

PUBLIC DISCLOSURE

October 15, 2018

COMMUNITY REINVESTMENT ACT PERFORMANCE EVALUATION

The Northern Trust Company
RSSD# 210434

50 South La Salle Street
Chicago, IL 60603

Federal Reserve Bank of Chicago

230 South LaSalle Street
Chicago, IL 60604-1413

NOTE: This document is an evaluation of this bank's record of meeting the credit needs of its entire community, including low- and moderate-income neighborhoods, consistent with safe and sound operation of the bank. This evaluation is not, nor should it be construed as, an assessment of the financial condition of this bank. The rating assigned to this bank does not represent an analysis, conclusion or opinion of the federal financial supervisory agency concerning the safety and soundness of this financial bank.

TABLE OF CONTENTS

PERFORMANCE EVALUATION	2
INSTITUTION'S RATING	3
The Northern Trust Company's Overall CRA Rating: Outstanding	3
Summary of Major Factors that Support the Rating	3
THE NORTHERN TRUST COMPANY	4
SCOPE OF THE EXAMINATION	4
DESCRIPTION OF INSTITUTION	5
CONCLUSIONS WITH RESPECT TO PERFORMANCE CRITERIA	8
WASHINGTON-ARLINGTON-ALEXANDRIA, DC-VA-MD-WV MSA 47900	11
CRA RATING FOR WASHINGTON-ARLINGTON-ALEXANDRIA, DC-VA-MD-WV MSA 47900 : Outstanding	11
DESCRIPTION OF INSTITUTION'S OPERATIONS IN WASHINGTON-ARLINGTON-ALEXANDRIA, DC-VA-MD-WV MSA 47900:	11
CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN WASHINGTON-ARLINGTON-ALEXANDRIA, DC-VA-MD-WV MSA 47900	17
STATE OF ILLINOIS	19
DESCRIPTION OF INSTITUTION'S OPERATIONS IN ILLINOIS	20
CONCLUSIONS WITH RESPECT TO COMMUNITY DEVELOPMENT TEST IN ARIZONA	34
TUCSON, AZ MSA 46060 – LIMITED REVIEW	43
DESCRIPTION OF INSTITUTION'S OPERATIONS IN TUCSON, AZ MSA 46060	43
SAN DIEGO-CARLSBAD, CA MSA 41740 – LIMITED REVIEW	79
DESCRIPTION OF INSTITUTION'S OPERATIONS IN SAN DIEGO-CARLSBAD, CA MSA 41740	79
MIAMI-FORT LAUDERDALE-WEST PALM BEACH, FL 33100 – FULL REVIEW	103
DESCRIPTION OF INSTITUTION'S OPERATIONS IN MIAMI-FORT LAUDERDALE-WEST PALM BEACH, FL MSA 33100	103
CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN MIAMI-FORT LAUDERDALE-WEST PALM BEACH, FL MSA 33100	112
CAPE CORAL-FORT MYERS, FL 15980 – FULL REVIEW	115
DESCRIPTION OF INSTITUTION'S OPERATIONS IN CAPE CORAL-FORT MYERS MSA 15980	115
CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN THE CAPE CORAL-FORT MYERS, FL MSA 15980	119
NAPLES-IMMOKALEE-MARCO ISLAND, FL 34940 – FULL REVIEW	122
NORTH PORT-SARASOTA-BRADENTON, FL MSA 35840– LIMITED REVIEW	132
DESCRIPTION OF INSTITUTION'S OPERATIONS IN NORTH PORT-SARASOTA-BRADENTON, FL MSA 35840	132
GRAND RAPIDS-WYOMING, MI MSA 24340 – LIMITED REVIEW	178
DESCRIPTION OF INSTITUTION'S OPERATIONS IN GRAND RAPIDS-WYOMING, MI MSA 24340	178

TABLE OF CONTENTS

PERFORMANCE EVALUATION	2
INSTITUTION'S RATING	5
Summary of Major Factors that Support the Rating	5
SCOPE OF THE EXAMINATION	6
DESCRIPTION OF INSTITUTION	7
CONCLUSIONS WITH RESPECT TO PERFORMANCE CRITERIA	10
FAIR LENDING OR OTHER ILLEGAL CREDIT PRACTICES REVIEW	12
WASHINGTON-ARLINGTON-ALEXANDRIA, DC-VA-MD-WV MSA 47900	13
CRA RATING FOR WASHINGTON-ARLINGTON-ALEXANDRIA, DC-VA-MD-WV MSA 47900 :	
Outstanding	13
SCOPE OF EXAMINATION	13
DESCRIPTION OF INSTITUTION'S OPERATIONS IN WASHINGTON-ARLINGTON-ALEXANDRIA, DC-VA-MD-WV MSA 47900	13
CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN WASHINGTON-ARLINGTON-ALEXANDRIA, DC-VA-MD-WV MSA 47900	19
STATE OF ILLINOIS	21
CRA RATING FOR ILLINOIS: Outstanding	21
SCOPE OF EXAMINATION	21
DESCRIPTION OF INSTITUTION'S OPERATIONS IN ILLINOIS	22
CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN THE CHICAGO-NAPERVILLE-ELGIN, IL-IN-WI MSA 16980	32
STATE OF ARIZONA	35
CRA RATING FOR ARIZONA: Outstanding	35
SCOPE OF EXAMINATION	35
DESCRIPTION OF INSTITUTION'S OPERATIONS IN ARIZONA	35
CONCLUSIONS WITH RESPECT TO COMMUNITY DEVELOPMENT TEST IN ARIZONA	36
PHOENIX-MESA-SCOTTSDALE, AZ MSA 38060-FULL REVIEW	38
SCOPE OF EXAMINATION	38
DESCRIPTION OF INSTITUTION'S OPERATIONS IN PHOENIX-MESA-SCOTTSDALE, AZ MSA 38060	38
CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN PHOENIX-MESA-SCOTTSDALE, AZ MSA 38060	43
TUCSON, AZ MSA 46060 – LIMITED REVIEW	45
SCOPE OF THE EXAMINATION	45
DESCRIPTION OF INSTITUTION'S OPERATIONS IN TUCSON, AZ MSA 46060	45
CONCLUSIONS WITH RESPECT TO PERFORMANCE TESTS	47
CALIFORNIA	48
CRA RATING FOR CALIFORNIA: Outstanding	48
SCOPE OF EXAMINATION	48
DESCRIPTION OF INSTITUTION'S OPERATIONS IN CALIFORNIA	49
CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TESTS IN CALIFORNIA	49

LOS ANGELES- LONG BEACH-ANAHEIM, CA MSA 31080-FULL REVIEW	52
SCOPE OF EXAMINATION	52
DESCRIPTION OF INSTITUTION'S OPERATIONS IN LOS ANGELES-LONG BEACH-ANAHEIM, CA MSA 31080	52
SAN FRANCISCO-OAKLAND-HAYWARD CA 41860 MSA-FULL REVIEW	62
SCOPE OF EXAMINATION	62
SANTA MARIA-SANTA BARBARA, CA MSA 42200-FULL REVIEW	74
SCOPE OF EXAMINATION	74
DESCRIPTION OF INSTITUTION'S OPERATIONS IN SANTA MARIA-SANTA BARBARA CA MSA 42200	74
CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN SANTA MARIA-SANTA BARBARA, CA MSA 42200	79
SAN DIEGO-CARLSBAD, CA MSA 41740 – LIMITED REVIEW	81
SCOPE OF THE EXAMINATION	81
DESCRIPTION OF INSTITUTION'S OPERATIONS IN SAN DIEGO-CARLSBAD, CA MSA 41740	81
STATE OF COLORADO	84
CRA RATING FOR COLORADO: Outstanding	84
SCOPE OF EXAMINATION	84
CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN DENVER-AURORA-LAKEWOOD, CO MSA 19740	91
STATE OF CONNECTICUT	93
CRA RATING FOR CONNECTICUT: Satisfactory	93
SCOPE OF EXAMINATION	93
CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN BRIDGEPORT-STAMFORD-NORWALK CT MSA 14860	99
FLORIDA	101
CRA RATING FOR FLORIDA: Outstanding	101
SCOPE OF EXAMINATION	101
DESCRIPTION OF INSTITUTION'S OPERATIONS IN FLORIDA	102
CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TESTS IN FLORIDA	103
MIAMI-FORT LAUDERDALE-WEST PALM BEACH, FL 33100 – FULL REVIEW	105
SCOPE OF THE EXAMINATION	105
DESCRIPTION OF INSTITUTION'S OPERATIONS IN MIAMI-FORT LAUDERDALE-WEST PALM BEACH, FL MSA 33100	105
CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN MIAMI-FORT LAUDERDALE-WEST PALM BEACH, FL MSA 33100	114
CAPE CORAL-FORT MYERS, FL 15980 – FULL REVIEW	117
SCOPE OF THE EXAMINATION	117
DESCRIPTION OF INSTITUTION'S OPERATIONS IN CAPE CORAL-FORT MYERS MSA 15980	117
CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN THE CAPE CORAL-FORT MYERS, FL MSA 15980	121
NAPLES-IMMOKALEE-MARCO ISLAND, FL 34940 – FULL REVIEW	124
CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN NAPLES-IMMOKALEE-	

MARCO ISLAND, FL MSA 34940.....	129
SCOPE OF THE EXAMINATION.....	131
CONCLUSIONS WITH RESPECT TO PERFORMANCE TESTS.....	133
NORTH PORT-SARASOTA-BRADENTON, FL MSA 35840- LIMITED REVIEW	134
SCOPE OF THE EXAMINATION.....	134
DESCRIPTION OF INSTITUTION'S OPERATIONS IN NORTH PORT-SARASOTA-BRADENTON, FL MSA 35840.....	134
CONCLUSIONS WITH RESPECT TO PERFORMANCE TESTS.....	136
SCOPE OF THE EXAMINATION.....	137
CONCLUSIONS WITH RESPECT TO PERFORMANCE TESTS.....	140
SCOPE OF THE EXAMINATION.....	141
CONCLUSIONS WITH RESPECT TO PERFORMANCE TESTS.....	143
TAMPA-ST. PETERSBURG-CLEARWATER, FL MSA 45300 - LIMITED REVIEW	144
SCOPE OF THE EXAMINATION.....	144
CONCLUSIONS WITH RESPECT TO PERFORMANCE TESTS.....	146
STATE OF GEORGIA	147
CRA RATING FOR GEORGIA: Outstanding.....	147
SCOPE OF EXAMINATION	147
CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN ATLANTA-SANDY SPRINGS-ROSWELL, GA MSA 12060.....	155
STATE OF MASSACHUSETTS	157
CRA RATING FOR MASSACHUSETTS: Outstanding.....	157
SCOPE OF EXAMINATION	157
DESCRIPTION OF INSTITUTION'S OPERATIONS IN MASSACHUSETTS	157
CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN BOSTON-CAMBRIDGE-NEWTON, MA-NH MSA 14460	165
STATE OF MICHIGAN	167
CRA RATING FOR MICHIGAN: Satisfactory	167
SCOPE OF EXAMINATION	167
DESCRIPTION OF INSTITUTION'S OPERATIONS IN MICHIGAN	167
CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TESTS IN MICHIGAN	168
DETROIT-WARREN-DEARBORN, MI MSA 19820-FULL REVIEW	170
SCOPE OF EXAMINATION	170
DESCRIPTION OF INSTITUTION'S OPERATIONS IN DETROIT-WARREN-DEARBORN, MI MSA 19820	170
GRAND RAPIDS-WYOMING, MI MSA 24340 - LIMITED REVIEW	180
SCOPE OF THE EXAMINATION.....	180
DESCRIPTION OF INSTITUTION'S OPERATIONS IN GRAND RAPIDS-WYOMING, MI MSA 24340	180
STATE OF MINNESOTA	183
CRA RATING FOR MINNESOTA: Outstanding.....	183
SCOPE OF EXAMINATION	183
CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN MINNEAPOLIS-St. PAUL-BLOOMINGTON, MN-WI MSA 33460	190

STATE OF MISSOURI.....	192
CRA RATING FOR MISSOURI: Satisfactory.....	192
SCOPE OF EXAMINATION.....	192
CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN ST. LOUIS, MO-IL MSA 41180.....	199
STATE OF NEVADA.....	202
CRA RATING FOR NEVADA: Outstanding.....	202
SCOPE OF EXAMINATION.....	202
CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN LAS VEGAS-HENDERSON-PARADISE, NV MSA 29820.....	207
STATE OF NEW YORK	209
CRA RATING FOR NEW YORK: Satisfactory	209
SCOPE OF EXAMINATION	209
CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN NEW YORK-NEWARK-JERSEY CITY, NY-NJ-PA MSA 35620.....	219
STATE OF OHIO	221
CRA RATING FOR OHIO: Satisfactory	221
SCOPE OF EXAMINATION	221
CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN CLEVELAND-ELYRIA, OH MSA 17460	227
TEXAS	229
CRA RATING FOR TEXAS: Outstanding.....	229
SCOPE OF EXAMINATION	229
DESCRIPTION OF INSTITUTION'S OPERATIONS IN TEXAS	229
CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TESTS IN TEXAS	230
AUSTIN-ROUND ROCK, TX MSA 12420-FULL REVIEW	232
SCOPE OF EXAMINATION	232
DESCRIPTION OF INSTITUTION'S OPERATIONS IN AUSTIN-ROUND ROCK, TX MSA 12420	232
DALLAS-FORT WORTH-ARLINGTON, TX MSA 19100 – FULL REVIEW	240
SCOPE OF THE EXAMINATION.....	240
DESCRIPTION OF INSTITUTION'S OPERATIONS IN DALLAS-FORT WORTH-ARLINGTON MSA 19100.....	240
HOUSTON-THE WOODLANDS-SUGAR LAND, TX MSA 26420 - FULL REVIEW	251
SCOPE OF EXAMINATION	251
CRA RATING FOR WASHINGTON: Outstanding.....	259
SCOPE OF EXAMINATION	259
DESCRIPTION OF INSTITUTION'S OPERATIONS IN WASHINGTON	259
CRA RATING FOR WISCONSIN: Satisfactory.....	269
SCOPE OF EXAMINATION	269
CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN MILWAUKEE-WAUKESHA-WEST ALLIS, WI MSA 33340	275
APPENDIX A – Scope of Examination	278
APPENDIX B - SUMMARY OF STATE AND MULTISTATE METROPOLITAN AREA RATINGS.....	282
APPENDIX C – GLOSSARY	283

INSTITUTION'S RATING

The Northern Trust Company's Overall CRA Rating: Outstanding

Summary of Major Factors that Support the Rating

- The institution has a high level of community development loans, community development services, or qualified investments, particularly investments not provided by private investors;
- The institution extensively uses innovative or complex qualified investments, community development loans, or community development services.
- The institution exhibits excellent responsiveness to credit and community development needs in its assessment areas.

THE NORTHERN TRUST COMPANY

SCOPE OF THE EXAMINATION

The Northern Trust Company's (TNTC) community development activities were evaluated using the Wholesale/Limited Purpose CRA Examination Procedures. Activities included community development loans, community development services, and qualifying investments made between July 28, 2015, and October 15, 2018.

The following chart summarizes the institution's assessment areas and the type of review conducted:

Assessment Area	Review Type
Washington-Arlington-Alexandria, DC-VA-MD-WV Multistate MSA 47900	Full Scope
ILLINOIS	
Chicago-Naperville-Elgin, IL-IN-WI MSA 16980	Full Scope
ARIZONA	
Phoenix-Mesa-Scottsdale, AZ MSA 38060	Full Scope
Tucson, AZ MSA 46060	Limited Scope
CALIFORNIA	
Los Angeles-Long Beach-Anaheim, CA MSA 31080	Full Scope
San Francisco-Oakland-Hayward, CA MSA 41860	Full Scope
San Diego-Carlsbad, CA MSA 41740	Limited Scope
Santa Maria-Santa Barbara, CA MSA 42200	Full Scope
COLORADO	
Denver-Aurora-Lakewood, CO MSA 19740	Full Scope
CONNECTICUT	
Bridgeport-Stamford-Norwalk, CT MSA 14860	Full Scope
FLORIDA	
Miami-Fort Lauderdale-West Palm Beach, FL MSA 33100	Full Scope
Port St. Lucie, FL MSA 38940	Limited Scope
Key West, FL Micropolitan Statistical Area 28580	Limited Scope
Cape Coral-Fort Myers, FL MSA 15980	Full Scope
Naples-Immokalee-Marco Island, FL MSA 34940	Full Scope
North Port-Sarasota-Bradenton, FL MSA 35840	Limited Scope
Tampa-St. Petersburg-Clearwater, FL MSA 45300	Limited Scope
Sebastian-Vero Beach, FL MSA 42680	Limited Scope
GEORGIA	
Atlanta-Sandy Springs-Roswell, GA MSA 12060	Full Scope
MASSACHUSETTS	
Boston-Cambridge-Newton MA-NH MSA 14460	Full Scope
MICHIGAN	
Detroit-Warren-Dearborn, MI MSA 19820	Full Scope

INSTITUTION'S RATING

The Northern Trust Company's Overall CRA Rating: Outstanding

Summary of Major Factors that Support the Rating

- The institution has a high level of community development loans, community development services, or qualified investments, particularly investments not provided by private investors;
- The institution extensively uses innovative or complex qualified investments, community development loans, or community development services.
- The institution exhibits excellent responsiveness to credit and community development needs in its assessment areas.

THE NORTHERN TRUST COMPANY

SCOPE OF THE EXAMINATION

The Northern Trust Company's (TNTC) community development activities were evaluated using the Wholesale/Limited Purpose CRA Examination Procedures. Activities included community development loans, community development services, and qualifying investments made between July 28, 2015, and October 15, 2018.

The following chart summarizes the institution's assessment areas and the type of review conducted:

Assessment Area	Review Type
Washington-Arlington-Alexandria, DC-VA-MD-WV Multistate MSA 47900	Full Scope
ILLINOIS	
Chicago-Naperville-Elgin, IL-IN-WI MSA 16980	Full Scope
ARIZONA	
Phoenix-Mesa-Scottsdale, AZ MSA 38060	Full Scope
Tucson, AZ MSA 46060	Limited Scope
CALIFORNIA	
Los Angeles-Long Beach-Anaheim, CA MSA 31080	Full Scope
San Francisco-Oakland-Hayward, CA MSA 41860	Full Scope
San Diego-Carlsbad, CA MSA 41740	Limited Scope
Santa Maria-Santa Barbara, CA MSA 42200	Full Scope
COLORADO	
Denver-Aurora-Lakewood, CO MSA 19740	Full Scope
CONNECTICUT	
Bridgeport-Stamford-Norwalk, CT MSA 14860	Full Scope
FLORIDA	
Miami-Fort Lauderdale-West Palm Beach, FL MSA 33100	Full Scope
Port St. Lucie, FL MSA 38940	Limited Scope
Key West, FL Micropolitan Statistical Area 28580	Limited Scope
Cape Coral-Fort Myers, FL MSA 15980	Full Scope
Naples-Immokalee-Marco Island, FL MSA 34940	Full Scope
North Port-Sarasota-Bradenton, FL MSA 35840	Limited Scope
Tampa-St. Petersburg-Clearwater, FL MSA 45300	Limited Scope
Sebastian-Vero Beach, FL MSA 42680	Limited Scope
GEORGIA	
Atlanta-Sandy Springs-Roswell, GA MSA 12060	Full Scope
MASSACHUSETTS	
Boston-Cambridge-Newton MA-NH MSA 14460	Full Scope
MICHIGAN	
Detroit-Warren-Dearborn, MI MSA 19820	Full Scope

Assessment Area	Review Type
Grand Rapids-Wyoming, MI MSA 24340	Limited Scope
MINNESOTA	
Minneapolis-St. Paul-Bloomington, MN-WI MSA 33460	Full Scope
MISSOURI	
St. Louis, MO-IL MSA 41180	Full Scope
NEVADA	
Las Vegas-Henderson-Paradise, NV MSA 29820	Full Scope
NEW YORK	
New York-Newark-Jersey City NY-NJ-PA MSA 35620	Full Scope
OHIO	
Cleveland-Elyria, OH MSA 17460	Full Scope
TEXAS	
Dallas-Fort Worth-Arlington, TX MSA 19100	Full Scope
Houston-The Woodlands-Sugarland, TX MSA 26420	Full Scope
Austin-Round Rock, TX MSA 12420	Full Scope
WASHINGTON	
Seattle-Tacoma-Bellevue, WA MSA 42660	Full Scope
WISCONSIN	
Milwaukee-Waukesha-West Allis, WI MSA 33340	Full Scope

Information was obtained from 31 community representatives throughout the bank's assessment areas, focusing on areas that were the most impactful to the overall rating. The individuals and organizations contacted represented small business, economic development, revitalization and stabilization, and affordable housing sectors within the metropolitan areas the institution operates. Contacts provided information including knowledge of local markets and an understanding of community development needs and opportunities in their respective areas. Conclusions and insight from community representatives are discussed within each applicable section.

DESCRIPTION OF INSTITUTION

The Northern Trust Company (TNTC) is a state-chartered financial institution and wholly-owned subsidiary of the Northern Trust Corporation. As of June 30, 2018, the bank had \$134.7 billion in total assets, \$10.7 trillion assets under custody and \$1.1 trillion in assets under management. TNTC continues to serve as a leading provider of asset servicing, fund administration, asset management, fiduciary and banking solutions for corporations, institutions, and wealth and asset management clients worldwide.

The bank focuses on serving and managing client assets in two target market segments: individuals, families, and privately held businesses through its Wealth Business Unit; and corporate and public retirement funds, foundations, endowments, fund managers, insurance

companies, sovereign wealth, and government funds through its Corporate & Institutional Services (C&IS) business unit. The bank has 56 branches operating in 18 states and the District of Columbia with 32 assessment areas. The main office and headquarters are located in Chicago, Illinois.

Since November 1, 2012, the bank has been operating under a Wholesale CRA Strategy. The institution no longer offers retail services or consumer loans to the general public as they are dedicated to wealth and asset management services. While traditional teller and ATM services are offered at a majority of the bank's branches, the main focus is on investment, trust and estate, financial planning and philanthropy.

Since the previous evaluation of July 27, 2015, the bank has closed eight branches and six full service ATMs as follows: three branches and two full-service ATM in upper-income census tracts in the Chicago-Naperville-Elgin, IL-IN-WI MSA 16980, one branch and one deposit taking ATM in a middle-income census tract in Dallas-Fort Worth-Arlington, TX MSA, 19100, one branch and one deposit taking ATM in an upper-income census tract in Miami-Fort Lauderdale-West Palm Beach, FL MSA 33100, one branch with cash only ATM in a middle-income census tract in Cape Coral-Fort Myers, FL MSA 15980, one branch in a moderate-income census tract in the Santa Maria-Santa Barbara, CA MSA 42200 and one branch in an upper-income census tract in the Detroit-Warren-Dearborn, MI MSA 19820 with the deposit ATM being relocated in an adjoining upper-income census tract. Branches located in upper-income census tracts in the Grand Rapids-Wyoming, MI MSA 24340 and Denver-Aurora-Lakewood, CO MSA 19740 were relocated within their respective geographies. The Grand Rapids location retained its full-service ATM while the Denver location did not retain its ATM. In addition, the bank relocated a full service ATM within the same upper income geography in the St. Louis MSA.

The bank did not open any new branches during the evaluation period. A full-service ATM was opened in a middle-income census tract in Dallas-Ft. Worth-Arlington, TX MSA 19100, but was subsequently closed within the evaluation period. A full-service ATM was also opened in an upper-income census tract in the San Francisco-Oakland-Hayward, CA MSA 41860. The bank established a cash-only ATM in an upper-income census tract in the Phoenix-Mesa-Scottsdale, AZ MSA 38060 for its employees.

The bank offers non-complex deposit and lending products, as well as standard banking services to its Wealth Business Unit and C&IS customers. Details of the allocation of the bank's loan portfolio are provided in the table below.

Comparative Loan Mix as of June 30, 2018 (consolidated bank)	
Real Estate	Dollar Volume (\$000)
1-4 Family Residential Construction Loans	\$89,509
Other Construction Loans & Land Development & Other	\$359,302
Farm Land	\$14,957
1-4 Family Revolving	\$952,765
1-4 Family Residential Secured by First Liens	\$5,980,537
1-4 Family Residential Secured by Junior Liens	\$79,969
Multifamily	\$563,207
Nonfarm Non residential	\$3,055,117
Total Real Estate Loans	\$11,095,363
DI & Accept of Other Banks	\$1,090
Agricultural	\$0
Commercial & Industrial	\$4,535,563
Individuals-Credit Cards	\$0
Individual Other Revolving Credit Plans	\$7,423
Loans to Individuals-(auto)	\$95
Other Consumer Loans	\$249,620
States & Political Subs in US	\$44,737
All Other Loans	\$16,382,903
Lease Financing	\$156,427
Total Loans	\$32,473,221

There are no known legal, financial, or other factors impeding the bank's ability to meet the credit needs in its communities. At its previous evaluation conducted on July 27, 2015, the bank was rated Outstanding under the CRA Wholesale/Limited Purpose CRA Examination Procedures.

CONCLUSIONS WITH RESPECT TO PERFORMANCE CRITERIA

The Northern Trust Company has a high level of community development loans, community development services, or qualified investments that exhibit excellent responsiveness to the community development needs of its assessment areas. The bank also made extensive use of innovative or complex qualified investments, community development loans, or community development services. TNTC's rating is based on an evaluation of full review assessment areas with a concentration in the following metropolitan statistical areas: Chicago-Naperville-Elgin, IL MSA 16980; Los Angeles-Long Beach-Anaheim, CA, MSA 31080; San Francisco-Oakland-Hayward, CA MSA 41860; Miami-Fort Lauderdale-West Palm Beach, FL MSA 33100; Houston-The Woodlands-Sugarland, TX MSA 26420; and Phoenix-Mesa-Scottsdale, AZ MSA 38060. The six assessment areas compose 36.4 percent of census tracts in the institution's overall combined assessment areas and 36.1 percent of all low-income and 39.0 percent of all moderate-income census tracts. Please refer to the summaries for each of these assessment areas for further details. Assessment areas subject to limited reviews were evaluated for consistency with the performance in the applicable state and did not contribute to the ratings.

Loan, Investment and Service Activity

The Northern Trust Company has a high level of community development loans, community development services, or qualified investments, particularly investments not typically provided by private investors.

Community Development Lending Activities

TNTC originated community development loans totaling \$288.2 million and an additional \$59.8 million in loans to small businesses in low- and moderate-income census tracts, which qualify for economic development purposes. This represented an increase of \$18.5 million or 6.9 percent from the previous examination, which covered a 37 month period compared to the approximate 40 month period of the current evaluation period. By monthly average the performance during the current evaluation period was equivalent to the previous. As indicated in the table below, the majority of community development loans both by number and dollar were originated for community services purposes:

Qualified Community Development Loans										
	Affordable Housing		Economic Development		Revitalization & Stabilization		Community Services		Total	
	#	\$(000s)	#	\$(000s)	#	\$(000s)	#	\$(000s)	#	\$(000s)
New Loans	26	85,233	2	12,153	1	4,000	20	24,864	49	126,250
Renewed Loans	11	39,295	0	0	0	0	52	122,666	63	161,961
Total	37	124,528	2	12,153	1	4,000	72	147,530	112	288,211

Community Development Investments

TNTC's qualified investments totaled \$2.49 billion in new disbursements, plus commitments and outstanding prior investments during the review period. This represented an increase of nearly 250 percent from the previous examination, which covered a 37 month period compared to the 40 month period of the current evaluation period. The greater majority of these fundings and commitments were related to affordable housing, which is an identified need across the bank's assessment areas. Many of these are of the type not routinely provided by private investors. The institution also made \$8.5 million in qualified grants and donations.

Qualified Community Development Investments by Type								
	Prior Period Investments \$ (000s)	Current Period Investments \$ (000s)					Total Investments \$ (000s)	Unfunded Commitments \$ (000s)
		CS	AH	ED	RS	Total		
TOTAL	406,607	113,111	1,513,493	95,275	0	1,721,879	2,128,486	357,015

Community Development Services

TNTC's community development services totaled 15,096 hours involving 344 activities which qualify for community development purposes. This is a slight decrease in hours and a slight increase in activities since the previous exam. The services were mainly provided in the area of community services and affordable housing.

Investment, Loan, and Service Initiatives

The Northern Trust Company extensively used innovative or complex community development loans, community development services, or qualified investments. These initiatives included the use of Social Impact Bonds (SIB), New Market Tax Credits (NMTC), Low Income Housing Tax Credits (LIHTC), equity-like investments, assistance in the private placement of mortgages made to low- and moderate-income individuals, and investments in loan pools for affordable housing and commercial purposes.

Examples of how communities in the assessment areas benefited from these initiatives through the institution's investments include a local nonprofit involved in a day care center for homeless children; a community land trust to create more affordable housing in a high cost area by separating the land expense from the home; both an equity investment and a community development loan to a public housing agency to facilitate employment training opportunities and small business job creation; and a social service organization that provide health care programs to the homeless.

The majority of the bank's service hours involved serving on the board of directors of organizations that provide community development services. TNTC also provided financial education services as well as tax preparation assistance to low- and moderate-income individuals.

Responsiveness to Credit and Community Development Needs

The institution exhibited excellent responsiveness to credit and community development needs in its assessment areas. Conversations with community representatives in many of the assessment areas indicate that affordable housing and workforce development are two of the primary needs many communities are currently encountering. TNTC has made affordable housing investments in each of its assessment areas. The institution has also made investments in, or extended community development loans to, organizations that provide employment training. One of the more notable is multiple investments to assist a social enterprise that expanded from a foreign nation to one of the assessment areas providing an employment opportunity to approximately 100 women living in urban poverty.

TNTC has also demonstrated responsiveness to a natural disaster that occurred in one of the assessment areas by providing investment to a CDFI attempting to assist small businesses that needed to make building repairs or replace inventory. The institution has also made investments in organizations that provide assistance to homeless individuals, as well as those involved in aiding unemployed or underemployed veterans.

Other Activities

TNTC originated \$2.8 million in small business loans in low-and moderate-income census tracts that serve community development needs on a nationwide basis.

The institution made investments totaling \$47.4 million outside of its assessment areas, serving community development needs on a nationwide basis. In addition, the bank had \$46.8 million in unfunded commitments and made an additional \$19.8 million in prior period investments still outstanding.

FAIR LENDING OR OTHER ILLEGAL CREDIT PRACTICES REVIEW

No evidence of discriminatory or other illegal credit practices inconsistent with helping to meet community credit needs was identified.

WASHINGTON-ARLINGTON-ALEXANDRIA, DC-VA-MD-WV MSA 47900

CRA RATING FOR WASHINGTON-ARLINGTON-ALEXANDRIA, DC-VA-MD-WV MSA 47900 : Outstanding

Major factors supporting the bank's rating include the following:

- The institution has a high level of community development loans, community development services , or qualified investments, particularly investments that are not routinely provided by private investors; and
- The institution exhibits excellent responsiveness to credit and community economic development needs in the assessment area.

SCOPE OF EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a full-scope review. Please refer to the "Scope of Examination Section" for details.

DESCRIPTION OF INSTITUTION'S OPERATIONS IN WASHINGTON-ARLINGTON-ALEXANDRIA, DC-VA-MD-WV MSA 47900:

The Northern Trust Company takes as its assessment area the Washington-Arlington-Alexandria, DC-VA-MD-WV MSA 47900 in its entirety, which is unchanged from the previous performance evaluation. The assessment area is composed of the following metropolitan divisions (MDs):

- Silver Spring-Frederick-Rockville, MD MD 43524 (Frederick County and Montgomery County)
- Washington-Arlington-Alexandria, DC-VA-MD-WV MD 47894 – District of Columbia, DC; Calvert County, Maryland; Charles County, Maryland; Prince George's County, Maryland; Arlington County, Virginia; Clarke County, Virginia; Culpeper County, Virginia; Fairfax County, Virginia; Fauquier County, Virginia; Loudoun County, Virginia; Prince William County, Virginia; Rappahannock County, Virginia; Spotsylvania County, Virginia; Stafford County, Virginia; Warren County, Virginia; Alexandria city, Virginia; Fairfax city, Virginia; Falls Church city, Virginia; Fredericksburg city, Virginia; Manassas city, Virginia; Manassas Park city, Virginia; Jefferson County, West Virginia.

Within the assessment area, TNTC has one branch and one full-service ATM located in a moderate-income census tract in the District of Columbia. The bank ranks 73rd out of 81 FDIC insured institutions in the assessment area, with a nominal amount of deposits that reflects minimal market share.

The assessment area consists of a total of 1,359 total census tracts; 131 (9.6 percent) are low-, 308 (22.7 percent) are moderate-, 472 (34.7 percent) are middle-, 429 (31.6 percent) are upper-, and 19 (1.4 percent) are of unknown-income.

The median family income levels (MFI) for census tracts are calculated using the income data from the United States Census Bureau's American Community Survey and geographic definitions from the Office of Management and Budget (OMB) and are updated approximately every five years. The income data used to calculate geographic income designations changed between 2016 and 2017. Accordingly, community development activity that took place in calendar years up to and including 2016 are evaluated based on ACS income level definitions from the five-year survey data set 2006-2010. Community development activity performed in 2017 and beyond are evaluated based on ACS income level definitions from the five-year survey data set 2011-2015.

