finite-lived intangible asset exists if the sum of the undiscounted cash flows expected to result from the use of the asset exceeds its carrying value.

Additional information regarding goodwill and core deposit intangibles can be found in Note 7.

Nonmarketable Equity Securities

The Corporation has certain investments that are not readily marketable. These investments include a portfolio of investments in indirect private equity and venture capital funds and restricted equity investments, which are securities the Corporation is required to hold for various reasons, primarily Federal Home Loan Bank of Dallas (FHLB) and Federal Reserve Bank (FRB) stock. These investments are accounted for on the cost or equity method and are included in accrued income and other

assets on the Consolidated Balance Sheets. The investments are individually reviewed for impairment on a quarterly basis. Indirect private equity and venture capital funds are evaluated by comparing the carrying value to the estimated fair value. The amount by which the carrying value exceeds the fair value that is determined to be other-than-temporary impairment is charged to current earnings and the carrying value of the investment is written down accordingly. FHLB and FRB stock are recorded at cost (par value) and evaluated for impairment based on the ultimate recoverability of the par value. If the Corporation does not expect to recover the full par value, the amount by which the par value exceeds the ultimately recoverable value would be charged to current earnings and the carrying value of the investment would be written down accordingly.

Derivative Instruments and Hedging Activities

Derivative instruments are carried at fair value in either accrued income and other assets or accrued expenses and other liabilities on the Consolidated Balance Sheets. The accounting for changes in the fair value (i.e., gains or losses) of a derivative instrument is determined by whether it has been designated and qualifies as part of a hedging relationship and, further, by the type of hedging relationship. The Corporation presents derivative instruments at fair value in the Consolidated Balance Sheets on a net basis when a right of offset exists, based on transactions with a single counterparty and any cash collateral paid to and/or received from that counterparty for derivative contracts that are subject to legally enforceable master netting arrangements.

The Corporation adopted ASU No. 2017-12 effective January 1, 2018. ASU 2017-12 better aligns the accounting and reporting of hedging relationships with the economics of risk management activities and provides administrative reliefs to simplify the application of hedge accounting, including expanding the application of the shortcut method, eliminating the separate measurement and reporting of hedge ineffectiveness and generally requiring the entire effect of the hedging instrument and the hedged item to be presented in the same income statement line item.

For derivative instruments designated and qualifying as fair value hedges (i.e., hedging the exposure to changes in the fair value of an asset or a liability or an identified portion thereof that is attributable to a particular risk), the gain or loss on the derivative instrument, as well as the offsetting loss or gain on the hedged item attributable to the hedged risk, are recognized in the same consolidated statement of income line that is used to present the earnings effect of the hedged item during the period of the change in fair values. For derivative instruments that are designated and qualify as cash flow hedges (i.e., hedging the exposure to variability in expected future cash flows that is attributable to a particular risk), the gain or loss on the derivative instrument is reported as a component of other comprehensive income and reclassified into earnings in the same consolidated statement of income line item as the earnings effect of the hedged item in the same period or periods during which the hedged transaction affects earnings. For derivative instruments not designated as hedging instruments, the gain or loss is recognized in current earnings during the period of change.

The Corporation's derivative instruments used for risk management predominately comprise swaps converting fixed-rate long-term debt to variable rates. An ineffectiveness net gain of $1 million and net loss of $2 million were included in other noninterest income in the consolidated statements of income for the years ended December 31, 2017 and 2016, respectively. Under ASU 2017-12, beginning January 1, 2018, gains or losses relating to hedge ineffectiveness are no longer separately measured or reported.

To qualify for the use of hedge accounting, a derivative must be effective at inception and expected to be continuously effective in offsetting the risk being hedged. For derivatives designated as hedging instruments at inception, the Corporation uses either the short-cut method or applies statistical regression analysis to assess effectiveness. The short-cut method is used for $1 billion notional of fair value hedges of medium- and long-term debt. This method allows for the assumption of perfect effectiveness and eliminates the requirement to further assess hedge effectiveness on these transactions. For hedge relationships to which the Corporation does not apply the short-cut method, statistical regression analysis is used at inception to assess whether the derivative used is expected to be highly effective in offsetting changes in the fair value or cash flows of the hedged item. A statistical regression or qualitative analysis is performed at each reporting period thereafter to evaluate hedge effectiveness.

Upon adopting ASU 2017-12, the Corporation elected to change the measurement methodology of all long-haul fair value hedges existing at December 31, 2017. The prior period effect of this election was a $1 million reduction to opening retained earnings, included in cumulative effect of change in accounting principles in the Consolidated Statements of Shareholders' Equity.

Further information on the Corporation's derivative instruments and hedging activities is included in Note 8.

Short-Term Borrowings

Securities sold under agreements to repurchase are treated as collateralized borrowings and are recorded at amounts equal to the cash received. The contractual terms of the agreements to repurchase may require the Corporation to provide additional collateral if the fair value of the securities underlying the borrowings declines during the term of the agreement.

Financial Guarantees

Certain guarantee contracts or indemnification agreements that contingently require the Corporation, as guarantor, to make payments to the guaranteed party are initially measured at fair value and included in accrued expenses and other liabilities on the Consolidated Balance Sheets. The subsequent accounting for the liability depends on the nature of the underlying guarantee. The release from risk is accounted for under a particular guarantee when the guarantee expires or is settled, or by a systematic and rational amortization method.

Further information on the Corporation's obligations under guarantees is included in Note 8.

Share-Based Compensation

The Corporation recognizes share-based compensation expense using the straight-line method over the requisite service period for all stock awards, including those with graded vesting. The requisite service period is the period an employee is required to provide service in order to vest in the award, which cannot extend beyond the date at which the employee is no longer required to perform any service to receive the share-based compensation (i.e. the retirement-eligible date). Forfeiture of stock awards and dividend equivalents are accounted for as they occur.

Certain awards are contingent upon performance and/or market conditions, which affect the number of shares ultimately issued. The Corporation periodically evaluates the probable outcome of the performance conditions and makes cumulative adjustments to compensation expense as appropriate. Market conditions are included in the determination of the fair value of the award on the date of grant. Subsequent to the grant date, market conditions have no impact on the amount of compensation expense the Corporation will recognize over the life of the award.

Further information on the Corporation's share-based compensation plans is included in Note 16.

Revenue Recognition

Effective January 1, 2018, the Corporation adopted the provision of Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Topic 606, "Revenue from Contracts with Customers" (Topic 606), using the modified retrospective method applied to all open contracts as of January 1, 2018.

Under Topic 606, card fee revenue from certain products is generally presented net of network costs, including interchange costs, surcharge fees and assessment fees, as opposed to the previous presentation of associated network costs in outside processing fee expense in the Consolidated Statements of Income. Similar adjustments were made for other revenue streams that resulted in certain costs being recognized in the same category as the associated revenues in noninterest income.

The adoption of Topic 606 resulted in decreases of $140 million in card fees and $5 million in service charges on deposits accounts, included in noninterest income, and a corresponding $145 million decrease in outside processing fee expense included in noninterest expenses, in the Consolidated Statements of Income for 2018.

The Corporation previously deferred recognition of certain treasury management fees included in service charges on deposit accounts in the Consolidated Statements of Income until the amount of compensation was considered fixed and determinable. Under the new guidance, the portion of these fees that are based on agreed-upon rates less estimated credits expected to be earned by the customer is recognized as services are rendered. As a result, the Corporation recorded a transition adjustment of $14 million, after tax, to retained earnings, included in cumulative effect of change in accounting principles in the accompanying Consolidated Statements of Changes in Shareholders' Equity. Similar adjustments were made for other revenue streams that resulted in an additional cumulative transition after-tax adjustment to retained earnings of $2 million.

Revenue from contracts with customers comprises the noninterest income earned by the Corporation in exchange for services provided to customers and are recognized when services are complete or as they are rendered, although contracts are generally short-term by nature. Services provided over a period of time are typically transferred to customers evenly over the term of the contracts and revenue is recognized evenly over the period services are provided. Contract receivables are included in accrued income and other assets on the Consolidated Balance Sheets. Payment terms vary by services offered, and the time between completion of performance obligations and payment is typically not significant.

Card Fees

Card fees comprise interchange and other fee income earned on government card, commercial card, debit/automated teller machine card and merchant payment processing programs. Card fees are presented net of network costs, as performance obligations for card services are limited to transaction processing and settlement with the card network on behalf of the customers. Fees for these services are primarily based on interchange rates set by the network and transaction volume. The Corporation also provides ongoing card program support services, for which fees are based on contractually agreed prices and customer demand for services.

Service Charges on Deposit Accounts

Service charges on deposit accounts comprise charges on retail and business accounts, including fees for treasury management services. Treasury management services include transaction-based services related to payment processing, overdrafts, non-sufficient funds and other deposit account activity, as well as account management services that are provided over time. Business customers can earn credits depending on deposit balances maintained with the Corporation, which may be used to offset fees. Fees and credits are based on predetermined, agreed-upon rates.

Fiduciary Income

Fiduciary income includes fees and commissions from asset management, custody, recordkeeping, investment advisory and other services provided primarily to personal and institutional trust customers. Revenue is recognized as the services are performed and is based either on the market value of the assets managed or the services provided, as well as agreed-upon rates.

Commercial Lending Fees

Commercial lending fees include both revenue from contracts with customers (primarily loan servicing fees) and other sources of revenue. Commercial loan servicing fees are based on contractually agreed-upon prices and when the services are provided. Other sources of revenue in commercial lending fees primarily include fees assessed on the unused portion of commercial lines of credit (unused commitment fees) and syndication arrangements.

Brokerage Fees

Brokerage fees are commissions earned for facilitating securities transactions for customers, as well as other brokerage services provided. Revenue is recognized when services are complete and is based on the type of services provided and agreed-upon rates. The Corporation pays commissions based on brokerage fee revenue. These are typically recognized when incurred because the amortization period is one year or less and are included in salaries and benefits expense in the Consolidated Statements of Income.

Other Revenues

Other revenues, consisting primarily of other retail fees, investment banking fees and insurance commissions, are typically recognized when services or transactions are completed and are based on the type of services provided and agreed-upon rates.

Except as discussed above, commissions and other incentives paid to employees are generally based on several internal and external metrics and, as a result, are not solely dependent on revenue generating activities.

Defined Benefit Pension and Other Postretirement Costs

Defined benefit pension costs are funded consistent with the requirements of federal laws and regulations. Inherent in the determination of defined benefit pension costs are assumptions concerning future events that will affect the amount and timing of required benefit payments under the plans. These assumptions include demographic assumptions such as retirement age and mortality, a compensation rate increase, a discount rate used to determine the current benefit obligation, form of payment election and a long-term expected rate of return on plan assets. Net periodic defined benefit pension expense includes service cost, interest cost based on the assumed discount rate, an expected return on plan assets based on an actuarially derived market-related value of assets, amortization of prior service cost or credit and amortization of net actuarial gains or losses. The market-related value of plan assets is determined by amortizing the current year's investment gains and losses (the actual investment return net of the expected investment return) over 5 years. The amortization adjustment cannot exceed 10 percent of the fair value of assets. Prior service costs or credits include the impact of plan amendments on the liabilities and are amortized over the future service periods of active employees expected to receive benefits under the plan. Actuarial gains and losses result from experience different from that assumed and from changes in assumptions (excluding asset gains and losses not yet reflected in market-related value). Amortization of actuarial gains and losses is included as a component of net periodic defined benefit pension cost for a year if the actuarial net gain or loss exceeds 10 percent of the greater of the projected benefit obligation or the market-related value of plan assets. If amortization is required, the excess is amortized over the average remaining service period of participating employees expected to receive benefits under the plan. Service costs are included in salaries and benefits expense, while the other components of net periodic defined benefit pension expense are included in other noninterest expenses on the Consolidated Statements of Income.

Postretirement benefits are recognized in other noninterest expenses on the Consolidated Statements of Income during the average remaining service period of participating employees expected to receive benefits under the plan or the average remaining future lifetime of retired participants currently receiving benefits under the plan.

The Corporation retrospectively adopted the provisions of ASU No. 2017-07, "Compensation - Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost" (ASU 2017-07) on January 1, 2018, which requires employers to report service cost as part of compensation expense and the other components of net benefit cost separately from service cost. As a result, $49 million and $28 million of benefit from the other components of

net benefit cost was reclassified from salaries and benefits expense to other noninterest expenses in the Consolidated Statements of Income for 2017 and 2016, respectively. The Corporation based the adjustment to the prior periods on amounts disclosed in Note 17.

See Note 17 for further information regarding the Corporation's defined benefit pension and other postretirement plans.

Income Taxes

The provision for income taxes is the sum of income taxes due for the current year and deferred taxes. The Corporation classifies interest and penalties on income tax liabilities and, beginning January 1, 2017, excess tax benefits and deficiencies resulting from employee stock awards in the provision for income taxes on the Consolidated Statements of Income.

Deferred taxes arise from temporary differences between the income tax basis and financial accounting basis of assets and liabilities. Deferred tax assets are evaluated for realization based on available evidence of projected future reversals of existing taxable temporary differences, assumptions made regarding future events and, when applicable, state loss carryback capacity. A valuation allowance is provided when it is more likely than not that some portion of the deferred tax asset will not be realized.

The Tax Cuts and Jobs Act (the "Act"), enacted on December 22, 2017, reduced the U.S. federal corporate tax rate from 35 percent to 21 percent. Also, on December 22, 2017, the Securities and Exchange Commission issued Staff Accounting Bulletin No. 118 (SAB 118), which provides guidance on accounting for tax effects of the Act. SAB 118 provided a measurement period of up to one year from the enactment date to complete the accounting. The amount recorded related to the remeasurement of the Corporation's deferred tax balance was a reduction of $99 million, including a provisional adjustment of $107 million recognized in 2017 and an $8 million revision to the impact recorded in 2018.

Earnings Per Share

Basic net income per common share is calculated using the two-class method. The two-class method is an earnings allocation formula that determines earnings per share for each share of common stock and participating securities according to dividends declared (distributed earnings) and participation rights in undistributed earnings. Distributed and undistributed earnings are allocated between common and participating security shareholders based on their respective rights to receive dividends. Nonvested share-based payment awards that contain nonforfeitable rights to dividends or dividend equivalents are considered participating securities (e.g., nonvested restricted stock and certain service-based restricted stock units). Undistributed net losses are not allocated to nonvested restricted shareholders, as these shareholders do not have a contractual obligation to fund the losses incurred by the Corporation. Net income attributable to common shares is then divided by the weighted-average number of common shares outstanding during the period.

Diluted net income per common share is calculated using the more dilutive of either the treasury method or the two-class method. The dilutive calculation considers common stock issuable under the assumed exercise of stock options and warrants, as well as service- and performance-based restricted stock units granted under the Corporation's stock plans using the treasury stock method, if dilutive. Net income attributable to common shares is then divided by the total of weighted-average number of common shares and common stock equivalents outstanding during the period.

Statements of Cash Flows

Cash and cash equivalents are defined as those amounts included in cash and due from banks and interest-bearing deposits with banks on the Consolidated Balance Sheets.

The Corporation adopted ASU No. 2016-15, "Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments," (ASU 2016-15) on January 1, 2018 and, as a result, reclassified $18 million and $16 million of proceeds from settlement of bank-owned life insurance policies from operating activities to investing activities for 2017 and 2016, respectively.

Comprehensive Income (Loss)

The Corporation presents on an annual basis the components of net income and other comprehensive income in two separate, but consecutive statements and presents on an interim basis the components of net income and a total for comprehensive income in one continuous consolidated statement of comprehensive income.

Pending Accounting Pronouncements

In February 2016, the FASB issued ASU No. 2016-02, "Leases (Topic 842)," (ASU 2016-02), to increase the transparency and comparability of lease recognition and disclosure. ASU 2016-02 requires lessees to recognize lease contracts on the balance sheet, while recognizing expenses on the income statement in a manner similar to current guidance. The Corporation will adopt Topic 842 in the first quarter 2019 for all open leases with a term greater than one year as of the adoption date using the modified

retrospective approach and will elect the hindsight practical expedient in determining its lease terms. This is expected to result in increases of $330 million and $345 million to total assets and total liabilities, respectively, and a reduction to retained earnings of approximately $15 million. The increase to total assets was primarily due to the recognition of a right-of-use asset recorded in accrued income and other assets, while the increase in total liabilities was primarily due to recognition of the lease payment liability recorded in accrued expenses and other liabilities. A similar increase in assets at December 31, 2018 would have caused a 5-basis-point decrease in the common equity tier 1 capital (CET1) ratio.

In June 2016, the FASB issued ASU No. 2016-13, "Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments," (ASU 2016-13), which addresses concerns regarding the perceived delay in recognition of credit losses under the existing incurred loss model. The amendment introduces a new, single model for recognizing credit losses on all financial instruments presented on a cost basis. Under the new model, entities must estimate current expected credit losses by considering all available relevant information, including historical and current conditions, as well as reasonable and supportable forecasts of future events. The update also requires additional qualitative and quantitative disclosure to allow users to better understand the credit risk within the portfolio and the methodologies for determining the allowance for credit losses.

ASU 2016-13 is effective for the Corporation on January 1, 2020 and must be applied using the modified retrospective approach with limited exceptions. In preparation, the Corporation has developed new credit estimation models, processes and controls. Internal validation of the models is underway and expected to be completed early in 2019. The Corporation has performed test runs of the new processes and controls and expects to begin full parallel runs by mid-2019. The impact of the standard will depend on the composition of the Corporation's portfolio as well as economic conditions and forecasts at the time of adoption. The Corporation expects to adopt the standard in the first quarter of 2020.

In August 2018, the FASB issued ASU No. 2018-15, "Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract," (ASU 2018-15), to align the requirements for capitalizing implementation costs in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs relating to internal-use software. The update requires entities in a hosting arrangement that is a service contract to follow the guidance in Subtopic 350-40 to determine which implementation costs to capitalize as an asset and which costs to expense. ASU 2018-15 is effective for the Corporation on January 1, 2020 and may be applied using either the retrospective or prospective approach. Early adoption is permitted. The Corporation is currently evaluating the impact of adoption.

In October 2018, the FASB issued ASU No. 2018-16, "Derivatives and Hedging (Topic 815): Inclusion of the Secured Overnight Financing Rate (SOFR) Overnight Index Swap (OIS) Rate as a Benchmark Interest Rate for Hedge Accounting Purposes," (ASU 2018-16), to permit the use of SOFR as an eligible benchmark interest rate for hedge accounting. SOFR has been identified by the Federal Reserve Board and the Alternative Reference Rates Committee as the preferred alternative reference rate to the London Interbank Offered Rate (LIBOR). The Corporation will adopt ASU 2018-16 prospectively in the first quarter of 2019. As of December 31, 2018, there were no active SOFR-based contracts.

NOTE 2 – FAIR VALUE MEASUREMENTS

Note 1 contains information about the fair value hierarchy, descriptions of the valuation methodologies and key inputs used to measure financial assets and liabilities recorded at fair value, as well as a description of the methods and significant assumptions used to estimate fair value disclosures for financial instruments not recorded at fair value in their entirety on a recurring basis.

Assets and Liabilities Recorded at Fair Value on a Recurring Basis

The following tables present the recorded amount of assets and liabilities measured at fair value on a recurring basis as of December 31, 2018 and 2017.

(in millions)	Total	Level 1	Level 2	Level 3
December 31, 2018				
Deferred compensation plan assets	$ 88	$ 88	$ —	$ —
Equity securities	43	43	—	—
Investment securities available-for-sale:				
U.S. Treasury and other U.S. government agency securities	2,727	2,727	—	—
Residential mortgage-backed securities (a)	9,318	—	9,318	—
Total investment securities available-for-sale	12,045	2,727	9,318	—
Derivative assets:				
Interest rate contracts	67	—	58	9
Energy derivative contracts	189	—	189	—
Foreign exchange contracts	19	—	19	—
Total derivative assets	275	—	266	9
Total assets at fair value	$ 12,451	$ 2,858	$ 9,584	$ 9
Derivative liabilities:				
Interest rate contracts	$ 70	$ —	$ 70	$ —
Energy derivative contracts	186	—	186	—
Foreign exchange contracts	13	—	13	—
Total derivative liabilities	269	—	269	—
Deferred compensation plan liabilities	88	88	—	—
Total liabilities at fair value	$ 357	$ 88	$ 269	$ —

(a) Issued and/or guaranteed by U.S. government agencies or U.S. government-sponsored enterprises.