As the following table indicates, the assessment area experienced a net increase of nine low-income census tracts and a net decrease of 30 moderate-income census tracts.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	122	131	9
Moderate	338	308	(30)
Middle	482	472	(10)
Upper	404	429	25
Unknown	13	19	6
Total	1,359	1,359	0
<i>Source: U. S. Census Bureau: Decennial Census: American Community Survey Data: 2006-2010 U.S. Census Bureau: Decennial Census: America Community Survey Data: 2011-2015</i>			

Additional demographic information as of 2017 for the assessment area is presented in the following table:

Assessment Area: 2017 Washington-Arlington-Alexandria, DC-VA-MD-WV MSA 47900								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	131	9.6	113,069	8.0	23,519	20.8	313,007	22.2
Moderate-income	308	22.7	299,911	21.3	25,128	8.4	237,802	16.9
Middle-income	472	34.7	509,228	36.2	21,993	4.3	286,415	20.3
Upper-income	429	31.6	483,261	34.3	9,636	2.0	571,216	40.6
Unknown-income	19	1.4	2,971	0.2	496	16.7	0	0.0
Total Assessment Area	1,359	100.0	1,408,440	100.0	80,772	5.7	1,408,440	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	212,246	51,335	3.8	24.2	139,564	65.8	21,347	10.1
Moderate-income	508,810	250,309	18.5	49.2	220,607	43.4	37,894	7.4
Middle-income	817,365	523,076	38.7	64.0	244,458	29.9	49,831	6.1
Upper-income	736,157	525,471	38.9	71.4	172,080	23.4	38,606	5.2
Unknown-income	9,515	1,881	0.1	19.8	6,876	72.3	758	8.0
Total Assessment Area	2,284,093	1,352,072	100.0	59.2	783,585	34.3	148,436	6.5
	Total Businesses by Tract	Businesses by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
	#	%	#	%	#	%	#	%
Low-income	12,689	4.7	11,384	4.7	1,166	4.4	139	5.5
Moderate-income	52,359	19.3	46,151	19.1	5,791	21.8	417	16.4
Middle-income	94,516	34.9	84,465	34.9	9,297	35.0	754	29.7
Upper-income	109,502	40.4	98,476	40.7	10,004	37.7	1,022	40.3
Unknown-income	1,781	0.7	1,283	0.5	293	1.1	205	8.1
Total Assessment Area	270,847	100.0	241,759	100.0	26,551	100.0	2,537	100.0
	Percentage of Total Businesses:			89.3		9.8		0.9
	Total Farms by Tract	Farms by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
	#	%	#	%	#	%	#	%
Low-income	26	1.2	26	1.2	0	0.0	0	0.0
Moderate-income	472	22.1	466	22.3	6	14.3	0	0.0
Middle-income	938	44.0	921	44.0	17	40.5	0	0.0
Upper-income	695	32.6	676	32.3	19	45.2	0	0.0
Unknown-income	2	0.1	2	0.1	0	0.0	0	0.0
Total Assessment Area	2,133	100.0	2,091	100.0	42	100.0	0	0.0
	Percentage of Total Farms:			98.0		2.0		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

The following presentation of key demographics used to help inform the evaluation of bank activity in its assessment area is based on a comparison of two sets of ACS data, 2006-2010 and 2011-2015.

Population Characteristics

Census data for the Washington-Arlington-Alexandria, DC-MD-VA-WV MSA 47900 indicates a 5.5 percent increase between 2010 and 2015. The District of Columbia has displayed the most significant increase by percentage with a 7.6 percent growth rate. A community representative indicated that the growth in the District of Columbia is attributable to growing households and increased gentrification, which attracts residents from other states.

Population Change 2010 - 2015			
Area	2010 Population	2011 - 2015 Population	Percentage Change
Washington-Arlington-Alexandria DC-VA-MD-WV MD 47894	4,431,070	4,690,171	5.9
Frederick County, Maryland	233,385	241,373	3.4
Montgomery County, Maryland	976,777	1,017,859	4.7
District of Columbia	601,723	647,484	7.6
State of Maryland	5,773,552	5,930,538	2.7
State of Virginia	8,001,024	8,256,630	3.2
State of West Virginia	1,852,994	1,851,420	-0.8
Source: 2006 - 2010 U.S. Census Bureau: American Community Survey Data 2011 - 2015 U.S. Census Bureau: American Community Survey Data			

The following table lists the five largest municipalities within the assessment area. Between mid-2015 and mid-2016 the District of Columbia displayed the 15th largest numeric increase in population among United States cities adding 10,793 residents.

Five Largest Municipalities within the Assessment Area		
Municipality	Population	County
District of Columbia	693,972	NA - District of Columbia
Arlington, VA (CDP)*	207,627	Arlington
Alexandria, VA	160,035	NA - Independent City
Silver Spring, MD (CDP)*	71,452	Montgomery
Frederick, MD	71,408	Frederick
Source: July 1, 2017 U.S. Census Bureau Population Estimates *Arlington, VA & Silver Spring MD are based on 2010 U.S. Census Bureau Data		

Income Characteristics

As displayed in the table below, the median family income in the assessment area varied widely,

with the highest in Montgomery County, Maryland at \$117,798 and the lowest in the State of West Virginia at \$52,866. However, income in the assessment area increased overall for the period of 2010-2015, with the District of Columbia increasing by 20.4 percent and far outpacing the Consumer Price Index (CPI) inflation rate of 7.4 percent. In all other instances, except for the state of West Virginia, income failed to keep pace with inflation. Frederick County which is part of the Silver Spring-Frederick-Rockville, MD MD 43524 had the lowest percentage change at 3.2 percent.

Median Family Income Change 2010 - 2015			
Area	2006 - 2010 Median Family Income	2011 - 2015 Median Family Income	Percentage Change
Washington-Arlington-Alexandria DC-VA-MD-WV MD 47894	100,486	106,762	6.2
Frederick County, Maryland	95,036	98,064	3.2
Montgomery County, Maryland	111,737	117,798	5.4
District of Columbia	70,883	85,321	20.4
State of Maryland	85,098	90,089	5.9
State of Virginia	73,514	78,390	6.6
State of West Virginia	48,896	52,866	8.1
Source: 2006 - 2010 U.S. Census Bureau: American Community Survey Data 2011 - 2015 U.S. Census Bureau: American Community Survey Data			

Housing Characteristics

Median housing values in the assessment area, with the exception of the District of Columbia and the state of West Virginia, experienced declines during 2010 through 2015. However, median gross rents experienced increases across the entire assessment area. The community representative noted that housing prices have recently been trending upward partly due to creditworthy individuals purchasing homes to utilize for short term rentals.

In terms of actual dollars median housing values vary across the assessment area, with the highest in the District of Columbia at \$454,700 and the lowest in the state of West Virginia at \$103,800. Similarly, median gross rent varies across the assessment area, with the highest in Montgomery County at \$1,627 and the lowest in the state of West Virginia at \$643.

Housing Costs Change 2010 – 2015				
Area	2006 – 2010 Median Housing	2011 – 2015 Median Housing	2006 – 2010 Median Gross Rent	2011 – 2015 Median Gross Rent
Washington-Arlington-Alexandria DC- VA-MD-WV MD 47894	404,218	369,808	1,254	1,483
Frederick County, Maryland	349,500	300,100	1,133	1,285
Montgomery County, Maryland	482,900	454,700	1,417	1,627
District of Columbia	443,300	475,800	1,063	1,327
State of Maryland	329,400	286,900	1,091	1,230
State of Virginia	255,100	245,000	970	1,116
State of West Virginia	94,500	103,800	549	643
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

A common method to compare relative affordability of housing across geographic areas is the affordability ratio, which is defined in Appendix C. A higher ratio indicates more affordable housing opportunities. The affordability ratios across the assessment area demonstrate a wide disparity, with the District of Columbia the least affordable with a ratio of .15 and the state of West Virginia the most affordable at .40.

One community representative at an affordable housing organization was contacted to help determine the credit and banking needs of the assessment area. The representative emphasized the need for affordable housing both in terms of purchase and rentals. With respect of opportunities for local financial institutions, the contact indicated there was a need for the institutions to provide products more tailored to the needs of the community.

Housing Narrative Information				
Area	2006 – 2010 Affordability Ratio	2011 – 2015 Affordability Ratio	2006 – 2010 Percentage of Occupied Housing that is Owner Occupied	2011 – 2015 Percentage of Occupied Housing that is Owner Occupied
Washington-Arlington-Alexandria DC- VA-MD-WV MD 47894	0.21	0.25	65.0	62.1
Frederick County, Maryland	0.23	0.28	76.8	73.9
Montgomery County, Maryland	0.19	0.22	69.3	66.2
District of Columbia	0.13	0.15	80.0	41.2
State of Maryland	0.21	0.26	71.6	66.8
State of Virginia	0.24	0.27	68.9	66.2
State of West Virginia	0.41	0.40	73.5	72.5
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

Employment Conditions

Unemployment rates across the assessment area trended downward. From 2013 through 2016 unemployment rates declined within the MSA and each of its component areas. Frederick and Montgomery Counties, which compose the Silver Spring-Frederick-Rockville, MD MD 43524, achieved rates below two percent while the District of Columbia and the state of West Virginia were at 6.0 percent. During the same period, Gross Domestic Product (GDP) in the Washington-Arlington-Alexandria, DC-VA-MD-WV MSA 47900 grew from \$459.3 billion to \$509.6 billion or 11.0 percent which was below the 12.6 percent rate of aggregate MSAs. The community representative indicated that employers were placing a large emphasis on hiring individuals with experience, causing less than optimum participation in job training programs. Per the Bureau of Labor Statistics, the major areas of occupations in excess of 250,000 employees are Office and Administration, Business and Financial Operations, Sales and Related, and Food Preparation and Service Related. The five largest employers within the MSA are University of Maryland (medical), NASA (U.S. Government), U.S. Department of Commerce (U.S. Government), George Washington University (education), and National Institute of Health (research).

Unemployment Rates 2013 – 2016				
Area	2013	2014	2015	2016
Washington-Arlington-Alexandria DC-VA-MD-WV MD 47894	5.5	5.1	4.5	3.9
District of Columbia	8.3	7.8	6.9	6.0
Frederick County, Maryland	3.1	2.5	2.0	1.9
Montgomery County, Maryland	2.3	2.0	1.7	1.6
State of Maryland	6.6	5.8	5.1	4.3
State of Virginia	5.5	5.2	4.5	4.0
State of West Virginia	6.5	6.5	6.8	6.0
Source: U.S. Department of Labor				

CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN WASHINGTON-ARLINGTON-ALEXANDRIA, DC-VA-MD-WV MSA 47900

Investment, Loan, and Service Activity

TNTC has a high level of community development loans, qualified investments, and services, particularly investments that are not routinely provided by private investors. The bank occasionally uses innovative or complex qualified investments in the assessment area, and exhibits excellent responsiveness to community development needs in the assessment area. Demographic and community representative information reveals a substantial need for investments targeting affordable housing. TNTC's investments include a \$1.0 million investment into a National Housing Trust CDFI and the purchase of \$51.6 million of mortgage back securities consisting of loan originations to low- and moderate-income borrowers are responsive to this deficiency.

In the assessment area from July 27, 2015 through October 15, 2018, TNTC had community development investment activity including prior period maintained investments of approximately \$74.1 million representing a 141.4 percent increase in comparison to the previous 37 month evaluation period of \$30.7 million. The variation of approximately three months in terms of the current performance evaluation period as compared to the previous does not materially impact the strength of the institution's performance.

Community Development Loans

No community development loans were originated during the review period in this assessment area. The institution originated one small business loan in a moderate-income census tract in the assessment area for the amount of \$100,000. By supporting this business in a moderate-income census tract, the loan qualifies as economic development.

Community Development Investments

During the review period, the institution disbursed funds related to new investments of approximately \$57.6 million. It maintained investments from the prior review periods of approximately \$16.4 million. The \$57.6 million of disbursed current period investments in the assessment area represents a \$27.0 million or 88 percent increase compared to the previous evaluation. The investments were primarily for affordable housing purposes, which was an assessment area need indicated by a community representative. Innovativeness and complexity was demonstrated through investments in CDFIs involved in development funds.

Qualified Community Development Investments by Type								
	Prior Period Investments \$ (000s)	Current Period Investments \$ (000s)					Total Investments \$ (000s)	Unfunded Commitments \$ (000s)
		CS	AH	ED	RS	Total		
TOTAL	16,359	5,000	52,597	0	0	57,597	73,956	0

TNTC also made \$155,000 in grants and donations to various organizations involved in affordable housing and community development services.

Community Development Services

Staff provided 300 hours of service to one affordable housing organization on behalf of the bank. Bank management and staff served on the board of directors, using their financial and management expertise to help guide the decisions of the nonprofit.

STATE OF ILLINOIS

CRA RATING FOR ILLINOIS: Outstanding

Major factors supporting the bank's rating include the following:

- The institution has a high level of community development loans, community development services, and qualified investments;
- The institution extensively uses innovative or complex community development loans, qualified investments, or services; and
- The institution exhibits excellent responsiveness to community development needs in the assessment area.

SCOPE OF EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a full-scope review. Please refer to the "Scope of Examination Section" for details.

A summary table of Illinois assessment area delineations follows:

State of Illinois Assessment Area		
MSA/MD	Counties Included	Counties Excluded
Chicago–Naperville–Elgin, IL–IN–WI MSA 16980	See MDs	All of Gary, IN MD 23844: Jasper County IN; Lake County IN; Newton County, IN; and Porter County, IN
Chicago–Naperville–Arlington Heights IL MD 16974	Cook County, IL; DuPage County, IL; Kendall County, IL; McHenry County, IL; Will County, IL	Grundy County, IL
Lake County–Kenosha County, IL–WI MD 29404	Lake County, IL	Kenosha County, WI
Elgin, IL MD 20994	Kane County, IL	DeKalb County, IL

Although the MSA is multi-state, TNTC takes counties only in the state of Illinois; therefore, the assessment area is not subject to a multi-state review. The current assessment area delineation reflects the addition of Kendall, McHenry, and Will Counties since the previous performance evaluation of July 27, 2015.

DESCRIPTION OF INSTITUTION'S OPERATIONS IN ILLINOIS

The Northern Trust Company is headquartered in Chicago, Illinois and a significant number of its community development activities occur within the Chicago-Naperville-Elgin, IL-IN-WI MSA 16980. Including the main office, there are eight branches, 26 full-service ATMs, and 13 cash-only ATMs. During the current evaluation period TNTC closed three branches and two full-service ATMs. Two of the branches and the two ATMs were located in upper income census tracts. The third closed branch was located in a middle-income census tract. The bank did not open any branches or ATMs in the assessment area. The following table provides a breakdown of the bank's facilities by individual MD of the location:

Northern Trust Branches and ATMs Chicago-Naperville-Elgin, IL-IN-WI MSA 16980									
MD	Branches by Census Tracts				ATMs by Census Tracts				
	Low	Moderate	Middle	Upper	Low	Moderate	Middle	Upper	Unknown
Chicago-Naperville-Arlington, IL MD 16974	0	0	0	6	0	1	2	23	1
Lake County-Kenosha County, IL-WI MD 29404	0	0	0	2	0	0	1	11	0
Elgin, IL MD 20994	0	0	0	0	0	0	0	0	0
Total	0	0	0	8	0	1	3	34	1

The bank ranks fourth out of 171 FDIC insured institutions with a deposit market share of 6.8 percent. Although the seven county assessment area is a highly competitive market, the combined deposit shares of JP Morgan Chase (22.8 percent), BMO Harris Bank NA (11.8 percent), Bank of America (11.5 percent), and TNTC exceeds 52 percent of all aggregate deposits.

With the addition of Kendall, McHenry, and Will Counties to the assessment area, the bank expanded its geographic coverage from the previous performance evaluation within the MSA to a total of 1,985 census tracts from 1,769 or by 12.2 percent. By census tract designation, the assessment area contains 281 (14.2 percent) low-, 475 (23.9 percent) moderate-, 563 (28.4 percent) middle-, 649 (32.7 percent) upper-income census tracts. Seventeen, or 0.9 percent, of the census tracts are of unknown income.

The median family income levels (MFI) for census tracts are calculated using the income data from the United States Census Bureau's American Community Survey and geographic definitions from the Office of Management and Budget (OMB) and are updated approximately every five years. The income data used to calculate geographic income designations changed between 2016 and

2017. Accordingly, community development activity that took place in calendar years up to and including 2016 are evaluated based on ACS income level definitions from the five-year survey data set 2006-2010. Community development activity performed in 2017 and beyond are evaluated based on ACS income level definitions from the five-year survey data set 2011-2015.

As the following table indicates, the assessment area had a net increase of 29 low-income census tracts and 13 moderate-income census tracts.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	252	281	29
Moderate	462	475	13
Middle	631	563	(68)
Upper	631	649	18
Unknown	9	17	8
Total	1,985	1,985	0
Source: U. S. Census Bureau: Decennial Census: American Community Survey Data: 2006-2010 U.S. Census Bureau: Decennial Census: America Community Survey Data: 2011-2015			

Additional demographic information as of 2017 for the assessment area is presented in the following tables:

Assessment Area: 2017 Chicago-Naperville-Elgin, IL-IN-WI MSA 16980								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	281	14.2	179,924	8.9	61,421	34.1	470,300	23.3
Moderate-income	475	23.9	438,529	21.8	75,773	17.3	328,351	16.3
Middle-income	563	28.4	644,413	32.0	47,344	7.3	373,398	18.5
Upper-income	649	32.7	750,056	37.2	24,331	3.2	844,025	41.9
Unknown-income	17	0.9	3,152	0.2	858	27.2	0	0.0
Total Assessment Area	1,985	100.0	2,016,074	100.0	209,727	10.4	2,016,074	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	350,824	88,620	4.5	25.3	193,250	55.1	68,954	19.7
Moderate-income	760,124	348,242	17.7	45.8	326,762	43.0	85,120	11.2
Middle-income	1,043,065	677,876	34.5	65.0	289,232	27.7	75,957	7.3
Upper-income	1,209,867	847,735	43.1	70.1	286,065	23.6	76,067	6.3
Unknown-income	11,232	2,519	0.1	22.4	7,293	64.9	1,420	12.6
Total Assessment Area	3,375,112	1,964,992	100.0	58.2	1,102,602	32.7	307,518	9.1
	Total Businesses Tract		Businesses by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	13,864	4.8	12,139	4.8	1,651	4.4	74	3.7
Moderate-income	44,100	15.2	38,443	15.3	5,400	14.5	257	12.9
Middle-income	87,978	30.3	75,515	30.0	11,873	31.8	590	29.7
Upper-income	143,363	49.3	124,113	49.4	18,192	48.7	1,058	53.3
Unknown-income	1,332	0.5	1,098	0.4	228	0.6	6	0.3
Total Assessment Area	290,637	100.0	251,308	100.0	37,344	100.0	1,985	100.0
	Percentage of Total Businesses:			86.5		12.8		0.7
	Total Farms by Tract		Farms by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	25	1.5	24	1.6	1	1.5	0	0.0
Moderate-income	119	7.4	114	7.4	5	7.5	0	0.0
Middle-income	782	48.4	748	48.4	34	50.7	0	0.0
Upper-income	687	42.5	659	42.6	27	40.3	1	100.0
Unknown-income	2	0.1	2	0.1	0	0.0	0	0.0
Total Assessment Area	1,615	100.0	1,547	100.0	67	100.0	1	100.0
	Percentage of Total Farms:			95.8		4.1		0.1
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

Assessment Area: 2017 Chicago-Naperville-Arlington Hts, IL MD 16974									
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income		
	#	%	#	%	#	%	#	%	
Low-income	265	15.2	167,253	9.8	57,642	34.5	406,879	23.8	
Moderate-income	416	23.8	369,150	21.6	64,441	17.5	277,093	16.2	
Middle-income	491	28.1	541,464	31.7	41,667	7.7	314,430	18.4	
Upper-income	563	32.2	626,808	36.7	21,017	3.4	709,425	41.5	
Unknown-income	14	0.8	3,152	0.2	858	27.2	0	0.0	
Total Assessment Area	1,749	100.0	1,707,827	100.0	185,625	10.9	1,707,827	100.0	
	Housing Units by Tract	Housing Types by Tract							
		Owner-Occupied			Rental		Vacant		
		#	%	%	#	%	#	%	
Low-income	330,047	81,326	4.9	24.6	182,430	55.3	66,291	20.1	
Moderate-income	654,277	292,451	17.6	44.7	286,719	43.8	75,107	11.5	
Middle-income	889,465	570,392	34.4	64.1	252,832	28.4	66,241	7.4	
Upper-income	1,045,478	711,616	42.9	68.1	265,111	25.4	68,751	6.6	
Unknown-income	11,232	2,519	0.2	22.4	7,293	64.9	1,420	12.6	
Total Assessment Area	2,930,499	1,658,304	100.0	56.6	994,385	33.9	277,810	9.5	
	Total Businesses Tract		Businesses by Tract & Revenue Size						
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
	#	%	#	%	#	%	#	%	
Low-income	12,676	5.1	11,110	5.2	1,502	4.7	64	3.9	
Moderate-income	37,708	15.2	32,756	15.3	4,752	14.9	200	12.2	
Middle-income	73,917	29.9	63,587	29.7	9,848	30.8	482	29.4	
Upper-income	121,896	49.2	105,346	49.3	15,663	49.0	887	54.1	
Unknown-income	1,330	0.5	1,096	0.5	228	0.7	6	0.4	
Total Assessment Area	247,527	100.0	213,895	100.0	31,993	100.0	1,639	100.0	
	Percentage of Total Businesses:			86.4			12.9		
	Total Farms by Tract		Farms by Tract & Revenue Size						
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
	#	%	#	%	#	%	#	%	
Low-income	22	1.7	21	1.7	1	2.3	0	0.0	
Moderate-income	102	8.0	99	8.0	3	7.0	0	0.0	
Middle-income	610	47.7	588	47.6	22	51.2	0	0.0	
Upper-income	544	42.5	526	42.6	17	39.5	1	100.0	
Unknown-income	2	0.2	2	0.2	0	0.0	0	0.0	
Total Assessment Area	1,280	100.0	1,236	100.0	43	100.0	1	100.0	
	Percentage of Total Farms:			96.6			3.4		
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS									
Note: Percentages may not add to 100.0 percent due to rounding									

Assessment Area: 2017 Lake County-Kenosha County, IL-WI MD 29404								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	12	7.8	9,730	5.4	2,888	29.7	36,568	20.4
Moderate-income	30	19.5	31,241	17.4	4,840	15.5	29,174	16.3
Middle-income	46	29.9	62,986	35.1	3,573	5.7	32,970	18.4
Upper-income	63	40.9	75,364	42.0	2,000	2.7	80,609	45.0
Unknown-income	3	1.9	0	0.0	0	0.0	0	0.0
Total Assessment Area	154	100.0	179,321	100.0	13,301	7.4	179,321	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied		Rental		Vacant		
		#	%	%	#	%	#	%
Low-income	16,175	5,406	3.0	33.4	8,549	52.9	2,220	13.7
Moderate-income	49,842	26,142	14.5	52.4	18,571	37.3	5,129	10.3
Middle-income	94,368	65,301	36.3	69.2	22,585	23.9	6,482	6.9
Upper-income	100,844	82,936	46.1	82.2	12,936	12.8	4,972	4.9
Unknown-income	0	0	0.0	0.0	0	0.0	0	0.0
Total Assessment Area	261,229	179,785	100.0	68.8	62,641	24.0	18,803	7.2
	Total Businesses by Tract	Businesses by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
	#	%	#	%	#	%	#	%
Low-income	726	2.6	648	2.7	71	2.2	7	3.1
Moderate-income	3,293	11.9	2,954	12.2	299	9.2	40	17.5
Middle-income	8,513	30.8	7,394	30.6	1,060	32.7	59	25.9
Upper-income	15,122	54.7	13,187	54.5	1,813	55.9	122	53.5
Unknown-income	2	0.0	2	0.0	0	0.0	0	0.0
Total Assessment Area	27,656	100.0	24,185	100.0	3,243	100.0	228	100.0
	Percentage of Total Businesses:			87.4		11.7		0.8
	Total Farms by Tract	Farms by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
	#	%	#	%	#	%	#	%
Low-income	1	0.6	1	0.6	0	0.0	0	0.0
Moderate-income	12	6.9	11	6.9	1	7.1	0	0.0
Middle-income	69	39.7	63	39.4	6	42.9	0	0.0
Upper-income	92	52.9	85	53.1	7	50.0	0	0.0
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	174	100.0	160	100.0	14	100.0	0	0.0
	Percentage of Total Farms:			92.0		8.0		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

Assessment Area: 2017 Elgin, IL MD 20994								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	4	4.9	2,941	2.3	891	30.3	26,853	20.8
Moderate-income	29	35.4	38,138	29.6	6,492	17.0	22,084	17.1
Middle-income	26	31.7	39,963	31.0	2,104	5.3	25,998	20.2
Upper-income	23	28.0	47,884	37.1	1,314	2.7	53,991	41.9
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	82	100.0	128,926	100.0	10,801	8.4	128,926	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	4,602	1,888	1.5	41.0	2,271	49.3	443	9.6
Moderate-income	56,005	29,649	23.4	52.9	21,472	38.3	4,884	8.7
Middle-income	59,232	42,183	33.2	71.2	13,815	23.3	3,234	5.5
Upper-income	63,545	53,183	41.9	83.7	8,018	12.6	2,344	3.7
Unknown-income	0	0	0.0	0.0	0	0.0	0	0.0
Total Assessment Area	183,384	126,903	100.0	69.2	45,576	24.9	10,905	5.9
	Total Businesses Tract		Businesses by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	462	3.0	381	2.9	78	3.7	3	2.5
Moderate-income	3,099	20.1	2,733	20.7	349	16.6	17	14.4
Middle-income	5,548	35.9	4,534	34.3	965	45.8	49	41.5
Upper-income	6,345	41.1	5,580	42.2	716	34.0	49	41.5
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	15,454	100.0	13,228	100.0	2,108	100.0	118	100.0
	Percentage of Total Businesses:			85.6		13.6		0.8
	Total Farms by Tract		Farms by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	2	1.2	2	1.3	0	0.0	0	0.0
Moderate-income	5	3.1	4	2.6	1	10.0	0	0.0
Middle-income	103	64.0	97	64.2	6	60.0	0	0.0
Upper-income	51	31.7	48	31.8	3	30.0	0	0.0
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	161	100.0	151	100.0	10	100.0	0	0.0
	Percentage of Total Farms:			93.8		6.2		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

The following presentation of key demographics used to help inform the evaluation of bank activity in its assessment area is based on a comparison of two sets of ACS data, 2006-2010 and 2011-2015.

Population Characteristics

Census data for the Chicago-Naperville-Elgin, IL-IN-WI MSA 16980 indicates relative minor growth between 2010 and 2015, with the exception of Kendall County, one of the smaller counties by population, which had a 4.6 percent increase. A community representative, whose organization is involved in both economic development and housing related issues, indicated that Kendall County in particular was attractive to older individuals who desire a suburban lifestyle. The assessment area contains 66.1 percent of the population of the state of Illinois.

Population Change 2010 – 2015			
Area	2010 Population	2011-2015 Population	Percentage Change
Cook County, IL	5,194,675	5,236,393	0.8
DuPage County, IL	916,924	930,412	1.5
Lake County, IL	703,462	702,898	0.0
Kane County, IL	515,269	524,886	1.9
Kendall County, IL	114,736	120,036	4.6
McHenry County, IL	308,760	307,357	-0.5
Will County, IL	677,560	683,995	1.0
Chicago-Naperville-Arlington Heights IL MD 16974	7,262,718	7,328,470	0.9
Lake County-Kenosha County IL-WI MD 29404	869,888	870,636	0.1
Elgin, IL MD 20994	620,429	629,231	1.4
State of Illinois	12,830,632	12,873,761	0.3
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

The five largest municipalities within the MSA are listed in the following table. Chicago remains the third largest city in the United States despite having only a net increase of twenty thousand residents between 2010 and 2017.

Five Largest Municipalities within the Assessment Area		
Municipality	Population	County
Chicago	2,716,450	Cook
Aurora	200,965	DuPage, Kane, Kendall, Will
Joliet	148,462	Kendall, Will
Naperville	147,682	DuPage, Will
Elgin	112,456	Cook, Kane
Source: U.S. Census Bureau: 2017 Population Estimates		

Income Characteristics

As displayed in the table below, between 2010 and 2015 the median family income increase ranged from 1.0 percent in the Lake County-Kenosha, IL-WI MD 29404 to 4.4 percent in the Chicago-Naperville-Arlington Heights, IL MD 16974. The percentage of change in the MDs and in the individual counties was below the 7.4 percent Consumer Price Index (CPI) inflation rate, indicating income failed to keep pace with inflation in the assessment area. By dollar amount, median family income varied somewhat with the highest in DuPage County at \$96,751 and the lowest in Cook County at \$67,324. A community representative whose organization focuses on neighborhood stabilization indicated that the fewer number of hours being worked was a contributing factor to lower overall incomes when considering inflation.

Median Family Income Change 2010 – 2015			
Area	2010 Median Family Income	2011-2015 Median Family Income	Percentage Change
Cook County, IL	65,039	67,324	3.5
DuPage County, IL	92,423	96,751	4.7
Lake County, IL	91,693	93,668	2.2
Kane County, IL	77,998	81,718	4.8
Kendall County, IL	87,309	91,612	4.9
McHenry County, IL	86,698	89,768	3.5
Will County, IL	85,488	87,950	2.9
Chicago-Naperville-Arlington Heights MD 16974	72,196	75,350	4.4
Lake County-Kenosha County IL-WI MD 29404	86,241	87,137	1.0
Elgin, IL MD 20994	76,576	79,687	4.1
State of Illinois	68,236	71,546	4.9
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

Housing Characteristics

Median housing values in the assessment area experienced declines from 2010 through 2015. However, median gross rents experienced increases across the assessment area. Notably, median housing values in the various counties that compose the assessment area are higher than those of the state of Illinois. Two community representatives indicated that housing prices have recently been increasing and one noted that this was leading to more individuals renting rather than owning.

In terms of actual dollars, median housing values vary across the assessment area, with the highest in DuPage County at \$278,500 and the lowest in Kendall County at \$200,200. Similarly, median gross rent varies across the assessment area, with the highest in Kendall County at \$1,305 and the lowest in Cook County at \$980.

Housing Costs Change 2010 – 2015				
Area	2010 Median Housing Value	2011-2015 Median Housing	2010 Median Gross Rent	2011 – 2015 Median Gross Rent
Cook County, IL	265,800	218,700	900	980
DuPage County, IL	316,900	278,500	1,008	1,143
Lake County, IL	287,300	245,300	963	1,069
Kane County, IL	245,000	213,200	929	1,011
Kendall County, IL	248,300	200,200	1,099	1,305
McHenry County, IL	249,700	208,200	998	1,074
Will County, IL	240,500	209,800	890	1,039
Chicago-Naperville-Arlington Heights MD 16974	267,990	224,861	914	996
Lake County-Kenosha County IL-WI MD 29404	256,403	221,365	909	999
Elgin, IL MD 20994	236,073	202,774	891	971
State of Illinois	202,500	173,800	834	907
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

A common method to compare relative affordability of housing across geographic areas is the affordability ratio, which is defined in Appendix C. A higher ratio supports more affordable housing opportunities. Each of the counties trended similarly in terms of becoming more affordable from 2010 through 2015; however, both community representatives commented that there have been recent increases in housing prices affecting all income levels. Overall, Kendall County would be more affordable with a ratio of .42 and Cook County would be least affordable with a ratio of .25.

Representatives from both a neighborhood stabilization organization and an economic development/housing assistance organization were contacted to assess the credit needs and market conditions within the assessment area. Each commented on the issue of the lack of affordable housing and a shortage of employable individuals due to the lack of needed skills and education. One noted that some individuals would not be candidates for workforce training as they lacked basic literacy and math skills.

Housing Narrative Information				
Area	2010 Affordability Ratio	2011-2015 Affordability Ratio	2010 Percentage of Occupied Housing that is Owner Occupied	2011 – 2015 Percentage of Occupied Housing that is Owner Occupied
Cook County, IL	0.20	0.25	60.4	57.0
DuPage County, IL	0.24	0.29	76.1	73.5
Lake County, IL	0.27	0.32	78.4	74.2
Kane County, IL	0.28	0.33	77.6	73.6
Kendall County, IL	0.32	0.42	85.8	82.5
McHenry County, IL	0.31	0.37	84.1	80.6
Will County, IL	0.32	0.36	85.0	81.5
Chicago-Naperville-Arlington Heights MD 16974	0.22	0.27	65.9	62.6
Lake County-Kenosha County IL-WI MD 29404	0.28	0.32	76.2	72.6
Elgin, IL MD 20994	0.27	0.33	74.9	70.9
State of Illinois	0.28	0.33	69.2	66.4
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

Employment Conditions

From 2013 through 2016 unemployment rates generally declined within the MDs and each of its component areas and in 2016 ranged between 4.8 and 6.2 percent. During the same period Gross Domestic Product (GDP) in the Chicago-Joliet-Naperville, IL-IN-WI MSA 16980 grew from \$585.9 billion to \$657.6 billion, or 12.2 percent, which was slightly below the MSA aggregate of 12.6 percent. One community representative indicated that an emerging issue is the number of major manufacturing companies that were moving out of the area. Per the Bureau of Labor Statistics, the major areas of occupations in excess of 350,000 employees are Office and Administration, Sales and Related, Food Preparation and Service Related, and Management. The top five employers in the assessment area are the University of Illinois Chicago (education), Shire (manufacturer of medical devices), Abbot (pharmaceuticals), Allstate (insurance), and CDW (electronic retailing).

Unemployment Rates 2013 – 2016				
Area	2013	2014	2015	2016
Cook County, IL	9.6	7.4	6.2	6.2
DuPage County, IL	7.5	5.6	4.7	4.8
Lake County, IL	8.7	6.5	5.3	5.2
Kane County, IL	8.9	7.0	5.7	5.5
Kendall County, IL	8.3	6.3	5.2	5.2
McHenry County, IL	8.3	6.4	5.4	5.3
Will County, IL	9.4	7.4	6.2	6.1
Chicago-Naperville-Arlington Heights MD 16974	9.2	7.1	6.0	5.9
Lake County-Kenosha County IL-WI MD 29404	8.5	6.4	5.3	5.2
Elgin, IL MD 20994	8.8	6.9	5.7	5.5
State of Illinois	9.2	7.1	5.9	5.9
<i>Source: U.S. Bureau of Labor Statistics</i>				

CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN THE CHICAGO-NAPERVILLE-ELGIN, IL-IN-WI MSA 16980

Investment, Loan, and Service Activity

The Northern Trust Company has a high level of community development loans, qualified investments or community development services. The institution makes extensive use of innovative or complex qualified investments, community development loans, or community development services. TNTC is involved in a number of initiatives within the assessment area that encompass the various community development activities. With regard to community services, the bank has invested in a social impact bond to improve educational outcomes for Chicago Public School students where 76 percent of such students are categorized as economically disadvantaged. The institution also invested in an organization dedicated to revitalization and stabilization, as well as economic development of low-and moderate income communities in Chicago. There is also a variety of affordable housing organizations in which TNTC has invested, including those that specialize in acquisition, rehabilitation, and preservation, as well as foreclosure prevention. The institution also has staff serve on various boards providing guidance and financial expertise to the organizations.

The institution exhibits excellent responsiveness and institutional awareness to community development needs in its assessment area. Demographic and community contact information reveals a substantial need for investments that fund affordable housing. The majority of TNTC's investments are in this category.

From July 27, 2015 through October 15, 2018, TNTC had community development lending and investment activity, including prior period investments, of approximately \$416.4 million in the assessment area, representing a 105.7 percent increase in comparison to the previous 37 month evaluation period of \$202.4 million. Demographic and community contact information reveals a substantial need for investments that fund affordable housing. The majority of TNTC's investments are in this category.

Community Development Lending

During the review period, the institution originated or renewed 35 community development loans across the assessment area totaling \$62.7 million. The loans were primarily in the provision of community services or affordable housing categories. Community development loans were originated to provide working capital for non-profit organizations experiencing funding gaps involved in the acquisition and rehabilitation of property to provide affordable housing, as well as to those offering services to individuals encountering economic hardship due to suffering from short or long term disability.

The institution also originated an additional 60 loans totaling \$12.2 million to small businesses across the assessment area in low-and moderate-income census tracts. These loans qualify for economic development purposes.

Qualified Community Development Loans										
	Affordable Housing		Economic Development		Revitalization & Stabilization		Community Services		Total	
	#	\$(000s)	#	\$(000s)	#	\$(000s)	#	\$(000s)	#	\$(000s)
New Loans	6	25,799	1	53	0	0	8	3,550	15	29,402
Renewed Loans	1	895	0	0	0	0	19	32,397	20	33,292
Total	7	26,694	1	53	0	0	27	35,947	35	62,694
Note: Percentages may not add to 100.0 percent due to rounding										

Community Development Investments

During the review period, the institution disbursed funds related to new investments of approximately \$197.5 million. It maintained investments from the prior review periods of approximately \$104.1 million. Investments included initiatives in both affordable housing and education, which community representatives indicated are significant needs in the assessment area. Innovativeness and complexity was demonstrated through investments in Low Income Housing Tax Credits (LIHTC), Social Impact Bonds (SIB) which focus on expanding educational opportunities for public school children in low- and moderate-income areas, and a medical student loan program designed to help students who cannot obtain such financing.

Qualified Community Development Investments by Type								
	Prior Period Investments \$ (000s)	Current Period Investments \$ (000s)					Total Investments \$ (000s)	Unfunded Commitments \$ (000s)
		CS	AH	ED	RS	Total		
TOTAL	104,090	40,817	140,103	16,560	0	197,480	301,570	39,897

TNTC also made approximately \$5.7 million in grants and donations to various organizations involved in each of the community development activities of affordable housing, economic development, revitalization and stabilization and community services.

Community Development Services

During the review period, staff performed 9,444 hours of service to 73 organizations on behalf of the bank. The overwhelming majority of the organizations receiving services are active in the provision of community services tailored to meet the needs of low- and moderate-income individuals. Bank management and staff served on boards of directors and on finance, loan, investment, and advisory committees, using their financial and management expertise to help guide the decisions of nonprofit community-based organizations located in the assessment area.

Qualified Community Development Services By Type													
Affordable Housing			Economic Development			Community Services			Revitalization/ Stabilization			Total	
#	Hours	%	#	Hours	%	#	Hours	%	#	Hours	%	#	Hours
1	24	.02	1	55	.06	71	9,365	99.2	0	0	0.0	73	9,444

STATE OF ARIZONA

CRA RATING FOR ARIZONA: Outstanding

Major factors supporting the bank's rating include the following:

- The institution has a high level of community development loans, community development services, or qualified investments; and
- The institution exhibits excellent responsiveness to community development needs in the assessment area.

SCOPE OF EXAMINATION:

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation. Please refer to the "Scope of Examination Section" for details. Full review examination procedures were used to evaluate the bank's operations in the Phoenix-Mesa-Scottsdale, AZ MSA 38060 area. The Tucson, AZ MSA 46060 was evaluated using limited review procedures.

A summary table of Arizona assessment area delineations is as follows:

State of Arizona Assessment Areas		
MSA/MD	Counties Included	Counties Excluded
Phoenix-Mesa-Scottsdale, AZ MSA 38060	Maricopa County, Pinal County	None
Tucson, AZ MSA 46060	Pima	None

DESCRIPTION OF INSTITUTION'S OPERATIONS IN ARIZONA

The Northern Trust Company delineates two assessment areas in their entirety within the state of Arizona. The assessment areas are as follows:

- Phoenix-Mesa-Scottsdale, AZ MSA 38060, consisting of Maricopa and Pinal Counties. Pinal County was added to the assessment area subsequent to the previous performance evaluation of July 27, 2015. The addition of Pinal County expanded the assessment area by 75 census tracts from 916 to 991, or by 8.2 percent.
- Tucson, AZ MSA 46060 consisting of Pima County in its entirety. The assessment area is unchanged from the previous evaluation of July 27, 2015.

TNTC operates three branches with full-service ATMs and one cash-only ATM in the state of

Arizona; all are in upper income census tracts. A breakout of branch and ATM location is discussed further under the individual assessment area summaries.

CONCLUSIONS WITH RESPECT TO COMMUNITY DEVELOPMENT TEST IN ARIZONA

The bank's community development performance is Outstanding based on the following characteristics:

- The institution has a high level of community development loans, community development services, or qualified investments
- The institution exhibits excellent responsiveness to credit and community development needs in the assessment area.

Investment, Loan, and Service Activity

The Northern Trust Company has a high level of community development loans, community development services, or qualified investments. It occasionally uses innovative or complex community development loans, qualified investments, or services in the assessment area. The institution exhibits excellent responsiveness to community development needs in the assessment area. Affordable housing initiatives included investments of over \$9.6 million in three Low Income Housing Tax Credit funds in the Phoenix assessment area as well as an additional such investment in the Tucson assessment area. TNTC also extended a line of credit to a national affordable housing developer for the construction of such type of housing. Demographic and community contact information reveals a substantial need for investments that fund affordable housing.

Community Development Lending

During the review period, the institution made six community development loans across two assessment areas totaling \$15.0 million dollars. Each of the six originations was for affordable housing purposes.

The institution originated an additional nine loans to small businesses in low-and moderate-income census tracts. These loans qualify under economic development and total \$4.6 million.

Community Development Investments

During the review period, the institution disbursed funds related to new qualified investments of approximately \$91.3 million across the assessment area and investments of \$3.9 million outside the assessment area which benefitted the state of Arizona. It maintained qualified investments from prior review years of approximately \$15.7 million and made unfunded commitments of \$28.7 million of which \$21.6 million are in the assessment area. Investments met the community development purposes of affordable housing, economic development, community services, and

revitalization/stabilization. TNTC also made \$236,835 in donations and grants to various affordable housing and community service support organizations in the assessment area.

Community Development Services

Bank staff performed 789 hours of service to 12 different organizations on behalf of the bank. The majority of the organizations receiving the services are active in the provision of community services tailored to meet the needs of low- and moderate-income individuals. TNTC staff also contributed their financial and management expertise to several affordable housing organizations as well. Bank management and staff served on boards of directors, and on finance, loan, investment, and advisory committees to help guide the decisions of non-profit community-based organizations in the assessment area.

PHOENIX-MESA-SCOTTSDALE, AZ MSA 38060-FULL REVIEW

SCOPE OF EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a full-scope review. Please refer to the "Scope of Examination Section" for details.

DESCRIPTION OF INSTITUTION'S OPERATIONS IN PHOENIX-MESA-SCOTTSDALE, AZ MSA 38060

The Northern Trust Company delineates all of the Phoenix-Mesa-Scottsdale, AZ MSA 38060 as its assessment area. This includes Maricopa and Pinal Counties, with the latter being an addition to the assessment area since the previous performance evaluation. The addition of Pinal County expanded the assessment area by 75 census tracts from 916 to 991 or by 8.2 percent.

Within the assessment area, TNTC has two branches, with one located in a middle-income and the other in an upper-income census tract. Each branch contains a full-service ATM. In addition, the bank opened a cash-only ATM in March of 2016 in an upper-income census tract. The FDIC Deposit Market Share Report as of June 30, 2017, ranks the bank 14th of 60 area institutions with 0.6 percent market share. The top three institutions in the market, JP Morgan Chase Bank NA, Wells Fargo Bank NA, and Bank of America account for 68.6 percent of the market. The high level of deposits in the three institutions indicates a heavily concentrated market and the bank's presence is limited.

The assessment area consists of a total of 991 census tracts; 110 (11.1 percent) are low-, 231 (23.3 percent) are moderate-, 326 (32.9 percent) are middle-, 311 (31.4 percent) are upper-income. Thirteen, or 1.3 percent, are of unknown income.

Community development activity that took place in calendar years up to and including 2016 are evaluated based on ACS income level definitions from the five-year survey data set 2006-2010. Community development activity performed in 2017 and beyond are evaluated based on ACS income level definitions from the five-year survey data set 2011-2015.

As the following table indicates the assessment area experienced a net increase of 19 low-income census tracts and a net decrease of 12 moderate-income census tracts.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	91	110	19
Moderate	243	231	(12)
Middle	336	326	(10)

Upper	311	311	0
Unknown	10	13	3
Total	991	991	0
<i>Source: U. S. Census Bureau: Decennial Census: American Community Survey Data: 2006-2010</i> <i>U.S. Census Bureau: Decennial Census: America Community Survey Data: 2011-2015</i>			

Additional demographic information as of 2017 for the assessment area is presented in the following table:

Assessment Area: 2017 Phoenix-Mesa-Scottsdale, AZ MSA 38060								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	110	11.1	89,438	8.6	38,136	42.6	227,358	21.9
Moderate-income	231	23.3	221,107	21.3	44,951	20.3	179,229	17.3
Middle-income	326	32.9	359,550	34.7	31,768	8.8	202,220	19.5
Upper-income	311	31.4	366,049	35.3	14,716	4.0	427,610	41.3
Unknown-income	13	1.3	273	0.0	66	24.2	0	0.0
Total Assessment Area	991	100.0	1,036,417	100.0	129,637	12.5	1,036,417	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	171,684	43,139	4.5	25.1	100,504	58.5	28,041	16.3
Moderate-income	437,948	189,893	19.6	43.4	178,876	40.8	69,179	15.8
Middle-income	651,320	359,336	37.1	55.2	196,439	30.2	95,545	14.7
Upper-income	569,032	374,888	38.7	65.9	125,323	22.0	68,821	12.1
Unknown-income	2,061	222	0.0	10.8	1,497	72.6	342	16.6
Total Assessment Area	1,832,045	967,478	100.0	52.8	602,639	32.9	261,928	14.3
	Total Businesses by Tract	Businesses by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
		#	%	#	%	#	%	#
Low-income	11,992	6.9	9,848	6.2	1,974	14.1	170	9.9
Moderate-income	30,395	17.5	26,861	17.0	3,307	23.6	227	13.3
Middle-income	50,833	29.2	46,885	29.6	3,549	25.3	399	23.3
Upper-income	79,839	45.9	73,953	46.7	4,979	35.5	907	53.0
Unknown-income	912	0.5	672	0.4	231	1.6	9	0.5
Total Assessment Area	173,971	100.0	158,219	100.0	14,040	100.0	1,712	100.0
	Percentage of Total Businesses:			90.9		8.1		1.0
	Total Farms by Tract	Farms by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
		#	%	#	%	#	%	#
Low-income	55	3.7	46	3.3	9	8.8	0	0.0
Moderate-income	288	19.4	261	18.9	27	26.5	0	0.0
Middle-income	491	33.1	453	32.8	38	37.3	0	0.0
Upper-income	644	43.4	616	44.6	28	27.5	0	0.0
Unknown-income	5	0.3	5	0.4	0	0.0	0	0.0
Total Assessment Area	1,483	100.0	1,381	100.0	102	100.0	0	0.0
	Percentage of Total Farms:			93.1		6.9		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

The following presentation of key demographics used to help inform the evaluation of bank activity in its

assessment area is based on a comparison of two sets of ACS data, 2006-2010 and 2011-2015.

Population Characteristics

Census data for the period of 2011-2015 Phoenix-Mesa-Scottsdale, AZ MSA 38060 indicate a high rate of population growth relative to the bank's other assessment areas. Maricopa County displays the strongest growth rate at 5.3 percent. Community representatives indicate an influx of businesses relocating to the area due to low cost of living and warm climate, along with a desire to live closer to their employment have contributed to the population increase.

Population Change 2010 – 2015			
Area	2010 Population	2011-2015 Population	Percentage Change
Phoenix-Mesa-Scottsdale, AZ MSA 38060	4,192,887	4,407,915	5.1
Maricopa County, AZ	3,817,117	4,018,143	5.3
Pinal County, AZ	375,770	389,772	3.7
State of Arizona	6,392,017	6,641,928	3.9
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

The following table lists the five largest municipalities within the assessment area. Per the U.S. Census Bureau, in the period of mid-2016 through mid-2017, the city of Phoenix added over 24,000 residents making it the second fastest growing city during that time period.

Five Largest Municipalities within the Assessment Area		
Municipality	Population	County
Phoenix	1,626,078	Maricopa
Mesa	496,401	Maricopa
Chandler	253,458	Maricopa
Scottsdale	249,950	Maricopa
Glendale	246,709	Maricopa
Source: U.S. Census Bureau 2017 Population Estimates		

Income Characteristics

As displayed in the table below the median family income in the assessment area varies, with the highest in Maricopa County at \$64,751 and the lowest in Pinal County at \$55,362. Overall, income in the MSA decreased slightly by -1.1 percent. The statistical lack of growth in wages affirms a community representative's observation that incomes in the area are not keeping pace with escalation in housing prices. Additionally, the decline in wages in median family incomes not only in the MSA, but the state of Arizona as a whole indicate a significant gap compared to the Consumer Price Index (CPI) of 7.4 percent with incomes failing to keep pace with inflation.

Median Family Income Change 2010 – 2015			
Area	2010 Median Family Income	2011-2015 Median Family Income	Percentage Change
Phoenix-Mesa-Scottsdale, AZ MSA 38060	64,408	63,686	-1.1
Maricopa County, AZ	65,438	64,751	-1.0
Pinal County, AZ	56,299	55,362	-1.7
State of Arizona	59,840	59,480	-0.6
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

Housing Characteristics

Although the following table indicates significant declines in housing values from 2010 to 2015, community contacts indicate increases have taken place in recent years with strong demand driving up housing prices to the point that affordable housing is becoming increasingly more difficult to obtain. Additionally, there has been a recent sharp increase in the construction of rental properties most of which are not affordable. Accordingly, median gross rents have experienced an increase across the assessment area.

Housing Costs Change 2010 – 2015				
Area	2010 Median Housing Value	2011-2015 Median Housing Value	2010 Median Gross Rent	2011 – 2015 Median Gross Rent
Phoenix-Mesa-Scottsdale, AZ MSA 38060	232,295	179,148	909	962
Maricopa County, AZ	238,600	187,100	912	962
Pinal County, AZ	164,000	128,700	848	992
State of Arizona	215,000	167,500	856	913
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

Employment Conditions

From 2013 through 2016, unemployment rates declined by nearly one third within each of the counties and within the state. During the same period Gross Domestic Product (GDP) in the Phoenix-Mesa-Scottsdale, AZ MSA 38060 grew from \$199.9 billion to \$ 231.0 billion, or 15.6 percent, which was above the national aggregate MSA of 12.6 percent. Community representatives within the MSA indicated that Phoenix has been traditionally home to service oriented industries; however, there have been recent increases in construction and manufacturing positions. Per the Bureau of Labor Statistics, the major areas of occupations in excess of 120,000 employees are Office and Administrative Support, Sales and Related, Food Preparation and Service Related, and

Transportation and Material Moving. The top five employers in the MSA are all located in Maricopa County: Arizona State University (education), Showroom Casino (entertainment), Mesa Public Schools (education), General Dynamics (Radar Manufacturers & Service), and Honor Health (medical).

Unemployment Rates 2013 - 2016				
Area	2013	2014	2015	2016
Phoenix-Mesa-Scottsdale, AZ MSA 38060	6.9	6.0	5.2	4.6
Maricopa County, AZ	6.7	5.9	5.1	4.5
Pinal County, AZ	8.6	7.2	6.3	5.5
State of Arizona	8.0	6.9	6.0	5.3
Source: U.S. Bureau of Labor Statistics				

Representatives from both an affordable housing organization and a small business association were contacted to assess the credit needs and market conditions within the assessment area. Each spoke about the recent population and economic growth in the area resulting in increased demand for residential housing. One mentioned the scarcity of affordable housing as it was increasingly difficult to find homes priced at less than \$100,000. The other representative mentioned that the greatest need for small businesses was gaining access to capital.

CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN PHOENIX-MESA-SCOTTSDALE, AZ MSA 38060

Investment, Loan, and Service Activity

The Northern Trust Company has a high level of community development loans, qualified investments and community development services. The bank occasionally uses innovative or complex qualified investments in the assessment area, and exhibits excellent responsiveness to community development needs in the assessment area. Demographic and community representative information reveals a substantial need for investments targeting affordable housing. TNTC's investments are responsive to this need as it made investments in Low Income Housing Tax Credits of \$9.6 million which helped provide affordable rental housing, and purchased approximately \$75.4 million dollars in mortgage back securities consisting of loan originations to low- and moderate-income borrowers. TNTC also made a \$5 million investment in a CDFI which provides affordable housing, education, healthcare, and other services to low- and moderate-income individuals.

TNTC had community development lending and investment activity including prior period maintained investments of approximately \$111.3 million, representing a 163.7 percent increase in comparison to the previous 37 month evaluation period of \$42.2 million.

Community Development Lending

During the review period, the institution made two community development loans for \$7.0 million. There was one new loan origination and one loan renewal each for \$3.5 million. Both loans were for the provision of affordable housing in the assessment area. Six additional loans to small businesses were originated in the assessment area in the amount of \$4.0 million. By supporting these businesses in low- or moderate-income census tracts, the loan qualifies as economic development.

Community Development Investments

During the review period, the institution made new investments of approximately \$83.0 million. It maintained investments from the prior review periods of approximately \$10.3 million. Investments included affordable housing initiatives, a need indicated by a community representative. Innovativeness and complexity were demonstrated through investments in a CDFI that provides financing and development assistance to underserved people and communities and multiple Low Income Housing Tax Credits.

Qualified Community Development Investments by Type								
	Prior Period Investments \$ (000s)	Current Period Investments \$ (000s)					Total Investments \$ (000s)	Unfunded Commitments \$ (000s)
		CS	AH	ED	RS	Total		
TOTAL	10,251	5,000	78,011	0	0	83,011	93,262	6,993

TNTC also made \$187,400 in grants and donations to various organizations involved in affordable housing and community development services.

Community Development Services

Staff performed 683 hours of service to six different organizations on behalf of the bank. Three of the organizations receiving the services are active in the provision of community services tailored to meet the needs of low- and moderate-income individuals and three are affordable housing organizations. Bank management and staff served on boards of directors and on finance, loan, investment, and advisory committees, using their financial and management expertise to help guide the decisions of nonprofit community-based organizations located in the assessment area.

Qualified Community Development Services By Type													
Affordable Housing			Economic Development			Community Services			Revitalization/ Stabilization			Total	
#	Hours	%	#	Hours	%	#	Hours	%	#	Hours	%	#	Hours
3	99	14.5	0	0	0.0	3	584	85.5	0	0	0.0	6	683

TUCSON, AZ MSA 46060 – LIMITED REVIEW

SCOPE OF THE EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a limited scope review. Please refer to the “Scope of Examination” section for details.

DESCRIPTION OF INSTITUTION’S OPERATIONS IN TUCSON, AZ MSA 46060

The Northern Trust Company delineates the Tucson, AZ MSA 46060, which consists of Pima County, AZ, in its entirety. The assessment area is unchanged from the previous performance evaluation of July 27, 2015. TNTC maintains operations in the Tucson, AZ MSA 46060 through one branch with a full-service ATM located in an upper-income census tract.

As of June 30, 2017 the bank ranked 11th out of 18 FDIC-insured depository financial institutions that have a presence in the assessment area with a market share of 1.4 percent. The top three financial institutions are Wells Fargo Bank, JP Morgan Bank, and Bank of America with 28.0 percent, 23.4 percent, and 18.3 percent of area deposits respectively.

The assessment area consists of a total of 241 census tracts; 19 (7.9 percent) are low-, 67 (27.8 percent) are moderate-, 77 (32.0 percent) are middle-, 76 (31.5 percent) are upper-income census tracts, and two (0.8 percent) census tracts are of unknown income.

The income data used to calculate geographic income designations changed between 2016 and 2017. As the following table indicates the assessment area experienced a net increase of one low-income census tracts and a net increase of two moderate-income census tracts

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	18	19	1
Moderate	65	67	2
Middle	81	77	(4)
Upper	76	76	0
Unknown	1	2	1
Total	241	241	0
<i>Source: U. S. Census Bureau: Decennial Census: American Community Survey Data: 2006-2010 U.S. Census Bureau: Decennial Census: American Community Survey Data: 2011-2015</i>			

Additional demographic information as of 2017 for the assessment area is presented in the following table:

Assessment Area: 2017 Tucson, AZ MSA 46060								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	19	7.9	18,616	7.8	7,539	40.5	53,265	22.2
Moderate-income	67	27.8	59,276	24.7	13,808	23.3	41,587	17.3
Middle-income	77	32.0	73,222	30.5	7,178	9.8	45,854	19.1
Upper-income	76	31.5	88,759	37.0	3,429	3.9	99,266	41.4
Unknown-income	2	0.8	99	0.0	4	4.0	0	0.0
Total Assessment Area	241	100.0	239,972	100.0	31,958	13.3	239,972	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	39,469	11,275	4.7	28.6	22,503	57.0	5,691	14.4
Moderate-income	120,907	51,052	21.4	42.2	53,612	44.3	16,243	13.4
Middle-income	140,975	78,342	32.9	55.6	44,291	31.4	18,342	13.0
Upper-income	144,909	97,618	41.0	67.4	30,516	21.1	16,775	11.6
Unknown-income	509	42	0.0	8.3	407	80.0	60	11.8
Total Assessment Area	446,769	238,329	100.0	53.3	151,329	33.9	57,111	12.8
	Total Businesses by Tract	Businesses by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
	#	%	#	%	#	%	#	%
Low-income	2,318	6.4	2,005	6.0	300	10.7	13	5.8
Moderate-income	8,663	23.8	7,597	22.8	1,028	36.7	38	16.9
Middle-income	10,926	30.1	10,027	30.1	839	29.9	60	26.7
Upper-income	14,067	38.7	13,379	40.2	581	20.7	107	47.6
Unknown-income	358	1.0	296	0.9	55	2.0	7	3.1
Total Assessment Area	36,332	100.0	33,304	100.0	2,803	100.0	225	100.0
	Percentage of Total Businesses:			91.7		7.7		0.6
	Total Farms by Tract	Farms by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
	#	%	#	%	#	%	#	%
Low-income	6	1.9	6	1.9	0	0.0	0	0.0
Moderate-income	37	11.6	36	11.7	1	9.1	0	0.0
Middle-income	139	43.6	133	43.2	6	54.5	0	0.0
Upper-income	136	42.6	132	42.9	4	36.4	0	0.0
Unknown-income	1	0.3	1	0.3	0	0.0	0	0.0
Total Assessment Area	319	100.0	308	100.0	11	100.0	0	0.0
	Percentage of Total Farms:			96.6		3.4		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

CONCLUSIONS WITH RESPECT TO PERFORMANCE TESTS

Assessment Area	Community Development Activity	Community Development Initiatives	Responsiveness to Community Development Needs
Assessment Area: Tucson, AZ MSA 46060	Consistent	Consistent	Consistent
<i>Community Development Activities include Qualified Loans, Investments and Services. Community Development Initiatives include Qualified Programs and Commitments.</i>			

CALIFORNIA

CRA RATING FOR CALIFORNIA: Outstanding

Major factors supporting the bank's rating include the following:

- The institution has a high level of community development loans, community development services, or qualified investments, particularly investments that are not routinely provided by private investors; and
- The institution exhibits excellent responsiveness to credit and community development needs in the assessment area.

SCOPE OF EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation. Please refer to the "Scope of Examination" sections for details.

A full review was conducted for evaluation under Wholesale/Limited Purpose CRA Examination Procedures for the Los Angeles-Long Beach-Anaheim, CA MSA 31080, San Francisco-Oakland-Hayward, CA MSA 41860, and Santa Maria-Santa Barbara, CA MSA 42200. A limited review was conducted for the San Diego-Carlsbad, CA 41740. A summary table is presented below, and a detailed breakout of TNTC's assessment delineations can be found under each assessment area summary.

State of California Assessment Areas		
MSA/MD	Counties Included	Counties Excluded
Los-Angeles-Long Beach –Anaheim CA MSA 31080	<u>Anaheim-Santa Ana- Irvine, MD 11244</u> (Orange County) <u>Los Angeles-Long Beach- Glendale MD 31084</u> (Los Angeles County)	None
San Francisco-Oakland-Hayward CA MSA 41860	<u>Oakland-Hayward-Berkeley MD 36084</u> (Alameda County) <u>San Francisco-Redwood City-South San Francisco MD 41884</u> (San Francisco County, San Mateo County) <u>San Rafael MD 42034</u> (Marin County)	Contra Costa
Santa Maria-Santa Barbara CA MSA 42200	Santa Barbara County	None
San Diego-Carlsbad CA MSA 41740	San Diego County	None

DESCRIPTION OF INSTITUTION'S OPERATIONS IN CALIFORNIA

The Northern Trust Company operates eight branches in the state of California and four full-service ATMs. One branch located in a moderate-income census tract in the Santa Maria-Santa Barbara, CA MSA 42200 was closed in September of 2016. A full-service ATM was opened in an upper-income census tract in January of the same year in the San Francisco-Oakland-Hayward, CA MSA 41860. The following table displays the bank's presence in the state:

Northern Trust Branches and ATMs California									
MD	Branches by Census Tracts				ATMs by Census Tracts				
	Low	Moderate	Middle	Upper	Low	Moderate	Middle	Upper	Unknown
Los Angeles-Long Beach-Anaheim CA MSA 31080	0	0	0	3	0	0	0	1	0
San Francisco-Oakland-Hayward CA MSA 41860	1	0	0	2	0	0	0	2	0
Santa Maria-Santa Barbara CA MSA 42200	0	0	0	1	0	0	0	0	0
San Diego-Carlsbad CA 41740	0	0	1	0	0	0	1	0	0
Total	1	0	1	6	0	0	1	3	0

CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TESTS IN CALIFORNIA

The bank's performance relative to the community development test is Outstanding based on the following community development test characteristics:

- The institution has a high level of community development loans, community development services, or qualified investments, particularly investments that are not routinely provided by private investors;
- The institution exhibits excellent responsiveness to credit and community development needs in the assessment area.

Investment, Loan, and Service Activity

The Northern Trust Company has a high level of community development loans, community development services, or qualified investments, particularly investments that are not routinely provided by private investors, and which exhibit excellent responsiveness to credit and community development needs. Also, the bank occasionally uses innovative or complex qualified investments, community development loans, or community development services. This is demonstrated by the variety of initiatives the institution is involved with that include low income housing tax credits, deposits in a low-income credit union and in a CDFI institution, a line of credit to a nonprofit whose mission is to create a community of volunteers to assist the less fortunate, and multiple affordable housing organizations.

The institution exhibits excellent responsiveness to credit and community development needs in the assessment area. All four community representatives contacted in the California full review assessment areas identified affordable housing as a critical need, commenting that the issue is now affecting middle-income individuals as well as low- and moderate-income individuals. TNTC significantly increased its disbursements in affordable housing investments to \$75.5 million during the review period. This included a combination of Low Income Housing Tax Credits and mortgage back securities composed of low- and moderate-income individual loan originations in the assessment area.

Community Development activities are detailed below:

Community Development Lending

During the review period the institution originated two community development loans for \$8.2 million across all four assessment areas and two additional community development loans outside the assessment area for \$30.0 million. One loan was for affordable housing and three qualified for community services. The institution also originated an additional eight small business loans within low- and moderate-income census tracts, which qualify for economic development. The loans include six within the assessment area and two outside, totaling \$5.8 million.

Community Development Investments

During the review period, the institution disbursed funds related to new investments of approximately \$76.2 million. It maintained investments from prior period reviews of approximately \$40.8 million. Additionally, it made unfunded commitments of approximately \$52.2 million. Investments met the community development purpose of affordable housing, community service, and economic development. Further, the bank made \$5.1 million in disbursements and maintained prior period qualifications of \$3.7 million that, while outside the assessment areas, benefited the state of California.

TNTC also made \$395,000 in qualified donations to various community service and affordable housing organizations within the assessment areas. There was an additional \$25,000 in donations outside of the assessment area that benefited the state of California.

Community Development Services

Bank staff performed 280 hours of service to six different organizations on behalf of the bank. All of the organizations receiving the services are active in the provision of community services tailored to meet the needs of low- and moderate-income individuals. Bank management and staff served on boards of directors and on finance, loan, investment, and advisory committees, using their financial and management expertise to help guide the decisions of nonprofit community based organizations located in assessment areas.

LOS ANGELES- LONG BEACH-ANAHEIM, CA MSA 31080-FULL REVIEW

SCOPE OF EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a full-scope review. Please refer to the "Scope of Examination Section" for details.

DESCRIPTION OF INSTITUTION'S OPERATIONS IN LOS ANGELES-LONG BEACH-ANAHEIM, CA MSA 31080

The Northern Trust Company assessment area is unchanged from the previous performance evaluation dated July 27, 2015 as it delineates all of the Los Angeles-Long Beach-Anaheim, CA MSA 31080 in its entirety. The assessment area is composed of the two following metropolitan divisions:

- Anaheim-Santa Ana-Irvine, CA MD 11244 (Orange County)
- Los Angeles-Long Beach-Glendale, CA MD 31084 (Los Angeles County)

Within the assessment area TNTC has three branches and one full-service ATM located in upper-income census tracts. The FDIC Deposit Market Share Report as of June 30, 2017, ranks the bank 42nd of 125 area institutions with 0.15 percent market share. The four major institutions in the market, Bank of America NA, JP Morgan Chase Bank NA, and MUFG Union Bank NA account for a combined 54.3 percent of the market. The high level of deposits in the four institutions indicates a heavily concentrated market, and the bank's presence is limited.

The assessment area consists of a total of 2,929 census tracts; 266 (9.1 percent) are low-, 821 (28.0 percent) are moderate-, 760 (25.9 percent) are middle-, 1,028 (35.1 percent) are upper-income, and 54 (1.8 percent) are of unknown income.