(in millions)	Total	Level 1	Level 2	Level 3
December 31, 2017				
Trading securities:				
Deferred compensation plan assets	$ 92	$ 92	$ —	$ —
Investment securities available-for-sale:				
U.S. Treasury and other U.S. government agency securities	2,727	2,727	—	—
Residential mortgage-backed securities (a)	8,124	—	8,124	—
State and municipal securities	5	—	—	5 (b)
Equity and other non-debt securities	82	38	—	44 (b)
Total investment securities available-for-sale	10,938	2,765	8,124	49
Derivative assets:				
Interest rate contracts	57	—	43	14
Energy derivative contracts	93	—	93	—
Foreign exchange contracts	42	—	42	—
Total derivative assets	192	—	178	14
Total assets at fair value	$ 11,222	$ 2,857	$ 8,302	$ 63
Derivative liabilities:				
Interest rate contracts	$ 59	$ —	$ 59	$ —
Energy derivative contracts	91	—	91	—
Foreign exchange contracts	40	—	40	—
Total derivative liabilities	190	—	190	—
Deferred compensation plan liabilities	92	92	—	—
Total liabilities at fair value	$ 282	$ 92	$ 190	$ —

(a) Issued and/or guaranteed by U.S. government agencies or U.S. government-sponsored enterprises.
(b) Auction-rate securities.

There were no transfers of assets or liabilities recorded at fair value on a recurring basis into or out of Level 1, Level 2 and Level 3 fair value measurements during the years ended December 31, 2018 and 2017.

The following table summarizes the changes in Level 3 assets measured at fair value on a recurring basis for the years ended December 31, 2018 and 2017.

(in millions)	Balance at Beginning of Period	Change in Classification (a)	Net Realized/Unrealized Gains (Losses) (Pretax)			Sales & Redemptions	Balance at End of Period
			Recorded in Earnings (b)		Recorded in Other Comprehensive Income (c)		
			Realized	Unrealized			
Year Ended December 31, 2018							
Equity securities	$ —	$ 44	$ —	$ —	$ —	$ (44)	$ —
Investment securities available-for-sale:							
State and municipal securities (d)	5	—	—	—	—	(5)	—
Equity and other non-debt securities (d)	44	(44)	—	—	—	—	—
Total investment securities available-for-sale	49	(44)	—	—	—	(5)	—
Derivative assets:							
Interest rate contracts	14	—	—	(5)	—	—	9
Year Ended December 31, 2017							
Investment securities available-for-sale:							
State and municipal securities (d)	$ 7	$ —	$ —	$ —	$ —	$ (2)	$ 5
Equity and other non-debt securities (d)	47	—	—	—	(2)	(1)	44
Total investment securities available-for-sale	54	—	—	—	(2)	(3)	49
Derivative assets:							
Interest rate contracts	11	—	—	3	—	—	14

(a) Reflects the reclassification of equity securities resulting from the adoption of ASU 2016-01.
(b) Realized and unrealized gains and losses due to changes in fair value recorded in other noninterest income on the Consolidated Statements of Income.
(c) Recorded in net unrealized holding losses arising during the period in the Consolidated Statements of Comprehensive Income.
(d) Auction-rate securities.

Assets and Liabilities Recorded at Fair Value on a Nonrecurring Basis

The Corporation may be required to record certain assets and liabilities at fair value on a nonrecurring basis. These include assets that are recorded at the lower of cost or fair value, and were recognized at fair value since it was less than cost at the end of the period.

The following table presents assets recorded at fair value on a nonrecurring basis at December 31, 2018 and 2017. No liabilities were recorded at fair value on a nonrecurring basis at December 31, 2018 and 2017.

(in millions)	Level 3
December 31, 2018	
Loans:	
Commercial	$ 33
Commercial mortgage	2
Total assets at fair value	$ 35
December 31, 2017	
Loans:	
Commercial	$ 111
Commercial mortgage	5
Total assets at fair value	$ 116

Level 3 assets recorded at fair value on a nonrecurring basis at December 31, 2018 and 2017 included loans for which a specific allowance was established based on the fair value of collateral. The unobservable inputs were the additional adjustments applied by management to the appraised values to reflect such factors as non-current appraisals and revisions to estimated time to sell. These adjustments are determined based on qualitative judgments made by management on a case-by-case basis and are not quantifiable inputs, although they are used in the determination of fair value.

Estimated Fair Values of Financial Instruments Not Recorded at Fair Value on a Recurring Basis

The Corporation typically holds the majority of its financial instruments until maturity and thus does not expect to realize many of the estimated fair value amounts disclosed. The disclosures also do not include estimated fair value amounts for items that are not defined as financial instruments, but which have significant value. These include such items as core deposit intangibles, the future earnings potential of significant customer relationships and the value of trust operations and other fee generating businesses. The Corporation believes the imprecision of an estimate could be significant.

The carrying amount and estimated fair value of financial instruments not recorded at fair value in their entirety on a recurring basis on the Corporation's Consolidated Balance Sheets are as follows:

(in millions)	Carrying Amount	Estimated Fair Value			
		Total	Level 1	Level 2	Level 3
December 31, 2018					
Assets					
Cash and due from banks	$ 1,390	$ 1,390	$ 1,390	$ —	$ —
Interest-bearing deposits with banks	3,171	3,171	3,171	—	—
Loans held-for-sale	3	3	—	3	—
Total loans, net of allowance for loan losses (a)	49,492	48,889	—	—	48,889
Customers' liability on acceptances outstanding	4	4	4	—	—
Restricted equity investments	248	248	248	—	—
Nonmarketable equity securities (b)	6	11			
Liabilities					
Demand deposits (noninterest-bearing)	28,690	28,690	—	28,690	—
Interest-bearing deposits	24,740	24,740	—	24,740	—
Customer certificates of deposit	2,131	2,100	—	2,100	—
Total deposits	55,561	55,530	—	55,530	—
Short-term borrowings	44	44	44	—	—
Acceptances outstanding	4	4	4	—	—
Medium- and long-term debt	6,463	6,436	—	6,436	—
Credit-related financial instruments	(57)	(57)	—	—	(57)
December 31, 2017					
Assets					
Cash and due from banks	$ 1,438	$ 1,438	$ 1,438	$ —	$ —
Interest-bearing deposits with banks	4,407	4,407	4,407	—	—
Investment securities held-to-maturity	1,266	1,246	—	1,246	—
Loans held-for-sale	4	4	—	4	—
Total loans, net of allowance for loan losses (a)	48,461	48,153	—	—	48,153
Customers' liability on acceptances outstanding	2	2	2	—	—
Restricted equity investments	207	207	207	—	—
Nonmarketable equity securities (b)	6	9			
Liabilities					
Demand deposits (noninterest-bearing)	32,071	32,071	—	32,071	—
Interest-bearing deposits	23,667	23,667	—	23,667	—
Customer certificates of deposit	2,165	2,142	—	2,142	—
Total deposits	57,903	57,880	—	57,880	—
Short-term borrowings	10	10	10	—	—
Acceptances outstanding	2	2	2	—	—
Medium- and long-term debt	4,622	4,636	—	4,636	—
Credit-related financial instruments	(67)	(67)	—	—	(67)

(a) Included $35 million and $116 million of impaired loans recorded at fair value on a nonrecurring basis at December 31, 2018 and 2017, respectively.

(b) Certain investments that are measured at fair value using the net asset value have not been classified in the fair value hierarchy. The fair value amounts presented in the table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the Consolidated Balance Sheets.

NOTE 3 - INVESTMENT SECURITIES

A summary of the Corporation's investment securities follows:

(in millions)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
December 31, 2018				
Investment securities available-for-sale:				
U.S. Treasury and other U.S. government agency securities	$ 2,732	$ 14	$ 19	$ 2,727
Residential mortgage-backed securities (a)	9,493	22	197	9,318
Total investment securities available-for-sale	$ 12,225	$ 36	$ 216	$ 12,045
December 31, 2017				
Investment securities available-for-sale:				
U.S. Treasury and other U.S. government agency securities	$ 2,743	$ —	$ 16	$ 2,727
Residential mortgage-backed securities (a)	8,230	22	128	8,124
State and municipal securities	5	—	—	5
Equity and other non-debt securities	83	1	2	82
Total investment securities available-for-sale (b)	$ 11,061	$ 23	$ 146	$ 10,938
Investment securities held-to-maturity (c):				
Residential mortgage-backed securities (a)	$ 1,266	$ —	$ 20	$ 1,246

(a) Issued and/or guaranteed by U.S. government agencies or U.S. government-sponsored enterprises.
(b) Included auction-rate securities at amortized cost and fair value of $51 million and $49 million, respectively, as of December 31, 2017.
(c) The amortized cost of investment securities held-to-maturity included the net unrealized losses of $9 million at December 31, 2017 related to securities transferred from available-for-sale in 2014, which are included in accumulated other comprehensive loss.

In connection with the adoption of ASU 2016-01 on January 1, 2018, cumulative unrealized gains and losses on available-for-sale equity and other non-debt securities were reclassified to retained earnings and the carrying value was reclassified to other short-term investments. Additionally, the Corporation transferred residential mortgage-backed securities with a book value of approximately $1.3 billion from held-to-maturity to available-for-sale upon the adoption of ASU 2017-12. For additional information about the adoption of ASU 2016-01 and ASU 2017-12, refer to Note 1.

A summary of the Corporation's investment securities in an unrealized loss position as of December 31, 2018 and 2017 follows:

	Temporarily Impaired					
	Less than 12 Months		12 Months or more		Total	
(in millions)	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
December 31, 2018						
U.S. Treasury and other U.S. government agency securities	$ —	$ —	$ 1,457	$ 19	$ 1,457	$ 19
Residential mortgage-backed securities (a)	1,008	9	6,412	188	7,420	197
Total temporarily impaired securities	$ 1,008	$ 9	$ 7,869	$ 207	$ 8,877	$ 216
December 31, 2017						
U.S. Treasury and other U.S. government agency securities	$ 2,727	$ 16	$ —	$ —	$ 2,727	$ 16
Residential mortgage-backed securities (a)	3,845	32	4,003	125	7,848	157
State and municipal securities (b)	—	—	5	— (c)	5	— (c)
Equity and other non-debt securities (b)	—	—	44	2	44	2
Total temporarily impaired securities	$ 6,572	$ 48	$ 4,052	$ 127	$ 10,624	$ 175

(a) Issued and/or guaranteed by U.S. government agencies or U.S. government-sponsored enterprises.
(b) Primarily auction-rate securities.
(c) Unrealized losses less than $0.5 million.

At December 31, 2018, the Corporation had 375 securities in an unrealized loss position with no credit impairment, including 16 U.S. Treasury securities and 359 residential mortgage-backed securities. The unrealized losses for these securities resulted from changes in market interest rates and liquidity, not changes in credit quality. The Corporation ultimately expects full collection of the carrying amount of these securities, does not intend to sell the securities in an unrealized loss position, and it is not more-likely-than-not that the Corporation will be required to sell the securities in an unrealized loss position prior to recovery of amortized cost. The Corporation does not consider these securities to be other-than-temporarily impaired at December 31, 2018.

Sales, primarily from repositioning $1.3 billion of lower-yielding treasury securities, calls and write-downs of investment securities available-for-sale resulted in the following gains and losses recorded in net securities losses on the Consolidated Statements of Income, computed based on the adjusted cost of the specific security. There were no securities gains or losses for the years ended December 31, 2017 and 2016.

(in millions)

Year Ended December 31	2018
Securities gains	$ 2
Securities losses	(21)
Net securities losses	$ (19)

The following table summarizes the amortized cost and fair values of debt securities by contractual maturity. Securities with multiple maturity dates are classified in the period of final maturity. Expected maturities will differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without call or prepayment penalties.

(in millions)

December 31, 2018	Amortized Cost	Fair Value
Contractual maturity		
Within one year	$ 100	$ 100
After one year through five years	2,647	2,642
After five years through ten years	1,522	1,502
After ten years	7,956	7,801
Total investment securities	$ 12,225	$ 12,045

Included in the contractual maturity distribution in the table above were residential mortgage-backed securities with a total amortized cost of $9.5 billion and a fair value of $9.3 billion. The actual cash flows of mortgage-backed securities may differ from contractual maturity as the borrowers of the underlying loans may exercise prepayment options.

At December 31, 2018, investment securities with a carrying value of $396 million were pledged where permitted or required by law to secure $274 million of liabilities, primarily public and other deposits of state and local government agencies and derivative instruments.

NOTE 4 – CREDIT QUALITY AND ALLOWANCE FOR CREDIT LOSSES

The following table presents an aging analysis of the recorded balance of loans.

	Loans Past Due and Still Accruing						
(in millions)	30-59 Days	60-89 Days	90 Days or More	Total	Nonaccrual Loans	Current Loans	Total Loans
December 31, 2018							
Business loans:							
Commercial	$ 34	$ 26	$ 8	$ 68	$ 141	$ 31,767	$ 31,976
Real estate construction:							
Commercial Real Estate business line (a)	6	—	—	6	—	2,681	2,687
Other business lines (b)	6	—	—	6	—	384	390
Total real estate construction	12	—	—	12	—	3,065	3,077
Commercial mortgage:							
Commercial Real Estate business line (a)	4	—	—	4	2	1,737	1,743
Other business lines (b)	32	5	8	45	18	7,300	7,363
Total commercial mortgage	36	5	8	49	20	9,037	9,106
Lease financing	—	—	—	—	2	505	507
International	—	—	—	—	3	1,010	1,013
Total business loans	82	31	16	129	166	45,384	45,679
Retail loans:							
Residential mortgage	11	3	—	14	36	1,920	1,970
Consumer:							
Home equity	4	1	—	5	19	1,741	1,765
Other consumer	1	—	—	1	—	748	749
Total consumer	5	1	—	6	19	2,489	2,514
Total retail loans	16	4	—	20	55	4,409	4,484
Total loans	$ 98	$ 35	$ 16	$ 149	$ 221	$ 49,793	$ 50,163
December 31, 2017							
Business loans:							
Commercial	$ 79	$ 134	$ 12	$ 225	$ 309	$ 30,526	$ 31,060
Real estate construction:							
Commercial Real Estate business line (a)	3	—	—	3	—	2,627	2,630
Other business lines (b)	4	—	—	4	—	327	331
Total real estate construction	7	—	—	7	—	2,954	2,961
Commercial mortgage:							
Commercial Real Estate business line (a)	14	—	—	14	9	1,808	1,831
Other business lines (b)	27	6	22	55	22	7,251	7,328
Total commercial mortgage	41	6	22	69	31	9,059	9,159
Lease financing	—	—	—	—	4	464	468
International	13	—	—	13	6	964	983
Total business loans	140	140	34	314	350	43,967	44,631
Retail loans:							
Residential mortgage	10	2	—	12	31	1,945	1,988
Consumer:							
Home equity	5	1	—	6	21	1,789	1,816
Other consumer	4	—	1	5	—	733	738
Total consumer	9	1	1	11	21	2,522	2,554
Total retail loans	19	3	1	23	52	4,467	4,542
Total loans	$ 159	$ 143	$ 35	$ 337	$ 402	$ 48,434	$ 49,173

(a) Primarily loans to real estate developers.
(b) Primarily loans secured by owner-occupied real estate.

The following table presents loans by credit quality indicator, based on internal risk ratings assigned to each business loan at the time of approval and subjected to subsequent reviews, generally at least annually, and to pools of retail loans with similar risk characteristics.

	Internally Assigned Rating				
(in millions)	Pass (a)	Special Mention (b)	Substandard (c)	Nonaccrual (d)	Total
December 31, 2018					
Business loans:					
Commercial	$ 30,817	$ 464	$ 554	$ 141	$ 31,976
Real estate construction:					
Commercial Real Estate business line (e)	2,664	23	—	—	2,687
Other business lines (f)	382	8	—	—	390
Total real estate construction	3,046	31	—	—	3,077
Commercial mortgage:					
Commercial Real Estate business line (e)	1,682	14	45	2	1,743
Other business lines (f)	7,157	118	70	18	7,363
Total commercial mortgage	8,839	132	115	20	9,106
Lease financing	500	3	2	2	507
International	996	4	10	3	1,013
Total business loans	44,198	634	681	166	45,679
Retail loans:					
Residential mortgage	1,931	3	—	36	1,970
Consumer:					
Home equity	1,738	—	8	19	1,765
Other consumer	748	1	—	—	749
Total consumer	2,486	1	8	19	2,514
Total retail loans	4,417	4	8	55	4,484
Total loans	$ 48,615	$ 638	$ 689	$ 221	$ 50,163
December 31, 2017					
Business loans:					
Commercial	$ 29,263	$ 591	$ 897	$ 309	$ 31,060
Real estate construction:					
Commercial Real Estate business line (e)	2,630	—	—	—	2,630
Other business lines (f)	327	4	—	—	331
Total real estate construction	2,957	4	—	—	2,961
Commercial mortgage:					
Commercial Real Estate business line (e)	1,759	20	43	9	1,831
Other business lines (f)	7,099	115	92	22	7,328
Total commercial mortgage	8,858	135	135	31	9,159
Lease financing	440	23	1	4	468
International	946	11	20	6	983
Total business loans	42,464	764	1,053	350	44,631
Retail loans:					
Residential mortgage	1,955	2	—	31	1,988
Consumer:					
Home equity	1,786	1	8	21	1,816
Other consumer	737	1	—	—	738
Total consumer	2,523	2	8	21	2,554
Total retail loans	4,478	4	8	52	4,542
Total loans	$ 46,942	$ 768	$ 1,061	$ 402	$ 49,173

(a) Includes all loans not included in the categories of special mention, substandard or nonaccrual.

(b) Special mention loans are accruing loans that have potential credit weaknesses that deserve management's close attention, such as loans to borrowers who may be experiencing financial difficulties that may result in deterioration of repayment prospects from the borrower at some future date. This category is generally consistent with the "special mention" category as defined by regulatory authorities.

(c) Substandard loans are accruing loans that have a well-defined weakness, or weaknesses, such as loans to borrowers who may be experiencing losses from operations or inadequate liquidity of a degree and duration that jeopardizes the orderly repayment of the loan. Substandard loans also are distinguished by the distinct possibility of loss in the future if these weaknesses are not corrected. This category is generally consistent with the "substandard" category as defined by regulatory authorities.

(d) Nonaccrual loans are loans for which the accrual of interest has been discontinued. For further information regarding nonaccrual loans, refer to the Nonperforming Assets subheading in Note 1 - Basis of Presentation and Accounting Policies. A significant majority of nonaccrual loans are generally consistent with the "substandard" category and the remainder are generally consistent with the "doubtful" category as defined by regulatory authorities.

(e) Primarily loans to real estate developers.

(f) Primarily loans secured by owner-occupied real estate.

The following table summarizes nonperforming assets.

(in millions)	December 31, 2018	December 31, 2017
Nonaccrual loans	$ 221	$ 402
Reduced-rate loans (a)	8	8
Total nonperforming loans	229	410
Foreclosed property (b)	1	5
Total nonperforming assets	$ 230	$ 415

(a) There were no reduced-rate business loans at both December 31, 2018 and 2017. Reduced-rate retail loans were $8 million at both December 31, 2018 and 2017.
(b) There were no foreclosed residential real estate properties at December 31, 2018 and $4 million at December 31, 2017.

There were $1 million of retail loans secured by residential real estate properties in process of foreclosure included in nonaccrual loans at both December 31, 2018 and 2017.

Allowance for Credit Losses

The following table details the changes in the allowance for loan losses and related loan amounts.

	2018			2017			2016		
(in millions)	Business Loans	Retail Loans	Total	Business Loans	Retail Loans	Total	Business Loans	Retail Loans	Total
Years Ended December 31									
Allowance for loan losses:									
Balance at beginning of period	$ 661	$ 51	$ 712	$ 682	$ 48	$ 730	$ 579	$ 55	$ 634
Loan charge-offs	(99)	(4)	(103)	(143)	(6)	(149)	(207)	(7)	(214)
Recoveries on loans previously charged-off	47	5	52	50	7	57	63	5	68
Net loan (charge-offs) recoveries	(52)	1	(51)	(93)	1	(92)	(144)	(2)	(146)
Provision for loan losses	19	(8)	11	71	2	73	246	(5)	241
Foreign currency translation adjustment	(1)	—	(1)	1	—	1	1	—	1
Balance at end of period	$ 627	$ 44	$ 671	$ 661	$ 51	$ 712	$ 682	$ 48	$ 730
As a percentage of total loans	1.37%	0.97%	1.34%	1.48%	1.12%	1.45%	1.53%	1.08%	1.49%
December 31									
Allowance for loan losses:									
Individually evaluated for impairment	$ 27	$ —	$ 27	$ 67	$ —	$ 67	$ 86	$ 3	$ 89
Collectively evaluated for impairment	600	44	644	594	51	645	596	45	641
Total allowance for loan losses	$ 627	$ 44	$ 671	$ 661	$ 51	$ 712	$ 682	$ 48	$ 730
Loans:									
Individually evaluated for impairment	$ 240	$ 36	$ 276	$ 443	$ 34	$ 477	$ 566	$ 48	$ 614
Collectively evaluated for impairment	45,439	4,448	49,887	44,188	4,508	48,696	44,058	4,416	48,474
Total loans evaluated for impairment	$45,679	$ 4,484	$50,163	$44,631	$ 4,542	$49,173	$44,624	$ 4,464	$49,088

Changes in the allowance for credit losses on lending-related commitments, included in accrued expenses and other liabilities on the Consolidated Balance Sheets, are summarized in the following table.

(in millions) Years Ended December 31	2018	2017	2016
Balance at beginning of period	$ 42	$ 41	$ 45
Charge-offs on lending-related commitments (a)	—	—	(11)
Provision for credit losses on lending-related commitments	(12)	1	7
Balance at end of period	$ 30	$ 42	$ 41

(a) Charge-offs result from the sale of unfunded lending-related commitments.

Individually Evaluated Impaired Loans

The following table presents additional information regarding individually evaluated impaired loans.

	Recorded Investment In:				
(in millions)	Impaired Loans with No Related Allowance	Impaired Loans with Related Allowance	Total Impaired Loans	Unpaid Principal Balance	Related Allowance for Loan Losses
December 31, 2018					
Business loans:					
Commercial	$ 50	$ 130	$ 180	$ 227	$ 24
Commercial mortgage:					
Commercial Real Estate business line (a)	39	—	39	49	—
Other business lines (b)	2	16	18	23	3
Total commercial mortgage	41	16	57	72	3
International	2	1	3	8	—
Total business loans	93	147	240	307	27
Retail loans:					
Residential mortgage	16	8	24	25	—
Consumer:					
Home equity	11	—	11	13	—
Other consumer	1	—	1	1	—
Total consumer	12	—	12	14	—
Total retail loans (c)	28	8	36	39	—
Total individually evaluated impaired loans	$ 121	$ 155	$ 276	$ 346	$ 27
December 31, 2017					
Business loans:					
Commercial	$ 105	$ 267	$ 372	$ 460	$ 63
Commercial mortgage:					
Commercial Real Estate business line (a)	39	1	40	49	—
Other business lines (b)	3	22	25	29	3
Total commercial mortgage	42	23	65	78	3
International	—	6	6	17	1
Total business loans	147	296	443	555	67
Retail loans:					
Residential mortgage	14	8	22	22	—
Consumer:					
Home equity	11	—	11	14	—
Other consumer	1	—	1	2	—
Total consumer	12	—	12	16	—
Total retail loans (c)	26	8	34	38	—
Total individually evaluated impaired loans	$ 173	$ 304	$ 477	$ 593	$ 67

(a) Primarily loans to real estate developers.
(b) Primarily loans secured by owner-occupied real estate.
(c) Individually evaluated retail loans generally have no related allowance for loan losses, primarily due to policy which results in direct write-downs of most restructured retail loans.

The following table presents information regarding average individually evaluated impaired loans and the related interest recognized. Interest income recognized for the period primarily related to performing restructured loans.

	Individually Evaluated Impaired Loans					
	2018		2017		2016	
(in millions)	Average Balance for the Period	Interest Income Recognized for the Period	Average Balance for the Period	Interest Income Recognized for the Period	Average Balance for the Period	Interest Income Recognized for the Period
Years Ended December 31						
Business loans:						
Commercial	$ 262	$ 5	$ 451	$ 8	$ 550	$ 10
Commercial mortgage:						
Commercial Real Estate business line (a)	40	4	21	2	9	—
Other business lines (b)	23	—	31	—	31	1
Total commercial mortgage	63	4	52	2	40	1
International	4	—	8	—	18	—
Total business loans	329	9	511	10	608	11
Retail loans:						
Residential mortgage	21	—	24	—	15	—
Consumer:						
Home equity	11	—	13	—	13	—
Other consumer	1	—	3	—	4	—
Total consumer	12	—	16	—	17	—
Total retail loans	33	—	40	—	32	—
Total individually evaluated impaired loans	$ 362	$ 9	$ 551	$ 10	$ 640	$ 11

(a) Primarily loans to real estate developers.
(b) Primarily loans secured by owner-occupied real estate.

Troubled Debt Restructurings

The following tables detail the recorded balance at December 31, 2018 and 2017 of loans considered to be TDRs that were restructured during the years ended December 31, 2018 and 2017, by type of modification. In cases of loans with more than one type of modification, the loans were categorized based on the most significant modification.

	2018			2017			
	Type of Modification			Type of Modification			
(in millions)	Principal Deferrals (a)	Interest Rate Reductions	Total Modifications	Principal Deferrals (a)	Interest Rate Reductions	AB Note Restructures (b)	Total Modifications
Years Ended December 31							
Business loans:							
Commercial	$ 27	$ —	$ 27	$ 77	$ 18	$ 21	$ 116
Commercial mortgage:							
Commercial Real Estate business line (c)	—	—	—	37	—	—	37
Other business lines (d)	2	—	2	3	—	—	3
Total commercial mortgage	2	—	2	40	—	—	40
International	1	—	1	—	—	—	—
Total business loans	30	—	30	117	18	21	156
Retail loans:							
Consumer:							
Home equity (e)	—	3	3	1	2	—	3
Total loans	$ 30	$ 3	$ 33	$ 118	$ 20	$ 21	$ 159

(a) Primarily represents loan balances where terms were extended 90 days or more at or above contractual interest rates.
(b) Loan restructurings whereby the original loan is restructured into two notes: an "A" note, which generally reflects the portion of the modified loan which is expected to be collected; and a "B" note, which is fully charged off.
(c) Primarily loans to real estate developers.
(d) Primarily loans secured by owner-occupied real estate.
(e) Includes bankruptcy loans for which the court has discharged the borrower's obligation and the borrower has not reaffirmed the debt.

At December 31, 2018 and 2017, commitments to lend additional funds to borrowers whose terms have been modified in TDRs totaled $20 million and $31 million, respectively.

The majority of the modifications considered to be TDRs that occurred during the years ended December 31, 2018 and 2017 were principal deferrals. The Corporation charges interest on principal balances outstanding during deferral periods. Additionally, none of the modifications involved forgiveness of principal. As a result, the current and future financial effects of the recorded balance of loans considered to be TDRs that were restructured during the years ended December 31, 2018 and 2017 were insignificant.

On an ongoing basis, the Corporation monitors the performance of modified loans to their restructured terms. The allowance for loan losses continues to be reassessed on the basis of an individual evaluation of the loan.

For principal deferrals, incremental deterioration in the credit quality of the loan, represented by a downgrade in the risk rating of the loan, for example, due to missed interest payments or a reduction of collateral value, is considered a subsequent default. For interest rate reductions and AB note restructures, a subsequent payment default is defined in terms of delinquency, when a principal or interest payment is 90 days past due. There were no subsequent defaults of principal deferrals during the year ended December 31, 2018 and $3 million during the year ended December 31, 2017. There were no subsequent payment defaults of interest rate reductions or AB note restructures during the December 31, 2018 and 2017.

NOTE 5 - SIGNIFICANT GROUP CONCENTRATIONS OF CREDIT RISK

Concentrations of credit risk may exist when a number of borrowers are engaged in similar activities, or activities in the same geographic region, and have similar economic characteristics that would cause them to be similarly impacted by changes in economic or other conditions. Concentrations of both on-balance sheet and off-balance sheet credit risk are controlled and monitored as part of credit policies. The Corporation is a regional financial services holding company with a geographic concentration of its on-balance-sheet and off-balance-sheet activities in Michigan, California and Texas.

As outlined below, the Corporation has a concentration of credit risk with the automotive industry. Loans to automotive dealers and to borrowers involved with automotive production are reported as automotive, as management believes these loans have similar economic characteristics that might cause them to react similarly to changes in economic conditions. This aggregation

involves the exercise of judgment. Included in automotive production are: (a) original equipment manufacturers and Tier 1 and Tier 2 suppliers that produce components used in vehicles and whose primary revenue source is automotive-related ("primary" defined as greater than 50%) and (b) other manufacturers that produce components used in vehicles and whose primary revenue source is automotive-related. Loans less than $1 million and loans recorded in the Small Business loan portfolio were excluded from the definition. Outstanding loans, included in commercial loans on the Consolidated Balance Sheets, and total exposure (outstanding loans, unused commitments and standby letters of credit) to companies related to the automotive industry were as follows:

(in millions)

December 31	2018	2017
Automotive loans:		
Production	$ 1,331	$ 1,344
Dealer	8,097	7,592
Total automotive loans	$ 9,428	$ 8,936
Total automotive exposure:		
Production	$ 2,396	$ 2,439
Dealer	10,044	9,405
Total automotive exposure	$ 12,440	$ 11,844

Further, the Corporation's portfolio of commercial real estate loans, which includes real estate construction and commercial mortgage loans, was as follows.

(in millions)

December 31	2018	2017
Real estate construction loans:		
Commercial Real Estate business line (a)	$ 2,687	$ 2,630
Other business lines (b)	390	331
Total real estate construction loans	3,077	2,961
Commercial mortgage loans:		
Commercial Real Estate business line (a)	1,743	1,831
Other business lines (b)	7,363	7,328
Total commercial mortgage loans	9,106	9,159
Total commercial real estate loans	$ 12,183	$ 12,120
Total unused commitments on commercial real estate loans	$ 3,146	$ 3,018

(a) Primarily loans to real estate developers.
(b) Primarily loans secured by owner-occupied real estate.

NOTE 6 - PREMISES AND EQUIPMENT

A summary of premises and equipment by major category follows:

(in millions)

December 31	2018	2017
Land	$ 85	$ 85
Buildings and improvements	842	813
Furniture and equipment	492	484
Total cost	1,419	1,382
Less: Accumulated depreciation and amortization	(944)	(916)
Net book value	$ 475	$ 466

The Corporation conducts a portion of its business from leased facilities and leases certain equipment. Rental expense for leased properties and equipment amounted to $75 million, $78 million and $80 million in 2018, 2017 and 2016, respectively.

As of December 31, 2018, future minimum rental payments under operating leases were as follows:

(in millions) Years Ending December 31	
2019	$ 67
2020	59
2021	50
2022	40
2023	34
Thereafter	127
Total	$ 377

NOTE 7 - GOODWILL AND CORE DEPOSIT INTANGIBLES

The following table summarizes the carrying value of goodwill by reporting unit for the years ended December 31, 2018 and 2017.

(in millions) December 31	2018	2017
Business Bank	$ 473	$ 380
Retail Bank	101	194
Wealth Management	61	61
Total	$ 635	$ 635

The Corporation performs its annual evaluation of goodwill impairment in the third quarter of each year and on an interim basis if events or changes in circumstances between annual tests indicate goodwill might be impaired. In 2018 and 2017, the annual test of goodwill impairment was performed as of the beginning of the third quarter. In 2018, a qualitative assessment was performed resulting in the Corporation determining goodwill was not impaired as it was more likely than not the fair value of each reporting unit exceeded its carrying value. In 2017, a quantitative assessment was performed and the estimated fair values of all reporting units exceeded their carrying amounts, including goodwill, indicating goodwill was not impaired.

During 2018 the Corporation reorganized certain reporting structures. As a result, Small Business, formerly a component of the Retail Bank, became a component of the Business Bank. Accordingly, the Corporation reallocated $93 million of goodwill from the Retail Bank to the Business Bank. The Corporation subsequently performed an additional qualitative impairment analysis and again determined that it was more-likely-than-not that the fair value of each reporting unit exceeded its carrying value and that performing a quantitative impairment test was not necessary. There have been no events since the annual test performed in the third quarter 2018 that would indicate that it was more-likely-than-not that goodwill had become impaired.

A summary of core deposit intangible carrying value and related accumulated amortization follows:

(in millions) December 31	2018	2017
Gross carrying amount	$ 34	$ 34
Accumulated amortization	(30)	(28)
Net carrying amount	$ 4	$ 6

The Corporation recorded amortization expense related to the core deposit intangible of $2 million for both the years ended December 31, 2018 and 2017. At December 31, 2018, estimated future amortization expense was as follows:

(in millions) Years Ending December 31	
2019	$ 2
2020	1
2021	1
Total	$ 4

NOTE 8 - DERIVATIVE AND CREDIT-RELATED FINANCIAL INSTRUMENTS

In the normal course of business, the Corporation enters into various transactions involving derivative and credit-related financial instruments to manage exposure to fluctuations in interest rate, foreign currency and other market risks and to meet the financing needs of customers (customer-initiated derivatives). These financial instruments involve, to varying degrees, elements of market and credit risk. Market and credit risk are included in the determination of fair value.

Market risk is the potential loss that may result from movements in interest rates, foreign currency exchange rates or energy commodity prices that cause an unfavorable change in the value of a financial instrument. The Corporation manages this risk by establishing monetary exposure limits and monitoring compliance with those limits. Market risk inherent in interest rate and energy contracts entered into on behalf of customers is mitigated by taking offsetting positions, except in those circumstances when the amount, tenor and/or contract rate level results in negligible economic risk, whereby the cost of purchasing an offsetting contract is not economically justifiable. The Corporation mitigates most of the inherent market risk in foreign exchange contracts entered into on behalf of customers by taking offsetting positions and manages the remainder through individual foreign currency position limits and aggregate value-at-risk limits. These limits are established annually and positions are monitored quarterly. Market risk inherent in derivative instruments held or issued for risk management purposes is typically offset by changes in the fair value of the assets or liabilities being hedged.

Credit risk is the possible loss that may occur in the event of nonperformance by the counterparty to a financial instrument. The Corporation attempts to minimize credit risk arising from customer-initiated derivatives by evaluating the creditworthiness of each customer, adhering to the same credit approval process used for traditional lending activities and obtaining collateral as deemed necessary. Derivatives with dealer counterparties are either cleared through a clearinghouse or settled directly with a single counterparty. For derivatives settled directly with dealer counterparties, the Corporation utilizes counterparty risk limits and monitoring procedures, as well as master netting arrangements and bilateral collateral agreements to facilitate the management of credit risk. Master netting arrangements effectively reduce credit risk by permitting settlement of positive and negative positions and offset cash collateral held with the same counterparty on a net basis. Bilateral collateral agreements require daily exchange of cash or highly rated securities issued by the U.S. Treasury or other U.S. government entities to collateralize amounts due to either party. At December 31, 2018, counterparties with bilateral collateral agreements had pledged $1 million of marketable investment securities and deposited $180 million of cash with the Corporation to secure the fair value of contracts in an unrealized gain position, and the Corporation had posted $2 million of cash as collateral for contracts in an unrealized loss position. For those counterparties not covered under bilateral collateral agreements, collateral is obtained, if deemed necessary, based on the results of management's credit evaluation of the counterparty. Collateral varies, but may include cash, investment securities, accounts receivable, equipment or real estate. Included in the fair value of derivative instruments are credit valuation adjustments reflecting counterparty credit risk. These adjustments are determined by applying a credit spread for the counterparty or the Corporation, as appropriate, to the total expected exposure of the derivative. There were no derivative instruments with credit-risk-related contingent features that were in a liability position at December 31, 2018.

Derivative Instruments

Derivative instruments utilized by the Corporation are negotiated over-the-counter and primarily include swaps, caps and floors, forward contracts and options, each of which may relate to interest rates, energy commodity prices or foreign currency exchange rates. Swaps are agreements in which two parties periodically exchange cash payments based on specified indices applied to a specified notional amount until a stated maturity. Caps and floors are agreements which entitle the buyer to receive cash payments based on the difference between a specified reference rate or price and an agreed strike rate or price, applied to a specified notional amount until a stated maturity. Forward contracts are over-the-counter agreements to buy or sell an asset at a specified future date and price. Options are similar to forward contracts except the purchaser has the right, but not the obligation, to buy or sell the asset during a specified period or at a specified future date.

Over-the-counter contracts are tailored to meet the needs of the counterparties involved and, therefore, contain a greater degree of credit risk and liquidity risk than exchange-traded contracts, which have standardized terms and readily available price information. The Corporation reduces exposure to market and liquidity risks from over-the-counter derivative instruments entered into for risk management purposes, and transactions entered into to mitigate the market risk associated with customer-initiated transactions, by conducting hedging transactions with investment grade domestic and foreign financial institutions and subjecting counterparties to credit approvals, limits and collateral monitoring procedures similar to those used in making other extensions of credit. In addition, certain derivative contracts executed bilaterally with a dealer counterparty in the over-the-counter market are cleared through a clearinghouse, whereby the clearinghouse becomes the counterparty to the transaction.

The following table presents the composition of the Corporation's derivative instruments held or issued for risk management purposes or in connection with customer-initiated and other activities at December 31, 2018 and 2017. The table excludes commitments and warrants accounted for as derivatives.

	December 31, 2018			December 31, 2017		
		Fair Value			Fair Value	
(in millions)	Notional/ Contract Amount (a)	Gross Derivative Assets	Gross Derivative Liabilities	Notional/ Contract Amount (a)	Gross Derivative Assets	Gross Derivative Liabilities
Risk management purposes						
Derivatives designated as hedging instruments						
Interest rate contracts:						
Swaps - fair value - receive fixed/ pay floating	$ 2,625	$ —	$ 2	$ 1,775	$ —	$ 2
Derivatives used as economic hedges						
Foreign exchange contracts:						
Spot, forwards and swaps	302	1	1	650	—	2
Total risk management purposes	2,927	1	3	2,425	—	4
Customer-initiated and other activities						
Interest rate contracts:						
Caps and floors written	885	—	1	635	—	—
Caps and floors purchased	885	1	—	635	—	—
Swaps	13,115	66	67	13,119	57	57
Total interest rate contracts	14,885	67	68	14,389	57	57
Energy contracts:						
Caps and floors written	278	—	26	164	—	11
Caps and floors purchased	278	26	—	164	11	—
Swaps	2,094	163	160	1,519	82	80
Total energy contracts	2,650	189	186	1,847	93	91
Foreign exchange contracts:						
Spot, forwards, options and swaps	1,095	18	12	1,884	42	38
Total customer-initiated and other activities	18,630	274	266	18,120	192	186
Total gross derivatives	$ 21,557	275	269	$ 20,545	192	190
Amounts offset in the Consolidated Balance Sheets:						
Netting adjustment - Offsetting derivative assets/liabilities		(45)	(45)		(49)	(49)
Netting adjustment - Cash collateral received/posted		(174)	(1)		(1)	(39)
Net derivatives included in the Consolidated Balance Sheets (b)		56	223		142	102
Amounts not offset in the Consolidated Balance Sheets:						
Marketable securities pledged under bilateral collateral agreements		(1)	—		(3)	(24)
Net derivatives after deducting amounts not offset in the Consolidated Balance Sheets		$ 55	$ 223		$ 139	$ 78

(a) Notional or contractual amounts, which represent the extent of involvement in the derivatives market, are used to determine the contractual cash flows required in accordance with the terms of the agreement. These amounts are typically not exchanged, significantly exceed amounts subject to credit or market risk and are not reflected in the Consolidated Balance Sheets.