The income data used to calculate geographic income designations changed between 2016 and 2017. Accordingly, community development activity that took place in calendar years up to and including 2016 are evaluated based on ACS income level definitions from the five-year survey data set 2006-2010. Community development activity performed in 2017 and beyond are evaluated based on ACS income level definitions from the five-year survey data set 2011-2015. As the following table indicates the assessment area experienced a net increase of 21 low-income census tracts and a net decrease of four moderate-income census tracts.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	245	266	21
Moderate	825	821	(4)
Middle	819	760	(59)
Upper	999	1,028	29
Unknown	41	54	13
Total	2,929	2,929	0
Source: U. S. Census Bureau: Decennial Census: American Community Survey Data: 2006-2010 U.S. Census Bureau: Decennial Census: America Community Survey Data: 2011-2015			

Additional demographic information as of 2017 for the assessment area is presented in the following tables:

Assessment Area: 2017 Los Angeles-Long Beach-Anaheim, CA MSA 31080								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	266	9.1	221,796	7.6	78,727	35.5	709,610	24.4
Moderate-income	821	28.0	788,614	27.1	169,096	21.4	475,277	16.3
Middle-income	760	25.9	773,794	26.6	80,644	10.4	495,608	17.0
Upper-income	1,028	35.1	1,126,100	38.7	50,469	4.5	1,233,043	42.3
Unknown-income	54	1.8	3,234	0.1	609	18.8	0	0.0
Total Assessment Area	2,929	100.0	2,913,538	100.0	379,545	13.0	2,913,538	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	340,504	55,545	2.7	16.3	263,439	77.4	21,520	6.3
Moderate-income	1,171,395	366,014	17.6	31.2	739,185	63.1	66,196	5.7
Middle-income	1,187,608	572,472	27.5	48.2	549,469	46.3	65,667	5.5
Upper-income	1,822,595	1,086,537	52.2	59.6	622,692	34.2	113,366	6.2
Unknown-income	19,258	1,462	0.1	7.6	15,607	81.0	2,189	11.4
Total Assessment Area	4,541,360	2,082,030	100.0	45.8	2,190,392	48.2	268,938	5.9
	Total Businesses by Tract	Businesses by Tract & Revenue Size						
		Less Than or = \$1 Million			Over \$1 Million		Revenue Not Reported	
		#	%	#	%	#	%	#
Low-income	28,678	5.1	25,038	4.9	3,524	6.2	116	4.7
Moderate-income	110,641	19.5	97,701	19.3	12,567	22.2	373	15.1
Middle-income	146,167	25.8	128,915	25.4	16,671	29.4	581	23.5
Upper-income	270,878	47.8	248,026	48.9	21,539	38.0	1,313	53.1
Unknown-income	9,818	1.7	7,311	1.4	2,417	4.3	90	3.6
Total Assessment Area	566,182	100.0	506,991	100.0	56,718	100.0	2,473	100.0
	Percentage of Total Businesses:			89.5		10.0		0.4
	Total Farms by Tract	Farms by Tract & Revenue Size						
		Less Than or = \$1 Million			Over \$1 Million		Revenue Not Reported	
		#	%	#	%	#	%	#
Low-income	28	1.7	27	1.7	1	1.2	0	0.0
Moderate-income	248	14.9	226	14.3	22	25.6	0	0.0
Middle-income	402	24.1	378	24.0	24	27.9	0	0.0
Upper-income	971	58.3	932	59.1	38	44.2	1	100.0
Unknown-income	16	1.0	15	1.0	1	1.2	0	0.0
Total Assessment Area	1,665	100.0	1,578	100.0	86	100.0	1	100.0
	Percentage of Total Farms:			94.8		5.2		0.1
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

Assessment Area: 2017 Anaheim-Santa Ana-Irvine, CA MD 11244								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	45	7.7	52,075	7.2	13,836	26.6	173,089	23.8
Moderate-income	147	25.2	175,738	24.2	26,958	15.3	118,318	16.3
Middle-income	177	30.4	210,988	29.0	14,855	7.0	130,291	17.9
Upper-income	211	36.2	288,183	39.6	10,574	3.7	305,355	42.0
Unknown-income	3	0.5	69	0.0	0	0.0	0	0.0
Total Assessment Area	583	100.0	727,053	100.0	66,223	9.1	727,053	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	69,793	19,072	3.3	27.3	47,712	68.4	3,009	4.3
Moderate-income	256,945	108,125	18.6	42.1	136,872	53.3	11,948	4.7
Middle-income	325,363	174,139	29.9	53.5	134,222	41.3	17,002	5.2
Upper-income	412,343	280,738	48.2	68.1	108,354	26.3	23,251	5.6
Unknown-income	198	77	0.0	38.9	42	21.2	79	39.9
Total Assessment Area	1,064,642	582,151	100.0	54.7	427,202	40.1	55,289	5.2
	Total Businesses Tract		Businesses by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	9,316	6.1	7,767	5.7	1,507	9.0	42	5.9
Moderate-income	31,740	20.7	27,888	20.5	3,751	22.5	101	14.3
Middle-income	54,465	35.6	47,129	34.7	7,089	42.5	247	35.0
Upper-income	56,901	37.2	52,519	38.7	4,071	24.4	311	44.1
Unknown-income	736	0.5	457	0.3	274	1.6	5	0.7
Total Assessment Area	153,158	100.0	135,760	100.0	16,692	100.0	706	100.0
	Percentage of Total Businesses:			88.6		10.9		0.5
	Total Farms by Tract		Farms by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	8	1.7	8	1.8	0	0.0	0	0.0
Moderate-income	81	17.5	76	17.3	5	21.7	0	0.0
Middle-income	146	31.6	137	31.2	9	39.1	0	0.0
Upper-income	227	49.1	218	49.7	9	39.1	0	0.0
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	462	100.0	439	100.0	23	100.0	0	0.0
	Percentage of Total Farms:			95.0		5.0		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

Assessment Area: 2017 Los Angeles-Long Beach-Anaheim, CA MSA 31080								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	266	9.1	221,796	7.6	78,727	35.5	709,610	24.4
Moderate-income	821	28.0	788,614	27.1	169,096	21.4	475,277	16.3
Middle-income	760	25.9	773,794	26.6	80,644	10.4	495,608	17.0
Upper-income	1,028	35.1	1,126,100	38.7	50,469	4.5	1,233,043	42.3
Unknown-income	54	1.8	3,234	0.1	609	18.8	0	0.0
Total Assessment Area	2,929	100.0	2,913,538	100.0	379,545	13.0	2,913,538	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	340,504	55,545	2.7	16.3	263,439	77.4	21,520	6.3
Moderate-income	1,171,395	366,014	17.6	31.2	739,185	63.1	66,196	5.7
Middle-income	1,187,608	572,472	27.5	48.2	549,469	46.3	65,667	5.5
Upper-income	1,822,595	1,086,537	52.2	59.6	622,692	34.2	113,366	6.2
Unknown-income	19,258	1,462	0.1	7.6	15,607	81.0	2,189	11.4
Total Assessment Area	4,541,360	2,082,030	100.0	45.8	2,190,392	48.2	268,938	5.9
	Total Businesses by Tract	Businesses by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
	#	%	#	%	#	%	#	%
Low-income	28,678	5.1	25,038	4.9	3,524	6.2	116	4.7
Moderate-income	110,641	19.5	97,701	19.3	12,567	22.2	373	15.1
Middle-income	146,167	25.8	128,915	25.4	16,671	29.4	581	23.5
Upper-income	270,878	47.8	248,026	48.9	21,539	38.0	1,313	53.1
Unknown-income	9,818	1.7	7,311	1.4	2,417	4.3	90	3.6
Total Assessment Area	566,182	100.0	506,991	100.0	56,718	100.0	2,473	100.0
	Percentage of Total Businesses:			89.5		10.0		0.4
	Total Farms by Tract	Farms by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
		#	%	#	%	#	%	#
Low-income	28	1.7	27	1.7	1	1.2	0	0.0
Moderate-income	248	14.9	226	14.3	22	25.6	0	0.0
Middle-income	402	24.1	378	24.0	24	27.9	0	0.0
Upper-income	971	58.3	932	59.1	38	44.2	1	100.0
Unknown-income	16	1.0	15	1.0	1	1.2	0	0.0
Total Assessment Area	1,665	100.0	1,578	100.0	86	100.0	1	100.0
	Percentage of Total Farms:			94.8		5.2		0.1
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

The following presentation of key demographics used to help inform the evaluation of bank activity in its assessment area is based on a comparison of two sets of ACS data, 2006-2010 and 2011-2015.

Population Characteristics

From 2010 to 2015, the overall population in the assessment area increased at a rate of 2.5 percent, with Orange County having a larger increase by percentage than Los Angeles County. The 2.5 percent was below the state of California which grew at a 3.1 percent rate. The population of the assessment area represents 34.2 percent of the state of California.

Population Change 2010 – 2015			
Area	2010 Population	2011-2015 Population	Percentage Change
Los Angeles County, CA	9,818,605	10,038,388	2.2
Orange County, CA	3,010,232	3,116,069	3.5
Anaheim-Santa Ana-Irvine, CA MD 11244	3,010,232	3,116,069	3.5
Los Angeles-Long Beach-Glendale, CA MD 31084	9,818,605	10,038,388	2.2
State of California	37,282,566	38,421,464	3.1
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

The following table lists the five largest municipalities within the assessment area. Los Angeles is the second largest city in the United States. Irvine was rated 14th in population numeric increase between mid-2016 and mid-2017 among U.S. cities with a growth of 11,068 residents.

Five Largest Municipalities within the Assessment Area		
Municipality	Population	County
Los Angeles	3,999,759	Los Angeles
Long Beach	469,450	Los Angeles
Anaheim	352,497	Orange
Santa Ana	334,136	Orange
Irvine	277,453	Orange
Source: U.S. Census Bureau 2017 Population Estimates		

Income Characteristics

As displayed in the table below, there is a wide disparity of income between Los Angeles County and Orange County with the median family income with the former being only 72.9 percent of the latter, or \$62,703 to \$86,003, respectively. This is further illustrated in the statistical data as families below the poverty level as percentage of families by census tract is much higher in Los Angeles County with 35.5 percent in low-income census tracts and 21.4 percent in moderate-income census tracts. In contrast, Orange County is 26.6 percent in low-income census tracts and 15.3 percent in

moderate-income census tracts.

Income in the assessment area increased overall for the period of 2010-2015, with Los Angeles County increasing by 1.8 percent and Orange County increasing slightly more by 2.7 percent, both of which are consistent with the state of California at 2.0 percent. However, income failed to keep pace with the Consumer Price Index (CPI) inflation rate of 7.4 percent.

Median Family Income Change 2010 – 2015			
Area	2006 – 2010 Median Family Income	2011-2015 Median Family Income	Percentage Change
Los Angeles County, CA	61,622	62,703	1.8
Orange County, CA	83,735	86,003	2.7
Anaheim-Santa Ana-Irvine, CA MD 11244	83,735	86,003	2.7
Los Angeles-Long Beach-Glendale, CA MD 31084	61,622	62,703	1.8
State of California	69,322	70,720	2.0
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

Housing Characteristics

Median housing values in the assessment area declined during 2010 through 2015. However, median gross rents increased across the assessment area. Two community representatives commented that housing prices have recently been trending upward and it was increasingly challenging for people to own their own home.

Median housing values in the assessment area are significantly higher than the state of California with Orange County 43.7 percent above that of the state. In terms of actual dollars, the highest median housing values are in Orange County at \$553,600, with the lowest in Los Angeles County at \$441,900, as compared to the state of California at \$385,500.

Housing Costs Change 2010 – 2015				
Area	2010 Median Housing Value	2011-2015 Median Housing Value	2010 Median Gross Rent	2011 – 2015 Median Gross Rent
Los Angeles County, CA	508,800	441,900	1,117	1,231
Orange County, CA	607,900	553,600	1,423	1,548
Anaheim-Santa Ana-Irvine, CA MD 11244	607,908	553,617	1,422	1,548
Los Angeles-Long Beach-Glendale, CA MD 31084	508,750	441,917	1,117	1,230
State of California	458,500	385,500	1,147	1,255
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

The low affordability ratio in both counties indicates that housing expenses are relatively high in the assessment area with the percentage of owner occupied housing in Los Angeles County being under 50 percent.

One affordable housing community representative and one economic development community representative were contacted to increase understanding of credit needs and market conditions within the assessment area. They both indicated that housing is a critical need, with an estimated 25 percent of the nation's homeless residing in the area. One of the community representatives noted that the area has experienced a historic shortage of housing due to slow growth anti-density sentiment. The other community representative indicated that it is not uncommon for residents of low- and moderate-income areas to spend 50 to 60 percent of their income on housing. The housing shortage has forced some to live in cars or recreational vehicles when possible. Affordable housing is also a challenge as only an estimated 70 percent of the jobs in the area pay a living wage while the median home price has reached a new peak.

Housing Narrative Information				
Area	2010 Affordability Ratio	2011-2015 Affordability Ratio	2010 Percentage of Occupied Housing that is Owner Occupied	2011 – 2015 Percentage of Occupied Housing that is Owner Occupied
Los Angeles County, CA	0.11	0.13	48.2	46.0
Orange County, CA	0.12	0.14	60.8	57.7
Anaheim-Santa Ana-Irvine, CA MD 11244	0.12	0.14	60.8	57.7
Los Angeles-Long Beach-Glendale, CA MD 31084	0.11	0.13	48.2	46.0
State of California	0.13	0.16	57.7	54.3
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

Employment Conditions

Unemployment rates across the assessment area trended downward and were below the state of California, with Orange County being lowest. From 2013 through 2016, unemployment rates declined within each of the counties and the state itself. During the same period, Gross Domestic Product (GDP) in the Los Angeles-Long Beach-Anaheim, CA MSA 31080 grew from \$852.0 billion to \$996.4 billion, or 16.9 percent compared to 12.6 percent for aggregate MSAs. One community representative indicated that opportunities exist in both the healthcare and technology sector; however, there is a shortage of individuals to fill those positions, citing that 25 percent of the population does not have a high school diploma. Per the Bureau of Labor Statistics, the major areas of occupations in excess of 400,000 employees within the MSA are Office and Administrative Support, Sales and Related, Food Preparation and Service Related, and Transportation and Material Moving. The top five employers in the MSA are: Los Angeles International Airport (transportation), University of California at Los Angeles Health System (medical), University of Southern California (education), Walt Disney Parks (amusement), and University of California at Los Angeles (education).

Unemployment Rates 2013 - 2016				
Area	2013	2014	2015	2016
Los Angeles County, CA	9.9	8.3	6.6	5.2
Orange County, CA	6.2	5.5	4.4	4.0
Anaheim-Santa Ana-Irvine, CA MD 11244	6.2	5.5	4.4	4.0
Los Angeles-Long Beach-Glendale, CA MD 31084	9.9	8.3	6.6	5.2
State of California	8.9	7.5	6.2	5.4
Source: U.S. Bureau of Labor Statistics				

CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN LOS ANGELES- LONG BEACH-ANAHEIM CA MSA 31080

Investment, Loan, and Service Activity

The Northern Trust Company has a high level of community development loans, qualified investments or community development services. The bank occasionally uses innovative or complex qualified investments in the assessment area and exhibits excellent responsiveness to community development needs in the assessment area. Demographic and community contact information reveals a substantial need for investments targeting affordable housing. TNTC's investments are primarily responsive to this need as it made investments in low income housing tax credits of \$20.7 million, which helped provide critical affordable rental housing, and purchased over \$21.1 million dollars in mortgage back securities consisting of loan originations to low- and moderate-income borrowers. TNTC also made an investment in a non-profit affordable

homeownership provider.

In the assessment area, TNTC had community development lending and investment activity, including prior period investments, of approximately \$70.0 million representing a 167.2 percent increase in comparison to the previous 37 month evaluation period of \$26.2 million.

Community Development Lending

During the review period, the institution originated two community development loans for \$8.2 million. One loan was for the provision of affordable housing for \$7.2 million and the second loan was originated in the amount of \$1.0 million for the provision of community services. Four additional loans to small businesses were originated in the assessment area for the amount of \$3.0 million. By supporting these businesses in low- or moderate-income census tracts, the loan qualifies as economic development.

Community Development Investments

During the review period, the institution disbursed funds related to new investments of approximately \$32.4 million. It maintained investments from the prior review periods of approximately \$12.3 million. Investments included affordable housing initiatives which was a need indicated by all community representatives. Innovativeness and complexity was demonstrated through investment in an affordable housing service organization and multiple low income housing tax credits that provide critical affordable rental housing.

Qualified Community Development Investments by Type								
	Prior Period Investments \$ (000s)	Current Period Investments \$ (000s)					Total Investments \$ (000s)	Unfunded Commitments \$ (000s)
		CS	AH	ED	RS	Total		
TOTAL	12,317	0	31,988	450	0	32,438	44,755	14,005

TNTC also made \$217,000 in grants and donations to various organizations involved in affordable housing and community development services, many of which provide critical services to low-and moderate-income youths.

Community Development Services

Staff performed 155 hours of service to two different organizations on behalf of the bank. The organizations receiving the services are active in the provision of community services tailored to meet the needs of low- and moderate-income individuals. Bank management and staff served on boards of directors, using their financial and management expertise to help guide the decisions of nonprofit community-based organizations located in the assessment area.

SAN FRANCISCO-OAKLAND-HAYWARD CA 41860 MSA-FULL REVIEW

SCOPE OF EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a full-scope review. Please refer to the "Scope of Examination Section" for details.

DESCRIPTION OF INSTITUTION'S OPERATIONS IN SAN FRANCISCO-OAKLAND-HAYWARD CA 41860 MSA

The Northern Trust Company assessment area reflects an adjustment from the previous performance evaluation dated July 27, 2015. The prior evaluation consisted of a portion of the San-Jose-San Francisco-Oakland, CA Combined Statistical Area (CSA) 488. The current assessment delineation is composed of the three following MDs:

- Oakland-Hayward-Berkeley, CA MD 36084 (Alameda County)
- San Francisco-Redwood City-South San Francisco, CA MD 41884 (San Francisco and San Mateo Counties)
- San Rafael, CA MD 42034 (Marin County)

Alameda County was added to the assessment area, but Contra Costa County that is also part of the Oakland-Hayward-Berkeley MD was not included. TNTC also did not include Santa Clara County which had been in the prior CSA 488 evaluation of July 27, 2015.

Within the assessment area, TNTC has three branches and two full-service ATMs. The San Francisco-Redwood City-South San Francisco, CA MD 41884 has one branch in a low-income census tract and one branch with ATM in an upper-income census tract. There is also a branch and a full-service ATM in an upper-income census tract in the San Rafael, CA MD 42034. The ATM was added during the current evaluation period in January of 2016. The FDIC Deposit Market Share Report as of June 30, 2017, ranks the bank 27th of 64 area institutions with 0.16 percent market share. The two leading institutions in the market, Bank of America NA and Wells Fargo NA, account for 56.4 percent of the market, indicating a highly concentrated market.

The MSA 41860 assessment area consists of a total of 772 census tracts; 93 (12.0 percent) are low-, 158 (20.5 percent) are moderate-, 242 (31.3 percent) are middle-, 263 (34.1 percent) are upper-income census tracts, and 16 (2.1 percent) are of unknown income. The current assessment area reflects a net decrease of eight census tracts from the previous performance evaluation.

Accordingly, community development activity that took place in calendar years up to and including 2016 are evaluated based on ACS income level definitions from the five-year survey data set 2006-2010. Community development activity performed in 2017 and beyond are evaluated

based on ACS income level definitions from the five-year survey data set 2011-2015.
As the following table indicates the assessment area experienced a net decrease of seven low-income census tracts and a net increase of four moderate-income census tracts.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	100	93	(7)
Moderate	154	158	4
Middle	275	242	(33)
Upper	234	263	29
Unknown	9	16	7
Total	772	772	0
Source: U. S. Census Bureau: Decennial Census: American Community Survey Data: 2006-2010 U.S. Census Bureau: Decennial Census: America Community Survey Data: 2011-2015			

Additional demographic information as of 2017 for the assessment area is presented in the following tables:

Assessment Area: 2017 San Francisco-Oakland-Hayward, CA MSA 41860								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	93	12.0	75,316	9.7	18,498	24.6	193,023	25.0
Moderate-income	158	20.5	153,829	19.9	16,472	10.7	122,098	15.8
Middle-income	242	31.3	266,083	34.4	13,432	5.0	139,387	18.0
Upper-income	263	34.1	276,044	35.7	7,095	2.6	319,068	41.2
Unknown-income	16	2.1	2,304	0.3	283	12.3	0	0.0
Total Assessment Area	772	100.0	773,576	100.0	55,780	7.2	773,576	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	152,794	27,935	4.4	18.3	111,350	72.9	13,509	8.8
Moderate-income	273,612	100,514	15.7	36.7	157,252	57.5	15,846	5.8
Middle-income	452,942	234,139	36.5	51.7	193,313	42.7	25,490	5.6
Upper-income	468,503	277,587	43.3	59.2	164,168	35.0	26,748	5.7
Unknown-income	10,511	1,318	0.2	12.5	7,999	76.1	1,194	11.4
Total Assessment Area	1,358,362	641,493	100.0	47.2	634,082	46.7	82,787	6.1
	Total Businesses by Tract	Businesses by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
	#	%	#	%	#	%	#	%
Low-income	20,705	12.1	17,411	11.5	3,187	17.8	107	13.5
Moderate-income	28,488	16.7	25,482	16.8	2,881	16.1	125	15.7
Middle-income	51,256	30.0	46,439	30.6	4,623	25.8	194	24.4
Upper-income	68,717	40.3	61,346	40.4	7,035	39.2	336	42.3
Unknown-income	1,436	0.8	1,185	0.8	219	1.2	32	4.0
Total Assessment Area	170,602	100.0	151,863	100.0	17,945	100.0	794	100.0
	Percentage of Total Businesses:			89.0		10.5		0.5
	Total Farms by Tract	Farms by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
	#	%	#	%	#	%	#	%
Low-income	54	6.7	47	6.2	6	11.5	1	100.0
Moderate-income	132	16.3	124	16.4	8	15.4	0	0.0
Middle-income	233	28.8	213	28.2	20	38.5	0	0.0
Upper-income	387	47.9	369	48.9	18	34.6	0	0.0
Unknown-income	2	0.2	2	0.3	0	0.0	0	0.0
Total Assessment Area	808	100.0	755	100.0	52	100.0	1	100.0
Percentage of Total Farms:			93.4		6.4		0.1	
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

Assessment Area: 2017 Oakland-Hayward-Berkeley, CA MD 36084								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	52	14.4	43,986	11.9	11,996	27.3	93,264	25.3
Moderate-income	84	23.3	78,637	21.3	9,861	12.5	58,686	15.9
Middle-income	108	29.9	117,954	32.0	6,283	5.3	66,716	18.1
Upper-income	114	31.6	128,038	34.7	3,150	2.5	150,239	40.7
Unknown-income	3	0.8	290	0.1	105	36.2	0	0.0
Total Assessment Area	361	100.0	368,905	100.0	31,395	8.5	368,905	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	78,248	17,073	5.8	21.8	54,737	70.0	6,438	8.2
Moderate-income	140,215	49,594	16.8	35.4	82,823	59.1	7,798	5.6
Middle-income	187,317	101,336	34.4	54.1	76,291	40.7	9,690	5.2
Upper-income	183,301	126,535	42.9	69.0	49,810	27.2	6,956	3.8
Unknown-income	777	106	0.0	13.6	602	77.5	69	8.9
Total Assessment Area	589,858	294,644	100.0	50.0	264,263	44.8	30,951	5.2
	Total Businesses by Tract	Businesses by Tract & Revenue Size						
		Less Than or = \$1 Million			Over \$1 Million		Revenue Not Reported	
		#	%	#	%	#	%	#
Low-income	6,714	10.7	5,888	10.6	793	11.6	33	12.4
Moderate-income	13,467	21.4	12,025	21.5	1,376	20.1	66	24.8
Middle-income	19,530	31.0	17,188	30.8	2,269	33.1	73	27.4
Upper-income	23,128	36.8	20,632	37.0	2,402	35.0	94	35.3
Unknown-income	88	0.1	73	0.1	15	0.2	0	0.0
Total Assessment Area	62,927	100.0	55,806	100.0	6,855	100.0	266	100.0
	Percentage of Total Businesses:			88.7		10.9		0.4
	Total Farms by Tract	Farms by Tract & Revenue Size						
		Less Than or = \$1 Million			Over \$1 Million		Revenue Not Reported	
		#	%	#	%	#	%	#
Low-income	13	4.8	12	4.7	1	6.7	0	0.0
Moderate-income	41	15.2	39	15.4	2	13.3	0	0.0
Middle-income	55	20.4	50	19.7	5	33.3	0	0.0
Upper-income	160	59.5	153	60.2	7	46.7	0	0.0
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	269	100.0	254	100.0	15	100.0	0	0.0
	Percentage of Total Farms:			94.4		5.6		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

Assessment Area: 2017 San Francisco-Redwood City-South San Francisco, CA MD 41884								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	38	10.7	28,397	8.3	5,680	20.0	84,644	24.9
Moderate-income	64	18.0	65,333	19.2	6,021	9.2	53,031	15.6
Middle-income	110	31.0	118,541	34.8	5,888	5.0	60,577	17.8
Upper-income	132	37.2	125,973	37.0	3,430	2.7	142,006	41.7
Unknown-income	11	3.1	2,014	0.6	178	8.8	0	0.0
Total Assessment Area	355	100.0	340,258	100.0	21,197	6.2	340,258	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	70,424	10,040	3.6	14.3	53,418	75.9	6,966	9.9
Moderate-income	113,757	42,001	14.9	36.9	65,530	57.6	6,226	5.5
Middle-income	214,345	101,664	36.0	47.4	100,364	46.8	12,317	5.7
Upper-income	248,254	127,203	45.1	51.2	104,169	42.0	16,882	6.8
Unknown-income	9,734	1,212	0.4	12.5	7,397	76.0	1,125	11.6
Total Assessment Area	656,514	282,120	100.0	43.0	330,878	50.4	43,516	6.6
	Total Businesses by Tract	Businesses by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
	#	%	#	%	#	%	#	%
Low-income	13,123	14.9	10,818	13.9	2,234	23.3	71	16.1
Moderate-income	11,653	13.3	10,454	13.4	1,151	12.0	48	10.9
Middle-income	23,179	26.4	21,330	27.4	1,760	18.3	89	20.2
Upper-income	38,637	43.9	34,191	43.9	4,245	44.2	201	45.6
Unknown-income	1,347	1.5	1,111	1.4	204	2.1	32	7.3
Total Assessment Area	87,939	100.0	77,904	100.0	9,594	100.0	441	100.0
	Percentage of Total Businesses:			88.6		10.9		0.5
	Total Farms by Tract	Farms by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
	#	%	#	%	#	%	#	%
Low-income	37	9.7	31	8.8	5	17.9	1	100.0
Moderate-income	28	7.3	27	7.6	1	3.6	0	0.0
Middle-income	127	33.2	115	32.6	12	42.9	0	0.0
Upper-income	188	49.2	178	50.4	10	35.7	0	0.0
Unknown-income	2	0.5	2	0.6	0	0.0	0	0.0
Total Assessment Area	382	100.0	353	100.0	28	100.0	1	100.0
	Percentage of Total Farms:			92.4		7.3		0.3
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

Assessment Area: 2017 San Rafael, CA MD 42034								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	3	5.4	2,933	4.6	822	28.0	15,115	23.5
Moderate-income	10	17.9	9,859	15.3	590	6.0	10,381	16.1
Middle-income	24	42.9	29,588	45.9	1,261	4.3	12,094	18.8
Upper-income	17	30.4	22,033	34.2	515	2.3	26,823	41.6
Unknown-income	2	3.6	0	0.0	0	0.0	0	0.0
Total Assessment Area	56	100.0	64,413	100.0	3,188	4.9	64,413	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	4,122	822	1.3	19.9	3,195	77.5	105	2.5
Moderate-income	19,640	8,919	13.8	45.4	8,899	45.3	1,822	9.3
Middle-income	51,280	31,139	48.1	60.7	16,658	32.5	3,483	6.8
Upper-income	36,948	23,849	36.8	64.5	10,189	27.6	2,910	7.9
Unknown-income	0	0	0.0	0.0	0	0.0	0	0.0
Total Assessment Area	111,990	64,729	100.0	57.8	38,941	34.8	8,320	7.4
	Total Businesses by Tract	Businesses by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
		#	%	#	%	#	%	#
Low-income	868	4.4	705	3.9	160	10.7	3	3.4
Moderate-income	3,368	17.1	3,003	16.5	354	23.7	11	12.6
Middle-income	8,547	43.3	7,921	43.6	594	39.7	32	36.8
Upper-income	6,952	35.2	6,523	35.9	388	25.9	41	47.1
Unknown-income	1	0.0	1	0.0	0	0.0	0	0.0
Total Assessment Area	19,736	100.0	18,153	100.0	1,496	100.0	87	100.0
	Percentage of Total Businesses:			92.0		7.6		0.4
	Total Farms by Tract	Farms by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
		#	%	#	%	#	%	#
Low-income	4	2.5	4	2.7	0	0.0	0	0.0
Moderate-income	63	40.1	58	39.2	5	55.6	0	0.0
Middle-income	51	32.5	48	32.4	3	33.3	0	0.0
Upper-income	39	24.8	38	25.7	1	11.1	0	0.0
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	157	100.0	148	100.0	9	100.0	0	0.0
	Percentage of Total Farms:			94.3		5.7		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

The following presentation of key demographics used to help inform the evaluation of bank activity in its assessment area is based on a comparison of two sets of ACS data, 2006-2010 and 2011-2015.

Population Characteristics

As presented in the table below, from 2010 to 2015, the overall population in the assessment area increased between 2.4 and 4.9 percent. With the exception of Marin County and San Rafael MD, the population growth in the area was greater by percentage than the state of California as a whole. A community representative indicated that the demand for urban living was a major contributor to the increase in population in San Francisco. The population of the assessment area composes 8.9 percent of the state of California.

Population Change 2010 – 2015			
Area	2010 Population	2011-2015 Population	Percentage Change
Alameda County, CA	1,510,271	1,584,983	4.9
Marin County, CA	252,409	258,349	2.4
San Francisco County/City, CA	805,235	840,763	4.4
San Mateo County, CA	718,451	748,731	4.2
Oakland-Heyward-Berkeley, CA MD 36084	2,559,296	2,681,051	4.8
San Francisco-Redwood City-South San Francisco, CA MD 41884	1,523,686	1,589,494	4.4
San Rafael, CA MD 42034	252,409	258,349	2.4
State of California	37,282,566	38,421,464	3.1
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

The following table indicates the five largest municipalities within the assessment area. Although it is approximately 20 percent smaller in square mileage than Oakland, San Francisco contains over twice the population.

Five Largest Municipalities within the Assessment Area		
Municipality	Population	County
San Francisco	884,363	San Francisco
Oakland	425,195	Alameda
Hayward	160,500	Alameda
Berkeley	122,324	Alameda
San Leandro	90,553	Alameda
Source: 2017-U.S. Census Bureau Population Estimate		

Income Characteristics

As displayed in the table below, the median family income in the assessment area is above the state median income. Based on 2010-2015 U.S. Census Bureau data, median family income in the area is nearing \$100,000, 34.3 percent greater than the state of California as a whole. All of the counties within the MSA experienced significant income growth, far above that of the state which was at 2.0 percent. San Francisco County experienced the greatest increase at 12.3 percent. All four counties in the assessment area were either at or above the national Consumer Price Index (CPI) inflation rate of 7.4 percent.

Median Family Income Change 2010 – 2015			
Area	2010 Median Family Income	2011-2015 Median Family Income	Percentage Change
Alameda County, CA	85,014	92,328	8.6
Marin County, CA	112,911	121,130	7.3
San Francisco County/City, CA	85,778	96,336	12.3
San Mateo County, CA	101,578	109,722	8.0
Oakland-Heyward-Berkeley, CA MD 36084	88,024	93,822	6.6
San Francisco-Redwood City-South San Francisco, CA MD 41884	93,987	103,742	10.4
San Rafael, CA MD 42034	112,911	121,130	7.3
State of California	69,322	70,720	2.0
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

Housing Characteristics

Median housing values in the assessment area are significantly higher than the state of California overall, with San Mateo (\$776,300) San Francisco County (\$799,600) and Marin County (\$815,100) over twice that of the state (\$385,500). Median housing values did not reflect the significant decline of 16.0 percent experienced in the state of California between 2010 and 2015, with San Mateo County at 13.0 percent having the largest decrease. Marin County had a slight increase with San Francisco County relatively unchanged. Median Gross Rent increases were incurred in all areas with San Mateo County having the largest acceleration in rents at 19.8 percent.

Housing Costs Change 2010 – 2015				
Area	2010 Median Housing Value	2011-2015 Median Housing Value	2010 Median Gross Rent	2011 – 2015 Median Gross Rent
Alameda County, CA	590,900	543,100	1,188	1,367
Marin County, CA	868,000	815,100	1,523	1,678
San Francisco County/City, CA	785,200	799,600	1,328	1,558
San Mateo County, CA	784,800	776,300	1,443	1,728
Oakland-Heyward-Berkeley, CA MD 36084	574,115	495,658	1,212	1,386
San Francisco-Redwood City-South San Francisco, CA MD 41884	784,985	788,193	1,377	1,626
San Rafael, CA MD 42034	867,956	815,094	1,523	1,678
State of California	458,500	385,500	1,147	1,255
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

The affordability ratios across the assessment area are lower than the state of California. The low affordability ratio in all counties indicates that housing expenses are relatively high in the assessment area, and there is a near even split between percentage of owner occupied at 47.2 percent and the percentage of rentals at 46.7 percent. Vacancies compose 6.1 percent of the total number of housing units. One community representative affiliated with an economic development organization noted that there is recent shift to construction of multifamily units and expanded number of “in-law” units due to their recent legalization. They also indicated there is an availability of affordable housing; however, the middle-income population was having difficulty in obtaining housing due as they do not earn enough to save for a downpayment, but earn too much to qualify for housing assistance programs.

Housing Narrative Information				
Area	2010 Affordability Ratio	2011-2015 Affordability Ratio	2010 Percentage of Occupied Housing that is Owner Occupied	2011 – 2015 Percentage of Occupied Housing that is Owner Occupied
Alameda County, CA	0.12	0.14	55.1	52.7
Marin County, Ca	0.10	0.11	64.0	62.4
San Francisco County/City, CA	0.09	0.10	37.5	36.4
San Mateo County, CA	0.11	0.12	61.1	59.1
Oakland-Heyward-Berkeley, CA MD 36084	0.13	0.16	61.0	57.6
San Francisco-Redwood City-South San Francisco CA 41884	0.10	0.11	47.7	46.0
San Rafael CA MD 42034	0.10	0.11	64.0	62.4
State of California	0.13	0.16	57.7	54.3
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

Employment Conditions

Unemployment rates across the assessment area were below the state of California. From 2013 through 2016 unemployment rates declined within each of the counties and the state itself. The community representative from an economic development organization indicated that within San Francisco, the unemployment rate has fallen below three percent with the city's economy mainly driven by technology and medicine. During the same period, Gross Domestic Product (GDP) in the San Francisco-Oakland-Hayward, CA MSA 41860 grew from \$385.5 billion to \$475.4 billion or 23.3 percent compared to 12.6 percent for aggregate MSAs. Per the Bureau of Labor Statistics, the major areas of occupations in excess of 135,000 employees within the MSA are Office and Administrative Support, Sales and Related, Food Preparation and Service Related, Business and Financial Operations, Computer and Math, and Transportation and Material Moving. The top five employers in the MSA are University of San Francisco (education), University of California-Berkeley (education), Western Digital (technology), Oracle Corporation (technology), and UCSF Medical Center (medical).

Unemployment Rates 2013 - 2016				
Area	2013	2014	2015	2016
Alameda County, CA	7.4	5.9	4.7	4.2
Marin County, CA	5.0	4.3	3.5	3.2
San Francisco County/City, CA	5.7	4.4	3.6	3.3
San Mateo County, CA	5.4	4.2	3.4	3.0
Oakland-Heyward-Berkeley, CA MD 36084	7.4	6.0	4.8	4.3
San Francisco-Redwood City-South San Francisco CA 41884	5.6	4.3	3.5	3.1
San Rafael CA MD 42034	5.0	4.3	3.5	3.2
State of California	8.9	7.5	6.2	5.4
<i>Source: U.S. Bureau of Labor Statistics</i>				

One community representative from an economic development organization was contacted to help determine the credit and banking needs of the assessment area. The representative noted that beyond the housing issues for the middle-income level population there was a need for workforce development for high school graduates as well as transportation issues where growth has outpaced the current capabilities of infrastructure.

CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN SAN FRANCISCO-OAKLAND-HAYWARD CA 41860 MSA

Investment, Loan, and Service Activity

The Northern Trust Company has an adequate level of community development loans, qualified investments or community development services. The bank occasionally uses innovative or complex qualified investments in the assessment area, and exhibits excellent responsiveness to community development needs in the assessment area. Demographic and community representative information reveals a substantial need for investments targeting affordable housing. TNTC's investments are responsive to this need as it made investments in low income housing tax credits of \$10.3 million, which help provide affordable rental housing, a Community Development Trust investment of \$800,000 for affordable housing for low-income senior residents, and purchased approximately \$18.3 million dollars in mortgage back securities consisting of loan originations to low- and moderate-income borrowers.

TNTC had community development lending and investment activity including prior period investments of approximately \$36.3 million representing an 86.2 percent increase in comparison to the previous 37 month evaluation period of \$19.5 million. The variation of approximately three months in terms of the current performance evaluation period as compared to the previous does not materially impact the strength of the institution's performance.

Community Development Lending

During the review period, the institution did not originate any community development loans. Two loans to small businesses were originated in the assessment area in the amount of \$1.7 million. By supporting these businesses in low- or moderate-income census tracts, the loans qualify as economic development.

Community Development Investments

During the review period, the institution disbursed funds related to new investments of approximately \$25.6 million. It maintained investments from the prior review periods of approximately \$5.2 million. Investments included affordable housing initiatives, which was a need indicated by a community representative. Innovativeness and complexity was demonstrated through investment in a community development trust to provide affordable rental housing for low income seniors and multiple low income housing tax credits.

Qualified Community Development Investments by Type								
	Prior Period Investments \$ (000s)	Current Period Investments \$ (000s)					Total Investments \$ (000s)	Unfunded Commitments \$ (000s)
		CS	AH	ED	RS	Total		
TOTAL	5,214	0	20,355	0	0	20,355	25,569	8,982

TNTC also made \$164,400 in grants and donations to various organizations involved in affordable housing and community development services.

Community Development Services

During the review period, the institution provided 125 hours of community development service to four different organizations. All services were related to the provision of community services.

SANTA MARIA-SANTA BARBARA, CA MSA 42200-FULL REVIEW

SCOPE OF EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a full-scope review. Please refer to the "Scope of Examination Section" for details

DESCRIPTION OF INSTITUTION'S OPERATIONS IN SANTA MARIA-SANTA BARBARA CA MSA 42200

The Northern Trust Company delineates the Santa Maria-Santa Barbara, CA MSA 42200 in its entirety as its assessment area, which consists solely of Santa Barbara County. The assessment area is unchanged from the previous performance evaluation of July 27, 2015. TNTC maintains operations in the MSA through one branch located in an upper-income census tract. A branch located in a moderate-income census tract was closed in September of 2016.

The FDIC Deposit Market Share Report as of June 30, 2017, ranks the bank 12th of 19 area institutions with 1.86 percent market share. The top three institutions in the market: Wells Fargo NA, MUFG Union Bank NA, and Bank of America NA combined account for nearly 50 percent of the market share, indicating a concentrated market.

The Santa Maria-Santa Barbara, CA MSA 42200 assessment area consists of a total of 90 census tracts; eight (8.9 percent) are low-, 23 (25.6 percent) are moderate-, 23 (25.6 percent) are middle-, and 32 (35.6 percent) are upper-income census tract , and four (4.4 percent) are of unknown income.

Accordingly, community development activity that took place in calendar years up to and including 2016 are evaluated based on ACS income level definitions from the five-year survey data set 2006-2010. Community development activity performed in 2017 and beyond are evaluated based on ACS income level definitions from the five-year survey data set 2011-2015. As the following table indicates, the assessment area experienced a net increase of one moderate-income census tract.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	8	8	0
Moderate	22	23	1
Middle	25	23	(2)
Upper	32	32	0
Unknown	3	4	1
Total	90	90	0
Source: U. S. Census Bureau: Decennial Census: American Community Survey Data: 2006-2010 U.S. Census Bureau: Decennial Census: America Community Survey Data: 2011-2015			

Additional demographic information as of 2017 for the assessment area is presented in the following table:

Assessment Area: 2017 Santa Maria-Santa Barbara, CA MSA 42200								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	8	8.9	8,221	8.8	2,339	28.5	21,869	23.4
Moderate-income	23	25.6	22,949	24.6	4,197	18.3	15,701	16.8
Middle-income	23	25.6	27,423	29.3	1,606	5.9	17,013	18.2
Upper-income	32	35.6	34,850	37.3	1,240	3.6	38,890	41.6
Unknown-income	4	4.4	30	0.0	0	0.0	0	0.0
Total Assessment Area	90	100.0	93,473	100.0	9,382	10.0	93,473	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	14,466	2,286	3.1	15.8	11,378	78.7	802	5.5
Moderate-income	36,611	11,539	15.6	31.5	22,384	61.1	2,688	7.3
Middle-income	44,310	25,270	34.1	57.0	16,525	37.3	2,515	5.7
Upper-income	58,678	34,988	47.2	59.6	18,307	31.2	5,383	9.2
Unknown-income	70	0	0.0	0.0	36	51.4	34	48.6
Total Assessment Area	154,135	74,083	100.0	48.1	68,630	44.5	11,422	7.4
	Total Businesses by Tract	Businesses by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
		#	%	#	%	#	%	#
Low-income	1,046	5.4	968	5.5	73	4.1	5	5.2
Moderate-income	5,761	29.6	5,033	28.7	703	39.6	25	25.8
Middle-income	4,925	25.3	4,387	25.0	510	28.7	28	28.9
Upper-income	7,605	39.1	7,107	40.5	459	25.9	39	40.2
Unknown-income	95	0.5	66	0.4	29	1.6	0	0.0
Total Assessment Area	19,432	100.0	17,561	100.0	1,774	100.0	97	100.0
	Percentage of Total Businesses:		90.4		9.1		0.5	
	Total Farms by Tract	Farms by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
#	%	#	%	#	%	#	%	
Low-income	24	4.5	15	3.3	9	12.3	0	0.0
Moderate-income	81	15.3	70	15.4	11	15.1	0	0.0
Middle-income	112	21.2	94	20.6	18	24.7	0	0.0
Upper-income	311	58.8	276	60.5	35	47.9	0	0.0
Unknown-income	1	0.2	1	0.2	0	0.0	0	0.0
Total Assessment Area	529	100.0	456	100.0	73	100.0	0	0.0
	Percentage of Total Farms:		86.2		13.8		0.0	
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

The following presentation of key demographics used to help inform the evaluation of bank activity in its assessment area is based on a comparison of two sets of ACS data, 2006-2010 and 2011-2015.

Population Characteristics

As presented in the table below, from 2010 to 2015, the overall population in the assessment area increased at a rate of 2.8 percent, which was slightly below that of the state of California at 3.1 percent. The population of the assessment area is 1.1 percent of the state as a whole.

Population Change 2010 – 2015			
Area	2010 Population	2011-2015 Population	Percentage Change
Santa Barbara County, CA	423,895	435,850	2.8
State of California	37,282,566	38,421,464	3.1
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

The following table lists the five largest municipalities within the assessment area. The city of Santa Maria, which is the most populous municipality in the assessment area, has displayed the largest growth from 2010 to 2017 increasing by approximately 7,500 residents.

Five Largest Municipalities within the Assessment Area		
Municipality	Population	County
Santa Maria	107,014	Santa Barbara
Santa Barbara	92,101	Santa Barbara
Lompoc	43,542	Santa Barbara
Goleta	31,116	Santa Barbara
Carpinteria	13,622	Santa Barbara
Source: U.S. Census Bureau 2017 Population Estimate		

Income Characteristics

As displayed in the table below, the median family income in the assessment area is above that of the state, at \$74,824 and \$70,720, respectively. The increase in median family income in the assessment area is significantly above that of the state, at 8.1 percent and 2.0 percent, respectively, and above the 7.4 percent Consumer Price Index (CPI) inflation rate during the same period of 2010-2015. A community representative who is primarily involved in affordable housing noted that median incomes in the assessment area are approximately \$30,000 less than the San Francisco Bay region.

Median Family Income Change 2010 – 2015			
Area	2006 – 2010 Median Family Income	2011-2015 Median Family Income	Percentage Change
Santa Barbara County, CA	69,190	74,824	8.1
State of California	69,322	70,720	2.0
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

Housing Characteristics

Median housing values in the assessment area experienced declines during 2010 through 2015. However, median gross rents experienced increases. The community representative indicated that housing costs have recently been on the rise to the extent that incomes have not been able to keep pace with the increases. Median housing values in the assessment area are significantly higher than the state of California, at \$465,300 to \$385,500, respectively.

Housing Costs Change 2010 – 2015				
Area	2006 – 2010 Median Housing	2011-2015 Median Housing	2006 – 2010 Median Gross Rent	2011 – 2015 Median Gross Rent
Santa Barbara County, CA	576,500	465,300	1,265	1,369
State of California	458,500	385,500	1,147	1,255
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

The low affordability ratio indicates that housing expenses are relatively high in the assessment area. The community representative indicated that recent escalation in home prices have reached unsustainable levels for even upper-income individuals.

Housing Narrative Information				
Area	2006 – 2010 Affordability Ratio	2011-2015 Affordability Ratio	2006 – 2010 Percentage of Occupied Housing that is Owner Occupied	2011 – 2015 Percentage of Occupied Housing that is Owner Occupied
Santa Barbara County, CA	0.10	0.14	54.1	51.9
State of California	0.13	0.16	57.7	54.3
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

One affordable housing community representative was contacted to increase understanding of credit needs and market conditions within the assessment area. They indicated that the area has a strong need for affordable housing, lower cost loan housing programs, and more accessible funding for small businesses.

Employment Conditions

From 2013 through 2016, unemployment rates declined within the assessment area and the state itself. During the same period, Gross Domestic Product (GDP) in the Santa Maria-Santa Barbara, CA MSA 42200 grew from \$22.9 billion to \$25.2 billion, or 10.0 percent compared to 12.6 percent for aggregate MSAs. The community representative indicated that a number of the larger businesses are hiring; however, they tend to be more specialized, leading prospective employees to seek opportunities in San Francisco or the Bay area. Per the Bureau of Labor Statistics, the major areas of occupations in excess of 10,000 employees within the MSA are Office and Administrative Support Food Preparation and Service Related. The top five employers in the MSA are University of California-Santa Barbara (education), Mission Linen Supply (uniforms/launderer), Santa Barbara Cottage Hospital (medical), University of California-Santa Barbara (education), and Santa Ynez Tribal Gaming Committee (government oversight).

Unemployment Rates 2013 - 2016				
Area	2013	2014	2015	2016
Santa Barbara County, CA	6.8	6.1	5.3	5.0
State of California	8.9	7.5	6.2	5.4

Source: U.S. Bureau of Labor Statistics

CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN SANTA MARIA-SANTA BARBARA, CA MSA 42200

Investment, Loan, and Service Activity

The Northern Trust Company has a high level of community development loans, qualified investments, or community development services, particularly investments that are not routinely provided by private investors. The bank occasionally uses innovative or complex qualified investments in the assessment area, and exhibits excellent responsiveness to community development needs in the assessment area. Demographic and community representative information reveals a substantial need for investments targeting affordable housing. TNTC's investments are primarily responsive to this deficiency as it made a \$16.4 million low income housing tax credit investment for an affordable rental housing project and purchased \$5.7 million in mortgage back securities consisting of loan originations to low- and moderate-income borrowers.

TNTC had community development investment activity including prior period maintained investments of approximately \$28.1 million representing a 103.6 percent increase in comparison to the previous 37 month evaluation period of \$13.8 million.

Community Development Lending

During the review period, the institution did not originate any community development loans.

Community Development Investments

During the review period, the institution disbursed funds related to disbursement of investments of approximately \$6.4 million as well as nearly \$16 million in unfunded commitments for affordable housing, which the community representative indicated is a significant need in the assessment area. Innovativeness and complexity was demonstrated through investments in a housing trust fund that operates as a funding vehicle to help bridge the financial gap between the cost of housing and what people can afford to pay and a low income housing tax credit project providing affordable rents.

Qualified Community Development Investments by Type								
	Prior Period Investments \$ (000s)	Current Period Investments \$ (000s)					Total Investments \$ (000s)	Unfunded Commitments \$ (000s)
		CS	AH	ED	RS	Total		
TOTAL	5,748	0	6,417	0	0	6,417	12,165	15,960

TNTC also made \$10,975 in grants and donations to various organizations involved in community services which focus on critical services for low- and moderate-income youths.

Community Development Services

The bank did not perform any community development services within the Santa Maria-Santa Barbara assessment area.

SAN DIEGO-CARLSBAD, CA MSA 41740 – LIMITED REVIEW

SCOPE OF THE EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this PE and was a limited scope review. Please refer to the “Scope of Examination” section for details.

DESCRIPTION OF INSTITUTION’S OPERATIONS IN SAN DIEGO-CARLSBAD, CA MSA 41740

The Northern Trust Company delineates the MSA in its entirety, which consists of San Diego County. The assessment area is unchanged from its previous performance evaluation of July 27, 2015. TNTC maintains operations in the San Diego-Carlsbad, CA MSA 41740 through one branch with a full-service ATM located in an upper-income census tract.

As of June 30, 2017, the bank ranked 30th out of 53 FDIC-insured depository financial institutions that have a presence in the assessment area with a market share of 0.18 percent. The top four financial institutions are Wells Fargo Bank, NA, Bank of America NA, JP Morgan Chase NA, and MFUG Union Bank NA with 24.0, 15.2, 13.5, and 12.9 percent of area deposits, respectively.

The assessment area consists of a total of 628 census tracts; 61 (9.7 percent) are low-, 142 (22.6 percent) are moderate-, 204 (32.5 percent) are middle-, 214 (34.1 percent) upper-income census tract, and seven (1.1 percent) are of unknown income.

As the following table indicates the assessment area experienced a net decrease of two low-income census tracts and a net increase of eight moderate-income census tracts.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	63	61	(2)
Moderate	134	142	8
Middle	227	204	(23)
Upper	198	214	16
Unknown	6	7	1
Total	628	628	0
Source: U. S. Census Bureau: Decennial Census: American Community Survey Data: 2006-2010 U.S. Census Bureau: Decennial Census: American Community Survey Data: 2011-2015			

Additional demographic information as of 2017 for the assessment area is presented in the following table:

Assessment Area: 2017 San Diego-Carlsbad, CA MSA 41740								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	61	9.7	57,401	7.8	18,951	33.0	172,423	23.6
Moderate-income	142	22.6	158,623	21.7	25,027	15.8	123,833	16.9
Middle-income	204	32.5	236,551	32.3	20,679	8.7	130,363	17.8
Upper-income	214	34.1	278,708	38.1	13,088	4.7	304,709	41.7
Unknown-income	7	1.1	45	0.0	0	0.0	0	0.0
Total Assessment Area	628	100.0	731,328	100.0	77,745	10.6	731,328	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	90,459	16,148	2.8	17.9	67,684	74.8	6,627	7.3
Moderate-income	255,834	87,646	15.1	34.3	148,426	58.0	19,762	7.7
Middle-income	403,508	205,291	35.5	50.9	168,950	41.9	29,267	7.3
Upper-income	430,949	269,968	46.6	62.6	129,999	30.2	30,982	7.2
Unknown-income	56	26	0.0	46.4	19	33.9	11	19.6
Total Assessment Area	1,180,806	579,079	100.0	49.0	515,078	43.6	86,649	7.3
	Total Businesses by Tract	Businesses by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
		#	%	#	%	#	%	#
Low-income	8,129	5.4	7,326	5.3	763	6.1	40	5.8
Moderate-income	23,095	15.3	21,185	15.4	1,811	14.5	99	14.5
Middle-income	53,182	35.3	48,186	35.0	4,775	38.3	221	32.3
Upper-income	66,243	43.9	60,819	44.2	5,102	40.9	322	47.1
Unknown-income	126	0.1	105	0.1	19	0.2	2	0.3
Total Assessment Area	150,775	100.0	137,621	100.0	12,470	100.0	684	100.0
	Percentage of Total Businesses:			91.3		8.3		0.5
	Total Farms by Tract	Farms by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
		#	%	#	%	#	%	#
Low-income	17	1.5	17	1.5	0	0.0	0	0.0
Moderate-income	154	13.1	146	13.2	8	11.6	0	0.0
Middle-income	440	37.5	412	37.4	28	40.6	0	0.0
Upper-income	561	47.9	528	47.9	33	47.8	0	0.0
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	1,172	100.0	1,103	100.0	69	100.0	0	0.0
	Percentage of Total Farms:			94.1		5.9		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

CONCLUSIONS WITH RESPECT TO PERFORMANCE TESTS

Assessment Area: San Diego-Carlsbad, CA MSA 41740	Community Development Activity	Community Development Initiatives	Responsiveness to Community Development Needs
Rating	Consistent	Consistent	Consistent
<i>Community Development Activities include Qualified Loans, Investments and Services. Community Development Initiatives include Qualified Programs and Commitments.</i>			

STATE OF COLORADO

CRA RATING FOR COLORADO: Outstanding

Major factors supporting the bank's rating include the following:

- The institution has a high level of community development loans, community development services, or qualified investments, particularly investments that are not routinely provided by private investors;
- The institution extensively uses innovative or complex community development loans, qualified investments, or services; and
- The institution exhibits excellent responsiveness to credit and community development needs in the assessment area.

SCOPE OF EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a full-scope review. Please refer to the "Scope of Examination Section" for details. Full review examination procedures were used to evaluate the bank's operations in the Denver-Aurora-Lakewood, CO MSA 19740. Results from this assessment area were used to determine the rating for the state of Colorado.

DESCRIPTION OF INSTITUTION'S OPERATIONS IN COLORADO

The Northern Trust Company delineates the Denver-Aurora-Lakewood, CO MSA 19740 in its entirety, which includes the following counties: Adams, Arapahoe, Broomfield, Clear Creek, Denver, Douglas, Elbert, Gilpin, Jefferson, and Park. There have been no changes to the assessment area since the previous performance evaluation. The bank operates one branch located in an upper-income census tract. This facility was relocated from within the same census tract with closure of a full-service ATM in August of 2016. The June 30, 2017, FDIC market share report ranks the bank 29th out of 71 area institutions with 0.22 percent of the market.

The Denver-Aurora-Lakewood, CO MSA 19740 consists of a total of 621 census tracts; 51 (8.2 percent) are low-, 150 (24.2 percent) are moderate-, 205 (33.0 percent) are middle-, 207 (33.3 percent) are upper-income, and eight (1.3 percent) are of unknown income.

As the following table indicates the assessment area experienced a net decrease of 18 low-income census tracts and a net increase of 10 moderate-income census tracts.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	69	51	(18)
Moderate	140	150	10
Middle	208	205	(3)
Upper	197	207	10
Unknown	7	8	1
Total	621	621	0
Source: U. S. Census Bureau: Decennial Census: American Community Survey Data: 2006-2010 U.S. Census Bureau: Decennial Census: American Community Survey Data: 2011-2015			

Additional demographic information as of 2017 for the assessment area is presented in the following table:

Assessment Area: 2017 Denver-Aurora-Lakewood, CO MSA 19740								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	51	8.2	47,570	7.2	13,712	28.8	140,177	21.3
Moderate-income	150	24.2	145,045	22.0	20,420	14.1	115,077	17.5
Middle-income	205	33.0	217,046	33.0	11,797	5.4	134,654	20.5
Upper-income	207	33.3	248,681	37.8	6,907	2.8	268,451	40.8
Unknown-income	8	1.3	17	0.0	0	0.0	0	0.0
Total Assessment Area	621	100.0	658,359	100.0	52,836	8.0	658,359	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	90,749	29,985	4.6	33.0	54,410	60.0	6,354	7.0
Moderate-income	260,089	123,259	18.7	47.4	121,260	46.6	15,570	6.0
Middle-income	386,399	226,973	34.4	58.7	134,326	34.8	25,100	6.5
Upper-income	368,119	278,649	42.3	75.7	73,182	19.9	16,288	4.4
Unknown-income	67	16	0.0	23.9	43	64.2	8	11.9
Total Assessment Area	1,105,423	658,882	100.0	59.6	383,221	34.7	63,320	5.7
	Total Businesses Tract		Businesses by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	9,757	6.3	8,271	5.9	1,429	11.8	57	4.4
Moderate-income	27,470	17.8	24,708	17.5	2,599	21.5	163	12.7
Middle-income	50,393	32.7	46,320	32.9	3,683	30.5	390	30.4
Upper-income	66,120	42.9	61,306	43.5	4,156	34.4	658	51.4
Unknown-income	502	0.3	281	0.2	208	1.7	13	1.0
Total Assessment Area	154,242	100.0	140,886	100.0	12,075	100.0	1,281	100.0
	Percentage of Total Businesses:			91.3		7.8		0.8
	Total Farms by Tract		Farms by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	57	3.8	51	3.5	6	20.0	0	0.0
Moderate-income	216	14.4	211	14.4	5	16.7	0	0.0
Middle-income	505	33.7	499	34.0	6	20.0	0	0.0
Upper-income	717	47.9	704	48.0	13	43.3	0	0.0
Unknown-income	3	0.2	3	0.2	0	0.0	0	0.0
Total Assessment Area	1,498	100.0	1,468	100.0	30	100.0	0	0.0
	Percentage of Total Farms:			98.0		2.0		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

The following presentation of key demographics used to help inform the evaluation of bank activity in its assessment area is based on a comparison of two sets of ACS data, 2006-2010 and 2011-2015.

Population Characteristics

As presented in the table below, from 2010 to 2015, the population of the assessment area overall grew at a faster rate (6.3 percent) than the state of Colorado (5.0 percent) and now composes 51.2 percent of the state's population. Population change rates varied across the assessment area, with Broomfield County/City experiencing the most significant increase with an 8.6 percent growth rate as compared to Park County, which experienced a slight decrease of 0.1 percent. A community representative indicated the overall growing population could be attributed to good weather, availability of outdoor activities, good job market, strong transportation system, and safety.

Population Change 2010 – 2015			
Area	2010 Population	2011-2015 Population	Percentage Change
Denver-Aurora-Lakewood, CO MSA 19740	2,543,482	2,703,972	6.3
Adams County, CO	441,603	471,206	6.7
Arapahoe County, CO	572,003	608,310	6.3
Broomfield County/City, CO	55,889	60,699	8.6
Clear Creek County, CO	9,088	9,136	0.5
Denver County/City, CO	600,158	649,654	8.3
Douglas County, CO	285,465	306,974	7.5
Elbert County, CO	23,086	23,855	3.3
Gilpin County, CO	5,441	5,605	3.0
Jefferson County, CO	534,543	552,344	3.3
Park County, CO	16,206	16,189	-0.1
State of Colorado	5,029,196	5,278,906	5.0
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

The following table lists the five largest municipalities within the assessment area. The city of Denver has displayed strong growth with a 17.5 percent increase from 2010 to 2017.

Five Largest Municipalities within the Assessment Area		
Municipality	Population	County
Denver	704,621	Denver
Aurora	366,623	Adams/Arapahoe
Lakewood	154,958	Jefferson
Thornton	136,978	Adams/Weld
Arvada	118,807	Adams/Jefferson
Source: U.S. Census Bureau 2017 Population Estimates		

Income Characteristics

As displayed in the table below median family income in the assessment area varied, with the highest in Douglas County at \$115,309 and the lowest in Adams County at \$66,619. Nevertheless, overall median family income in the assessment area exceeds that of the state by 0.8 percent. Douglas County which composes 19.5 percent of the assessment area's population has a median family income 54.6 percent greater than the state.

Median family income in the MSA increased overall for the period of 2010-2015 at 7.6 percent, which exceeds the 7.4 percent rise in the Consumer Price Index (CPI) inflation rate during the same time period. However, percentage change did vary across the assessment area, with Denver County/City experiencing the greatest increase at 22.0 percent and Gilpin County experiencing a decrease of 8.4 percent.

Median Family Income Change 2010 – 2015			
Area	2006 – 2010 Median Family Income	2011-2015 Median Family Income	Percentage Change
Denver-Aurora-Lakewood, CO MSA 19740	75,101	80,820	7.6
Adams County, CO	62,864	66,619	6.0
Arapahoe County, CO	72,459	76,437	5.5
Broomfield County/City, CO	94,135	97,886	4.0
Clear Creek County, CO	73,134	86,563	18.4
Denver County/City, CO	57,182	69,783	22.0
Douglas County, CO	108,613	115,309	6.2
Elbert County, CO	83,074	96,535	16.2
Gilpin County, CO	82,632	75,694	-8.4
Jefferson County, CO	81,136	86,565	6.7
Park County, CO	73,815	69,234	-6.2
State of Colorado	70,046	74,826	6.8
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

Housing Characteristics

Median housing values in the assessment area increased in seven of the area's 10 counties from 2010 through 2015, with only Elbert and Gilpin Counties showing declines and Park County being relatively unchanged. Similarly, with the exception of Park County, median gross rents experienced increases across the entire assessment area. The community representative indicated that the increase in population has significantly contributed to the increase in home prices. In terms of actual dollars, median housing values vary across the assessment area, with the highest in Douglas County at \$354,700 and the lowest in Adams County at \$198,800. Similarly, median

gross rent varies across the assessment area, with the highest in Douglas County at \$1,399 and the lowest in Clear Creek County at \$813.

Housing Costs Change 2010 – 2015				
Area	2006 – 2010 Median Housing	2011-2015 Median Housing	2006 – 2010 Median Gross Rent	2011 – 2015 Median Gross Rent
Denver-Aurora-Lakewood, CO MSA 19740	246,226	267,007	871	1,049
Adams County, CO	196,100	198,800	878	1,039
Arapahoe County, CO	232,300	247,600	880	1,077
Broomfield County/City, CO	270,500	295,500	982	1,336
Clear Creek County, CO	280,000	283,900	793	813
Denver County/City, CO	240,900	271,300	798	962
Douglas County, CO	338,700	354,700	1,174	1,399
Elbert County, CO	346,400	337,400	909	1,083
Gilpin County, CO	316,400	252,800	1,017	1,029
Jefferson County, CO	259,300	279,500	900	1,052
Park County, CO	245,800	244,800	1,206	1,088
State of Colorado	236,600	247,800	852	1,002
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

The assessment area and the state of Colorado have comparable affordability ratios, with Adams County being somewhat more affordable than Denver County/City. With the exception of Gilpin County the percentage of owner occupied housing units has declined in each county as well as in the state.

Housing Narrative Information				
Area	2006 – 2010 Affordability Ratio	2011-2015 Affordability Ratio	2006 – 2010 Percentage of Occupied Housing that is Owner Occupied	2011 – 2015 Percentage of Occupied Housing that is Owner Occupied
Denver-Aurora-Lakewood, CO MSA 19740	0.24	0.25	66.5	63.2
Adams County, CO	0.28	0.30	68.4	64.5
Arapahoe County, CO	0.25	0.26	65.9	62.1
Broomfield County/City, CO	0.28	0.28	74.4	68.4
Clear Creek County, CO	0.22	0.24	81.3	78.7
Denver County/City, CO	0.19	0.20	52.5	49.4
Douglas County, CO	0.29	0.29	82.5	79.4
Elbert County, CO	0.23	0.25	91.3	88.7
Gilpin County, CO	0.18	0.26	71.8	76.7
Jefferson County, CO	0.25	0.25	71.9	69.9
Park County, CO	0.26	0.23	87.9	82.3
State of Colorado	0.24	0.24	67.5	64.3
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

One economic community development representative was contacted to increase understanding of credit needs and market conditions within the assessment area. They indicated that rising interest rates was impacting affordable housing and there was a need for lower or more competitive rates to developers to stimulate lower cost residential housing. Compounding the issue is the housing shortage faced by the impoverished, the homeless, seniors, and the disabled.

Employment Conditions

With the exception of Adams County, unemployment rates across the assessment area were below the state of Colorado. From 2013 through 2016 unemployment rates declined within each of the counties and the state itself. During the same period, Gross Domestic Product (GDP) in the Denver-Aurora-Lakewood, CO MSA 19740 grew from \$173.0 billion to \$197.1 billion or 13.9 percent compared to 12.6 percent for aggregate MSAs. The community representative indicated that many industries are experiencing labor shortages with the construction industry in particular having a difficult time finding workers. Per the Bureau of Labor Statistics, the major areas of occupations in excess of 120,000 employees within the MSA are Office and Administrative Support, Sales and Related, Food Preparation and Service Related, and Business and Financial. The top five employers in the MSA are Denver International Airport (transportation), Lockheed Martin Space Systems (satellite equipment and systems manufacturer), Western Union (money transfer), Denver Health (medical), and Children's Hospital Colorado (medical).

Unemployment Rates 2013 – 2016				
Area	2013	2014	2015	2016
Denver-Aurora-Lakewood, CO MSA 19740	6.6	4.8	3.7	3.1
Adams County, CO	7.5	5.7	4.4	3.6
Arapahoe County, CO	6.5	4.9	3.7	3.1
Broomfield County/City, CO	6.1	4.3	3.3	2.9
Clear Creek County, CO	6.3	4.7	3.7	3.2
Denver County/City, CO	7.0	4.9	3.7	3.1
Douglas County, CO	5.4	4.0	3.1	2.7
Elbert County, CO	5.8	4.3	3.2	2.7
Gilpin County, CO	5.7	4.4	3.1	2.4
Jefferson County, CO	6.3	4.6	3.5	3.0
Park County, CO	6.5	4.6	3.4	2.8
State of Colorado	6.8	5.0	3.9	3.3
Source: U.S. Bureau of Labor Statistics				

CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN DENVER-AURORA-LAKEWOOD, CO MSA 19740

Investment, Loan, and Service Activity

The Northern Trust Company has a high level of community development loans, qualified investments or community development services, particularly investments that are not routinely provided by private investors. The institution extensively uses innovative or complex qualified investments in the assessment area and exhibits excellent responsiveness to community development needs in the assessment area. Demographic and community contact information reveals a substantial need for investments targeting affordable housing. TNTC's investments are primarily responsive to this deficiency as it made investments in purchasing \$3.0 million dollars in secured notes to allow an affordable housing organization to continue to develop affordable homes as well as investments in two other like organizations. The institution also made \$3.1 million investments in Social Impact Bonds designed to alleviate homelessness in the assessment area. TNTC also made significant investments of \$11.6 million through a new market tax credit designed to create permanent jobs and provide training opportunities. In addition, investments totaling \$4.0 million were made to an organization engaged in providing housing and support services for homeless individuals.

In the assessment area from July 27, 2015 through October 15, 2018, TNTC had community development lending and investment activity including prior period maintained investments of approximately \$63.0 million representing a 68.0 percent increase in comparison to the previous 37 month evaluation period of \$37.5 million. The variation of approximately three months in terms of the current performance evaluation period as compared to the previous does not materially impact

the strength of the institution's performance.

Community Development Lending

During the review period, the institution originated three community development loans for \$12.6 million. One loan for \$12.1 million was for the provision of economic development in conjunction with a new market tax credit and the other two originations for a combined \$500,000 was for community service purposes. Two additional loans to small businesses were originated in the assessment area in the amount of \$838,000. By supporting these businesses in low- or moderate-income census tracts, the loans qualify as economic development.

Community Development Investments

During the review period, the institution disbursed funds related to new investments of approximately \$34.7 million. It maintained investments from the prior review periods of approximately \$13.9 million. Investments included affordable housing initiatives, which was a need indicated by a community representative. Innovativeness and complexity were demonstrated through investments in the purchase of secured notes to facilitate additional development of affordable housing, Social Impact Bond (SIB) designed to create permanent supportive housing for the homeless, and two multi-purpose new market tax credits that include workforce development.

Qualified Community Development Investments by Type								
	Prior Period Investments \$ (000s)	Current Period Investments \$ (000s)					Total Investments \$ (000s)	Unfunded Commitments \$ (000s)
		CS	AH	ED	RS	Total		
TOTAL	13,862	4,000	13,615	17,097	0	34,712	48,574	1,149

TNTC also made \$99,220 in grants and donations to various organizations involved in community development services, many of which focus on providing critical services to low- and moderate-income youths and the homeless.