(b) Net derivative assets are included in accrued income and other assets and net derivative liabilities are included in accrued expenses and other liabilities on the Consolidated Balance Sheets. Included in the fair value of net derivative assets and net derivative liabilities are credit valuation adjustments reflecting counterparty credit risk and credit risk of the Corporation. The fair value of net derivative assets included credit valuation adjustments for counterparty credit risk of $2 million and $4 million at December 31, 2018 and 2017, respectively.

Risk Management

The Corporation's derivative instruments used for managing interest rate risk currently comprise swaps converting fixed rate long-term debt to variable rates.

The following table details the effects of fair value hedging on the Consolidated Statements of Income.

(in millions)	Interest on Medium- and Long-Term Debt	
Years Ended December 31	**2018**	**2017**
Total interest on medium-and long-term debt (a)	**$ 144**	$ 76
Fair value hedging relationships:		
Interest rate contracts:		
Hedged items	**74**	79
Derivatives designated as hedging instruments	**(7)**	(32)

(a) Includes the effects of hedging.

The following table summarizes the expected weighted average remaining maturity of the notional amount of risk management interest rate swaps, the carrying amount of the related hedged item and the weighted average interest rates associated with amounts expected to be received or paid on interest rate swap agreements as of December 31, 2018 and 2017.

			Weighted Average		
(dollar amounts in millions)	Derivative Notional Amount	Carrying Value of Hedged Items (a)	Remaining Maturity (in years)	Receive Rate	Pay Rate (b)
December 31, 2018					
Swaps - fair value - receive fixed/pay floating rate					
Medium- and long-term debt designation	**$ 2,625**	**$ 2,663**	**3.9**	**3.40%**	**3.45%**
December 31, 2017					
Swaps - fair value - receive fixed/pay floating rate					
Medium- and long-term debt designation	1,775	1,822	4.6	3.26	2.35

(a) Included $49 million and $56 million of cumulative hedging adjustments at December 31, 2018 and 2017, respectively, which included $8 million and $9 million, respectively, of hedging adjustment on a discontinued hedging relationship.

(b) Variable rates paid on receive fixed swaps are based on one- and six-month LIBOR rates in effect at December 31, 2018 and six-month LIBOR rates in effect at December 31, 2017.

Foreign exchange rate risk arises from changes in the value of certain assets and liabilities denominated in foreign currencies. The Corporation employs spot and forward contracts in addition to swap contracts to manage exposure to these and other risks. These instruments are used as economic hedges and net gains or losses are included in other noninterest income in the Consolidated Statements of Income.

Customer-Initiated and Other

The Corporation enters into derivative transactions at the request of customers and generally takes offsetting positions with dealer counterparties to mitigate the inherent market risk. Income primarily results from the spread between the customer derivative and the offsetting dealer position.

For customer-initiated foreign exchange contracts where offsetting positions have not been taken, the Corporation manages the remaining inherent market risk through individual foreign currency position limits and aggregate value-at-risk limits. These limits are established annually and reviewed quarterly. For those customer-initiated derivative contracts which were not offset or where the Corporation holds a position within the limits described above, the Corporation recognized no net gains and losses in other noninterest income in the Consolidated Statements of Income for the years ended December 31 2018 and 2017, respectively.

Fair values of customer-initiated and other derivative instruments represent the net unrealized gains or losses on such contracts and are recorded in the Consolidated Balance Sheets. Changes in fair value are recognized in the Consolidated Statements of Income. The net gains recognized in income on customer-initiated derivative instruments, net of the impact of offsetting positions, were as follows:

(in millions)			
Years Ended December 31	**Location of Gain**	**2018**	**2017**
Interest rate contracts	Other noninterest income	**$ 26**	$ 24
Energy contracts	Other noninterest income	**4**	2
Foreign exchange contracts	Foreign exchange income	**47**	45
Total		**$ 77**	$ 71

Credit-Related Financial Instruments

The Corporation issues off-balance sheet financial instruments in connection with commercial and consumer lending activities. The Corporation's credit risk associated with these instruments is represented by the contractual amounts indicated in the following table.

(in millions) December 31	2018	2017
Unused commitments to extend credit:		
Commercial and other	$ 24,266	$ 22,636
Bankcard, revolving check credit and home equity loan commitments	3,001	2,833
Total unused commitments to extend credit	$ 27,267	$ 25,469
Standby letters of credit	$ 3,244	$ 3,228
Commercial letters of credit	39	39

The Corporation maintains an allowance to cover probable credit losses inherent in lending-related commitments, including unused commitments to extend credit, letters of credit and financial guarantees. The allowance for credit losses on lending-related commitments, included in accrued expenses and other liabilities on the Consolidated Balance Sheets, was $30 million and $42 million at December 31, 2018 and 2017 respectively.

Unused Commitments to Extend Credit

Commitments to extend credit are legally binding agreements to lend to a customer, provided there is no violation of any condition established in the contract. These commitments generally have fixed expiration dates or other termination clauses and may require payment of a fee. Since many commitments expire without being drawn upon, the total contractual amount of commitments does not necessarily represent future cash requirements of the Corporation. Commercial and other unused commitments are primarily variable rate commitments. The allowance for credit losses on lending-related commitments included $24 million and $27 million at December 31, 2018 and 2017, respectively, for probable credit losses inherent in the Corporation's unused commitments to extend credit.

Standby and Commercial Letters of Credit

Standby letters of credit represent conditional obligations of the Corporation which guarantee the performance of a customer to a third party. Standby letters of credit are primarily issued to support public and private borrowing arrangements, including commercial paper, bond financing and similar transactions. Commercial letters of credit are issued to finance foreign or domestic trade transactions. These contracts expire in decreasing amounts through the year 2028. The Corporation may enter into participation arrangements with third parties that effectively reduce the maximum amount of future payments which may be required under standby and commercial letters of credit. These risk participations covered $136 million and $127 million at December 31, 2018 and 2017, respectively, of the $3.3 billion of standby and commercial letters of credit outstanding at both December 31, 2018 and 2017.

The carrying value of the Corporation's standby and commercial letters of credit, included in accrued expenses and other liabilities on the Consolidated Balance Sheets, totaled $34 million at December 31, 2018, including $28 million in deferred fees and $6 million in the allowance for credit losses on lending-related commitments. At December 31, 2017, the comparable amounts were $40 million, $25 million and $15 million, respectively.

The following table presents a summary of criticized standby and commercial letters of credit at December 31, 2018 and December 31, 2017. The Corporation's criticized list is consistent with the Special Mention, Substandard and Doubtful categories defined by regulatory authorities. The Corporation manages credit risk through underwriting, periodically reviewing and approving its credit exposures using Board committee approved credit policies and guidelines.

(dollar amounts in millions)	December 31, 2018	December 31, 2017
Total criticized standby and commercial letters of credit	$ 49	$ 88
As a percentage of total outstanding standby and commercial letters of credit	1.5%	2.7%

Other Credit-Related Financial Instruments

The Corporation enters into credit risk participation agreements, under which the Corporation assumes credit exposure associated with a borrower's performance related to certain interest rate derivative contracts. The Corporation is not a party to the interest rate derivative contracts and only enters into these credit risk participation agreements in instances in which the Corporation is also a party to the related loan participation agreement for such borrowers. The Corporation manages its credit risk on the credit risk participation agreements by monitoring the creditworthiness of the borrowers, which is based on the normal credit review process had it entered into the derivative instruments directly with the borrower. The notional amount of such credit risk participation

agreement reflects the pro-rata share of the derivative instrument, consistent with its share of the related participated loan. As of December 31, 2018 and 2017, the total notional amount of the credit risk participation agreements was approximately $703 million and $549 million, respectively, and the fair value was insignificant for both periods. The maximum estimated exposure to these agreements, as measured by projecting a maximum value of the guaranteed derivative instruments, assuming 100 percent default by all obligors on the maximum values, was $7 million and insignificant at December 31, 2018 and 2017, respectively. In the event of default, the lead bank has the ability to liquidate the assets of the borrower, in which case the lead bank would be required to return a percentage of the recouped assets to the participating banks. As of December 31, 2018, the weighted average remaining maturity of outstanding credit risk participation agreements was 3.5 years.

NOTE 9 - VARIABLE INTEREST ENTITIES (VIEs)

The Corporation evaluates its interest in certain entities to determine if these entities meet the definition of a VIE and whether the Corporation is the primary beneficiary and should consolidate the entity based on the variable interests it held both at inception and when there is a change in circumstances that requires a reconsideration.

The Corporation holds ownership interests in funds in the form of limited partnerships or limited liability companies (LLCs) investing in affordable housing projects that qualify for the low-income housing tax credit (LIHTC). The Corporation also directly invests in limited partnerships and LLCs which invest in community development projects which generate similar tax credits to investors (other tax credit entities). As an investor, the Corporation obtains income tax credits and deductions from the operating losses of these tax credit entities. These tax credit entities meet the definition of a VIE; however, the Corporation is not the primary beneficiary of the entities, as the general partner or the managing member has both the power to direct the activities that most significantly impact the economic performance of the entities and the obligation to absorb losses or the right to receive benefits that could be significant to the entities.

The Corporation accounts for its interests in LIHTC entities using the proportional amortization method. Exposure to loss as a result of the Corporation's involvement with LIHTC entities at December 31, 2018 was limited to $425 million. Ownership interests in other tax credit entities are accounted for under either the cost or equity method. Exposure to loss as a result of the Corporation's involvement in other tax credit entities at December 31, 2018 was limited to $6 million.

Investment balances, including all legally binding commitments to fund future investments, are included in accrued income and other assets on the Consolidated Balance Sheets. A liability is recognized in accrued expenses and other liabilities on the Consolidated Balance Sheets for all legally binding unfunded commitments to fund tax credit entities ($165 million at December 31, 2018). Amortization and other write-downs of LIHTC investments are presented on a net basis as a component of the provision for income taxes on the Consolidated Statements of Income, while amortization and write-downs of other tax credit investments are recorded in other noninterest income. The income tax credits and deductions are recorded as a reduction of income tax expense and a reduction of federal income taxes payable.

The Corporation provided no financial or other support that was not contractually required to any of the above VIEs during the years ended December 31, 2018, 2017 and 2016.

The following table summarizes the impact of these tax credit entities on line items on the Corporation's Consolidated Statements of Income.

(in millions)

Years Ended December 31	2018	2017	2016
Other noninterest income:			
Sales (amortization) of other tax credit investments	$ 5	$ 2	$ (1)
Provision for income taxes:			
Amortization of LIHTC Investments	65	67	66
Low income housing tax credits	(62)	(63)	(62)
Other tax benefits related to tax credit entities	(14)	(24)	(26)
Total provision for income taxes	$ (11)	$ (20)	$ (22)

For further information on the Corporation's consolidation policy, see Note 1.

NOTE 10 - DEPOSITS

At December 31, 2018, the scheduled maturities of certificates of deposit and other deposits with a stated maturity were as follows:

(in millions) Years Ending December 31	
2019	$ 1,614
2020	434
2021	38
2022	17
2023	11
Thereafter	25
Total	$ 2,139

A maturity distribution of domestic certificates of deposit of $100,000 and over follows:

(in millions) December 31	2018	2017
Three months or less	$ 363	$ 355
Over three months to six months	146	207
Over six months to twelve months	278	319
Over twelve months	297	130
Total	$ 1,084	$ 1,011

The aggregate amount of domestic certificates of deposit that meet or exceed the current FDIC insurance limit of $250,000 was $543 million and $462 million at December 31, 2018 and 2017, respectively. All foreign office time deposits of $8 million and $15 million at December 31, 2018 and 2017, respectively, were in denominations of $250,000 or more.

NOTE 11 - SHORT-TERM BORROWINGS

Federal funds purchased and securities sold under agreements to repurchase generally mature within one to four days from the transaction date. Other short-term borrowings, which may consist of borrowed securities and short-term notes, generally mature within one to 120 days from the transaction date.

At December 31, 2018, Comerica Bank (the Bank), a wholly-owned subsidiary of the Corporation, had pledged loans totaling $22.8 billion which provided for up to $18.9 billion of available collateralized borrowing with the FRB.

The following table provides a summary of short-term borrowings.

(dollar amounts in millions)	Federal Funds Purchased and Securities Sold Under Agreements to Repurchase	Other Short-term Borrowings
December 31, 2018		
Amount outstanding at year-end	$ 44	$ —
Weighted average interest rate at year-end	2.39%	—%
Maximum month-end balance during the year	$ 182	$ 250
Average balance outstanding during the year	59	3
Weighted average interest rate during the year	1.91%	1.75%
December 31, 2017		
Amount outstanding at year-end	$ 10	$ —
Weighted average interest rate at year-end	1.43%	—%
Maximum month-end balance during the year	$ 41	$ 1,024
Average balance outstanding during the year	20	257
Weighted average interest rate during the year	1.02%	1.15%
December 31, 2016		
Amount outstanding at year-end	$ 25	$ —
Weighted average interest rate at year-end	0.54%	—%
Maximum month-end balance during the year	$ 25	$ 501
Average balance outstanding during the year	15	123
Weighted average interest rate during the year	0.47%	0.45%

NOTE 12 - MEDIUM- AND LONG-TERM DEBT

Medium- and long-term debt is summarized as follows:

(in millions) December 31	2018	2017
Parent company		
Subordinated notes:		
3.80% subordinated notes due 2026 (a)	$ 250	$ 255
Medium-term notes:		
2.125% notes due 2019 (a)	348	347
3.70% notes due 2023 (a)	861	—
Total medium-term notes	1,209	347
Total parent company	1,459	602
Subsidiaries		
Subordinated notes:		
4.00% subordinated notes due 2025 (a)	343	347
7.875% subordinated notes due 2026 (a)	198	208
Total subordinated notes	541	555
Medium-term notes:		
2.50% notes due 2020 (a)	663	665
FHLB advances:		
Floating-rate based on FHLB auction rate due 2026	2,800	2,800
Floating-rate based on FHLB auction rate due 2028	1,000	—
Total FHLB advances	3,800	2,800
Total subsidiaries	5,004	4,020
Total medium- and long-term debt	$ 6,463	$ 4,622

(a) The fixed interest rates on these notes have been swapped to a variable rate and designated in a hedging relationship. Accordingly, carrying value has been adjusted to reflect the change in the fair value of the debt as a result of changes in the benchmark rate.

Subordinated notes with remaining maturities greater than one year qualify as Tier 2 capital.

The Bank is a member of the FHLB, which provides short- and long-term funding to its members through advances collateralized by real-estate related assets. In the first quarter 2018, the Bank borrowed an additional $1 billion of 10-year, floating-rate FHLB advances due January 26, 2028. The interest rate on the FHLB advances resets between four and eight weeks, based

on the FHLB auction rate. At December 31, 2018, the weighted-average rate on the FHLB advances was 2.55%. Each note may be prepaid in full, without penalty, at each scheduled reset date. Borrowing capacity is contingent upon the amount of collateral available to be pledged to the FHLB. At December 31, 2018, $15.7 billion of real estate-related loans were pledged to the FHLB as blanket collateral for current and potential future borrowings of approximately $5.0 billion.

In the third quarter 2018, the Corporation issued $850 million of 3.70% senior notes maturing in 2023, swapped to a floating rate at 30-day LIBOR plus 80 basis points.

Unamortized debt issuance costs deducted from the carrying amount of medium- and long-term debt totaled $8 million and $5 million at December 31, 2018 and 2017, respectively.

At December 31, 2018, the principal maturities of medium- and long-term debt were as follows:

(in millions) Years Ending December 31		
2019	$	350
2020		675
2021		—
2022		—
2023		850
Thereafter		4,550
Total	$	6,425

NOTE 13 - SHAREHOLDERS' EQUITY

On July 6, 2018, the Board of Governors of the Federal Reserve System issued a statement announcing that, consistent with the recently enacted Economic Growth, Regulatory Relief and Consumer Protection Act (EGRRCPA), bank holding companies with less than $100 billion in total assets are no longer subject to certain regulations and reporting requirements, such as Dodd-Frank Act stress testing and the Comprehensive Capital Analysis and Review, effective immediately.

Repurchases of common stock under the equity repurchase program authorized in 2010 by the Board of Directors of the Corporation totaled 14.8 million shares at an average price paid of $89.21 in 2018, 7.3 million shares at an average price paid of $72.44 per share in 2017 and 6.6 million shares at an average price paid of $46.09 per share in 2016. There is no expiration date for the Corporation's equity repurchase program. During the year ended December 31, 2018, the Corporation repurchased $1.3 billion under the equity repurchase program.

At December 31, 2018, the Corporation had no outstanding warrants as all remaining warrants to purchase common stock expired during the fourth quarter of 2018. Approximately 585,000, 1.8 million and 2.3 million shares of common stock were issued upon exercise of warrants in 2018, 2017 and 2016, respectively.

At December 31, 2018, the Corporation had 4.0 million shares of common stock reserved for stock option exercises and restricted stock unit vesting and 869,000 shares of restricted stock outstanding to employees and directors under share-based compensation plans.

NOTE 14 - ACCUMULATED OTHER COMPREHENSIVE LOSS

The following table presents a reconciliation of the changes in the components of accumulated other comprehensive loss and details the components of other comprehensive income (loss) for the year ended December 31, 2018, 2017 and 2016, including the amount of income tax expense (benefit) allocated to each component of other comprehensive income (loss).

(in millions) Years Ended December 31	2018	2017	2016
Accumulated net unrealized (losses) gains on investment securities:			
Balance at beginning of period, net of tax	**$ (101)**	$ (33)	$ 9
Cumulative effect of change in accounting principle	**1**	—	—
Net unrealized holding losses arising during the period	**(69)**	(81)	(70)
Less: Benefit for income taxes	**(16)**	(27)	(26)
Net unrealized holding losses arising during the period, net of tax	**(53)**	(54)	(44)
Less:			
Net realized losses included in net securities losses	**(20)**	—	—
Less: Benefit for income taxes	**(5)**	—	—
Reclassification adjustment for net securities losses included in net income, net of tax	**(15)**	—	—
Less:			
Net losses realized as a yield adjustment in interest on investment securities	**—**	(3)	(3)
Less: Benefit for income taxes	**—**	(1)	(1)
Reclassification adjustment for net losses realized as a yield adjustment included in net income, net of tax	**—**	(2)	(2)
Change in net unrealized losses on investment securities, net of tax	**(38)**	(52)	(42)
Reclassification of certain deferred tax effects (a)	**—**	(16)	—
Balance at end of period, net of tax	**$ (138)**	$ (101)	$ (33)
Accumulated defined benefit pension and other postretirement plans adjustment:			
Balance at beginning of period, net of tax	**$ (350)**	$ (350)	$ (438)
Actuarial (loss) gain arising during the period	**(191)**	72	(134)
Prior service credit arising during the period	**—**	—	234
Net defined benefit pension and other postretirement adjustment arising during the period	**(191)**	72	100
Less: (Benefit) provision for income taxes	**(44)**	17	37
Net defined benefit pension and other postretirement adjustment arising during the period, net of tax	**(147)**	55	63
Amounts recognized in other noninterest expense:			
Amortization of actuarial net loss	**61**	51	46
Amortization of prior service credit	**(27)**	(27)	(7)
Total amounts recognized in other noninterest expense	**34**	24	39
Less: Provision for income taxes	**8**	8	14
Adjustment for amounts recognized as other components of net benefit cost during the period, net of tax	**26**	16	25
Change in defined benefit pension and other postretirement plans adjustment, net of tax	**(121)**	71	88
Reclassification of certain deferred tax effects (a)	**—**	(71)	—
Balance at end of period, net of tax	**$ (471)**	$ (350)	$ (350)
Total accumulated other comprehensive loss at end of period, net of tax	**$ (609)**	$ (451)	$ (383)

(a) Amounts reclassified to retained earnings due to early adoption of ASU 2018-02. For further information, refer to Note 1.