Community Development Services

During the review period, the institution provided 34 hours of community development service to one organization. All services were related to the provision of community services to low- and moderate-income youths.

STATE OF CONNECTICUT

CRA RATING FOR CONNECTICUT: Satisfactory

Major factors supporting the bank's rating include the following:

- The institution has an adequate level of community development loans, community development services, or qualified investments, particularly investments that are not routinely provided by private investors;
- The institution occasionally uses innovative or qualified complex investments, community development loans, or community development services; and
- The institution exhibits adequate responsiveness to community development needs in the assessment area.

SCOPE OF EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a full-scope review. Please refer to the "Scope of Examination Section" for details. Full review examination procedures were used to evaluate the bank's operations in the Bridgeport-Stamford-Norwalk, CT MSA 14860. Results from this assessment area were used to determine the rating for the state of Connecticut.

DESCRIPTION OF INSTITUTION'S OPERATIONS IN CONNECTICUT

The Northern Trust Company delineates the Bridgeport-Stamford-Norwalk CT MSA 14860 in its entirety, which consists of Fairfield County. There have been no changes to the assessment area since the previous performance evaluation. The bank operates one branch in an upper-income census tract. The June 30, 2017, FDIC market share report ranks the bank 25th out of 29 area institutions with 0.40 percent of the market.

The Bridgeport-Stamford-Norwalk MSA 14860 consists of a total of 211 census tracts; 31 (14.7 percent) are low-, 40 (19.0 percent) are moderate-, 57 (27.0 percent) are middle-, and 81 (38.4 percent) are upper-income census tracts, and two (0.9 percent) of unknown income.

As the following table indicates the assessment area experienced a net decrease of two low-income census tracts and a net increase of three moderate-income census tracts.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	33	31	(2)
Moderate	37	40	3
Middle	67	57	(10)
Upper	73	81	8
Unknown	1	2	1
Total	211	211	0
Source: U. S. Census Bureau: Decennial Census: American Community Survey Data: 2006-2010 U.S. Census Bureau: Decennial Census: America Community Survey Data: 2011-2015			

Additional demographic information as of 2017 for the assessment area is presented in the following table:

Assessment Area: 2017 Bridgeport-Stamford-Norwalk, CT MSA 14860								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	31	14.7	25,980	11.2	5,928	22.8	57,209	24.6
Moderate-income	40	19.0	43,817	18.8	4,671	10.7	36,377	15.6
Middle-income	57	27.0	71,494	30.7	2,459	3.4	41,431	17.8
Upper-income	81	38.4	91,619	39.3	1,896	2.1	97,904	42.0
Unknown-income	2	0.9	11	0.0	0	0.0	0	0.0
Total Assessment Area	211	100.0	232,921	100.0	14,954	6.4	232,921	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	45,976	11,714	5.1	25.5	28,050	61.0	6,212	13.5
Moderate-income	77,904	36,769	16.1	47.2	34,166	43.9	6,969	8.9
Middle-income	115,194	79,024	34.6	68.6	27,900	24.2	8,270	7.2
Upper-income	124,471	100,874	44.2	81.0	15,812	12.7	7,785	6.3
Unknown-income	11	0	0.0	0.0	11	100.0	0	0.0
Total Assessment Area	363,556	228,381	100.0	62.8	105,939	29.1	29,236	8.0
	Total Businesses Tract		Businesses by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	5,040	8.5	4,363	8.2	660	12.4	17	3.8
Moderate-income	8,869	15.0	7,803	14.6	1,032	19.3	34	7.6
Middle-income	17,922	30.3	16,219	30.4	1,587	29.7	116	26.1
Upper-income	27,333	46.2	24,996	46.8	2,059	38.6	278	62.5
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	59,164	100.0	53,381	100.0	5,338	100.0	445	100.0
	Percentage of Total Businesses:			90.2		9.0		0.8
	Total Farms by Tract		Farms by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	8	3.0	8	3.1	0	0.0	0	0.0
Moderate-income	18	6.7	18	6.9	0	0.0	0	0.0
Middle-income	89	33.2	87	33.2	2	33.3	0	0.0
Upper-income	153	57.1	149	56.9	4	66.7	0	0.0
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	268	100.0	262	100.0	6	100.0	0	0.0
	Percentage of Total Farms:			97.8		2.2		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

The following presentation of key demographics used to help inform the evaluation of bank activity in its assessment area is based on a comparison of two sets of ACS data, 2006-2010 and 2011-2015.

Population Characteristics

As presented in the table below, from 2010 to 2015, the population in the assessment area not only grew at a percentage rate five times that of the state, but also exceeded the state numerically by 4,029 residents, indicating the remainder of the state had a net loss in population. The assessment area composes 26.2 percent of the population in the state of Connecticut.

Population Change 2010 – 2015			
Area	2010 Population	2011-2015 Population	Percentage Change
Fairfield County, CT	916,829	939,983	2.5
State of Connecticut	3,574,097	3,593,222	0.5
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

The following table indicates the five largest municipalities within the assessment area. Each of the municipalities displayed positive growth from the 2010 U.S Census Bureau Data with Stamford having the largest increase by percentage at 6.7 percent.

Five Largest Municipalities within the Assessment Area		
Municipality	Population	County
Bridgeport	146,579	Fairfield
Stamford	130,824	Fairfield
Norwalk	89,005	Fairfield
Danbury	85,246	Fairfield
Stratford	52,345	Fairfield
Source: U.S. Census Bureau 2017 Population Estimate		

Income Characteristics

As displayed in the table below, the median family income in the assessment area is greater than that of the state of Connecticut, at \$105,628 and \$89,031, respectively. The percentage change in median family income in the assessment area was below that of the state of Connecticut, at 5.0 percent growth and 5.8 percent growth respectively. The percentage of growth was also well below the 7.4 percent Consumer Price Index (CPI) inflation rate for the period of 2010-2015. A community representative whose organization is primarily involved in economic development indicated that there have been recent increases to the minimum wage.

Median Family Income Change 2010 – 2015			
Area	2006 – 2010 Median Family Income	2011-2015 Median Family Income	Percentage Change
Fairfield County, CT	100,593	105,628	5.0
State of Connecticut	84,170	89,031	5.8
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

Housing Characteristics

Median housing values in the assessment area and state of Connecticut experienced declines during 2010 through 2015. However, median gross rents increased during this same period of time.

Median housing values in the assessment area are significantly higher than the state of Connecticut as a whole, at \$416,000 and \$270,000, respectively. Similarly, median gross rents are greater in the assessment area than the state, at \$1,348 and \$1,075, respectively. The community representative indicated that rent costs are higher than in other areas of the state due to the proximity to the larger municipalities of New York, New Haven, and Boston.

Housing Costs Change 2010 – 2015				
Area	2006 – 2010 Median Housing	2011-2015 Median Housing	2006 – 2010 Median Gross Rent	2011 – 2015 Median Gross Rent
Fairfield County, CT	477,700	416,000	1,206	1,348
State of Connecticut	296,500	270,500	982	1,075
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

As the following table indicates, with its lower affordability ratio, housing in the assessment area has been more costly than the state of Connecticut. The percentage of owner occupied housing is similar to the state of Connecticut.

Housing Narrative Information				
Area	2006 – 2010 Affordability Ratio	2011-2015 Affordability Ratio	2006 – 2010 Percentage of Occupied Housing that is Owner Occupied	2011 – 2015 Percentage of Occupied Housing that is Owner Occupied
Fairfield County, CT	0.17	0.20	70.7	68.3
State of Connecticut	0.23	0.26	69.1	67.0
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

Employment Conditions

Unemployment rates within the assessment area were below the state of Connecticut. From 2013 through 2016 unemployment rates declined within Fairfield County and the state itself. During the same period, Gross Domestic Product (GDP) in the Bridgeport-Stamford-Norwalk, CT MSA 14860 grew from \$92.5 billion to \$99.3 billion, or 7.4 percent compared to 12.6 percent for aggregate MSAs. The community representative indicated that people who have worked in the manufacturing industry do not have the skillset to go into computer based precision manufacturing. Per the Bureau of Labor Statistics, the major areas of occupations in excess of 30,000 employees within the MSA are Office and Administrative Support, Sales and Related, Management, and Food Preparation and Service Related. The top five employers in the MSA are Sikorsky Aircraft Corporation (helicopter manufacturer), Trefetz Corporation (restaurant management), Stamford Health (medical), Danbury Hospital (medical), and St. Vincent's Medical Center (medical).

Unemployment Rates 2013 – 2016				
Area	2013	2014	2015	2016
Fairfield County, CT	7.1	6.2	5.4	4.8
State of Connecticut	7.8	6.6	5.7	5.1
Source: U.S. Bureau of Labor Statistics				

One economic development community representative was contacted to increase understanding of credit needs and market conditions within the assessment area. They indicated that the area has a high need for affordable housing as well as micro lending programs for small businesses.

CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN BRIDGEPORT-STAMFORD-NORWALK CT MSA 14860

Investment, Loan, and Service Activity

The Northern Trust Company has an adequate level of community development loans, qualified investments or community development services. The institution occasionally uses innovative or complex qualified investments in the assessment area and exhibits adequate responsiveness to community development needs in the assessment area. Demographic and community contact information reveals a substantial need for investments targeting affordable housing. TNTC's investments are primarily responsive to this deficiency as it made a \$1.0 million investment in a community trust to support an affordable rental property and purchased approximately \$5.0 million in mortgage back securities composed of loans originated to low-and moderate-income borrowers. The institution also made an investment in an organization providing health services to the uninsured and those who cannot afford medical services.

In the assessment area from July 27, 2015 through October 15, 2018, TNTC had community development lending and investment activity, including prior period maintained investments, of approximately \$14.2 million, representing a 43.4 percent increase in comparison to the previous 37 month evaluation period of \$9.9 million. The variation of approximately three months in terms of the current performance evaluation period as compared to the previous does not materially impact the strength of the institution's performance.

Community Development Lending

During the review period, the institution did not originate any community development loans. Two loans to small businesses were originated in the assessment area for the amount of \$800,000. By supporting these businesses in low- or moderate-income census tracts, the loans qualify as economic development.

Community Development Investments

During the review period, the institution disbursed funds related to new investments of approximately \$6.3 million. It maintained investments from the prior review periods of approximately \$7.1 million. Investments included affordable housing initiatives, which was a need indicated by a community representative. Innovativeness was demonstrated through a Public Welfare Investment to support an affordable rental property in Bridgeport.

Qualified Community Development Investments by Type								
	Prior Period Investments \$ (000s)	Current Period Investments \$ (000s)					Total Investments \$ (000s)	Unfunded Commitments \$ (000s)
		CS	AH	ED	RS	Total		
TOTAL	7,065	300	5,989	0	0	6,289	13,354	0

TNTC also made \$32,000 in grants and donations to various organizations involved in community development services.

Community Development Services

Staff performed six hours of community development services on behalf of the bank by serving on the board of directors for an organization primarily involved in providing of community services.

FLORIDA

CRA RATING FOR FLORIDA: Outstanding

Major factors supporting the bank's rating include the following:

- The institution has a high level of community development loans, community development services, or qualified investments, particularly investments that are not routinely provided by private investors;
- The institution extensively uses innovative or complex qualified investments, community development loans, or community development services; and
- The institution exhibits excellent responsiveness to credit and community development needs in the state of Florida.

SCOPE OF EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation. Please refer to the "Scope of Examination" sections for details.

A full review was conducted for evaluation under Wholesale/Limited Purpose CRA Examination Procedures for the Miami-Fort Lauderdale-West Palm Beach, FL MSA 33100, Cape Coral-Fort Myers, FL MSA 15980, and the Naples-Immokalee-Marco Island, FL MSA 34940. Limited reviews were conducted for the North Port-Sarasota-Bradenton, FL MSA 35840, Port St. Lucie, FL MSA 38940, Tampa-St. Petersburg-Clearwater, FL MSA 45300, the Sebastian-Vero Beach, FL MSA 42680 and the Key West, FL Micropolitan Statistical Area 28580. A summary table is presented below, and a detailed breakout of TNTC's assessment area delineations can be found under each assessment area summary.

State of Florida Assessment Areas		
MSA/MD	Counties Included	Counties Excluded
Miami-Fort Lauderdale-West Palm Beach, FL MSA 33100	Fort Lauderdale-Pompano Beach-Deerfield Beach MD 22744 (Broward County) Miami-Miami Beach-Kendall MD 33124 (Miami-Dade County) West Palm Beach-Boca Raton-Delray Beach MD 48424 (Palm Beach County)	None
Cape Coral-Fort Myers, FL MSA 15980	Lee County	None
Naples-Immokalee-Marco Island, FLA MSA 34940	Collier County	None
Port St. Lucie, FL MSA 38940	Martin County, St. Lucie County	None

North Port-Sarasota-Bradenton, FL MSA 35840	Manatee County, Sarasota County	None
Tampa-St. Petersburg-Clearwater, FL MSA 45300	Hillsborough County, Pasco County, Pinellas County	Hernando County
Sebastian-Vero Beach, FL MSA 42680	Indian River County	None
Key West, FL Micropolitan Statistical Area 28580	Monroe County	None

DESCRIPTION OF INSTITUTION'S OPERATIONS IN FLORIDA

The Northern Trust Company operates 18 branches in the state of Florida and eight full-service and one cash-only ATM. During the evaluation period, one branch and one full-service ATM closing occurred in the Miami-Fort Lauderdale-West Palm Beach, FL MSA 33100 and in the Cape Coral-Fort Myers MSA. The institution did not open any new branches or ATMs. The following table displays the bank's presence in the state:

Northern Trust Branches and ATMs Florida								
MD	Branches by Census Tracts				ATMs by Census Tracts			
	Low	Moderate	Middle	Upper	Low	Moderate	Middle	Upper
Miami-Fort Lauderdale-West Palm Beach, FL MSA 33100	0	0	1	7	0	0	0	3
Naples-Immokalee-Marco Island, FL MSA 34940	0	0	0	2	0	0	0	2
Port St. Lucie, FL MSA 38940	0	0	1	0	0	0	0	0
Cape Coral-Fort Myers -Naples, FL MSA 15980	0	0	0	2	0	0	0	2
North Port-Sarasota Bradenton, FL MSA 35840	0	0	0	2	0	0	0	1
Tampa-St. Petersburg-Clearwater, FL MSA 45300	0	0	0	2	0	0	0	0
Sebastian-Vero Beach, FL MSA 42680	0	0	0	1	0	0	0	1
Key West, FL Micropolitan Statistical Area 28580	0	0	0	0	0	0	0	1
Total	0	0	2	16	0	0	0	10

CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TESTS IN FLORIDA

The bank's performance relative to the community development test is Outstanding based on the following community development test characteristics:

- The institution has a high level of community development loans, community development services, or qualified investments, particularly investments that are not routinely provided by private investors;
- The institution extensively uses innovative or complex qualified investments, community development loans, or community development services; and
- The institution exhibits excellent responsiveness to credit and community development needs in the assessment area.

Investment, Loan, and Service Activity

The Northern Trust Company has a high level of community development loans, community development services, or qualified investments, particularly investments that are not routinely provided by private investors. It extensively uses innovative or complex qualified investments, community development loans, or community development services. The institution exhibits excellent responsiveness to credit and community economic development needs in the assessment area as demonstrated in its participation both by loan and investment in a multifaceted organization that provides comprehensive assistance to homeless individuals.

Demographic and community representative information reveals a substantial need for investments targeting affordable housing and workforce development. A considerable amount of TNTC's investments are for affordable housing purposes; however, both an investment and loan was made to an organization that provides vocational training

Community Development activities are detailed below.

Community Development Lending

During the review period, the institution made 27 community development loans across the assessment area for approximately \$45.0 million and five community development affordable housing loans outside the assessment area which benefited the state of Florida for approximately \$10.0 million, bringing the overall total to \$55.0 million.

The institution originated an additional 63 small business loans, qualifying for economic development purposes. The loans totaled over \$19.8 million and helped address small business needs within the assessment area.

Community Development Investments

During the review period, the institution disbursed funds related to new qualified investments across the assessment area of approximately \$295.7 million and investments of approximately \$35.7 million outside the assessment area which benefited the state of Florida. It maintained qualified investments from prior review years of approximately \$39.9 million within the assessment area and had total unfunded commitments of \$61.8 million, of which \$35.6 million are in the assessment area. Investments met the community development purposes of affordable housing, economic development, community services, and revitalization/stabilization.

TNTC also made donations of approximately \$572,000 to various affordable housing, community service, and small business support organizations in the assessment area. In addition, donations totaling \$65,000 were made to provide operating expenses and lending activities to affordable housing developers and human services organizations in the state of Florida.

Community Development Services

During the review period, bank staff performed 2,548 hours of service to 28 different organizations on behalf of the institution. Bank management and staff serve on boards of directors, using their financial and management expertise to help guide the decisions of nonprofit community-based organizations located in the assessment area.

MIAMI-FORT LAUDERDALE-WEST PALM BEACH, FL 33100 – FULL REVIEW

SCOPE OF THE EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a full scope review. Please refer to the “Scope of Examination” section for details.

DESCRIPTION OF INSTITUTION’S OPERATIONS IN MIAMI-FORT LAUDERDALE-WEST PALM BEACH, FL MSA 33100

The Northern Trust Company takes all of the Miami-Fort Lauderdale-West Palm Beach, FL MSA 33100 as its assessment area. The previous performance evaluation had also included Port St. Lucie, FL MSA 38940 which is part of the Miami-Fort Lauderdale-Port St. Lucie, FL Combined Statistical Area (CSA) 370. The assessment area is composed of the following metropolitan divisions (MDs) in their entirety:

- Fort Lauderdale-Pompano Beach-Deerfield Beach, FL MD 22744 (Broward County)
- Miami-Miami Beach-Kendall, FL MD 33124 (Miami-Dade County)
- West Palm Beach-Boca Raton-Delray Beach, FL MD 48424 (Palm Beach County)

Within the assessment area, TNTC has eight branches and three full-service ATMs. Seven of the branches are located in upper-income census tracts with one in a middle-income census tract. All three ATMs are located in upper-income census tracts. One branch with a full-service ATM in an upper-income census tract was closed in September of 2018. The bank ranks 16th out of 99 FDIC insured institutions with a 1.6 percent market share. Bank of America NA and Wells Fargo NA are the only institutions with double-digit deposit share with 17.0 percent and 15.7 percent, respectively.

The MSA 33100 assessment area consists of a total of 1,219 census tracts; 76 (6.2 percent) are low-, 344 (28.2 percent) are moderate-, 359 (29.5 percent) are middle-, 409 (33.6 percent) are upper-income, and 31 (2.5 percent) of unknown income. The previous performance evaluation that had included Port St. Lucie as part of the assessment area review was composed of 1,249 census tracts reflecting a decrease of 30 tracts for the current evaluation.

Community development activity performed in 2017 and beyond are evaluated based on ACS income level definitions from the five-year survey data set 2011-2015. As the following table indicates the assessment area experienced a net increase of five low-income census tracts and a net increase of 29 moderate-income census tracts.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	71	76	5
Moderate	315	344	29
Middle	405	359	(46)
Upper	399	409	10
Unknown	29	31	2
Total	1,219	1,219	0
Source: U. S. Census Bureau: Decennial Census: American Community Survey Data: 2006-2010 U.S. Census Bureau: Decennial Census: American Community Survey Data: 2011-2015			

Additional demographic information as of 2017 for the assessment area is presented in the following tables:

Assessment Area: 2017 Miami-Fort Lauderdale-West Palm Beach, FL MSA 33100								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	=	%	=	%	=	%	=	%
Low-income	76	6.2	66,251	5.0	26,032	39.3	308,004	23.1
Moderate-income	344	28.2	362,887	27.3	77,367	21.4	226,177	17.0
Middle-income	359	29.5	420,721	31.6	48,134	11.4	235,608	17.7
Upper-income	409	33.6	478,696	36.0	26,997	5.6	561,004	42.2
Unknown-income	31	2.5	2,238	0.2	608	27.2	0	0.0
Total Assessment Area	1,219	100.0	1,330,793	100.0	179,338	13.5	1,330,793	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		=	%	%	=	%	=	%
Low-income	137,732	32,484	2.6	23.6	80,676	58.6	24,572	17.8
Moderate-income	693,336	289,169	23.2	41.7	290,987	42.0	113,180	16.3
Middle-income	767,541	410,125	32.9	53.4	240,369	31.3	117,047	15.2
Upper-income	877,623	514,343	41.2	58.6	183,155	20.9	180,125	20.5
Unknown-income	8,372	1,917	0.2	22.9	3,817	45.6	2,638	31.5
Total Assessment Area	2,484,604	1,248,038	100.0	50.2	799,004	32.2	437,562	17.6
	Total Businesses by Tract	Businesses by Tract & Revenue Size						
		Less Than or = \$1 Million			Over \$1 Million		Revenue Not Reported	
		=	%	=	%	=	%	=
Low-income	16,867	4.3	14,674	4.1	2,068	7.1	125	3.4
Moderate-income	86,505	22.0	78,424	21.8	7,569	26.1	512	13.8
Middle-income	112,334	28.6	104,655	29.1	6,863	23.7	816	22.0
Upper-income	172,422	43.9	158,625	44.1	11,604	40.0	2,193	59.1
Unknown-income	4,528	1.2	3,572	1.0	890	3.1	66	1.8
Total Assessment Area	392,656	100.0	359,950	100.0	28,994	100.0	3,712	100.0
	Percentage of Total Businesses:			91.7			7.4	0.9
	Total Farms by Tract	Farms by Tract & Revenue Size						
		Less Than or = \$1 Million			Over \$1 Million		Revenue Not Reported	
		=	%	=	%	=	%	=
Low-income	75	4.2	63	3.8	12	9.3	0	0.0
Moderate-income	257	14.2	236	14.1	21	16.3	0	0.0
Middle-income	457	25.3	436	26.0	21	16.3	0	0.0
Upper-income	1,003	55.6	928	55.4	75	58.1	0	0.0
Unknown-income	13	0.7	13	0.8	0	0.0	0	0.0
Total Assessment Area	1,805	100.0	1,676	100.0	129	100.0	0	0.0
	Percentage of Total Farms:			92.9			7.1	0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

Assessment Area: 2017 Miami-Miami Beach-Kendall, FL MD 33124								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	=	%	=	%	=	%	=	%
Low-income	30	5.8	27,891	4.9	12,291	44.1	137,489	24.0
Moderate-income	144	27.7	164,741	28.8	42,437	25.8	94,754	16.6
Middle-income	150	28.9	177,461	31.0	26,545	15.0	96,605	16.9
Upper-income	177	34.1	200,815	35.1	14,841	7.4	243,540	42.5
Unknown-income	18	3.5	1,480	0.3	509	34.4	0	0.0
Total Assessment Area	519	100.0	572,388	100.0	96,623	16.9	572,388	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		=	%	%	=	%	=	%
Low-income	53,324	9,001	2.0	16.9	37,511	70.3	6,812	12.8
Moderate-income	274,713	97,114	21.4	35.4	147,255	53.6	30,344	11.0
Middle-income	292,995	144,514	31.9	49.3	109,954	37.5	38,527	13.1
Upper-income	371,417	201,131	44.4	54.2	91,389	24.6	78,897	21.2
Unknown-income	6,384	1,066	0.2	16.7	3,218	50.4	2,100	32.9
Total Assessment Area	998,833	452,826	100.0	45.3	389,327	39.0	156,680	15.7
	Total Businesses by Tract	Businesses by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
		=	%	=	%	=	%	=
Low-income	4,984	3.1	4,487	3.0	461	3.4	36	2.4
Moderate-income	35,567	21.9	32,082	21.8	3,306	24.5	179	12.0
Middle-income	42,275	26.1	39,192	26.6	2,821	20.9	262	17.5
Upper-income	75,554	46.6	68,469	46.5	6,119	45.3	966	64.7
Unknown-income	3,816	2.4	2,954	2.0	811	6.0	51	3.4
Total Assessment Area	162,196	100.0	147,184	100.0	13,518	100.0	1,494	100.0
	Percentage of Total Businesses:			90.7		8.3		0.9
	Total Farms by Tract	Farms by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
		=	%	=	%	=	%	=
Low-income	19	2.6	14	2.1	5	7.4	0	0.0
Moderate-income	94	12.9	87	13.2	7	10.3	0	0.0
Middle-income	144	19.8	138	20.9	6	8.8	0	0.0
Upper-income	465	63.8	415	62.8	50	73.5	0	0.0
Unknown-income	7	1.0	7	1.1	0	0.0	0	0.0
Total Assessment Area	729	100.0	661	100.0	68	100.0	0	0.0
	Percentage of Total Farms:			90.7		9.3		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

Assessment Area: 2017 West Palm Beach-Boca Raton-Delray Beach, FL MD 48424								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	=	%	=	%	=	%	=	%
Low-income	26	7.7	19,292	5.8	7,117	36.9	75,778	22.8
Moderate-income	94	27.8	82,482	24.8	14,460	17.5	57,664	17.3
Middle-income	92	27.2	104,384	31.4	7,979	7.6	59,302	17.8
Upper-income	115	34.0	125,809	37.8	5,343	4.2	139,981	42.1
Unknown-income	11	3.3	758	0.2	99	13.1	0	0.0
Total Assessment Area	338	100.0	332,725	100.0	34,998	10.5	332,725	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied		Rental		Vacant		
		=	%	%	=	%	=	%
Low-income	40,022	11,598	3.1	29.0	20,247	50.6	8,177	20.4
Moderate-income	184,776	86,275	23.3	46.7	59,215	32.0	39,286	21.3
Middle-income	204,366	120,910	32.7	59.2	49,258	24.1	34,198	16.7
Upper-income	240,165	149,887	40.6	62.4	35,765	14.9	54,513	22.7
Unknown-income	1,988	851	0.2	42.8	599	30.1	538	27.1
Total Assessment Area	671,317	369,521	100.0	55.0	165,084	24.6	136,712	20.4
	Total Businesses by Tract	Businesses by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
	=	%	=	%	=	%	=	%
Low-income	5,236	5.1	4,586	4.8	609	9.2	41	4.0
Moderate-income	20,420	19.9	18,749	19.7	1,541	23.2	130	12.6
Middle-income	31,233	30.4	29,299	30.9	1,660	25.0	274	26.5
Upper-income	45,041	43.9	41,708	43.9	2,739	41.5	574	55.5
Unknown-income	709	0.7	616	0.6	78	1.2	15	1.5
Total Assessment Area	102,639	100.0	94,958	100.0	6,647	100.0	1,034	100.0
	Percentage of Total Businesses:			92.5		6.5		1.0
	Total Farms by Tract	Farms by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
		=	%	=	%	=	%	=
Low-income	35	5.1	29	4.5	6	12.5	0	0.0
Moderate-income	87	12.7	77	12.1	10	20.8	0	0.0
Middle-income	219	31.9	206	32.2	13	27.1	0	0.0
Upper-income	340	49.5	321	50.2	19	39.6	0	0.0
Unknown-income	6	0.9	6	0.9	0	0.0	0	0.0
Total Assessment Area	687	100.0	639	100.0	48	100.0	0	0.0
Percentage of Total Farms:			93.0			7.0		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

Assessment Area: 2017 Fort Lauderdale-Pompano Beach-Deerfield Beach, FL MD 22744								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	=	%	=	%	=	%	=	%
Low-income	20	5.5	19,068	4.5	6,624	34.7	94,737	22.3
Moderate-income	106	29.3	115,664	27.2	20,670	17.9	73,759	17.3
Middle-income	117	32.3	138,876	32.6	13,610	9.8	79,701	18.7
Upper-income	117	32.3	152,072	35.7	6,813	4.5	177,483	41.7
Unknown-income	2	0.6	0	0.0	0	0.0	0	0.0
Total Assessment Area	362	100.0	425,680	100.0	47,717	11.2	425,680	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		=	%	%	=	%	=	%
Low-income	44,386	11,885	2.8	26.8	22,918	51.6	9,583	21.6
Moderate-income	233,847	105,780	24.8	45.2	84,517	36.1	43,550	18.6
Middle-income	270,180	144,701	34.0	53.6	81,157	30.0	44,322	16.4
Upper-income	266,041	163,325	38.4	61.4	56,001	21.0	46,715	17.6
Unknown-income	0	0	0.0	0.0	0	0.0	0	0.0
Total Assessment Area	814,454	425,691	100.0	52.3	244,593	30.0	144,170	17.7
	Total Businesses by Tract		Businesses by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	=	%	=	%	=	%	=	%
Low-income	6,647	5.2	5,601	4.8	998	11.3	48	4.1
Moderate-income	30,518	23.9	27,593	23.4	2,722	30.8	203	17.1
Middle-income	38,826	30.4	36,164	30.7	2,382	27.0	280	23.6
Upper-income	51,827	40.5	48,448	41.1	2,726	30.9	653	55.2
Unknown-income	3	0.0	2	0.0	1	0.0	0	0.0
Total Assessment Area	127,821	100.0	117,808	100.0	8,829	100.0	1,184	100.0
	Percentage of Total Businesses:			92.2		6.9		0.9
	Total Farms by Tract		Farms by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	=	%	=	%	=	%	=	%
Low-income	21	5.4	20	5.3	1	7.7	0	0.0
Moderate-income	76	19.5	72	19.1	4	30.8	0	0.0
Middle-income	94	24.2	92	24.5	2	15.4	0	0.0
Upper-income	198	50.9	192	51.1	6	46.2	0	0.0
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	389	100.0	376	100.0	13	100.0	0	0.0
Percentage of Total Farms:			96.7		3.3		0.0	
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

The following presentation of key demographics used to help inform the evaluation of bank activity in its assessment area is based on a comparison of two sets of ACS data, 2006-2010 and 2011-2015.

Population Characteristics

As presented in the table below, Broward and Miami-Dade Counties grew at a faster rate from 2010 to 2015 than the state of Florida, with Palm Beach comparable. For the three counties which compose the assessment area and the MSA the overall increase was 5.3 percent, slightly higher than the state's 4.5 percent. The assessment area represents 29.8 percent of Florida's population. Two community representatives both indicated they anticipate the population growth to persist as retirees continue to come to the area.

Population Change 2010 – 2015			
Area	2010 Population	2011-2015 Population	Percentage Change
Broward County, FL	1,748,066	1,843,152	5.4
Miami-Dade County, FL	2,496,435	2,639,042	5.7
Palm Beach County, FL	1,320,134	1,378,806	4.4
Fort Lauderdale-Pompano Beach- Deerfield Beach, FL MD 22744	1,748,066	1,843,152	5.4
Miami-Miami Beach-Kendall, FL MD 33124	2,496,435	2,639,042	5.7
West Palm Beach-Boca Raton-Delray Beach, FL MD 48424	1,320,134	1,378,806	4.4
State of Florida	18,801,310	19,645,772	4.5
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

The following table lists the five largest municipalities in the assessment area. West Palm Beach with a population of 110,000 is the largest municipality in Palm Beach County.

Five Largest Municipalities within the Assessment Area		
Municipality	Population	County
Miami	463,347	Miami-Dade
Hialeah	239,673	Miami-Dade
Fort Lauderdale	180,072	Broward
Hollywood	153,627	Broward
Miami Gardens	113,750	Miami-Dade
Source: U.S. Census Bureau 2017 Population Estimates		

Income Characteristics

As displayed in the table below, the median family income in the assessment varies slightly, with the highest in Palm Beach County at \$65,914 and the lowest in Miami-Dade at \$49,264. Both Broward County and Palm Beach County are above the state of Florida (\$57,504), while Miami-Dade is only at 85.7 percent of the state. Between 2010 and 2015 the median family income has declined slightly in Broward County and Miami Dade County and grown slightly in Palm Beach County. As compared to the Consumer Price Index (CPI) inflation rate of 7.4 percent, income in the assessment area and the state failed to keep pace with inflation. One of the community representatives indicated that the high number of low wage jobs is affecting the income performance.

Median Family Income Change 2010 – 2015			
Area	2006 – 2010 Median Family Income	2011-2015 Median Family Income	Percentage Change
Broward County, FL	62,619	61,809	-1.3
Miami-Dade County, FL	50,065	49,264	-1.6
Palm Beach County, FL	64,445	65,914	2.3
Fort Lauderdale-Pompano Beach-Deerfield Beach, FL MD 22744	62,619	61,809	-1.3
Miami-Miami Beach-Kendall, FL MD 33124	50,065	49,264	-1.6
West Palm Beach-Boca Raton-Delray Beach, FL MD 48424	64,445	65,914	2.3
State of Florida	57,204	57,504	0.5
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

Housing Characteristics

As the following table indicates, median housing values in the assessment area and the state experienced significant decreases during 2010 to 2015. However, median gross rents experienced increases during the same period of time.

In terms of actual dollars, median housing values across the assessment area are similar, but above the state. The highest is Palm Beach County at \$205,700 and the lowest is Broward County at \$185,900, as compared to the state of Florida at \$159,000. Similarly, median gross rents are comparable at \$1,129 in Palm Beach County and \$1,004 in Miami-Dade County. Community representatives commented that the trend in housing prices has recently been upward and is creating an affordability issue within the assessment area.

Housing Costs Change 2010 – 2015				
Area	2006 – 2010 Median Housing	2011-2015 Median Housing	2006 – 2010 Median Gross Rent	2011 – 2015 Median Gross Rent
Broward County, FL	247,500	185,900	1,133	1,191
Miami-Dade County, FL	269,600	203,300	1,004	1,112
Palm Beach County, FL	261,900	204,700	1,129	1,170
Fort Lauderdale-Pompano Beach-Deerfield Beach, FL MD 22744	247,531	185,893	1,132	1,190
Miami-Miami Beach-Kendall, FL MD 33124	269,603	203,346	1,004	1,112
West Palm Beach-Boca Raton-Delray Beach, FL MD 48424	261,889	204,663	1,129	1,169
State of Florida	205,600	159,000	957	1,002
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

As the following table indicates, with its lower affordability ratio, housing in the assessment area has been more costly than the state of Florida. The percentage of owner occupied housing is significantly lower in Miami-Dade County, which has the lowest affordability ratio, compared to either Broward or Palm Beach counties or the state of Florida.

Housing Narrative Information				
Area	2006 – 2010 Affordability Ratio	2011-2015 Affordability Ratio	2006 – 2010 Percentage of Occupied Housing that is Owner Occupied	2011 – 2015 Percentage of Occupied Housing that is Owner Occupied
Broward County, FL	0.21	0.28	69.3	63.5
Miami-Dade County, FL	0.16	0.21	58.1	53.8
Palm Beach County, FL	0.20	0.26	73.6	69.1
Fort Lauderdale-Pompano Beach-Deerfield Beach, FL MD 22744	0.21	0.28	69.3	63.5
Miami-Miami Beach-Kendall, FL MD 33124	0.16	0.21	58.1	53.8
West Palm Beach-Boca Raton-Delray Beach, FL MD 48424	0.20	0.26	73.6	69.1
State of Florida	0.23	0.30	68.8	65.3
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

Employment Conditions

With the exception of Miami-Dade County, the unemployment rates across the assessment area were below the state of Florida. From 2013 through 2016, unemployment rates declined within each of the counties and the state itself. During the same period, Gross Domestic Product (GDP) in the Miami-Fort Lauderdale-West Palm Beach, FL MSA 33100 grew from \$268.2 billion to \$330.8 billion or 23.3 percent compared to 12.6 percent for aggregate MSAs. The community representatives indicated that there are not enough work force development type programs available to help untrained individuals, and most of the positions available tend to be low wage. Per the Bureau of Labor Statistics, the major areas of occupations in excess of 130,000 employees within the MSA are Office and Administrative Support, Sales and Related, Food Preparation and Service Related, Transportation and Material Moving, and Health Care Practitioners. The top five employers in the MSA are Palm Beach County Schools (education), Kurriosity (wellness program), Gimble International (wholesale food brokers), Miami Cardiac and Vascular Institute (medical), and Jackson Health System (medical).

Unemployment Rates 2013 - 2016				
Area	2013	2014	2015	2016
Broward County, FL	6.1	5.8	5.1	4.6
Miami-Dade County, FL	8.4	6.8	5.9	5.4
Palm Beach County, FL	7.3	5.9	5.1	4.8
Fort Lauderdale-Pompano Beach-Deerfield Beach, FL MD 22744	6.1	5.8	5.1	4.6
Miami-Miami Beach-Kendall, FL MD 33124	8.4	6.8	5.9	5.4
West Palm Beach-Boca Raton-Delray Beach, FL MD 48424	7.3	5.9	5.1	4.8
State of Florida	7.2	6.3	5.4	4.9
Source: U.S. Bureau of Labor Statistics				

Two economic community representatives were contacted to increase understanding of credit needs and market conditions within the assessment area. They indicated that the preponderance of lower wage jobs and rising housing prices have caused some portions of the population to move further from the jobs to find affordable housing and thus experience long commutes. There is both a definite need for affordable housing and workforce development programs.

CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN MIAMI-FORT LAUDERDALE-WEST PALM BEACH, FL MSA 33100

Investment, Loan, and Service Activity

The Northern Trust Company has a high level of community development loans, qualified investments or community development services. The institution extensively uses innovative or

complex qualified investments in the assessment area, particularly investments that are not routinely provided by private investors. It exhibits excellent responsiveness to community development needs in the assessment area. Demographic and community representative information reveals a substantial need for investments targeting affordable housing. TNTC's investments are primarily responsive to this deficiency as it made investments in a number of affordable housing investment initiatives, including a low income housing tax credit of \$18.8 million, private placement of \$6.4 million in loans originated by an affordable housing organization, and \$1.0 million dollar investment to an affordable housing organization that develops sustainable housing to stabilize neighborhoods. The bank also made a \$5.0 million dollar loan to an organization to construct a multi-building campus for the chronically homeless. TNTC has a multi-faceted relationship with this organization, including both community development loans and investments. In addition the institution purchased approximately \$147.8 million in mortgage back securities consisting of loan originations to low- and moderate-income borrowers.

TNTC had community development lending and investment activity, including prior period maintained investments, of approximately \$260.3 million, representing a 109.4 percent increase in comparison to the previous 37 month evaluation period of \$124.3 million. The variation of approximately three months in terms of the current performance evaluation period as compared to the previous does not materially impact the strength of the institution's performance.

Community Development Lending

During the review period, the institution made 18 community development loans totaling \$38.2 million. Twelve of the loans were for the provision of community services with the remaining six transactions related to affordable housing. TNTC exhibited innovativeness in its \$5.0 million loan to facilitate the construction of a building complex to provide overnight shelter for the chronically homeless. An additional 32 small business loans for \$10.6 million were originated to small businesses located in low- and moderate-income census tracts. These loans fall within the economic development category.

Qualified Community Development Loans										
	Affordable Housing		Economic Development		Revitalization & Stabilization		Community Services		Total	
	#	\$(000s)	#	\$(000s)	#	\$(000s)	#	\$(000s)	#	\$(000s)
New Loans	3	2,900	0	0	0	0	5	8,164	8	11,064
Renewed Loans	3	21,300	0	0	0	0	7	5,850	10	27,150
Total	6	24,200	0	0	0	0	12	14,014	18	38,214
Note: Percentages may not add to 100.0 percent due to rounding										

Community Development Investments

During the review period, the institution disbursed funds related to new investments of approximately \$171.3 million. It maintained investments from the prior review periods of approximately \$27.8 million. Investments included affordable housing initiatives which was a need indicated by a community representative. Innovativeness and complexity was demonstrated through helping facilitate the private placement of mortgages originated by an affordable housing organization and multiple low income housing tax credits. The bank also made an equity investment in an organization that provides comprehensive services to the homeless.

Qualified Community Development Investments by Type								
	Prior Period Investments \$ (000s)	Current Period Investments \$ (000s)					Total Investments \$ (000s)	Unfunded Commitments \$ (000s)
		CS	AH	ED	RS	Total		
TOTAL	27,802	597	170,724	0	0	171,321	199,123	12,384

TNTC also made \$378,065 in grants and donations primarily to organizations involved in community services.

Community Development Services

During the review period, the institution performed 821 qualified community development service hours supporting eight different organizations. The organizations receiving the services are active in the provision of community services tailored to meet the needs of low- and moderate-income individuals. Bank management and staff served on boards of directors and on finance, loan, investment, and advisory committees, using their financial and management expertise to help guide the decisions of nonprofit community-based organizations located in the assessment area.

CAPE CORAL-FORT MYERS, FL 15980 – FULL REVIEW

SCOPE OF THE EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a full scope review. Please refer to the “Scope of Examination” section for details.

DESCRIPTION OF INSTITUTION’S OPERATIONS IN CAPE CORAL-FORT MYERS MSA 15980

The Northern Trust Company delineates the Cape Coral Fort Myers, FL MSA 15980 in its entirety as its assessment area, which consists of Lee County, FL. The assessment area is unchanged from the previous performance evaluation. TNTC maintains operations in the Cape Coral-Fort Myers, FL MSA 15980 through two branches branch with full-service ATMs located in upper-income census tracts. A branch with a full-service ATM located in a middle-income census tract was consolidated into one of the existing branches in April of 2018.

As of June 30, 2017, the bank ranked 12th out of 35 FDIC-insured depository financial institutions that have a presence in the assessment area with a market share of 2.36 percent. The top three financial institutions are Wells Fargo Bank NA, Bank of America NA, and Sun Trust Bank, with 15.6 percent, 15.1 percent, and 14.5 percent of assessment area deposits, respectively.

The assessment area consists of a total of 167 census tracts; seven (4.2 percent) are low-, 42 (25.1 percent) are moderate-, 60 (35.9 percent) are middle-, and 56 (33.5 percent) are upper-income, and two (1.2 percent) are of unknown income.

As the following table indicates the assessment area experienced a net increase of two low-income census tracts and a net increase of 10 moderate-income census tracts.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	5	7	2
Moderate	32	42	10
Middle	80	60	(20)
Upper	48	56	8
Unknown	2	2	0
Total	167	167	0
Source: U. S. Census Bureau: Decennial Census: American Community Survey Data: 2006-2010 U.S. Census Bureau: Decennial Census: America Community Survey Data: 2011-2015			

Additional demographic information as of 2017 for the assessment area is presented in the following table:

Assessment Area: 2017 Cape Coral-Fort Myers, FL MSA 15980								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	7	4.2	5,910	3.6	1,945	32.9	34,371	20.8
Moderate-income	42	25.1	37,663	22.7	7,613	20.2	30,610	18.5
Middle-income	60	35.9	71,586	43.2	6,820	9.5	32,556	19.7
Upper-income	56	33.5	50,476	30.5	2,045	4.1	68,098	41.1
Unknown-income	2	1.2	0	0.0	0	0.0	0	0.0
Total Assessment Area	167	100.0	165,635	100.0	18,423	11.1	165,635	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	13,065	3,624	2.1	27.7	6,678	51.1	2,763	21.1
Moderate-income	79,613	32,377	18.6	40.7	25,723	32.3	21,513	27.0
Middle-income	153,042	76,990	44.2	50.3	29,699	19.4	46,353	30.3
Upper-income	128,613	61,171	35.1	47.6	16,025	12.5	51,417	40.0
Unknown-income	0	0	0.0	0.0	0	0.0	0	0.0
Total Assessment Area	374,333	174,162	100.0	46.5	78,125	20.9	122,046	32.6
	Total Businesses Tract	Businesses by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
	#	%	#	%	#	%	#	%
Low-income	1,046	2.6	958	2.6	82	3.3	6	2.1
Moderate-income	8,389	21.0	7,707	20.8	633	25.7	49	17.1
Middle-income	16,509	41.4	15,624	42.1	778	31.6	107	37.3
Upper-income	13,896	34.8	12,814	34.5	958	39.0	124	43.2
Unknown-income	41	0.1	32	0.1	8	0.3	1	0.3
Total Assessment Area	39,881	100.0	37,135	100.0	2,459	100.0	287	100.0
	Percentage of Total Businesses:			93.1		6.2		0.7
	Total Farms by Tract	Farms by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
#	%	#	%	#	%	#	%	
Low-income	4	1.5	4	1.6	0	0.0	0	0.0
Moderate-income	52	19.5	48	18.8	4	36.4	0	0.0
Middle-income	125	47.0	122	47.8	3	27.3	0	0.0
Upper-income	85	32.0	81	31.8	4	36.4	0	0.0
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	266	100.0	255	100.0	11	100.0	0	0.0
	Percentage of Total Farms:			95.9		4.1		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

The following presentation of key demographics used to help inform the evaluation of bank activity in its assessment area is based on a comparison of two sets of ACS data, 2006-2010 and 2011-2015.

Population Characteristics

As presented in the table below, from 2010 to 2015, population in the assessment area grew at a much more rapid rate (7.3 percent) than the state of Florida (4.5 percent). The increase of approximately 45,000 residents in Lee County represented 5.3 percent of the number of additional residents in the state. Overall, the assessment area represents 3.4 percent of the state population in Florida.

Population Change 2010 – 2015			
Area	2010 Population	2011-2015 Population	Percentage Change
Lee County, FL	618,754	663,675	7.3
State of Florida	18,801,310	19,645,772	4.5
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

The following table lists the four largest municipalities within the assessment area. Since the 2010 U.S. Census, the population of Fort Myers has increased by the largest percentage at 28.3 percent, with Bonita Springs growing at the second highest rate at 27.7 percent.

Four Largest Municipalities within the Assessment Area with Populations Greater than 10,000		
Municipality	Population	County
Cape Coral	183,365	Lee
Fort Myers	79,943	Lee
Bonita Springs	56,088	Lee
Estero	33,048	Lee
Source: U.S. Census Bureau 2017 Population Estimate		

Income Characteristics

As displayed in the table below, median family income in the assessment area is similar to that of the state of Florida, at \$57,627 and \$57,504, respectively. Income in the assessment area decreased for the period of 2010 to 2015 by 2.2 percent, and increased slightly in the state of Florida by 0.5 percent. Notably, the percentage change in median family income in the assessment area and the state of Florida were well below the 7.4 percent Consumer Price Index (CPI) inflation rate for the period of 2010-2015, indicating income failed to keep pace with inflation. A community representative indicated that although a number of businesses have moved into the county and there is a labor shortage, wages have remained unchanged.

Median Family Income Change 2010 – 2015			
Area	2006 – 2010 Median Family Income	2011-2015 Median Family Income	Percentage Change
Lee County, FL	58,950	57,627	-2.2
State of Florida	57,204	57,504	0.5
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

Housing Characteristics

Median housing values in the assessment area and the state of Florida are similar, and experienced declines by 25.3 percent and 22.7 percent, respectively, during the period of 2010 to 2015. Median gross rents experienced a slight decrease in Lee County and an increase in the state of Florida during the same time period. The community representative indicated that housing prices have recently increased and most individuals are struggling to afford housing in the area.

Housing Costs Change 2010 – 2015				
Area	2006 – 2010 Median Housing	2011-2015 Median Housing	2006 – 2010 Median Gross Rent	2011 – 2015 Median Gross Rent
Lee County, FL	210,600	157,400	962	951
State of Florida	205,600	159,000	957	1,002
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

As the following table indicates housing in the assessment area has been getting more affordable and is similar to that of the state of Florida.

Housing Narrative Information				
Area	2006 – 2010 Affordability Ratio	2011-2015 Affordability Ratio	2006 – 2010 Percentage of Occupied Housing that is Owner Occupied	2011 – 2015 Percentage of Occupied Housing that is Owner Occupied
Lee County, FL	0.24	0.31	74.8	69.0
State of Florida	0.23	0.30	68.8	65.3
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

Employment Conditions

From 2013 through 2016, unemployment rates declined within the county and the state itself. During the same period Gross Domestic Product (GDP) in the Cape Coral-Fort Myers, FL MSA 15980 grew from \$21.9 billion to \$27.1 billion, or 23.7 percent compared to 12.6 percent for aggregate MSAs. A community representative indicated that unemployment continues to decline; however, it has given rise to the issue where employers cannot find qualified talent. The representative also indicated that tourism and retail industries have been impacted by red tide and blue algae. The SBA offers loan recovery programs, but many small businesses do not qualify. Per the Bureau of Labor Statistics, the major areas of occupations in excess of 50,000 employees within the MSA are Office and Administrative Support, Production, Sales and Related, Food Preparation and Service Related, Health Care Practitioners, and Transportation and Material Moving. The top five employers in the assessment area are T-Mobile (communications), Lee Virtual Schools (education), Chico's FAS Inc. (retail), City of Cape Coral (government), and Vance Brothers (restaurants).

Unemployment Rates 2013 - 2016				
Area	2013	2014	2015	2016
Lee County, FL	7.1	6.0	5.1	4.6
State of Florida	7.2	6.3	5.4	4.9
Source: U.S. Bureau of Labor Statistics				

One economic development community representative and one community service representative were contacted to increase understanding of credit needs and market conditions within the assessment area. The economy is primarily a tourism and retail based economy, but has seen growth in the information technology and medical industries. The contacts indicated that area's main concern is the availability for workforce housing for individuals earning above the median area income and workforce development training. Due to the growth in population and the level of salaries/wages being paid, there are not enough homes for the amount of people who can afford the housing that is available. In addition, they both noted the negative impact that red tide and blue algae has had on local businesses that support the tourism and retail industries.

CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN THE CAPE CORAL-FORT MYERS, FL MSA 15980

Investment, Loan, and Service Activity

The Northern Trust Company has a high level of community development loans, qualified investments or community development services. The bank occasionally uses innovative or complex qualified investments in the assessment area and exhibits excellent responsiveness to community development needs in the assessment area. Demographic and community contact

information reveals a substantial need for investments targeting affordable housing. TNTC's investments are primarily responsive to this deficiency as it made investments consisting of loans originated by a local affordable housing organization and in two affordable rental housing initiatives. In addition, the institutions purchased over \$13.8 million dollars in mortgage back securities consisting of loan originations to low- and moderate-income borrowers. The institution also demonstrated responsiveness in a renewed investment for \$500,000 that included assistance to low- and moderate-income homeowners who suffered in natural disasters such as Hurricane Irma in 2017.

Total activity in terms of dollar disbursements including maintained prior period investments exceeded \$27.1 million reflecting a significant increase for such disbursements compared to the previous performance evaluation period with the greater majority of the funding for affordable housing purposes.

Community Development Lending

The bank did not originate any community development loans in the review period. Three loans to small businesses were originated in the assessment area in the amount of \$1.0 million. By supporting these businesses in low- or moderate-income census tracts, the loans qualify as economic development.

Community Development Investments

During the review period, the institution disbursed funds related to new investments of approximately \$16.1 million. It maintained investments from the prior review periods of approximately \$1.7 million. Investments included affordable housing initiatives which was a need indicated by a community representative. Innovativeness was demonstrated through a bond focused on disaster relief and two affordable rental initiatives in Fort Myers through a Community Development Trust and Enterprise housing Equity Fund.

Qualified Community Development Investments by Type								
	Prior Period Investments \$ (000s)	Current Period Investments \$ (000s)					Total Investments \$ (000s)	Unfunded Commitments \$ (000s)
		CS	AH	ED	RS	Total		
TOTAL	1,724	68	16,004	0	0	16,072	17,796	8,299

TNTC also made \$1,000 in donations to an organization involved in providing community services.

Community Development Services

During the review period, the institution provided 272 hours of community development service to three organizations. All services were involved providing financial knowledge by serving on the board of directors of organizations that provide community services.

NAPLES-IMMOKALEE-MARCO ISLAND, FL 34940 – FULL REVIEW

SCOPE OF THE EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this PE and was a limited scope review. Please refer to the "Scope of Examination" section for details.

DESCRIPTION OF INSTITUTION'S OPERATIONS IN NAPLES- IMMOKALEE-MARCO ISLAND, FL MSA 34940

The Northern Trust Company takes all of the Naples- Immokalee-Marco Island, FL MSA 34940 which consists of Collier County as its assessment area which is unchanged from the previous performance evaluation.

Within the assessment area, TNTC has two branches and two full-service ATMs; all located within upper-income census tracts. The bank ranks 12th out of 38 FDIC insured institutions with a 2.06 percent market share. Key Bank NA and Fifth Third Bank are the largest institutions by deposit share with 18.9 percent and 14.0 percent respectively.

The MSA 34940 assessment area consists of a total of 74 census tracts; six (8.1 percent) are low-, 15 (20.3 percent) are moderate-, 26 (35.1 percent) are middle-, 26 (35.1 percent) are upper-income, and one (1.4 percent) is of unknown income.

Community development activity that took place in calendar years up to and including 2016 are evaluated based on ACS income level definitions from the five-year survey data set 2006-2010. Community development activity performed in 2017 and beyond are evaluated based on ACS income level definitions from the five-year survey data set 2011-2015.

As the following table indicates the assessment area experienced no changes in the number of low- or moderate-income census tracts.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	6	6	0
Moderate	15	15	0
Middle	28	26	(2)
Upper	24	26	2
Unknown	1	1	0
Total	74	74	0
Source: U. S. Census Bureau: Decennial Census: American Community Survey Data: 2006-2010 U.S. Census Bureau: Decennial Census: America Community Survey Data: 2011-2015			

Additional demographic information as of 2017 for the assessment area is presented in the following table:

Assessment Area: 2017 Naples-Immokalee-Marco Island, FL MSA 34940								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	6	8.1	4,106	4.7	1,627	39.6	18,278	20.8
Moderate-income	15	20.3	17,381	19.8	3,098	17.8	15,489	17.7
Middle-income	26	35.1	35,130	40.1	2,147	6.1	16,908	19.3
Upper-income	26	35.1	31,048	35.4	1,147	3.7	36,990	42.2
Unknown-income	1	1.4	0	0.0	0	0.0	0	0.0
Total Assessment Area	74	100.0	87,665	100.0	8,019	9.1	87,665	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	7,284	2,124	2.3	29.2	3,424	47.0	1,736	23.8
Moderate-income	36,919	15,285	16.3	41.4	10,215	27.7	11,419	30.9
Middle-income	76,674	38,746	41.3	50.5	13,667	17.8	24,261	31.6
Upper-income	80,705	37,578	40.1	46.6	8,849	11.0	34,278	42.5
Unknown-income	0	0	0.0	0.0	0	0.0	0	0.0
Total Assessment Area	201,582	93,733	100.0	46.5	36,155	17.9	71,694	35.6
	Total Businesses by Tract	Businesses by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
		#	%	#	%	#	%	#
Low-income	779	3.1	716	3.1	54	3.4	9	3.9
Moderate-income	3,058	12.3	2,925	12.7	115	7.3	18	7.8
Middle-income	10,005	40.4	9,346	40.7	575	36.4	84	36.4
Upper-income	10,935	44.1	9,981	43.5	834	52.9	120	51.9
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	24,777	100.0	22,968	100.0	1,578	100.0	231	100.0
	Percentage of Total Businesses:			92.7		6.4		0.9
	Total Farms by Tract	Farms by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
		#	%	#	%	#	%	#
Low-income	23	12.2	17	10.0	6	31.6	0	0.0
Moderate-income	32	16.9	26	15.3	6	31.6	0	0.0
Middle-income	74	39.2	71	41.8	3	15.8	0	0.0
Upper-income	60	31.7	56	32.9	4	21.1	0	0.0
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	189	100.0	170	100.0	19	100.0	0	0.0
	Percentage of Total Farms:			89.9		10.1		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

The following presentation of key demographics used to help inform the evaluation of bank activity in its assessment area is based on a comparison of two sets of ACS data, 2006-2010 and 2011-2015.

Population Characteristics

As presented in the table below the assessment area grew by percentage at a higher rate (6.1 percent) than the state of Florida (4.5 percent). The assessment area represents 1.7 percent of the state's entire population. Based on 2017 U.S. Census Bureau population estimates the assessment area has only two municipalities with populations in excess of 10,000, with Naples at 21,948 and Marco Island at 17,904.

Population Change 2010 – 2015			
Area	2010 Population	2011-2015 Population	Percentage Change
Collier County, FL	321,520	341,091	6.1
State of Florida	18,801,310	19,645,772	4.5
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

Income Characteristics

As displayed in the table below, the median family income in the assessment area is greater than that of the state of Florida, at \$66,264 and \$57,504, respectively. Income in the assessment area decreased by 3.3 percent between 2010 and 2015, while increasing slightly in the state of Florida by 0.5 percent. The percentage change in median family income in the assessment area and the state of Florida was below that of the 7.4 percent Consumer Price Index (CPI) inflation rate for the period of 2010-2015, indicating that income failed to keep pace with inflation. A community representative indicated there had been an influx of foreign residents from other nations who have purchased in the area and may not be reporting their income, thus lowering the overall number. Hurricane Irma, which occurred in 2017, has also adversely impacted incomes in the assessment area.

Median Family Income Change 2010 – 2015			
Area	2006 – 2010 Median Family Income	2011-2015 Median Family Income	Percentage Change
Collier County, FL	68,556	66,264	-3.3
State of Florida	57,204	57,504	0.5
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

Housing Characteristics

Median housing values experienced declines during 2010 to 2011 by 23.7 percent and 22.7 percent, respectively, for the assessment area and the state. However, median gross rents experienced increases during the same period of time. Median housing values in the assessment area (\$272,800) are significantly higher than the state of Florida (\$159,600), while median gross rents are comparable. The community representative indicated that housing values have recently trended upward to extremely high levels.

Housing Costs Change 2010 – 2015				
Area	2006 – 2010 Median Housing	2011-2015 Median Housing	2006 – 2010 Median Gross Rent	2011 – 2015 Median Gross Rent
Collier County, FL	357,400	272,800	1,054	1,063
State of Florida	205,600	159,000	957	1,002
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

As the following table indicates, housing in the assessment area has been more costly than the state of Florida, although the assessment area has a higher percentage of owner occupied housing.

Housing Narrative Information				
Area	2006 – 2010 Affordability Ratio	2011-2015 Affordability Ratio	2006 – 2010 Percentage of Occupied Housing that is Owner Occupied	2011 – 2015 Percentage of Occupied Housing that is Owner Occupied
Collier County, FL	0.16	0.21	76.5	72.2
State of Florida	0.23	0.30	68.8	65.3
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

Employment Conditions

Unemployment rate in the assessment area (Collier County) was comparable to the state of Florida. From 2013 through 2016, unemployment rates declined within the county and the state itself. During the same period Gross Domestic Product (GDP) in the Naples-Immokalee-Marco Island, FL MSA 34940 grew from \$14.0 billion to \$17.7 billion or 26.4 percent compared to 12.6 percent for aggregate MSAs. The community representative indicated that opportunities exist in the software

industry as more such companies move into the area. Per the Bureau of Labor Statistics, the major areas of occupations in excess of 10,000 employees within the MSA are Office and Administrative Support, Food Preparation and Service Related, Office and Administrative, Sales and Related, Construction and Extraction, and Building and Grounds Cleaning and Maintenance. The top five employers in the assessment area are NCH Outpatient Infusion Services (medical), NCH Healthcare System (medical), Collier County Sheriff (law enforcement), Landmark Hospital-SW Florida (medical), and Marion E. Fether Medical Center (medical). Overall, 17 of the 20 largest employers in the assessment area provide medical services.

Unemployment Rates 2013 – 2016				
Area	2013	2014	2015	2016
Collier County, FL	6.9	5.9	5.2	4.8
State of Florida	7.2	6.3	5.4	4.9
Source: U.S. Bureau of Labor Statistics				

One economic community development representative was contacted to increase understanding of credit needs and market conditions within the assessment area. They indicated that the area still has a high need for affordable housing programs and financial literacy programs for low-income families.

CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN NAPLES-IMMOKALEE-MARCO ISLAND, FL MSA 34940

Investment, Loan, and Service Activity

The Northern Trust Company has a high level of community development loans, qualified investments or community development services. The bank occasionally uses innovative or complex qualified investments in the assessment area, and exhibits excellent responsiveness to community development needs in the assessment area. Demographic and community contact information reveals a substantial need for investments targeting affordable housing. TNTC's investments are primarily responsive to this deficiency as it made investments of approximately \$2.0 million in purchasing a mortgage back security of loan transactions originated by an affordable housing agency and purchased over \$13.1 million dollars in mortgage back securities consisting of loan originations to low- and moderate-income borrowers.

TNTC had community development lending and investment activity, including maintained prior period investments, of approximately \$23.2 million reflecting a significant increase for such disbursements compared to the previous performance evaluation period with the greater majority of funding for affordable housing purposes.

Community Development Lending

During the review period, the institution originated and renewed a total of three community development loans for \$4.9 million. Two loans were new originations amounting to \$2.9 million and the third transaction was a renewal for \$2.0 million. All three loans were for the provision of community services in the assessment area. Two additional loans to small businesses were originated in the assessment area in the amount of \$122,000. By supporting these businesses in low- or moderate-income census tracts, the loans qualify as economic development.

Community Development Investments

During the review period, the institution disbursed funds related to new investments of approximately \$15.2 million. It maintained investments from the prior review periods of approximately \$3.0 million. Investments included affordable housing initiatives, which was a need indicated by a community representative. Innovativeness was demonstrated through investment in a mortgage back security originated by an affordable housing organization.

Qualified Community Development Investments by Type								
	Prior Period Investments \$ (000s)	Current Period Investments \$ (000s)					Total Investments \$ (000s)	Unfunded Commitments \$ (000s)
		CS	AH	ED	RS	Total		
TOTAL	2,992	25	15,144	0	0	15,169	18,161	0

TNTC also made \$49,800 in grants and donations to various organizations involved in affordable housing and community services.

Community Development Services

During the review period, the institution provided 298 hours of community development service to three organizations. All services were related to the provision of community services, including those focused on providing services to the homeless.

KEY WEST, FL MICROPOLITAN STATISTICAL AREA 28580 – LIMITED REVIEW

SCOPE OF THE EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a limited scope review. Please refer to the “Scope of Examination” section for details.

DESCRIPTION OF INSTITUTION’S OPERATIONS IN KEY WEST, FL MICROPOLITAN STATISTICAL AREA 28580

The Northern Trust Company delineates the Key West, FL Micropolitan Statistical Area 28580 in its entirety as its assessment area, which consists of Monroe County, FL. The assessment area is unchanged from the previous performance evaluation of July 27, 2015. TNTC maintains operations in the Key West, FL Micropolitan Statistical Area 28580 through one full-service ATM located in an upper-income census tract.

TNTC is not considered in the FDIC Deposit Market Share Report, as they do not have branch located in the Key West Micropolitan Statistical Area. As of June 30, 2017, the top three FDIC insured financial institutions with a market presence are First State Bank of the Florida Keys, Capital Bank Corporation, and Bank of America, NA, with 22.0 percent, 17.9 percent, and 16.9 percent of assessment area deposits, respectively.

The assessment area consists of a total of 31 census tracts; none are low-, one (3.2 percent) is moderate-, three (9.7 percent) are middle-, 24 (77.4 percent) are upper-income, and three (9.7 percent) are of unknown income.

As the following table indicates the assessment area experienced no changes in either low- and moderate-income census tracts in the MSA.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	0	0	0
Moderate	1	1	0
Middle	5	3	(2)
Upper	22	24	2
Unknown	3	3	0
Total	31	31	0
Source: U. S. Census Bureau: Decennial Census: American Community Survey Data: 2006-2010 U.S. Census Bureau: Decennial Census: American Community Survey Data: 2011-2015			

Additional demographic information as of 2017 for the assessment area is presented in the following table:

Assessment Area: 2017 FL Non MSA								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	0	0.0	0	0.0	0	0.0	1,907	11.6
Moderate-income	1	3.2	293	1.8	83	28.3	1,804	10.9
Middle-income	3	9.7	2,494	15.1	328	13.2	2,681	16.3
Upper-income	24	77.4	13,689	83.1	928	6.8	10,088	61.2
Unknown-income	3	9.7	4	0.0	0	0.0	0	0.0
Total Assessment Area	31	100.0	16,480	100.0	1,339	8.1	16,480	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	0	0	0.0	0.0	0	0.0	0	0.0
Moderate-income	1,032	224	1.3	21.7	278	26.9	530	51.4
Middle-income	6,597	2,082	11.8	31.6	2,528	38.3	1,987	30.1
Upper-income	45,263	15,369	87.0	34.0	8,425	18.6	21,469	47.4
Unknown-income	21	0	0.0	0.0	4	19.0	17	81.0
Total Assessment Area	52,913	17,675	100.0	33.4	11,235	21.2	24,003	45.4
	Total Businesses Tract		Businesses by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	0	0.0	0	0.0	0	0.0	0	0.0
Moderate-income	170	2.5	148	2.3	20	4.5	2	3.4
Middle-income	1,077	15.7	985	15.5	83	18.7	9	15.3
Upper-income	5,607	81.7	5,219	82.1	341	76.6	47	79.7
Unknown-income	9	0.1	7	0.1	1	0.2	1	1.7
Total Assessment Area	6,863	100.0	6,359	100.0	445	100.0	59	100.0
	Percentage of Total Businesses:			92.7		6.5		0.9
	Total Farms by Tract		Farms by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	0	0.0	0	0.0	0	0.0	0	0.0
Moderate-income	2	4.8	2	4.8	0	0.0	0	0.0
Middle-income	6	14.3	6	14.3	0	0.0	0	0.0
Upper-income	34	81.0	34	81.0	0	0.0	0	0.0
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	42	100.0	42	100.0	0	0.0	0	0.0
	Percentage of Total Farms:			100.0		0.0		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

CONCLUSIONS WITH RESPECT TO PERFORMANCE TESTS

Assessment Area	Community Development Activity	Community Development Initiatives	Responsiveness to Community Development Needs
Assessment Area: Key West, FL Micropolitan Statistical Area 28580	Below	Below	Below
<p><i>Community Development Activities include Qualified Loans, Investments and Services. Community Development Initiatives include Qualified Programs and Commitments.</i></p>			

NORTH PORT-SARASOTA-BRADENTON, FL MSA 35840- LIMITED REVIEW

SCOPE OF THE EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a limited scope review. Please refer to the "Scope of Examination" section for details.

DESCRIPTION OF INSTITUTION'S OPERATIONS IN NORTH PORT-SARASOTA-BRADENTON, FL MSA 35840

The Northern Trust Company delineates the North Port-Sarasota-Bradenton, FL MSA 35840 MSA in its entirety as its assessment area, which consists of all of Manatee and Sarasota Counties. The assessment area is unchanged from the previous performance evaluation of July 27, 2015. TNTC maintains operations in the North Port-Sarasota-Bradenton MSA through two branches with one full-service ATM. Both branches are located in upper-income census tracts.

As of June 30, 2017, the bank ranked ninth out of 40 FDIC-insured depository financial institutions that have a presence in the assessment area with a market share of 2.64 percent. The top three FDIC insured financial institutions with a market presence are Bank of America NA, Wells Fargo Bank, and Sun Trust Bank with 20.2 percent, 15.1 percent, and 10.5 percent of assessment area deposits, respectively.

The assessment area consists of a total of 174 census tracts; four (2.3 percent) are low-, 43 (24.7 percent) are moderate-, 79 (45.4 percent) are middle-, and 46 (26.4 percent) are upper-income, and two (1.1 percent) are of unknown income.