NOTE 15 - NET INCOME PER COMMON SHARE

Basic and diluted net income per common share are presented in the following table.

(in millions, except per share data)

Years Ended December 31	2018	2017	2016
Basic and diluted			
Net income	$ 1,235	$ 743	$ 477
Less: Income allocated to participating securities	8	5	4
Net income attributable to common shares	$ 1,227	$ 738	$ 473
Basic average common shares	168	174	172
Basic net income per common share	$ 7.31	$ 4.23	$ 2.74
Basic average common shares	168	174	172
Dilutive common stock equivalents:			
Net effect of the assumed exercise of stock options	2	3	2
Net effect of the assumed exercise of warrants	1	1	3
Diluted average common shares	171	178	177
Diluted net income per common share	$ 7.20	$ 4.14	$ 2.68

The following average shares related to outstanding options to purchase shares of common stock were not included in the computation of diluted net income per common share because the options were anti-dilutive for the period. There were no anti-dilutive options for the year ended December 31, 2017.

(shares in millions)

Years Ended December 31	2018	2016
Average outstanding options	0.2	3.3
Range of exercise prices	$95.25	$37.26 - $59.86

NOTE 16 - SHARE-BASED COMPENSATION

Share-based compensation expense is charged to salaries and benefits expense on the Consolidated Statements of Income. The components of share-based compensation expense for all share-based compensation plans and related tax benefits are as follows:

(in millions)

Years Ended December 31	2018	2017	2016
Total share-based compensation expense	$ 48	$ 39	$ 34
Related tax benefits recognized in net income	$ 11	$ 14	$ 13

The following table summarizes unrecognized compensation expense for all share-based plans.

(dollar amounts in millions)	December 31, 2018
Total unrecognized share-based compensation expense	$ 40
Weighted-average expected recognition period (in years)	2.5

The Corporation has share-based compensation plans under which it awards shares of restricted stock units to executive officers, directors and key personnel, and stock options to executive officers and key personnel of the Corporation and its subsidiaries. Additionally, the Corporation has awarded restricted stock and restricted stock units to executive officers, directors and key personnel under previous share-based compensation plans that remain unvested. Restricted stock and restricted stock units fully vest after a period ranging from three years to five years, and stock options fully vest after four years. The maturity of each option is determined at the date of grant; however, no options may be exercised later than ten years from the date of grant. The options may have restrictions regarding exercisability. The plans provide for a grant of up to 6.1 million common shares, plus shares under certain plans that are forfeited, expire or are canceled, which become available for re-grant. At December 31, 2018, over 6 million shares were available for grant.

The Corporation used a binomial model to value stock options granted in the periods presented. Option valuation models require several inputs, including the expected stock price volatility, and changes in input assumptions can materially affect the fair value estimates. The model used may not necessarily provide a reliable single measure of the fair value of stock options. The risk-free interest rate assumption used in the binomial option-pricing model as outlined in the table below was based on the federal ten-year treasury interest rate. The expected dividend yield was based on the historical and projected long-term dividend yield patterns of the Corporation's common shares. Expected volatility assumptions considered both the historical volatility of the Corporation's common stock over a ten-year period and implied volatility based on actively traded options on the Corporation's common stock with pricing terms and trade dates similar to the stock options granted. Expected option life was based on historical exercise activity over the contractual term of the option grant (10 years), excluding certain forced transactions.

The estimated weighted-average grant-date fair value per option and the underlying binomial option-pricing model assumptions are summarized in the following table:

Years Ended December 31	2018	2017	2016
Weighted-average grant-date fair value per option	$ 30.32	$ 19.61	$ 9.94
Weighted-average assumptions:			
Risk-free interest rates	2.63%	2.47%	2.01%
Expected dividend yield	3.00	3.00	3.00
Expected volatility factors of the market price of Comerica common stock	36	34	38
Expected option life (in years)	7.4	7.0	6.9

A summary of the Corporation's stock option activity and related information for the year ended December 31, 2018 follows:

	Number of Options (in thousands)	Weighted-Average Exercise Price per Share	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in millions)
Outstanding-January 1, 2018	4,173	$ 40.06		
Granted	196	95.25		
Forfeited or expired	(24)	49.75		
Exercised	(1,402)	37.86		
Outstanding-December 31, 2018	2,943	44.70	5.6	$ 76
Exercisable-December 31, 2018	1,707	$ 38.62	4.3	$ 51

The aggregate intrinsic value of outstanding options shown in the table above represents the total pretax intrinsic value at December 31, 2018, based on the Corporation's closing stock price of $68.69 at December 31, 2018.

The total intrinsic value of stock options exercised was $81 million, $104 million and $46 million for the years ended December 31, 2018, 2017 and 2016, respectively.

A summary of the Corporation's restricted stock activity and related information for the year ended December 31, 2018 follows:

	Number of Shares (in thousands)	Weighted-Average Grant-Date Fair Value per Share
Outstanding-January 1, 2018	1,243	$ 43.59
Forfeited	(44)	44.05
Vested	(330)	41.55
Outstanding-December 31, 2018	869	$ 44.34

The total fair value of restricted stock awards that fully vested was $14 million, $19 million and $22 million for the years ended December 31, 2018, 2017 and 2016, respectively.

A summary of the Corporation's restricted stock unit activity and related information for the year ended December 31, 2018 follows:

	Service-Based Units		Performance-Based Units	
	Number of Units (in thousands)	Weighted-Average Grant-Date Fair Value per Share	Number of Units (in thousands)	Weighted-Average Grant-Date Fair Value per Share
Outstanding-January 1, 2018	199	$ 43.00	718	$ 42.39
Granted	194	96.55	184	92.80
Forfeited	(26)	86.54	(1)	93.26
Vested	—	—	(239)	41.59
Outstanding-December 31, 2018	367	68.14	662	56.64

The total fair value of restricted stock units that fully vested was $10 million, $10 million and $11 million for the years ended December 31, 2018, 2017 and 2016, respectively.

The Corporation expects to satisfy the exercise of stock options, the vesting of restricted stock units and future grants of restricted stock by issuing shares of common stock out of treasury. At December 31, 2018, the Corporation held 68.1 million shares in treasury.

For further information on the Corporation's share-based compensation plans, refer to Note 1.

NOTE 17 - EMPLOYEE BENEFIT PLANS

Defined Benefit Pension and Postretirement Benefit Plans

The Corporation has a qualified and non-qualified defined benefit pension plan. Prior to January 1, 2017, the plans were in effect for substantially all salaried employees hired before January 1, 2007. In October 2016, the Corporation modified its defined benefit pension plans to freeze final average pay benefits as of December 31, 2016, other than for participants who were age 60 or older as of December 31, 2016, and added a cash balance plan provision effective January 1, 2017. Active pension plan participants 60 years or older as of December 31, 2016 receive the greater of the final average pay formula or the frozen final average pay benefit as of December 31, 2016 plus the cash balance benefit earned after January 1, 2017. Employees participating in the retirement account plan as of December 31, 2016 were eligible to participate in the cash balance pension plan effective January 1, 2017. Benefits earned under the cash balance pension formula, in the form of an account balance, include contribution credits based on eligible pay earned each month, age and years of service and monthly interest credits based on the 30-year Treasury rate.

The Corporation's postretirement benefit plan provides postretirement health care and life insurance benefits for retirees as of December 31, 1992. The plan also provides certain postretirement health care and life insurance benefits for a limited number of retirees who retired prior to January 1, 2000. For all other employees hired prior to January 1, 2000, a nominal benefit is provided. Employees hired on or after January 1, 2000 and prior to January 1, 2007 are eligible to participate in the plan on a full contributory basis until Medicare-eligible based on age and service. Employees hired on or after January 1, 2007 are not eligible to participate in the plan. The Corporation funds the pre-1992 retiree plan benefits with bank-owned life insurance.

The following table sets forth reconciliations of plan assets and the projected benefit obligation, the weighted-average assumptions used to determine year-end benefit obligations, and the amounts recognized in accumulated other comprehensive income (loss) for the Corporation's defined benefit pension plans and postretirement benefit plan at December 31, 2018 and 2017. The Corporation used a measurement date of December 31, 2018 for these plans.

	Defined Benefit Pension Plans				Postretirement Benefit Plan	
	Qualified		Non-Qualified			
(dollar amounts in millions)	2018	2017	2018	2017	2018	2017
Change in fair value of plan assets:						
Fair value of plan assets at January 1	$ 2,747	$ 2,453	$ —	$ —	$ 60	$ 62
Actual return on plan assets	(167)	396	—	—	(1)	2
Employer contributions	—	—	—	—	1	1
Benefits paid	(122)	(102)	—	—	(4)	(5)
Fair value of plan assets at December 31	$ 2,458	$ 2,747	$ —	$ —	$ 56	$ 60
Change in projected benefit obligation:						
Projected benefit obligation at January 1	$ 2,061	$ 1,902	$ 212	$ 201	$ 51	$ 55
Service cost	29	29	2	2	—	—
Interest cost	75	78	8	8	2	2
Actuarial (gain) loss	(142)	154	—	12	(3)	(1)
Benefits paid	(122)	(102)	(11)	(11)	(4)	(5)
Projected benefit obligation at December 31	$ 1,901	$ 2,061	$ 211	$ 212	$ 46	$ 51
Accumulated benefit obligation	$ 1,893	$ 2,052	$ 209	$ 209	$ 46	$ 51
Funded status at December 31 (a) (b)	$ 557	$ 686	$ (211)	$ (212)	$ 10	$ 9
Weighted-average assumptions used:						
Discount rate	4.37%	3.74%	4.37%	3.74%	4.26%	3.55%
Rate of compensation increase	4.00	3.75	4.00	3.75	n/a	n/a
Healthcare cost trend rate:						
Cost trend rate assumed for next year	n/a	n/a	n/a	n/a	6.50	6.50
Rate to which the cost trend rate is assumed to decline (the ultimate trend rate)	n/a	n/a	n/a	n/a	4.50	4.50
Year when rate reaches the ultimate trend rate	n/a	n/a	n/a	n/a	2027	2027
Amounts recognized in accumulated other comprehensive income (loss) before income taxes:						
Net actuarial loss	$ (687)	$ (548)	$ (76)	$ (85)	$ (19)	$ (19)
Prior service credit	140	159	34	42	1	1
Balance at December 31	$ (547)	$ (389)	$ (42)	$ (43)	$ (18)	$ (18)

(a) Based on projected benefit obligation for defined benefit pension plans and accumulated benefit obligation for postretirement benefit plan.
(b) The Corporation recognizes the overfunded and underfunded status of the plans in accrued income and other assets and accrued expenses and other liabilities, respectively, on the Consolidated Balance Sheets.
n/a - not applicable

Because the non-qualified defined benefit pension plan has no assets, the accumulated benefit obligation exceeded the fair value of plan assets at December 31, 2018 and December 31, 2017.

The following table details the changes in plan assets and benefit obligations recognized in other comprehensive income (loss) for the year ended December 31, 2018.

	Defined Benefit Pension Plans		Postretirement Benefit Plan	Total
(in millions)	Qualified	Non-Qualified		
Actuarial (loss) gain arising during the period	$ (190)	$ —	$ (1)	$ (191)
Amortization of net actuarial loss	51	9	1	61
Amortization of prior service credit	(19)	(8)	—	(27)
Total recognized in other comprehensive income (loss)	$ (158)	$ 1	$ —	$ (157)

Components of net periodic defined benefit cost and postretirement benefit cost, the actual return on plan assets and the weighted-average assumptions used were as follows:

(dollar amounts in millions)	Defined Benefit Pension Plans					
	Qualified			Non-Qualified		
Years Ended December 31	**2018**	**2017**	**2016**	**2018**	**2017**	**2016**
Service cost (a)	$ 29	$ 29	$ 31	$ 2	$ 2	$ 3
Other components of net benefit (credit) cost:						
Interest cost	75	78	87	8	8	10
Expected return on plan assets	(165)	(159)	(163)	—	—	—
Amortization of prior service credit	(19)	(19)	(2)	(8)	(8)	(5)
Amortization of net loss	51	43	38	9	8	7
Total other components of net benefit (credit) cost (b)	(58)	(57)	(40)	9	8	12
Net periodic defined benefit (credit) cost	$ (29)	$ (28)	$ (9)	$ 11	$ 10	$ 15
Actual return on plan assets	$ (167)	$ 396	$ 200	n/a	n/a	n/a
Actual rate of return on plan assets	(6.21)%	16.48%	8.66%	n/a	n/a	n/a
Weighted-average assumptions used:						
Discount rate	3.74 %	4.23%	4.53%	3.74%	4.23%	4.53%
Expected long-term return on plan assets	6.50	6.50	6.75	n/a	n/a	n/a
Rate of compensation increase	3.75	3.50	3.75	3.75	3.50	3.75

(a) Included in salaries and benefits expense on the Consolidated Statements of Income.
(b) Included in other noninterest expenses on the Consolidated Statements of Income.
n/a - not applicable

(dollar amounts in millions)	Postretirement Benefit Plan		
Years Ended December 31	**2018**	**2017**	**2016**
Other components of net benefit cost:			
Interest cost	$ 2	$ 2	$ 3
Expected return on plan assets	(3)	(3)	(4)
Amortization of net loss	1	1	1
Net periodic postretirement benefit cost	$ —	$ —	$ —
Actual return on plan assets	$ (1)	$ 2	$ 2
Actual rate of return on plan assets	(2.05)%	3.52%	2.83%
Weighted-average assumptions used:			
Discount rate	3.55 %	3.92%	4.53%
Expected long-term return on plan assets	5.00	5.00	5.00
Healthcare cost trend rate:			
Cost trend rate assumed	6.50	6.50	7.00
Rate to which the cost trend rate is assumed to decline (the ultimate trend rate)	4.50	4.50	5.00
Year that the rate reaches the ultimate trend rate	2027	2027	2027

The expected long-term rate of return of plan assets is the average rate of return expected to be realized on funds invested or expected to be invested over the life of the plan, which has an estimated duration of approximately 11 years as of December 31, 2018. The expected long-term rate of return on plan assets is set after considering both long-term returns in the general market and long-term returns experienced by the assets in the plan. The returns on the various asset categories are blended to derive one long-term rate of return. The Corporation reviews its pension plan assumptions on an annual basis with its actuarial consultants to determine if assumptions are reasonable and adjusts the assumptions to reflect changes in future expectations.

The estimated portion of balances remaining in accumulated other comprehensive income (loss) that are expected to be recognized as a component of net periodic benefit cost in the year ended December 31, 2019 are as follows:

	Defined Benefit Pension Plans			
(in millions)	Qualified	Non-Qualified	Postretirement Benefit Plan	Total
Net loss	$ 34	$ 8	$ 1	$ 43
Prior service credit	(19)	(8)	—	(27)

Assumed healthcare cost trend rates have a significant effect on the amounts reported for the postretirement benefit plan. A one-percentage-point change in 2018 assumed healthcare and prescription drug cost trend rates would result in a two-percentage-point change in the postretirement benefit obligation.

Plan Assets

The Corporation's overall investment goals for the qualified defined benefit pension plan are to maintain a portfolio of assets of appropriate liquidity and diversification; to generate investment returns (net of operating costs) that are reasonably anticipated to maintain the plan's fully funded status or to reduce a funding deficit, after taking into account various factors, including reasonably anticipated future contributions and expense and the interest rate sensitivity of the plan's assets relative to that of the plan's liabilities; and to generate investment returns (net of operating costs) that meet or exceed a customized benchmark as defined in the plan investment policy. Derivative instruments are permissible for hedging and transactional efficiency, but only to the extent that the derivative use enhances the efficient execution of the plan's investment policy. The plan does not directly invest in securities issued by the Corporation and its subsidiaries. The Corporation's target allocations for plan investments are 45 percent to 55 percent for both equity securities and fixed income, including cash. Equity securities include collective investment and mutual funds and common stock. Fixed income securities include U.S. Treasury and other U.S. government agency securities, mortgage-backed securities, corporate bonds and notes, municipal bonds, collateralized mortgage obligations and money market funds.

Fair Value Measurements

The Corporation's qualified defined benefit pension plan utilizes fair value measurements to record fair value adjustments and to determine fair value disclosures. The Corporation's qualified benefit pension plan categorizes investments recorded at fair value into a three-level hierarchy, based on the markets in which the investment are traded and the reliability of the assumptions used to determine fair value. Refer to Note 1 for a description of the three-level hierarchy.

Following is a description of the valuation methodologies and key inputs used to measure the fair value of the Corporation's qualified defined benefit pension plan investments, including an indication of the level of the fair value hierarchy in which the investments are classified.

Mutual funds

Fair value measurement is based upon the net asset value (NAV) provided by the administrator of the fund. Mutual fund NAVs are quoted in an active market exchange, such as the New York Stock Exchange, and are included in Level 1 of the fair value hierarchy.

Common stock

Fair value measurement is based upon the closing price quoted in an active market exchange, such as the New York Stock Exchange. Level 1 common stock includes domestic and foreign stock and real estate investment trusts.

U.S. Treasury and other U.S. government agency securities

Level 1 securities include U.S. Treasury securities that are traded by dealers or brokers in active over-the-counter markets. Fair value measurement is based upon quoted prices in an active market exchange, such as the New York Stock Exchange. Level 2 securities include debt securities issued by U.S. government agencies and U.S. government-sponsored entities. The fair value of Level 2 securities is determined using quoted prices of securities with similar characteristics, or pricing models based on observable market data inputs, primarily interest rates and spreads.

Corporate and municipal bonds and notes

Fair value measurement is based upon quoted prices of securities with similar characteristics or pricing models based on observable market data inputs, primarily interest rates, spreads and prepayment information. Level 2 securities include corporate bonds, municipal bonds, foreign bonds and foreign notes.

Mortgage-backed securities

Fair value measurement is based upon independent pricing models or other model-based valuation techniques such as the present value of future cash flows, adjusted for the security's credit rating, prepayment assumptions and other factors, such as credit loss and liquidity assumptions, and are included in Level 2 of the fair value hierarchy.

Private placements

Fair value is measured using the NAV provided by fund management as quoted prices in active markets are not available. Management considers additional discounts to the provided NAV for market and credit risk. Private placements are included in Level 3 of the fair value hierarchy.

Collective investment funds

Fair value measurement is based upon the NAV provided by the administrator of the fund as a practical expedient to estimate fair value. There are no unfunded commitments or redemption restrictions on the collective investment funds. The investments are redeemable daily.

Fair Values

The fair values of the Corporation's qualified defined benefit pension plan investments measured at fair value on a recurring basis at December 31, 2018 and 2017, by asset category and level within the fair value hierarchy, are detailed in the table below.

(in millions)	Total	Level 1	Level 2	Level 3
December 31, 2018				
Equity securities:				
Mutual funds	$ 3	$ 3	$ —	$ —
Common stock	803	803	—	—
Fixed income securities:				
U.S. Treasury and other U.S. government agency securities	496	482	14	—
Corporate and municipal bonds and notes	679	—	679	—
Mortgage-backed securities	29	—	29	—
Private placements	60	—	—	60
Total investments in the fair value hierarchy	2,070	$ 1,288	$ 722	$ 60
Investments measured at net asset value:				
Collective investment funds	392			
Total investments at fair value	$ 2,462			
December 31, 2017				
Equity securities:				
Mutual funds	$ 1	$ 1	$ —	$ —
Common stock	961	961	—	—
Fixed income securities:				
U.S. Treasury and other U.S. government agency securities	456	451	5	—
Corporate and municipal bonds and notes	765	—	765	—
Mortgage-backed securities	25	—	25	—
Private placements	80	—	—	80
Total investments in the fair value hierarchy	2,288	$ 1,413	$ 795	$ 80
Investments measured at net asset value:				
Collective investment funds	455			
Total investments at fair value	$ 2,743			

The table below provides a summary of changes in the Corporation's qualified defined benefit pension plan's Level 3 investments measured at fair value on a recurring basis for the years ended December 31, 2018 and 2017.

(in millions)	Balance at Beginning of Period	Net Gains (Losses) Realized	Net Gains (Losses) Unrealized	Purchases	Sales	Balance at End of Period
Year Ended December 31, 2018						
Private placements	$ 80	$ (1)	$ (7)	$ 70	$ (82)	$ 60
Year Ended December 31, 2017						
Private placements	$ 71	$ 2	$ 3	$ 77	$ (73)	$ 80

There were no assets in the non-qualified defined benefit pension plan at December 31, 2018 and 2017. The postretirement benefit plan is fully invested in bank-owned life insurance policies. The fair value of bank-owned life insurance policies is based on the cash surrender values of the policies as reported by the insurance companies and is classified in Level 2 of the fair value hierarchy.

Cash Flows

The Corporation currently expects to make no employer contributions to the qualified and non-qualified defined benefit pension plans and postretirement benefit plan for the year ended December 31, 2019.

	Estimated Future Benefit Payments		
(in millions) Years Ended December 31	Qualified Defined Benefit Pension Plan	Non-Qualified Defined Benefit Pension Plan	Postretirement Benefit Plan (a)
2019	$ 125	$ 12	$ 5
2020	125	14	5
2021	128	14	5
2022	131	14	5
2023	133	14	4
2024 - 2028	672	73	18

(a) Estimated benefit payments in the postretirement benefit plan are net of estimated Medicare subsidies.

Defined Contribution Plans

Substantially all of the Corporation's employees are eligible to participate in the Corporation's principal defined contribution plan (a 401(k) plan). Under this plan, the Corporation makes core matching cash contributions of 100 percent of the first 4 percent of qualified earnings contributed by employees (up to the current IRS compensation limit), invested based on employee investment elections. Employee benefits expense included expense for the plan of $21 million for both of the years ended December 31, 2018 and 2017 and $22 million for the year ended December 31, 2016.

Through December 31, 2016, the Corporation also provided a retirement account plan for the benefit of substantially all employees who worked at least 1,000 hours in a plan year and were not accruing a benefit in the defined benefit pension plan. Under the retirement account plan, the Corporation made an annual discretionary allocation to the individual account of each eligible employee ranging from 3 percent to 8 percent of annual compensation, determined based on combined age and years of service. The allocations were invested based on employee investment elections. Employees participating in the retirement account plan as of December 31, 2016 were eligible to participate in the cash balance pension plan effective January 1, 2017. Final retirement account plan balances were transferred to the Corporation's 401(k) plan in the first quarter of 2017. Contributions to the retirement account plan ceased for periods beginning after December 31, 2016. The Corporation recognized $10 million of employee benefits expense for the year ended December 31, 2016.

Deferred Compensation Plans

The Corporation offers optional deferred compensation plans under which certain employees may make an irrevocable election to defer incentive compensation and/or a portion of base salary until retirement or separation from the Corporation. The employee may direct deferred compensation into one or more deemed investment options. Although not required to do so, the Corporation invests actual funds into the deemed investments as directed by employees, resulting in a deferred compensation asset, recorded in other short-term investments on the Consolidated Balance Sheets that offsets the liability to employees under the plan, recorded in accrued expenses and other liabilities. The earnings from the deferred compensation asset are recorded in interest on short-term investments and other noninterest income and the related change in the liability to employees under the plan is recorded in salaries and benefits expense on the Consolidated Statements of Income.

NOTE 18 - INCOME TAXES AND TAX-RELATED ITEMS

The provision for income taxes is calculated as the sum of income taxes due for the current year and deferred taxes. Income taxes due for the current year is computed by applying federal and state tax statutes to current year taxable income. Deferred taxes arise from temporary differences between the income tax basis and financial accounting basis of assets and liabilities. Tax-related interest and penalties and foreign taxes are then added to the tax provision.

The current and deferred components of the provision for income taxes were as follows:

(in millions) December 31	2018	2017	2016
Current:			
Federal	$ 227	$ 371	$ 224
Foreign	10	5	5
State and local	39	36	15
Total current	276	412	244
Deferred:			
Federal	29	(26)	(49)
State and local	3	(2)	(2)
Remeasurement of deferred taxes	(8)	107	—
Total deferred	24	79	(51)
Total	$ 300	$ 491	$ 193

Income before income taxes of $1.5 billion for the year ended December 31, 2018 included $38 million of foreign-source income.

The provision for income taxes included a $107 million charge for the year ended December 31, 2017 to adjust deferred taxes as a result of the enactment of the Tax Cuts and Jobs Act and an $8 million downward revision to the impact recorded in 2018. Refer to Note 1 for further details.

The provision for income taxes for 2018 and 2017 included a benefit of $23 million and $35 million, respectively, related to employee stock transactions as a result of new accounting guidance for stock compensation. For the year ended December 31, 2016, tax effects of employee stock transactions of $4 million were recorded in shareholders' equity.

The provision for income taxes does not reflect the tax effects of unrealized gains and losses on investment securities available-for-sale or the change in defined benefit pension and other postretirement plans adjustment included in accumulated other comprehensive loss. Refer to Note 14 for additional information on accumulated other comprehensive loss.

A reconciliation of expected income tax expense at the federal statutory rate to the Corporation's provision for income taxes and effective tax rate follows:

(dollar amounts in millions)	2018		2017		2016	
Years Ended December 31	Amount	Rate	Amount	Rate	Amount	Rate
Tax based on federal statutory rate	$ 323	21.0%	$ 432	35.0%	$ 235	35.0%
State income taxes	35	2.3	22	1.8	8	1.2
Employee stock transactions	(23)	(1.5)	(35)	(2.8)	—	—
Capitalization and recovery positions (a)	(17)	(1.1)	—	—	—	—
Affordable housing and historic credits	(12)	(0.8)	(21)	(1.7)	(22)	(3.3)
Bank-owned life insurance	(9)	(0.6)	(16)	(1.3)	(15)	(2.3)
Remeasurement of deferred taxes	(8)	(0.5)	107	8.7	—	—
FDIC fees (b)	8	0.5	—	—	—	—
Other changes in unrecognized tax benefits	4	0.3	—	—	—	—
Tax-related interest and penalties	(3)	(0.2)	4	0.3	3	0.5
Lease termination transactions	—	—	(2)	(0.2)	(15)	(2.2)
Other	2	0.1	—	—	(1)	(0.1)
Provision for income taxes	$ 300	19.5%	$ 491	39.8%	$ 193	28.8%

(a) Tax benefits from the review of tax capitalization and recovery positions related to software and fixed assets included in the 2017 tax return.
(b) Beginning January 1, 2018, FDIC fees are no longer deductible as a result of the enactment of the Tax Cuts and Jobs Act.

The liability for tax-related interest and penalties included in accrued expenses and other liabilities on the Consolidated Balance Sheets was $7 million and $10 million at December 31, 2018 and 2017, respectively.

In the ordinary course of business, the Corporation enters into certain transactions that have tax consequences. From time to time, the Internal Revenue Service (IRS) may review and/or challenge specific interpretive tax positions taken by the Corporation with respect to those transactions. The Corporation believes that its tax returns were filed based upon applicable statutes, regulations and case law in effect at the time of the transactions. The IRS or other tax jurisdictions, an administrative authority or a court, if presented with the transactions, could disagree with the Corporation's interpretation of the tax law.

A reconciliation of the beginning and ending amount of net unrecognized tax benefits follows:

(in millions)	2018	2017	2016
Balance at January 1	$ 10	$ 15	$ 22
Increase as a result of tax positions taken during a prior period	9	4	—
Decrease related to settlements with tax authorities	(4)	(8)	(7)
Other	(1)	(1)	—
Balance at December 31	$ 14	$ 10	$ 15

The Corporation anticipates it is reasonably possible settlements with tax authorities will result in a $1 million decrease in net unrecognized tax benefits within the next twelve months.

After consideration of the effect of the federal tax benefit available on unrecognized state tax benefits, the total amount of unrecognized tax benefits, if recognized, would affect the Corporation's effective tax rate was approximately $11 million and $8 million at December 31, 2018 and 2017, respectively.

The following tax years for significant jurisdictions remain subject to examination as of December 31, 2018:

Jurisdiction	Tax Years
Federal	2014-2017
California	2006-2017

Based on current knowledge and probability assessment of various potential outcomes, the Corporation believes current tax reserves are adequate, and the amount of any potential incremental liability arising is not expected to have a material adverse effect on the Corporation's consolidated financial condition or results of operations. Probabilities and outcomes are reviewed as events unfold, and adjustments to the reserves are made when necessary.

The principal components of deferred tax assets and liabilities were as follows:

(in millions) December 31	2018	2017
Deferred tax assets:		
Allowance for loan losses	$ 141	$ 150
Deferred compensation	68	49
Deferred loan origination fees and costs	9	6
Net unrealized losses on investment securities available-for-sale	42	31
Other temporary differences, net	42	57
Total deferred tax asset before valuation allowance	302	293
Valuation allowance	(3)	(3)
Total deferred tax assets	299	290
Deferred tax liabilities:		
Lease financing transactions	(74)	(76)
Defined benefit plans	(41)	(72)
Allowance for depreciation	(18)	(1)
Total deferred tax liabilities	(133)	(149)
Net deferred tax asset	$ 166	$ 141

Deferred tax assets included state net operating loss carryforwards of $4 million at both December 31, 2018 and December 31, 2017, which expire between 2018 and 2027. The Corporation believes it is more likely than not the benefit from certain of these state net operating loss carryforwards will not be realized and, accordingly, maintained a valuation allowance of $3 million at both December 31, 2018 and December 31, 2017. For further information on the Corporation's valuation policy for deferred tax assets, refer to Note 1.

NOTE 19 - TRANSACTIONS WITH RELATED PARTIES

The Corporation's banking subsidiaries had, and expect to have in the future, transactions with the Corporation's directors and executive officers, companies with which these individuals are associated, and certain related individuals. Such transactions were made in the ordinary course of business and included extensions of credit, leases and professional services. With respect to extensions of credit, all were made on substantially the same terms, including interest rates and collateral, as those prevailing at the same time for comparable transactions with other customers and did not, in management's opinion, involve more than normal risk of collectibility or present other unfavorable features. The aggregate amount of loans attributable to persons who were related parties at December 31, 2018, totaled $66 million at the beginning of 2018 and $109 million at the end of 2018. During 2018, new loans to related parties aggregated $716 million and repayments totaled $673 million.

NOTE 20 - REGULATORY CAPITAL AND RESERVE REQUIREMENTS

Reserves required to be maintained and/or deposited with the FRB are classified in interest-bearing deposits with banks. These reserve balances vary, depending on the level of customer deposits in the Corporation's banking subsidiaries. The average required reserve balances were $599 million and $572 million for the years ended December 31, 2018 and 2017, respectively.

Banking regulations limit the transfer of assets in the form of dividends, loans or advances from the bank subsidiaries to the parent company. Under the most restrictive of these regulations, the aggregate amount of dividends which can be paid to the parent company, with prior approval from bank regulatory agencies, approximated $108 million at January 1, 2019, plus 2019 net profits. Substantially all the assets of the Corporation's banking subsidiaries are restricted from transfer to the parent company of the Corporation in the form of loans or advances.

The Corporation's subsidiary banks declared dividends of $1.1 billion, $907 million and $545 million in 2018, 2017 and 2016, respectively.

The Corporation and its U.S. banking subsidiaries are subject to various regulatory capital requirements administered by federal and state banking agencies. The U.S. adoption of the Basel III regulatory capital framework (Basel III) became effective for the Corporation on January 1, 2015. Basel III sets forth two comprehensive methodologies for calculating risk-weighted assets (RWA), a standardized approach and an advanced approach. The Corporation and its U.S. banking subsidiaries are subject to the standardized approach under the rules. Under the standardized approach, RWA is generally based on supervisory risk-weightings which vary by counterparty type and asset class. Under the Basel III standardized approach, capital is required for credit risk RWA, to cover the risk of unexpected losses due to failure of a customer or counterparty to meet its financial obligations in accordance with contractual terms; and if trading assets and liabilities exceed certain thresholds, capital is also required for market risk RWA, to cover the risk of losses due to adverse market movements or from position-specific factors.

Under Basel III, there are three categories of risk-based capital: CET1 capital, Tier 1 capital and Tier 2 capital. CET1 capital predominantly includes common shareholders' equity, less certain deductions for goodwill, intangible assets and deferred tax assets that arise from net operating losses and tax credit carry-forwards. Additionally, the Corporation has elected to permanently exclude capital in accumulated other comprehensive income related to debt and equity securities classified as available-for-sale as well as for defined benefit postretirement plans from CET1, an option available to standardized approach entities under Basel III. Tier 1 capital incrementally includes noncumulative perpetual preferred stock. Tier 2 capital includes Tier 1 capital as well as subordinated debt qualifying as Tier 2 and qualifying allowance for credit losses. Total capital is Tier 1 capital plus Tier 2 capital. In addition to the minimum risk-based capital requirements, the Corporation is required to maintain a minimum capital conservation buffer, in the form of common equity, in order to avoid restrictions on capital distributions and discretionary bonuses. The required amount of the capital conservation buffer is being phased in and ultimately increasing to 2.5% on January 1, 2019.

Quantitative measures established by regulation to ensure capital adequacy require the maintenance of minimum amounts and ratios of CET1, Tier 1 and total capital (as defined in the regulations) to average and/or risk-weighted assets. Failure to meet minimum capital requirements can initiate certain mandatory and possibly additional discretionary actions by regulators that, if undertaken, could have a direct material effect on the Corporation's financial statements. At December 31, 2018 and 2017, the Corporation and its U.S. banking subsidiaries exceeded the ratios required for an institution to be considered "well capitalized" For U.S. banking subsidiaries, those requirements were total risk-based capital, Tier 1 risk-based capital, CET1 risk-based capital and leverage ratios greater than 10 percent, 8 percent, 6.5 percent and 5 percent, respectively, at December 31, 2018 and 2017. For the Corporation, requirements to be considered "well capitalized" were total risk-based capital and Tier 1 risk-based capital ratios greater than 10 percent and 6 percent, respectively, at December 31, 2018 and 2017. There have been no conditions or events since December 31, 2018 that management believes have changed the capital adequacy classification of the Corporation or its U.S. banking subsidiaries.

The following is a summary of the capital position of the Corporation and Comerica Bank, its principal banking subsidiary.

(dollar amounts in millions)	Comerica Incorporated (Consolidated)	Comerica Bank
December 31, 2018		
CET1 capital (minimum $3.0 billion (Consolidated))	$ 7,470	$ 7,229
Tier 1 capital (minimum $4.0 billion (Consolidated))	7,470	7,229
Total capital (minimum $5.4 billion (Consolidated))	8,855	8,433
Risk-weighted assets	67,047	66,857
Average assets (fourth quarter)	71,070	70,905
CET1 capital to risk-weighted assets (minimum-4.5%)	11.14%	10.81%
Tier 1 capital to risk-weighted assets (minimum-6.0%)	11.14	10.81
Total capital to risk-weighted assets (minimum-8.0%)	13.21	12.61
Tier 1 capital to average assets (minimum-4.0%)	10.51	10.20
Capital conservation buffer	5.14	4.61
December 31, 2017		
CET1 capital (minimum $3.0 billion (Consolidated))	$ 7,773	$ 7,121
Tier 1 capital (minimum $4.0 billion (Consolidated))	7,773	7,121
Total capital (minimum $5.3 billion (Consolidated))	9,211	8,378
Risk-weighted assets	66,575	66,447
Average assets (fourth quarter)	71,372	71,181
CET1 capital to risk-weighted assets (minimum-4.5%)	11.68%	10.72%
Tier 1 capital to risk-weighted assets (minimum-6.0%)	11.68	10.72
Total capital to risk-weighted assets (minimum-8.0%)	13.84	12.61
Tier 1 capital to average assets (minimum-4.0%)	10.89	10.00
Capital conservation buffer	5.68	4.61

NOTE 21 - CONTINGENT LIABILITIES

Legal Proceedings

Comerica Bank, a wholly-owned subsidiary of the Corporation, was named in November 2011 as a third-party defendant in *Butte Local Development v. Masters Group v. Comerica Bank* (the case), for lender liability. The case was tried in January 2014, in the Montana Second District Judicial Court for Silver Bow County in Butte, Montana. On January 17, 2014, a jury awarded Masters $52 million against the Bank. On July 1, 2015, after an appeal filed by the Corporation, the Montana Supreme Court reversed the judgment against the Corporation and remanded the case for a new trial with instructions that Michigan contract law should apply and dismissing all other claims. The case was retried in the same district court, without a jury, in January 2017, and the Corporation awaits a ruling. Management believes that current reserves related to this case are adequate in the event of a negative outcome.

The Corporation and certain of its subsidiaries are subject to various other pending or threatened legal proceedings arising out of the normal course of business or operations. The Corporation believes it has meritorious defenses to the claims asserted against it in its other currently outstanding legal proceedings and, with respect to such legal proceedings, intends to continue to defend itself vigorously, litigating or settling cases according to management's judgment as to what is in the best interests of the Corporation and its shareholders. Settlement may result from the Corporation's determination that it may be more prudent financially to settle, rather than litigate, and should not be regarded as an admission of liability. On at least a quarterly basis, the Corporation assesses its potential liabilities and contingencies in connection with outstanding legal proceedings utilizing the latest information available. On a case-by-case basis, reserves are established for those legal claims for which it is probable that a loss will be incurred either as a result of a settlement or judgment, and the amount of such loss can be reasonably estimated. The actual costs of resolving these claims may be substantially higher or lower than the amounts reserved. Based on current knowledge, and after consultation with legal counsel, management believes current reserves are adequate, and the amount of any incremental liability arising from these matters is not expected to have a material adverse effect on the Corporation's consolidated financial condition, results of operations or cash flows. Legal fees of $17 million, $15 million and $19 million for the years ended December 31, 2018, 2017 and 2016, respectively, were included in other noninterest expenses on the Consolidated Statements of Income.

For matters where a loss is not probable, the Corporation has not established legal reserves. The Corporation believes the estimate of the aggregate range of reasonably possible losses, in excess of reserves established, for all legal proceedings in which it is involved is from zero to approximately $33 million at December 31, 2018. This estimated aggregate range of reasonably

possible losses is based upon currently available information for those proceedings in which the Corporation is involved, taking into account the Corporation's best estimate of such losses for those cases for which such estimate can be made. For certain cases, the Corporation does not believe that an estimate can currently be made. The Corporation's estimate involves significant judgment, given the varying stages of the proceedings (including the fact many are currently in preliminary stages), the existence in certain proceedings of multiple defendants (including the Corporation) whose share of liability has yet to be determined, the numerous yet-unresolved issues in many of the proceedings (including issues regarding class certification and the scope of many of the claims) and the attendant uncertainty of the various potential outcomes of such proceedings. Accordingly, the Corporation's estimate will change from time to time, and actual losses may be more or less than the current estimate.

In the event of unexpected future developments, it is possible that the ultimate resolution of these matters, if unfavorable, may be material to the Corporation's consolidated financial condition, results of operations or cash flows.

For information regarding income tax contingencies, refer to Note 18.

NOTE 22 - RESTRUCTURING CHARGES

The Corporation launched an initiative in 2016 designed to reduce overhead and increase revenue (the "GEAR Up" initiative). The actions in the initiative include, but are not limited to, a reduction in workforce, a new retirement program, streamlining operational processes, real estate optimization including consolidating banking centers as well as reducing office and operations space, selective outsourcing of technology functions, reduction of technology system applications, enhanced sales tools and training, expanded product offerings and improved customer analytics to drive opportunities.

Certain actions associated with the GEAR Up initiative resulted in restructuring charges. Generally, costs associated with or incurred to generate revenue as part of the initiative were recorded according to the nature of the cost and were not included in restructuring charges. The Corporation considers the following costs associated with the initiative to be restructuring charges:

- **Employee costs:** Primarily severance costs in accordance with the Corporation's severance plan.
- **Facilities costs:** Costs pertaining to consolidating banking centers and other facilities, such as lease termination costs and decommissioning costs. Also includes accelerated depreciation and impairment of owned property to be sold.
- **Technology costs:** Impairment and other costs associated with optimizing technology infrastructure and reducing the number of applications.
- **Other costs:** Includes primarily professional fees, as well as other contract termination fees and legal fees incurred in the execution of the initiative.

Restructuring charges are recorded as a component of noninterest expenses on the Consolidated Statements of Income. The following table presents changes in restructuring reserves and cumulative charges incurred to date:

(in millions)	Employee Costs	Facilities Costs	Technology Costs	Other Costs	Total
Year Ended December 31, 2018					
Balance at beginning of period	$ 8	$ —	$ 6	$ 1	$ 15
Restructuring charges	10	4	37	2	53
Payments	(13)	(3)	(39)	(3)	(58)
Balance at end of period	$ 5	$ 1	$ 4	$ —	$ 10
Year Ended December 31, 2017					
Balance at beginning of period	$ 10	$ 4	$ —	$ 4	$ 18
Restructuring charges	10	2	26	7	45
Payments	(12)	(6)	(15)	(10)	(43)
Adjustments for non-cash charges (a)	—	—	(5)	—	(5)
Balance at end of period	$ 8	$ —	$ 6	$ 1	$ 15
Year Ended December 31, 2016					
Balance at beginning of period	$ —	$ —	$ —	$ —	$ —
Restructuring charges	52	15	—	26	93
Payments	(44)	(6)	—	(22)	(72)
Adjustments for non-cash charges (a)	2	(5)	—	—	(3)
Balance at end of period	$ 10	$ 4	$ —	$ 4	$ 18
Total restructuring charges incurred (b)	$ 72	$ 21	$ 63	$ 35	$ 191

(a) Adjustments for non-cash charges primarily relate to impairments of previously capitalized software costs in Technology Costs.
(b) Restructuring activities were completed as of 12/31/2018.

Restructuring charges directly attributable to a business segment are assigned to that business segment. For example, facilities costs pertaining to the consolidation of banking centers primarily impacted the Retail Bank. Restructuring charges incurred by areas whose services support the overall Corporation are allocated based on the methodology described in Note 23 to the consolidated financial statements. Total restructuring charges assigned to the Business Bank, Retail Bank and Wealth Management were $30 million, $16 million and $7 million, respectively, for the year ended December 31, 2018, $24 million, $15 million and $6 million, respectively, for the year ended December 31, 2017 and $43 million, $38 million and $12 million, respectively, for the year ended December 31, 2016.

NOTE 23 - BUSINESS SEGMENT INFORMATION

The Corporation has strategically aligned its operations into three major business segments: the Business Bank, the Retail Bank and Wealth Management. These business segments are differentiated based on the type of customer and the related products and services provided. In addition to the three major business segments, the Finance Division is also reported as a segment. Business segment results are produced by the Corporation's internal management accounting system. This system measures financial results based on the internal business unit structure of the Corporation. The performance of the business segments is not comparable with the Corporation's consolidated results and is not necessarily comparable with similar information for any other financial institution. Additionally, because of the interrelationships of the various segments, the information presented is not indicative of how the segments would perform if they operated as independent entities. The management accounting system assigns balance sheet and income statement items to each business segment using certain methodologies, which are regularly reviewed and refined. From time to time, the Corporation may make reclassifications among the segments to more appropriately reflect management's current view of the segments, and methodologies may be modified as the management accounting system is enhanced and changes occur in the organizational structure and/or product lines. During the 2018, the Small Business component was reclassified from Retail Bank to Business Bank. For comparability purposes, amounts in all periods are based on business unit structure and methodologies in effect at December 31, 2018.

Net interest income for each segment reflects the interest income generated by earning assets less interest expense on interest-bearing liabilities plus the net impact from associated internal funds transfer pricing (FTP) funding credits and charges. The FTP methodology allocates credits to each business segment for deposits and other funds provided as well as charges for loans and other assets being funded. This credit or charge is based on matching stated or implied maturities for these assets and liabilities. The FTP crediting rates for deposits reflect the long-term value of deposits and other funding sources based on their implied maturity. FTP charge rates for funding assets reflect a matched cost of funds based on the pricing and duration characteristics of

the assets. For acquired loans and deposits, matched maturity funding is determined based on origination date. Accordingly, the FTP process reflects the transfer of interest rate risk exposures to the Corporate Treasury department within the Finance segment, where such exposures are centrally managed. Effective January 1, 2016, in conjunction with the effective date for regulatory Liquidity Coverage Ratio (LCR) requirements, the Corporation prospectively implemented an additional FTP charge, primarily for the cost of maintaining liquid assets to support potential draws on unfunded loan commitments and for the long-term economic cost of holding collateral for secured deposits. The allowance for loan losses is allocated to the business segments based on the methodology used to estimate the consolidated allowance for loan losses described in Note 1. The related provision for loan losses is assigned based on the amount necessary to maintain an allowance for loan losses appropriate for each business segment. Noninterest income and expenses directly attributable to a line of business are assigned to that business segment. Direct expenses incurred by areas whose services support the overall Corporation are allocated to the business segments as follows: product processing expenditures are allocated based on standard unit costs applied to actual volume measurements; administrative expenses are allocated based on estimated time expended; and corporate overhead is assigned 50 percent based on the ratio of the business segment's noninterest expenses to total noninterest expenses incurred by all business segments and 50 percent based on the ratio of the business segment's attributed equity to total attributed equity of all business segments. Equity is attributed based on credit, operational and interest rate risks. Most of the equity attributed relates to credit risk, which is determined based on the credit score and expected remaining life of each loan, letter of credit and unused commitment recorded in the business segments. Operational risk is allocated based on loans and letters of credit, deposit balances, non-earning assets, trust assets under management, certain noninterest income items, and the nature and extent of expenses incurred by business units. Virtually all interest rate risk is assigned to Finance, as are the Corporation's hedging activities.

The following discussion provides information about the activities of each business segment. A discussion of the financial results and the factors impacting 2018 performance can be found in the section entitled "Business Segments" in the financial review.

The Business Bank meets the needs of small and middle market businesses, multinational corporations and governmental entities by offering various products and services, including commercial loans and lines of credit, deposits, cash management, capital market products, international trade finance, letters of credit, foreign exchange management services and loan syndication services.

The Retail Bank includes a full range of personal financial services, consisting of consumer lending, consumer deposit gathering and mortgage loan origination. This business segment offers a variety of consumer products, including deposit accounts, installment loans, credit cards, student loans, home equity lines of credit and residential mortgage loans.

Wealth Management offers products and services consisting of fiduciary services, private banking, retirement services, investment management and advisory services, investment banking and brokerage services. This business segment also offers the sale of annuity products, as well as life, disability and long-term care insurance products.

The Finance segment includes the Corporation's securities portfolio and asset and liability management activities. This segment is responsible for managing the Corporation's funding, liquidity and capital needs, performing interest sensitivity analysis and executing various strategies to manage the Corporation's exposure to liquidity, interest rate risk and foreign exchange risk.

The Other category includes the income and expense impact of equity and cash, tax benefits not assigned to specific business segments, charges of an unusual or infrequent nature that are not reflective of the normal operations of the business segments and miscellaneous other expenses of a corporate nature.

Business segment financial results are as follows:

(dollar amounts in millions) **Year Ended December 31, 2018**	Business Bank	Retail Bank	Wealth Management	Finance	Other	Total
Earnings summary:						
Net interest income (expense)	$ 1,613	$ 548	$ 181	$ (46)	$ 56	$ 2,352
Provision for credit losses	6	(1)	(3)	—	(3)	(1)
Noninterest income	547	136	266	27	—	976
Noninterest expenses	847	602	293	(4)	56	1,794
Provision (benefit) for income taxes	283	18	36	(14)	(23) (a)	300
Net income (loss)	$ 1,024	$ 65	$ 121	$ (1)	$ 26	$ 1,235
Net credit-related charge-offs (recoveries)	$ 52	$ —	$ (1)	$ —	$ —	$ 51
Selected average balances:						
Assets	$43,207	$ 2,633	$ 5,214	$ 13,705	$ 5,965	$ 70,724
Loans	41,618	2,067	5,081	—	—	48,766
Deposits	30,116	20,812	3,941	941	125	55,935
Statistical data:						
Return on average assets (b)	2.37%	0.31%	2.32%	N/M	N/M	1.75%
Efficiency ratio (c)	39.22	87.47	65.60	N/M	N/M	53.56

(dollar amounts in millions) **Year Ended December 31, 2017**	Business Bank	Retail Bank	Wealth Management	Finance	Other	Total
Earnings summary:						
Net interest income (expense)	$ 1,513	$ 453	$ 169	$ (111)	$ 37	$ 2,061
Provision for credit losses	69	2	1	—	2	74
Noninterest income	639	154	255	49	10	1,107
Noninterest expenses	918	615	285	(4)	46	1,860
Provision (benefit) for income taxes	410	(4)	51	(35)	69 (a)	491
Net income (loss)	$ 755	$ (6)	$ 87	$ (23)	$ (70)	$ 743
Net credit-related (recoveries) charge-offs	$ 96	$ 1	$ (5)	$ —	$ —	$ 92
Selected average balances:						
Assets	$42,653	$ 2,626	$ 5,401	$ 13,954	$ 6,818	$71,452
Loans	41,241	2,061	5,256	—	—	48,558
Deposits	31,999	20,775	4,081	241	162	57,258
Statistical data:						
Return on average assets (b)	1.77%	(0.03)%	1.61%	N/M	N/M	1.04%
Efficiency ratio (c)	42.67	100.72	67.06	N/M	N/M	58.64

(Table continues on following page)

(dollar amounts in millions) Year Ended December 31, 2016	Business Bank	Retail Bank	Wealth Management	Finance	Other	Total
Earnings summary:						
Net interest income (expense)	$ 1,506	$ 393	$ 158	$ (283)	$ 23	$ 1,797
Provision for credit losses	254	(2)	(4)	—	—	248
Noninterest income	608	153	243	43	4	1,051
Noninterest expenses	963	643	301	(4)	27	1,930
Provision (benefit) for income taxes	284	(34)	36	(90)	(3)	193
Net income (loss)	$ 613	$ (61)	$ 68	$ (146)	$ 3	$ 477
Net credit-related charge-offs	$ 155	$ 2	$ —	$ —	$ —	$ 157
Selected average balances:						
Assets	$ 43,373	$ 2,675	$ 5,232	$ 13,993	$ 6,470	$ 71,743
Loans	41,954	1,994	5,048	—	—	48,996
Deposits	32,930	20,332	4,126	88	265	57,741
Statistical data:						
Return on average assets (b)	1.41%	(0.29)%	1.32%	N/M	N/M	0.67%
Efficiency ratio (c)	45.52	116.63	75.03	N/M	N/M	67.62

(a) Primarily reflected discrete tax items, including a benefit of $48 million in 2018 and a net charge of $72 million in 2017.
(b) Return on average assets is calculated based on the greater of average assets or average liabilities and attributed equity.
(c) Noninterest expenses as a percentage of the sum of net interest income and noninterest income excluding gains (losses) from securities and a derivative contract tied to the conversion rate of Visa Class B shares.
N/M – not meaningful

The Corporation operates in three primary markets - Texas, California, and Michigan, as well as in Arizona and Florida, with select businesses operating in several other states, and in Canada and Mexico. The Corporation produces market segment results for the Corporation's three primary geographic markets as well as Other Markets. Other Markets includes Florida, Arizona, the International Finance division and businesses with a national perspective. The Finance & Other category includes the Finance segment and the Other category as previously described. Market segment results are provided as supplemental information to the business segment results and may not meet all operating segment criteria as set forth in GAAP. For comparability purposes, amounts in all periods are based on market segments and methodologies in effect at December 31, 2018.

A discussion of the financial results and the factors impacting performance can be found in the section entitled "Market Segments" in the financial review.

Market segment financial results are as follows:

(dollar amounts in millions) Year Ended December 31, 2018	Michigan	California	Texas	Other Markets	Finance & Other	Total
Earnings summary:						
Net interest income	$ 727	$ 788	$ 475	$ 352	$ 10	$ 2,352
Provision for credit losses	30	31	(53)	(6)	(3)	(1)
Noninterest income	296	164	130	359	27	976
Noninterest expenses	577	424	365	376	52	1,794
Provision (benefit) for income taxes	90	122	64	61	(37) (a)	300
Net income	$ 326	$ 375	$ 229	$ 280	$ 25	$ 1,235
Net credit-related charge-offs	$ 7	$ 27	$ 12	$ 5	$ —	$ 51
Selected average balances:						
Assets	$ 13,207	$ 18,532	$ 10,389	$ 8,925	$ 19,671	$ 70,724
Loans	12,531	18,283	9,821	8,131	—	48,766
Deposits	20,772	16,964	8,993	8,141	1,065	55,935
Statistical data:						
Return on average assets (b)	1.52%	2.02%	2.20%	3.14%	N/M	1.75%
Efficiency ratio (c)	56.16	44.58	60.28	52.95	N/M	53.56

(Table continues on following page)

(dollar amounts in millions) Year Ended December 31, 2017	Michigan	California	Texas	Other Markets	Finance & Other	Total
Earnings summary:						
Net interest income (expense)	$ 657	$ 711	$ 451	$ 316	$ (74)	$ 2,061
Provision for credit losses	8	104	(72)	33	1	74
Noninterest income	324	171	131	423	58	1,107
Noninterest expenses	589	404	375	450	42	1,860
Provision for income taxes	137	145	104	71	34 (a)	491
Net income (loss)	$ 247	$ 229	$ 175	$ 185	$ (93)	$ 743
Net credit-related (recoveries) charge-offs	$ (1)	$ 33	$ 46	$ 14	$ —	$ 92
Selected average balances:						
Assets	$ 13,395	$ 18,264	$ 10,443	$ 8,578	$ 20,772	$ 71,452
Loans	12,677	18,008	9,969	7,904	—	48,558
Deposits	21,823	17,533	9,625	7,874	403	57,258
Statistical data:						
Return on average assets (b)	1.09%	1.24%	1.61%	2.14%	N/M	1.04%
Efficiency ratio (c)	59.84	45.82	64.30	60.99	N/M	58.64

(dollar amounts in millions) Year Ended December 31, 2016	Michigan	California	Texas	Other Markets	Finance & Other	Total
Earnings summary:						
Net interest income (expense)	$ 616	$ 678	$ 444	$ 319	$ (260)	$ 1,797
Provision for credit losses	9	21	225	(7)	—	248
Noninterest income	320	162	129	393	47	1,051
Noninterest expenses	618	435	408	446	23	1,930
Provision (benefit) for income taxes	99	138	(21)	70	(93)	193
Net income (loss)	$ 210	$ 246	$ (39)	$ 203	$ (143)	$ 477
Net credit-related charge-offs	$ 9	$ 26	$ 118	$ 4	$ —	$ 157
Selected average balances:						
Assets	$ 13,105	$ 18,012	$ 11,101	$ 9,062	$ 20,463	$ 71,743
Loans	12,457	17,731	10,637	8,171	—	48,996
Deposits	21,777	17,438	10,168	8,005	353	57,741
Statistical data:						
Return on average assets (b)	0.93%	1.33%	(0.32)%	2.24%	N/M	0.67%
Efficiency ratio (c)	65.65	51.84	70.93	62.67	N/M	67.62

(a) Primarily reflected discrete tax items, including a benefit of $48 million in 2018 and a net charge of $72 million in 2017.

(b) Return on average assets is calculated based on the greater of average assets or average liabilities and attributed equity.

(c) Noninterest expenses as a percentage of the sum of net interest income and noninterest income excluding gains (losses) from securities and a derivative contract tied to the conversion rate of Visa Class B shares.

N/M – not meaningful

NOTE 24 - PARENT COMPANY FINANCIAL STATEMENTS

BALANCE SHEETS - COMERICA INCORPORATED

(in millions, except share data)

December 31	2018	2017
Assets		
Cash and due from subsidiary bank	$ 1,524	$ 1,059
Other short-term investments	88	92
Investment in subsidiaries, principally banks	7,429	7,467
Premises and equipment	1	2
Other assets	169	127
Total assets	$ 9,211	$ 8,747
Liabilities and Shareholders' Equity		
Medium- and long-term debt	$ 1,459	$ 602
Other liabilities	245	182
Total liabilities	1,704	784
Common stock - $5 par value:		
Authorized - 325,000,000 shares		
Issued - 228,164,824 shares	1,141	1,141
Capital surplus	2,148	2,122
Accumulated other comprehensive loss	(609)	(451)
Retained earnings	8,781	7,887
Less cost of common stock in treasury - 68,081,176 shares at 12/31/18 and 55,306,483 shares at 12/31/17	(3,954)	(2,736)
Total shareholders' equity	7,507	7,963
Total liabilities and shareholders' equity	$ 9,211	$ 8,747

STATEMENTS OF INCOME - COMERICA INCORPORATED

(in millions)

Years Ended December 31	2018	2017	2016
Income			
Income from subsidiaries:			
Dividends from subsidiaries	$ 1,135	$ 915	$ 549
Other interest income	13	3	1
Intercompany management fees	228	136	138
Other noninterest income	—	8	3
Total income	1,376	1,062	691
Expenses			
Interest on medium- and long-term debt	29	13	10
Salaries and benefits expense	140	127	114
Net occupancy expense	5	5	5
Equipment expense	1	1	1
Restructuring charges	2	6	33
Other noninterest expenses	75	80	72
Total expenses	252	232	235
Income before benefit for income taxes and equity in undistributed earnings of subsidiaries	1,124	830	456
Benefit for income taxes	(5)	(26)	(28)
Income before equity in undistributed earnings of subsidiaries	1,129	856	484
Equity in undistributed earnings of subsidiaries, principally banks	106	(113)	(7)
Net income	1,235	743	477
Less income allocated to participating securities	8	5	4
Net income attributable to common shares	$ 1,227	$ 738	$ 473

STATEMENTS OF CASH FLOWS - COMERICA INCORPORATED

(in millions) Years Ended December 31	2018	2017	2016
Operating Activities			
Net income	$ 1,235	$ 743	$ 477
Adjustments to reconcile net income to net cash provided by operating activities:			
Undistributed earnings of subsidiaries, principally banks	(106)	113	7
Depreciation and amortization	1	1	1
Net periodic defined benefit cost (credit)	4	(2)	1
Share-based compensation expense	21	16	14
Benefit for deferred income taxes	(1)	(10)	(3)
Other, net	10	59	6
Net cash provided by operating activities	1,164	920	503
Financing Activities			
Medium- and long-term debt:			
Issuances	850	—	—
Common Stock:			
Repurchases	(1,338)	(560)	(320)
Cash dividends paid	(263)	(180)	(152)
Issuances of common stock under employee stock plans	52	118	157
Net cash used in financing activities	(699)	(622)	(315)
Net increase (decrease) in cash and cash equivalents	465	298	188
Cash and cash equivalents at beginning of period	1,059	761	573
Cash and cash equivalents at end of period	$ 1,524	$ 1,059	$ 761
Interest paid	$ 11	$ 12	$ 9
Income taxes recovered	$ (155)	$ (331)	$ (139)

NOTE 25 - SUMMARY OF QUARTERLY FINANCIAL STATEMENTS (UNAUDITED)

The following quarterly information is unaudited. However, in the opinion of management, the information reflects all adjustments, which are necessary for the fair presentation of the results of operations, for the periods presented.

	2018			
(in millions, except per share data)	Fourth Quarter	Third Quarter	Second Quarter	First Quarter
Interest income	$ 704	$ 675	$ 650	$ 590
Interest expense	90	76	60	41
Net interest income	614	599	590	549
Provision for credit losses	16	—	(29)	12
Net securities (losses) gains	—	(20)	—	1
Noninterest income excluding net securities losses	250	254	248	243
Noninterest expenses	448	452	448	446
Provision for income taxes	90	63	93	54
Net income	310	318	326	281
Less income allocated to participating securities	2	2	2	2
Net income attributable to common shares	$ 308	$ 316	$ 324	$ 279
Earnings per common share:				
Basic	$ 1.91	$ 1.89	$ 1.90	$ 1.62
Diluted	1.88	1.86	1.87	1.59
Comprehensive income	312	296	290	178

	2017			
(in millions, except per share data)	Fourth Quarter	Third Quarter	Second Quarter	First Quarter
Interest income	$ 578	$ 579	$ 529	$ 496
Interest expense	33	33	29	26
Net interest income	545	546	500	470
Provision for credit losses	17	24	17	16
Noninterest income	285	275	276	271
Noninterest expenses	483	463	457	457
Provision for income taxes	218	108	99	66
Net income	112	226	203	202
Less income allocated to participating securities	—	2	1	2
Net income attributable to common shares	$ 112	$ 224	$ 202	$ 200
Earnings per common share:				
Basic	$ 0.65	$ 1.29	$ 1.15	$ 1.15
Diluted	0.63	1.26	1.13	1.11
Comprehensive income	107	228	221	206

NOTE 26 - REVENUE FROM CONTRACTS WITH CUSTOMERS

Revenue from contracts with customers comprises the noninterest income earned by the Corporation in exchange for services provided to customers. The following table presents the composition of revenue from contracts with customers, segregated from other sources of noninterest income, by business segment.

(in millions)	Business Bank	Retail Bank	Wealth Management	Finance & Other	Total
Year Ended December 31, 2018					
Revenue from contracts with customers:					
Card fees (a)	$ 201	$ 39	$ 4	$ —	$ 244
Service charges on deposit accounts (a)	134	72	5	—	211
Fiduciary income	—	—	206	—	206
Commercial loan servicing fees (b)	18	—	—	—	18
Brokerage fees	—	—	27	—	27
Other noninterest income (c)	12	19	17	1	49
Total revenue from contracts with customers	365	130	259	1	755
Other sources of noninterest income	182	6	7	26	221
Total noninterest income	$ 547	$ 136	$ 266	$ 27	$ 976
Year Ended December 31, 2017					
Card fees	$ 285	$ 43	$ 5	$ —	$ 333
Service charges on deposit accounts	143	79	5	—	227
Fiduciary income	—	—	198	—	198
Commercial lending fees	84	—	1	—	85
Letter of credit fees	44	—	1	—	45
Bank-owned life insurance	—	—	—	43	43
Foreign exchange income	43	—	2	—	45
Brokerage fees	—	—	23	—	23
Other noninterest income	40	32	20	16	108
Total noninterest income	$ 639	$ 154	$ 255	$ 59	$ 1,107
Year Ended December 31, 2016					
Card fees	$ 257	$ 42	$ 4	$ —	$ 303
Services charges on deposit accounts	136	79	4	—	219
Fiduciary income	—	—	190	—	190
Commercial lending fees	90	—	—	(1)	89
Letter of credit fees	49	—	1	—	50
Bank-owned life insurance	—	—	—	42	42
Foreign exchange income	39	1	2	—	42
Brokerage fees	—	—	19	—	19
Other noninterest income	37	31	23	6	97
Total noninterest income	$ 608	$ 153	$ 243	$ 47	$ 1,051

(a) Adoption of Topic 606 resulted in a change in presentation which records certain costs in the same category as the associated revenues. The effect of this change was to reduce card fees by $140 million and service charges on deposit accounts by $5 million for the twelve months ended December 31, 2018. Refer to Note 1 for further information.
(b) Included in commercial lending fees on the Consolidated Statements of Income.
(c) Excludes derivative, warrant and other miscellaneous income.

Adjustments to revenue during the year ended December 31, 2018 for refunds or credits relating to prior periods were not significant.

Revenue from contracts with customers did not generate significant contract assets and liabilities.

REPORT OF MANAGEMENT

The management of Comerica Incorporated (the Corporation) is responsible for the accompanying consolidated financial statements and all other financial information in this Annual Report. The consolidated financial statements have been prepared in conformity with U.S. generally accepted accounting principles and include amounts which of necessity are based on management's best estimates and judgments and give due consideration to materiality. The other financial information herein is consistent with that in the consolidated financial statements.

In meeting its responsibility for the reliability of the consolidated financial statements, management develops and maintains effective internal controls, including those over financial reporting, as defined in the Securities and Exchange Act of 1934, as amended. The Corporation's internal control over financial reporting includes policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Corporation; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of the consolidated financial statements in conformity with U.S. generally accepted accounting principles, and that receipts and expenditures of the Corporation are made only in accordance with authorizations of management and directors of the Corporation; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Corporation's assets that could have a material effect on the consolidated financial statements.

Management assessed, with participation of the Corporation's Chief Executive Officer and Chief Financial Officer, internal control over financial reporting as it relates to the Corporation's consolidated financial statements presented in conformity with U.S. generally accepted accounting principles as of December 31, 2018. The assessment was based on criteria for effective internal control over financial reporting described in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). Based on this assessment, management determined that internal control over financial reporting is effective as it relates to the Corporation's consolidated financial statements presented in conformity with U.S. generally accepted accounting principles as of December 31, 2018.

Because of inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

The Corporation's internal control over financial reporting as of December 31, 2018 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their accompanying report.

The Corporation's Board of Directors oversees management's internal control over financial reporting and financial reporting responsibilities through its Audit Committee as well as various other committees. The Audit Committee, which consists of directors who are not officers or employees of the Corporation, meets regularly with management, internal audit and the independent public accountants to assure that the Audit Committee, management, internal auditors and the independent public accountants are carrying out their responsibilities, and to review auditing, internal control and financial reporting matters.

Ralph W. Babb Jr. Chairman and Chief Executive Officer	Muneera S. Carr Executive Vice President and Chief Financial Officer	Mauricio A. Ortiz Senior Vice President and Chief Accounting Officer

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of Comerica Incorporated

Opinion on Internal Control over Financial Reporting
We have audited Comerica Incorporated and subsidiaries' internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Comerica Incorporated and subsidiaries (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2018 and 2017, and the related consolidated statements of income, comprehensive income, changes in shareholders' equity and cash flows for each of the three years in the period ended December 31, 2018, and the related notes of the Company and our report dated February 12, 2019 expressed an unqualified opinion thereon.

Basis for Opinion
The Company's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Report of Management. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting
A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLP

Dallas, TX
February 12, 2019

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of Comerica Incorporated

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Comerica Incorporated and subsidiaries (the Company) as of December 31, 2018 and 2017, and the related consolidated statements of income, comprehensive income, changes in shareholders' equity and cash flows for each of the three years in the period ended December 31, 2018, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the consolidated financial position of the Company at December 31, 2018 and 2017, and the consolidated results of their operations and their cash flows for each of the three years in the period ended December 31, 2018, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 12, 2019 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 1992.
Dallas, TX
February 12, 2019

HISTORICAL REVIEW - AVERAGE BALANCE SHEETS
Comerica Incorporated and Subsidiaries

CONSOLIDATED FINANCIAL INFORMATION

(in millions)

Years Ended December 31	2018	2017	2016	2015	2014
ASSETS					
Cash and due from banks	$ 1,135	$ 1,209	$ 1,146	$ 1,059	$ 934
Interest-bearing deposits with banks	4,700	5,443	5,099	6,158	5,513
Other short-term investments	134	92	102	106	109
Investment securities	11,810	12,207	12,348	10,237	9,350
Commercial loans	30,534	30,415	31,062	31,501	29,715
Real estate construction loans	3,155	2,958	2,508	1,884	1,909
Commercial mortgage loans	9,131	9,005	8,981	8,697	8,706
Lease financing	470	509	684	783	834
International loans	1,021	1,157	1,367	1,441	1,376
Residential mortgage loans	1,983	1,989	1,894	1,878	1,778
Consumer loans	2,472	2,525	2,500	2,444	2,270
Total loans	48,766	48,558	48,996	48,628	46,588
Less allowance for loan losses	(695)	(728)	(730)	(621)	(601)
Net loans	48,071	47,830	48,266	48,007	45,987
Accrued income and other assets	4,874	4,671	4,782	4,680	4,443
Total assets	$ 70,724	$ 71,452	$ 71,743	$ 70,247	$ 66,336
LIABILITIES AND SHAREHOLDERS' EQUITY					
Noninterest-bearing deposits	$ 29,241	$ 31,013	$ 29,751	$ 28,087	$ 25,019
Money market and interest-bearing checking deposits	22,378	21,585	22,744	24,073	22,891
Savings deposits	2,199	2,133	2,013	1,841	1,744
Customer certificates of deposit	2,092	2,471	3,200	4,209	4,869
Foreign office time deposits	25	56	33	116	261
Total interest-bearing deposits	26,694	26,245	27,990	30,239	29,765
Total deposits	55,935	57,258	57,741	58,326	54,784
Short-term borrowings	62	277	138	93	200
Accrued expenses and other liabilities	1,076	996	1,273	1,389	1,016
Medium- and long-term debt	5,842	4,969	4,917	2,905	2,963
Total liabilities	62,915	63,500	64,069	62,713	58,963
Total shareholders' equity	7,809	7,952	7,674	7,534	7,373
Total liabilities and shareholders' equity	$ 70,724	$ 71,452	$ 71,743	$ 70,247	$ 66,336

HISTORICAL REVIEW - STATEMENTS OF INCOME
Comerica Incorporated and Subsidiaries

CONSOLIDATED FINANCIAL INFORMATION

(in millions, except per share data)

Years Ended December 31	2018	2017	2016	2015	2014
INTEREST INCOME					
Interest and fees on loans	$ 2,262	$ 1,872	$ 1,635	$ 1,551	$ 1,525
Interest on investment securities	265	250	247	216	211
Interest on short-term investments	92	60	27	17	14
Total interest income	2,619	2,182	1,909	1,784	1,750
INTEREST EXPENSE					
Interest on deposits	122	42	40	43	45
Interest on short-term borrowings	1	3	—	—	—
Interest on medium- and long-term debt	144	76	72	52	50
Total interest expense	267	121	112	95	95
Net interest income	2,352	2,061	1,797	1,689	1,655
Provision for credit losses	(1)	74	248	147	27
Net interest income after provision for loan losses	2,353	1,987	1,549	1,542	1,628
NONINTEREST INCOME					
Card fees	244	333	303	276	81
Service charges on deposit accounts	211	227	219	223	215
Fiduciary income	206	198	190	187	180
Commercial lending fees	85	85	89	99	98
Letter of credit fees	40	45	50	53	57
Bank-owned life insurance	39	43	42	40	39
Foreign exchange income	47	45	42	40	40
Brokerage fees	27	23	19	17	17
Net securities losses	(19)	—	—	(2)	1
Other noninterest income	96	108	97	102	129
Total noninterest income	976	1,107	1,051	1,035	857
NONINTEREST EXPENSES					
Salaries and benefits expense	1,009	961	989	1,000	972
Outside processing fee expense	255	366	336	318	111
Net occupancy expense	152	154	157	159	171
Equipment expense	48	45	53	53	57
Restructuring charges	53	45	93	—	—
Software expense	125	126	119	99	95
FDIC insurance expense	42	51	54	37	33
Advertising expense	30	28	21	24	23
Litigation-related expenses	—			(32)	4
Gain on debt redemption	—	—	—	—	(32)
Other noninterest expenses	80	84	108	169	181
Total noninterest expenses	1,794	1,860	1,930	1,827	1,615
Income before income taxes	1,535	1,234	670	750	870
Provision for income taxes	300	491	193	229	277
NET INCOME	$ 1,235	$ 743	$ 477	$ 521	$ 593
Less income allocated to participating securities	8	5	4	6	7
Net income attributable to common shares	$ 1,227	$ 738	$ 473	$ 515	$ 586
Earnings per common share:					
Basic	$ 7.31	$ 4.23	$ 2.74	$ 2.93	$ 3.28
Diluted	7.20	4.14	2.68	2.84	3.16
Comprehensive income	1,076	762	523	504	572
Cash dividends declared on common stock	309	193	154	148	143
Cash dividends declared per common share	1.84	1.09	0.89	0.83	0.79

HISTORICAL REVIEW - STATISTICAL DATA
Comerica Incorporated and Subsidiaries

CONSOLIDATED FINANCIAL INFORMATION

Years Ended December 31	2018	2017	2016	2015	2014
Average Rates					
Interest-bearing deposits with banks	**1.94%**	1.09%	0.51%	0.26%	0.26%
Other short-term investments	**0.96**	0.64	0.61	0.81	0.54
Investment securities	**2.19**	2.05	2.02	2.13	2.25
Commercial loans	**4.64**	3.82	3.25	3.06	3.11
Real estate construction loans	**5.21**	4.18	3.63	3.48	3.41
Commercial mortgage loans	**4.69**	3.97	3.49	3.41	3.75
Lease financing	**3.82**	2.63	2.64	3.15	2.30
International loans	**4.97**	4.07	3.63	3.58	3.65
Residential mortgage loans	**3.77**	3.70	3.76	3.77	3.82
Consumer loans	**4.41**	3.70	3.32	3.26	3.20
Total loans	**4.64**	3.85	3.34	3.19	3.27
Interest income as a percentage of earning assets	**3.99**	3.29	2.88	2.75	2.85
Domestic deposits	**0.45**	0.16	0.14	0.14	0.14
Deposits in foreign offices	**1.19**	0.64	0.35	1.02	0.82
Total interest-bearing deposits	**0.46**	0.16	0.14	0.14	0.15
Short-term borrowings	**1.90**	1.14	0.45	0.05	0.03
Medium- and long-term debt	**2.42**	1.51	1.45	1.80	1.68
Interest expense as a percentage of interest-bearing sources	**0.82**	0.38	0.34	0.29	0.29
Interest rate spread	**3.17**	2.91	2.54	2.46	2.56
Impact of net noninterest-bearing sources of funds	**0.41**	0.20	0.17	0.14	0.13
Net interest margin as a percentage of earning assets	**3.58%**	3.11%	2.71%	2.60%	2.69%
Ratios					
Return on average common shareholders' equity	**15.82%**	9.34%	6.22%	6.91%	8.05%
Return on average assets	**1.75**	1.04	0.67	0.74	0.89
Efficiency ratio (a)	**53.56**	58.64	67.62	67.03	64.26
Common equity tier 1 capital as a percentage of risk weighted assets (b)	**11.14**	11.68	11.09	10.54	n/a
Tier 1 capital as a percentage of risk-weighted assets (b)	**11.14**	11.68	11.09	10.54	10.50
Total capital as a percentage of risk-weighted assets	**13.21**	13.84	13.27	12.69	12.51
Common equity ratio	**10.60**	11.13	10.68	10.52	10.70
Tangible common equity as a percentage of tangible assets (c)	**9.78**	10.32	9.89	9.70	9.85
Per Common Share Data					
Book value at year-end	**$ 46.89**	$ 46.07	$ 44.47	$ 43.03	$ 41.35
Market value at year-end	**68.69**	86.81	68.11	41.83	46.84
Market value for the year					
High	**102.66**	88.22	70.44	53.45	53.50
Low	**63.69**	64.04	30.48	39.52	42.73
Other Data (share data in millions)					
Average common shares outstanding - basic	**168**	174	172	176	179
Average common shares outstanding - diluted	**171**	178	177	181	185
Number of banking centers	**436**	438	458	477	481
Number of employees (full-time equivalent)	**7,865**	7,999	7,960	8,880	8,876

(a) Noninterest expenses as a percentage of the sum of net interest income and noninterest income excluding net securities gains (losses) from securities and a derivative contract tied to the conversion rate of Visa Class B shares.

(b) Ratios calculated based on the risk-based capital requirements in effect at the time. The U.S. implementation of the Basel III regulatory capital framework became effective on January 1, 2015, with transitional provisions.

(c) See Supplemental Financial Data section for reconcilements of non-GAAP financial measures.

n/a - not applicable

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized as of February 12, 2019.

COMERICA INCORPORATED

By: /s/ Ralph W. Babb, Jr.
Ralph W. Babb, Jr.
Chairman and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed by the following persons on behalf of the registrant in the capacities indicated as of February 12, 2019.

/s/ Ralph W. Babb, Jr. Ralph W. Babb, Jr.	Chairman and Chief Executive Officer and Director (Principal Executive Officer)
/s/ Muneera S. Carr Muneera S. Carr	Executive Vice President and Chief Financial Officer (Principal Financial Officer)
/s/ Mauricio A. Ortiz Mauricio A. Ortiz	Senior Vice President and Chief Accounting Officer (Principal Accounting Officer)
/s/ Michael E. Collins Michael E. Collins	Director
/s/ Roger A. Cregg Roger A. Cregg	Director
/s/ T. Kevin DeNicola T. Kevin DeNicola	Director
/s/ Curtis C. Farmer Curtis C. Farmer	Director
/s/ Jacqueline P. Kane Jacqueline P. Kane	Director
/s/ Richard G. Lindner Richard G. Lindner	Director
/s/ Barbara R. Smith Barbara R. Smith	Director
/s/ Robert S. Taubman Robert S. Taubman	Director
/s/ Reginald M. Turner, Jr. Reginald M. Turner, Jr.	Director
/s/ Nina G. Vaca Nina G. Vaca	Director
/s/ Michael G. Van de Ven Michael G. Van de Ven	Director

SHAREHOLDER INFORMATION

Common Stock:
Comerica's common stock trades under the symbol CMA on the New York Stock Exchange (NYSE). Subject to approval of the board of directors and applicable regulatory requirements, dividends customarily are paid on or about January 1, April 1, July 1 and October 1.

Transfer Agent/Registration and Shareholder Assistance:

- Inquiries related to shareholder name change, address or ownership of stock, and lost or stolen stock certificates
- Eliminate duplicate mailings received at one address
- Reinvest dividends and invest up to $10,000 each month for the purchase of additional shares
- Direct deposit of dividends

CONTACT INFORMATION:
Website: computershare.com/investor
Email: web.queries@computershare.com
Phone: 877.536.3551 or 781.575.3100

WRITTEN REQUESTS:
Computershare
P.O. Box 505000
Louisville, KY 40233-5000

CERTIFIED/OVERNIGHT MAIL:
Computershare
462 South 4th Street, Suite 1600
Louisville, KY 40202

Officer Certifications:
On May 16, 2018, Comerica's Chief Executive Officer submitted his annual certification to the New York Stock Exchange stating that he was not aware of any violation by Comerica of the Exchange's corporate governance listing standards. Comerica filed the certifications by its Chief Executive Officer and Chief Financial Officer required by Section 302 of the Sarbanes-Oxley Act of 2002 as exhibits to its Annual Report on Form 10-K for the fiscal year ended December 31, 2018.

Investor Relations Information:
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214.462.6831

General Information:
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Product Information 800.292.1300

COMERICA CORPORATE HEADQUARTERS

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