As the following table indicates the assessment area experienced a net increase of one moderate-income census tracts.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	4	4	0
Moderate	42	43	1
Middle	78	79	1
Upper	48	46	(2)
Unknown	2	2	0
Total	174	174	0
Source: U. S. Census Bureau: Decennial Census: American Community Survey Data: 2006-2010 U.S. Census Bureau: Decennial Census: America Community Survey Data: 2011-2015			

Additional demographic information as of 2017 for the assessment area is presented in the following table:

Assessment Area: 2017 North Port-Sarasota-Bradenton, FL MSA 35840								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	4	2.3	3,985	2.0	1,609	40.4	37,816	19.4
Moderate-income	43	24.7	40,142	20.6	6,281	15.6	37,216	19.1
Middle-income	79	45.4	94,159	48.3	6,073	6.4	40,920	21.0
Upper-income	46	26.4	56,588	29.0	2,458	4.3	78,922	40.5
Unknown-income	2	1.1	0	0.0	0	0.0	0	0.0
Total Assessment Area	174	100.0	194,874	100.0	16,421	8.4	194,874	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	7,369	2,319	1.0	31.5	3,924	53.3	1,126	15.3
Moderate-income	91,418	40,715	18.3	44.5	29,679	32.5	21,024	23.0
Middle-income	193,422	112,636	50.7	58.2	38,420	19.9	42,366	21.9
Upper-income	114,987	66,323	29.9	57.7	15,894	13.8	32,770	28.5
Unknown-income	0	0	0.0	0.0	0	0.0	0	0.0
Total Assessment Area	407,196	221,993	100.0	54.5	87,917	21.6	97,286	23.9
	Total Businesses by Tract		Businesses by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	612	1.3	541	1.2	68	2.3	3	0.9
Moderate-income	9,172	19.1	8,454	18.9	659	22.1	59	17.5
Middle-income	22,477	46.8	21,112	47.2	1,243	41.8	122	36.1
Upper-income	15,818	32.9	14,657	32.7	1,007	33.8	154	45.6
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	48,079	100.0	44,764	100.0	2,977	100.0	338	100.0
	Percentage of Total Businesses:			93.1		6.2		0.7
	Total Farms by Tract		Farms by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	0	0.0	0	0.0	0	0.0	0	0.0
Moderate-income	42	10.8	37	10.4	5	14.7	0	0.0
Middle-income	125	32.1	120	33.7	5	14.7	0	0.0
Upper-income	223	57.2	199	55.9	24	70.6	0	0.0
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	390	100.0	356	100.0	34	100.0	0	0.0
	Percentage of Total Farms:			91.3		8.7		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

CONCLUSIONS WITH RESPECT TO PERFORMANCE TESTS

Assessment Area	Community Development Activity	Community Development Initiatives	Responsiveness to Community Development Needs
Assessment Area: North Port-Sarasota Bradenton, FL MSA 35840	Consistent	Below	Consistent
<i>Community Development Activities include Qualified Loans, Investments and Services. Community Development Initiatives include Qualified Programs and Commitments.</i>			

PORT ST. LUCIE, FL MSA 38940 – LIMITED REVIEW

SCOPE OF THE EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a limited scope review. Please refer to the “Scope of Examination” section for details.

DESCRIPTION OF INSTITUTION’S OPERATIONS IN PORT ST. LUCIE, FL MSA 38940

The Northern Trust Company delineates the Port St. Lucie, FL MSA 38940 in its entirety as its assessment area, which consists of Martin and St Lucie Counties. The assessment area is expanded from the previous performance evaluation of July 27, 2015, with the addition of St. Lucie County. TNTC maintains operations in the Port St. Lucie, FL MSA 38940 through one branch located in a middle-income census tract. The previous evaluation of July 27, 2015, had included only Martin County in the Miami-Fort Lauderdale-Port St. Lucie, FL CSA 370. The addition of St. Lucie County added an additional 45 census tracts.

As of June 30, 2017, the bank ranked 13th out of 20 FDIC-insured depository financial institutions that have a presence in the assessment area with a market share of 1.63 percent. The top three FDIC insure financial institutions with a market presence are Bank of America NA, Seacoast National Bank, and Wells Fargo Bank NA, with 16.5 percent, 16.3 percent, and 12.8 percent of assessment area deposits respectively.

The assessment area consists of a total of 81 census tracts; four (4.9 percent) are low-, 17 (21.0 percent) are moderate-, 33 (40.7 percent) are middle-, and 23 (28.4 percent) are upper-income, and four (4.9 percent) are of unknown income.

As the following table indicates the assessment area experienced a net increase of one low-income census tracts and a net decrease of two moderate-income census tracts.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	3	4	1
Moderate	19	17	(2)
Middle	35	33	(2)
Upper	20	23	3
Unknown	4	4	0
Total	81	81	0
Source: U.S. Census Bureau: Decennial Census: American Community Survey Data: 2006-2010 U.S. Census Bureau: Decennial Census: American Community Survey Data: 2011-2015			

Additional demographic information as of 2017 for the assessment area is presented in the following table:

Assessment Area: 2017 Port St. Lucie, FL MSA 38940								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	4	4.9	3,334	3.0	1,586	47.6	21,870	19.8
Moderate-income	17	21.0	18,475	16.7	4,248	23.0	20,671	18.7
Middle-income	33	40.7	57,704	52.2	5,449	9.4	22,014	19.9
Upper-income	23	28.4	31,016	28.1	1,214	3.9	45,974	41.6
Unknown-income	4	4.9	0	0.0	0	0.0	0	0.0
Total Assessment Area	81	100.0	110,529	100.0	12,497	11.3	110,529	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	7,373	2,040	1.6	27.7	3,754	50.9	1,579	21.4
Moderate-income	36,646	16,347	13.0	44.6	14,454	39.4	5,845	15.9
Middle-income	107,124	68,235	54.4	63.7	18,642	17.4	20,247	18.9
Upper-income	64,766	38,753	30.9	59.8	7,625	11.8	18,388	28.4
Unknown-income	0	0	0.0	0.0	0	0.0	0	0.0
Total Assessment Area	215,909	125,375	100.0	58.1	44,475	20.6	46,059	21.3
	Total Businesses by Tract	Businesses by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
		#	%	#	%	#	%	#
Low-income	776	3.1	709	3.0	54	4.0	13	5.7
Moderate-income	4,891	19.4	4,400	18.6	452	33.9	39	17.0
Middle-income	12,100	48.1	11,504	48.7	502	37.6	94	40.9
Upper-income	7,389	29.3	6,987	29.6	319	23.9	83	36.1
Unknown-income	23	0.1	15	0.1	7	0.5	1	0.4
Total Assessment Area	25,179	100.0	23,615	100.0	1,334	100.0	230	100.0
	Percentage of Total Businesses:			93.8		5.3		0.9
	Total Farms by Tract	Farms by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
		#	%	#	%	#	%	#
Low-income	7	2.6	6	2.4	1	3.6	0	0.0
Moderate-income	66	24.1	56	22.8	10	35.7	0	0.0
Middle-income	107	39.1	98	39.8	9	32.1	0	0.0
Upper-income	94	34.3	86	35.0	8	28.6	0	0.0
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	274	100.0	246	100.0	28	100.0	0	0.0
	Percentage of Total Farms:			89.8		10.2		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

CONCLUSIONS WITH RESPECT TO PERFORMANCE TESTS

Assessment Area	Community Development Activity	Community Development Initiatives	Responsiveness to Community Development Needs
Assessment Area: Port St. Lucie, FL MSA 38940	Below	Consistent	Consistent
<p><i>Community Development Activities include Qualified Loans, Investments and Services. Community Development Initiatives include Qualified Programs and Commitments.</i></p>			

SEBASTIAN-VERO BEACH, FL MSA 42680 – LIMITED REVIEW

SCOPE OF THE EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a limited scope review. Please refer to the "Scope of Examination" section for details.

DESCRIPTION OF INSTITUTION'S OPERATIONS IN SEBASTIAN-VERO BEACH, FL MSA 42680

The Northern Trust Company delineates the Sebastian-Vero Beach, FL MSA 42680 in its entirety as its assessment area, which consists of Indian River County. The assessment area is unchanged from the previous performance evaluation of July 27, 2015. TNTC maintains operations in the Sebastian-Vero Beach, FL MSA 42680 through one branch and full-service ATM located in an upper-income census tract.

As of June 30, 2017, the bank ranked fourth out of 17 FDIC-insured depository financial institutions that have a presence in the assessment area with a market share of 8.74 percent. The top three financial institutions are Wells Fargo Bank NA, PNC Bank NA, and Bank of America NA, with 16.9 percent, 16.0 percent, and 12.2 percent of assessment area deposits, respectively.

The assessment area consists of a total of 31 census tracts; one (3.2 percent) is low-, five (16.1 percent) are moderate-, 15 (48.4 percent) are middle-, and eight (25.8 percent) are upper-income, and two (6.5 percent) are of unknown income.

As the following table indicates the assessment area experienced a net increase of one moderate-income census tract.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	1	1	0
Moderate	4	5	1
Middle	17	15	(2)
Upper	7	8	1
Unknown	2	2	0
Total	31	31	0
Source: U. S. Census Bureau: Decennial Census: American Community Survey Data: 2006-2010 U.S. Census Bureau: Decennial Census: American Community Survey Data: 2011-2015			

Additional demographic information as of 2017 for the assessment area is presented in the following table:

Assessment Area: 2017 Sebastian-Vero Beach, FL MSA 42680									
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income		
	#	%	#	%	#	%	#	%	
Low-income	1	3.2	827	2.3	155	18.7	7,463	20.6	
Moderate-income	5	16.1	6,207	17.1	1,362	21.9	6,753	18.6	
Middle-income	15	48.4	18,906	52.2	1,361	7.2	6,726	18.6	
Upper-income	8	25.8	10,307	28.4	376	3.6	15,305	42.2	
Unknown-income	2	6.5	0	0.0	0	0.0	0	0.0	
Total Assessment Area	31	100.0	36,247	100.0	3,254	9.0	36,247	100.0	
	Housing Units by Tract	Housing Types by Tract							
		Owner-Occupied			Rental		Vacant		
		#	%	%	#	%	#	%	
Low-income	2,220	605	1.4	27.3	1,173	52.8	442	19.9	
Moderate-income	12,198	5,796	13.4	47.5	4,055	33.2	2,347	19.2	
Middle-income	39,798	23,356	54.1	58.7	7,125	17.9	9,317	23.4	
Upper-income	22,843	13,411	31.1	58.7	2,304	10.1	7,128	31.2	
Unknown-income	0	0	0.0	0.0	0	0.0	0	0.0	
Total Assessment Area	77,059	43,168	100.0	56.0	14,657	19.0	19,234	25.0	
	Total Businesses by Tract	Businesses by Tract & Revenue Size							
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported			
	#	%	#	%	#	%	#	%	
Low-income	517	4.6	450	4.3	64	10.5	3	4.3	
Moderate-income	1,565	14.0	1,474	14.0	82	13.5	9	12.9	
Middle-income	5,437	48.7	5,165	49.2	245	40.3	27	38.6	
Upper-income	3,630	32.5	3,390	32.3	209	34.4	31	44.3	
Unknown-income	25	0.2	17	0.2	8	1.3	0	0.0	
Total Assessment Area	11,174	100.0	10,496	100.0	608	100.0	70	100.0	
	Percentage of Total Businesses:			93.9			5.4		
	Total Farms by Tract	Farms by Tract & Revenue Size							
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported			
		#	%	#	%	#	%	#	%
Low-income	2	1.3	2	1.5	0	0.0	0	0.0	
Moderate-income	38	23.9	31	23.7	7	25.0	0	0.0	
Middle-income	77	48.4	63	48.1	14	50.0	0	0.0	
Upper-income	42	26.4	35	26.7	7	25.0	0	0.0	
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0	
Total Assessment Area	159	100.0	131	100.0	28	100.0	0	0.0	
	Percentage of Total Farms:			82.4			17.6		
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS									
Note: Percentages may not add to 100.0 percent due to rounding									

CONCLUSIONS WITH RESPECT TO PERFORMANCE TESTS

Assessment Area	Community Development Activity	Community Development Initiatives	Responsiveness to Community Development Needs
Assessment Area: Sebastian-Vero Beach, FL MSA 42680	Below	Consistent	Consistent
<i>Community Development Activities include Qualified Loans, Investments and Services. Community Development Initiatives include Qualified Programs and Commitments.</i>			

TAMPA-ST. PETERSBURG-CLEARWATER, FL MSA 45300 - LIMITED REVIEW

SCOPE OF THE EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a limited scope review. Please refer to the "Scope of Examination" section for details.

DESCRIPTION OF INSTITUTION'S OPERATIONS IN TAMPA-ST. PETERSBURG-CLEARWATER, FL MSA

The Northern Trust Company delineates three of the four counties in the Tampa-St. Petersburg-Clearwater, FL MSA 45300 as its assessment area. Included in the assessment area are Pinellas, Hillsborough, and Pasco Counties. This reflects an adjustment of the assessment area from the previous performance evaluation of July 27, 2015, that had consisted only of Pinellas and Hillsborough Counties. The addition of Pasco County expanded the assessment area by an additional 138 census tracts. TNTC maintains operations in the MSA through two branches located in upper-income census tracts.

As of June 30, 2017, the bank ranked 24th out of 60 FDIC-insured depository financial institutions that have a presence in the assessment area with a market share of 0.4 percent. The top three FDIC insured financial institutions with a market presence are Raymond James Bank NA, Bank of America NA, and Wells Fargo Bank NA, with 21.9 percent, 15.8 percent, and 12.6 percent of assessment area deposits, respectively.

The assessment area consists of a total of 701 census tracts: 41 (5.8 percent) are low-, 174 (24.8 percent) are moderate-, 248 (35.4 percent) are middle-, and 222 (31.7 percent) are upper-income and 16 2.3 percent) are of unknown income.

As the following table indicates the assessment area experienced a net increase of eight low-income census tracts and a decrease of three moderate-income census tracts.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	33	41	8
Moderate	177	174	(3)
Middle	278	248	(30)
Upper	201	222	21
Unknown	12	16	4
Total	701	701	0
Source: U. S. Census Bureau: Decennial Census: American Community Survey Data: 2006-2010 U.S. Census Bureau: Decennial Census: America Community Survey Data: 2011-2015			

Assessment Area: 2017 Tampa-St. Petersburg-Clearwater, FL MSA 45300								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	41	5.8	25,578	3.9	10,031	39.2	139,286	21.3
Moderate-income	174	24.8	143,443	21.9	26,907	18.8	115,264	17.6
Middle-income	248	35.4	240,862	36.8	24,327	10.1	123,042	18.8
Upper-income	222	31.7	243,900	37.3	11,670	4.8	277,012	42.3
Unknown-income	16	2.3	821	0.1	202	24.6	0	0.0
Total Assessment Area	701	100.0	654,604	100.0	73,137	11.2	654,604	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	59,342	14,061	2.1	23.7	34,692	58.5	10,589	17.8
Moderate-income	309,568	138,053	20.2	44.6	111,416	36.0	60,099	19.4
Middle-income	490,313	260,828	38.2	53.2	150,061	30.6	79,424	16.2
Upper-income	422,818	269,219	39.4	63.7	94,753	22.4	58,846	13.9
Unknown-income	2,253	437	0.1	19.4	1,529	67.9	287	12.7
Total Assessment Area	1,284,294	682,598	100.0	53.1	392,451	30.6	209,245	16.3
	Total Businesses by Tract	Businesses by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
	#	%	#	%	#	%	#	%
Low-income	5,917	3.9	5,034	3.6	849	8.0	34	3.0
Moderate-income	29,924	19.8	27,402	19.7	2,365	22.3	157	13.7
Middle-income	52,003	34.4	47,574	34.1	4,087	38.6	342	29.8
Upper-income	62,912	41.6	59,075	42.4	3,226	30.5	611	53.3
Unknown-income	413	0.3	347	0.2	63	0.6	3	0.3
Total Assessment Area	151,169	100.0	139,432	100.0	10,590	100.0	1,147	100.0
	Percentage of Total Businesses:			92.2		7.0		0.8
	Total Farms by Tract	Farms by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
		#	%	#	%	#	%	#
Low-income	12	1.1	10	1.0	2	3.3	0	0.0
Moderate-income	217	19.7	203	19.5	14	23.0	0	0.0
Middle-income	478	43.4	453	43.6	24	39.3	1	100.0
Upper-income	395	35.8	374	36.0	21	34.4	0	0.0
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	1,102	100.0	1,040	100.0	61	100.0	1	100.0
	Percentage of Total Farms:			94.4		5.5		0.1
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

CONCLUSIONS WITH RESPECT TO PERFORMANCE TESTS

Assessment Area	Community Development Activity	Community Development Initiatives	Responsiveness to Community Development Needs
Assessment Area: Tampa-St. Petersburg-Clearwater, FL MSA 45300	Consistent	Below	Consistent
<i>Community Development Activities include Qualified Loans, Investments and Services. Community Development Initiatives include Qualified Programs and Commitments.</i>			

STATE OF GEORGIA

CRA RATING FOR GEORGIA: Outstanding

Major factors supporting the bank's rating include the following:

- The institution has a high level of community development loans, community development services, or qualified investments, particularly investments that are not routinely provided by private investors;
- The institution extensively uses innovative or complex qualified investments, community development loans, or community development services; and
- The institution exhibits excellent responsiveness to credit and community development needs in the assessment area.

SCOPE OF EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a full-scope review. Please refer to the "Scope of Examination Section" for details. Full review examination procedures were used to evaluate the bank's operations in the Atlanta-Sandy Springs-Roswell, GA MSA 12060. Results from this assessment area were used to determine the rating for the state of Georgia.

DESCRIPTION OF INSTITUTION'S OPERATIONS IN GEORGIA

The Northern Trust Company delineates the following counties within the Atlanta-Sandy Springs-Roswell, GA MSA 12060 as its assessment area: Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Newton, Paulding, Rockdale, Spalding, and Walton. The assessment area in the previous performance evaluation of July 27, 2015, consisted only of Fulton and DeKalb Counties. This reflects an expanded assessment area of an additional 513 census tracts, or 147.0 percent. The following counties are located within the MSA; however they were not included in the assessment area: Barrow, Bartow, Butts, Carroll, Dawson, Haralson, Heard, Jasper, Lamar, Meriwether, Morgan, Pickens, and Pike. The bank operates one branch in an upper-income census tract. The June 30, 2017 FDIC market share report ranks the bank 48th out of 76 insured area institutions with 0.1 percent of the market. Sun Trust Bank, Bank of America NA, and Wells Fargo Bank NA are the top three FDIC insured institutions with a combined deposit market share of 67.8 percent, indicating a very concentrated market.

The assessment area consists of a total of 862 census tracts; 99 are low-, 210 are moderate-, 249 are middle-, 296 upper-incomes, and eight are of unknown income.

As the following table indicates the assessment area experienced a net increase of eight low-income census tracts and a net increase of 18 moderate-income census tracts.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	91	99	8
Moderate	192	210	18
Middle	286	249	(37)
Upper	288	296	8
Unknown	5	8	3
Total	862	862	0
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

Additional demographic information as of 2017 for the assessment area is presented in the following tables:

Assessment Area: 2017 Atlanta-Sandy Springs-Roswell, GA MSA 12060								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	99	11.5	79,457	6.6	28,736	36.2	272,589	22.6
Moderate-income	210	24.4	269,098	22.3	54,035	20.1	197,338	16.4
Middle-income	249	28.9	414,778	34.4	40,464	9.8	216,875	18.0
Upper-income	296	34.3	442,674	36.7	20,100	4.5	519,467	43.1
Unknown-income	8	0.9	262	0.0	93	35.5	0	0.0
Total Assessment Area	862	100.0	1,206,269	100.0	143,428	11.9	1,206,269	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	179,778	38,889	3.4	21.6	103,818	57.7	37,071	20.6
Moderate-income	494,726	204,671	18.1	41.4	224,021	45.3	66,034	13.3
Middle-income	635,663	405,784	36.0	63.8	172,694	27.2	57,185	9.0
Upper-income	689,464	478,318	42.4	69.4	160,170	23.2	50,976	7.4
Unknown-income	2,621	186	0.0	7.1	2,086	79.6	349	13.3
Total Assessment Area	2,002,252	1,127,848	100.0	56.3	662,789	33.1	211,615	10.6
	Total Businesses Tract		Businesses by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	13,398	5.3	12,034	5.3	1,282	6.4	82	4.6
Moderate-income	50,870	20.3	46,065	20.1	4,483	22.4	322	18.0
Middle-income	76,151	30.4	70,439	30.8	5,252	26.2	460	25.7
Upper-income	108,725	43.4	99,109	43.3	8,711	43.5	905	50.6
Unknown-income	1,359	0.5	1,044	0.5	295	1.5	20	1.1
Total Assessment Area	250,503	100.0	228,691	100.0	20,023	100.0	1,789	100.0
	Percentage of Total Businesses:			91.3		8.0		0.7
	Total Farms by Tract		Farms by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	34	2.8	33	2.8	1	3.7	0	0.0
Moderate-income	166	13.8	163	13.9	3	11.1	0	0.0
Middle-income	448	37.4	439	37.5	9	33.3	0	0.0
Upper-income	545	45.5	534	45.6	11	40.7	0	0.0
Unknown-income	6	0.5	3	0.3	3	11.1	0	0.0
Total Assessment Area	1,199	100.0	1,172	100.0	27	100.0	0	0.0
	Percentage of Total Farms:			97.7		2.3		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

The following presentation of key demographics used to help inform the evaluation of bank activity in its assessment area is based on a comparison of two sets of ACS data, 2006-2010 and 2011-2015.

Population Characteristics

With the exception of Spaulding County, all of the counties within the assessment area experienced population growth between 2010 and 2015. Forsyth County had the largest increase by percentage and Fulton County (which contains the city of Atlanta) had the largest increase by number. The bank's assessment area's population composes 91.1 percent of the Atlanta-Sandy Springs-Roswell, GA MSA 12060 and 50.4 percent of the state of Georgia.

Population Change 2010 – 2015			
Area	2010 Population	2011-2015 Population	Percentage Change
Cherokee County, GA	214,346	225,944	5.4
Clayton County, GA	259,424	267,234	3.0
Cobb County, GA	688,078	719,133	4.5
Coweta County, GA	127,317	133,416	4.8
DeKalb County, GA	691,893	716,331	3.5
Douglas County, GA	132,403	136,520	3.1
Fayette County, GA	106,567	108,655	2.0
Forsyth County, GA	175,511	196,236	11.8
Fulton County, GA	920,581	983,903	6.9
Gwinnett County, GA	805,321	859,234	6.7
Henry County, GA	203,922	211,512	3.7
Newton County, GA	99,958	102,645	2.7
Paulding County, GA	142,324	147,400	3.6
Rockdale County, GA	85,215	86,901	2.0
Spalding County, GA	64,073	63,873	-0.3
Walton County, GA	83,768	86,201	2.9
Atlanta-Sandy Springs-Roswell, GA MSA 12060	5,286,728	5,535,837	4.7
State of Georgia	9,687,653	10,006,693	3.3
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

The following table lists the five largest municipalities within the assessment area. Between mid-2016 and mid-2017, Atlanta ranked 10th in population growth among United States cities with 13,323 additional residents.

Five Largest Municipalities within the Assessment Area		
Municipality	Population	County
Atlanta	486,290	Fulton
Sandy Springs	106,739	Fulton
Roswell	94,786	Fulton
Johns Creek	84,350	Fulton
Alpharetta	65,799	Fulton

Source: U.S. Census Bureau 2017 Population Estimates

Income Characteristics

As displayed in the table below, for the period of 2010 to 2015 the median family income in the assessment area varied widely, with the highest in Forsyth County at \$101,155 and the lowest in Spalding County at \$48,886. The percentage change of median family income also varied widely, with Coweta County increasing the largest at 5.3 percent, and Rockdale County decreasing the most by 11.1 percent. In all instances, including the state of Georgia, income failed to keep pace with the Consumer Price Index (CPI) inflation rate of 7.4 percent.

Area	2006 – 2010 Median Family Income`	2011-2015 Median Family Income	Percentage Change
Cherokee County, GA	77,190	80,067	3.7
Clayton County, GA	48,064	45,702	-4.9
Cobb County, GA	78,920	78,831	-0.1
Coweta County, GA	68,469	72,129	5.3
DeKalb County, GA	60,718	60,203	-0.8
Douglas County, GA	62,977	60,243	-4.3
Fayette County, GA	92,976	91,077	-2.0
Forsyth County, GA	96,501	101,155	4.8
Fulton County, GA	75,579	77,460	2.5
Gwinnett County, GA	70,767	66,259	-6.4
Henry County, GA	70,972	66,229	-6.7
Newton County, GA	56,519	56,370	-0.3
Paulding County, GA	67,117	67,622	0.8
Rockdale County, GA	63,167	56,136	-11.1
Spalding County, GA	49,640	48,886	-1.5
Walton County, GA	58,750	61,012	3.9
Atlanta-Sandy Springs-Roswell, GA MSA 12060	67,374	67,322	-0.1
State of Georgia	58,790	59,410	1.1

Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data
2011 – 2015 U.S. Census Bureau: American Community Survey Data

Housing Characteristics

Median housing values in the assessment area, with the exception of Coweta County, experienced declines from 2010 to 2015. However, median gross rents experienced increases across the assessment area, with the exception of Newton County and Rockdale County. In terms of actual dollars, median housing values vary greatly across the assessment area, with the highest in Forsyth County at \$267,300 and the lowest in Clayton County at \$85,200. Median gross rents also vary, with the highest in Forsyth County at \$1,172 and the lowest in Spalding County at \$786.

A community representative, whose organization is involved in both affordable housing and economic development, indicated that the declining trend in housing prices illustrated in the table has recently reversed itself and is now increasing at an “insurmountable” rate, limiting access to housing for many individuals. This has also led to a gap in affordable housing, with the need for affordable homes growing faster than the number of housing developments that are being built.

Housing Costs Change 2010 – 2015				
Area	2006 – 2010 Median Housing	2011 – 2015 Median Housing	2006 – 2010 Median Gross Rent	2011 – 2015 Median Gross Rent
Cherokee County, GA	201,900	190,500	936	1,010
Clayton County, GA	127,800	85,200	865	881
Cobb County, GA	211,000	197,400	933	1,006
Coweta County, GA	177,900	181,000	887	933
DeKalb County, GA	190,000	163,000	922	991
Douglas County, GA	157,300	121,300	912	949
Fayette County, GA	252,700	229,500	1,057	1,096
Forsyth County, GA	276,700	267,300	1,078	1,172
Fulton County, GA	253,100	241,300	929	1,001
Gwinnett County, GA	194,200	167,700	954	1,043
Henry County, GA	171,500	140,300	1,003	1,056
Newton County, GA	148,600	115,500	907	889
Paulding County, GA	149,600	133,500	907	1,018
Rockdale County, GA	169,900	140,000	933	916
Spalding County, GA	124,400	111,500	762	786
Walton County, GA	164,900	152,900	784	845
Atlanta-Sandy Springs-Roswell, GA MSA 12060	188,255	168,085	913	977
State of Georgia	161,400	148,100	808	879
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

In a comparative analysis of the counties, the affordability ratio indicated that Clayton County is the most affordable, while Fulton County was the most expensive. With the exception of Rockwell County, the percentage of owner-occupancy trended downward from the 2006-2010 period to the 2011-2015 period.

Housing Narrative Information				
Area	2006 – 2010 Affordability Ratio	2011 – 2015 Affordability Ratio	2006 – 2010 Percentage of Occupied Housing that is Owner Occupied	2011 – 2015 Percentage of Occupied Housing that is Owner Occupied
Cherokee County, GA	0.33	0.36	80.6	77.4
Clayton County, GA	0.34	0.48	59.0	52.7
Cobb County, GA	0.31	0.33	69.6	64.2
Coweta County, GA	0.35	0.35	75.8	72.8
DeKalb County, GA	0.27	0.32	58.6	55.3
Douglas County, GA	0.36	0.44	71.5	67.3
Fayette County, GA	0.33	0.34	84.5	81.3
Forsyth County, GA	0.32	0.33	86.8	84.1
Fulton County, GA	0.22	0.24	56.0	51.7
Gwinnett County, GA	0.33	0.36	72.1	66.4
Henry County, GA	0.37	0.43	80.2	72.9
Newton County, GA	0.35	0.43	76.0	70.2
Paulding County, GA	0.42	0.45	81.6	79.0
Rockdale County, GA	0.33	0.36	68.9	68.9
Spalding County, GA	0.33	0.36	64.6	61.4
Walton County, GA	0.31	0.36	76.0	73.2
Atlanta-Sandy Springs-Roswell, GA MSA 12060	0.31	0.34	67.9	63.5
State of Georgia	0.31	0.34	67.2	63.3
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

Employment Conditions

From 2013 through 2016, unemployment rates declined within each of the counties and the state itself. The community representative indicated that the numbers may not be portraying an accurate picture, as there is a hidden workforce of unskilled workers. The contact also noted the assessment area is home to a number of large corporations. During the same period, Gross Domestic Product (GDP) in the Atlanta-Sandy Springs-Roswell, GA MSA 12060 grew from \$307.8 billion to \$369.8 billion, or 20.1 percent compared to 12.6 percent for aggregate MSAs. Per the Bureau of Labor Statistics, the major areas of occupations in excess of 200,000 employees within the MSA are Office and Administrative Support, Sales and Related, Food Preparation and Service

Related, Transportation and Material Moving. The top five employers in the MSA are Delta Airlines (transportation), Emory University (education), Army National Guard (military), Fort Gillum Army Base (military), and Security One Services (security services).

Unemployment Rates 2013 – 2016				
Area	2013	2014	2015	2016
Cherokee County, GA	6.5	5.6	4.7	4.2
Clayton County, GA	9.9	9.3	7.6	6.6
Cobb County, GA	7.1	6.0	5.1	4.6
Coweta County, GA	7.4	6.2	5.3	5.0
DeKalb County, GA	8.3	7.3	6.0	5.4
Douglas County, GA	8.3	7.4	6.3	5.5
Fayette County, GA	7.2	6.2	5.2	4.7
Forsyth County, GA	6.0	5.3	4.5	4.2
Fulton County, GA	8.6	7.2	6.0	5.4
Gwinnett County, GA	7.1	6.1	5.2	4.7
Henry County, GA	8.1	7.3	6.2	5.5
Newton County, GA	9.2	8.2	6.7	6.0
Paulding County, GA	7.4	6.2	5.2	4.6
Rockdale County, GA	9.0	7.9	6.5	5.7
Spalding County, GA	10.7	9.5	8.0	6.8
Walton County, GA	7.5	6.5	5.4	4.9
Atlanta-Sandy Springs-Roswell, GA MSA 12060	7.9	6.8	5.7	5.1
State of Georgia	8.2	7.2	6.6	5.4

Source: U.S. Bureau of Labor Statistics

One community representative from an organization involved primarily in economic development, as well as with affordable housing, was contacted to help determine the credit and banking needs of the assessment area. The representative noted the need for more housing developments in the city of Atlanta as opposed to its suburbs. The contact also indicated the attractive job market was contributing to the increase in population and that more and more companies were implementing apprenticeships to fill job openings.

CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN ATLANTA-SANDY SPRINGS-ROSWELL, GA MSA 12060

Investment, Loan, and Service Activity

The Northern Trust Company has a high level of community development loans, qualified investments or community development services. The institution extensively uses innovative or complex qualified investments in the assessment area and exhibits excellent responsiveness to credit and community development needs in the assessment area. Demographic and community contact information reveals a substantial need for investments targeting affordable housing. TNTC's investments are primarily responsive to this deficiency as it made investments in purchasing over \$253.3 million dollars in mortgage back securities consisting of loan originations to low- and moderate-income borrowers. The institution also made economic development investments totaling \$7.0 million. These investments included the redevelopment of a low income community in South Atlanta, two investments to a CDFI that provides economic development to underserved people and communities, and a community development loan, new markets tax credit, and a low interest rate investment in an initiative to improve education for over 3,000 low- and moderate-income students.

TNTC had community development lending and investment activity including prior period maintained investments of approximately \$288.5 million representing a 2,647 percent increase in comparison to the previous 37 month evaluation period of \$10.5 million.

Community Development Lending

During the review period, the institution originated three community development loans for \$14.0 million. Two loans, one a new origination for \$5.0 million and one a renewal for \$5.0 million, were for the provision of community services. The third loan for \$4.0 million was originated for the provision of revitalization and stabilization in the assessment area. Three additional loans to small businesses were originated in the assessment area in the amount of \$1.8 million. By supporting these businesses in low- or moderate-income census tracts, the loans qualify as economic development.

Community Development Investments

During the review period, the institution disbursed funds related to new investments of approximately \$268.8 million. It maintained investments from the prior review periods of approximately \$3.9 million. Innovativeness and complexity was demonstrated through investment a new market tax credit in the redevelopment of a low income area. TNTC also displayed innovativeness in its investment in a CDFI that provides loans and business development resources to underserved people and communities.

Qualified Community Development Investments by Type								
	Prior Period Investments \$ (000s)	Current Period Investments \$ (000s)					Total Investments \$ (000s)	Unfunded Commitments \$ (000s)
		CS	AH	ED	RS	Total		
TOTAL	3,882	7,446	254,332	7,000	0	268,778	272,660	0

TNTC also made \$193,300 in grants and donations to various organizations involved in affordable housing, economic development, and community services.

Community Development Services

The bank did not perform and community development services within the assessment area.

STATE OF MASSACHUSETTS

CRA RATING FOR MASSACHUSETTS: Outstanding

Major factors supporting the bank's rating include the following:

- The institution has a high level of community development loans, community development services, or qualified investments, particularly investments that are not routinely provided by private investors;
- The institution extensively uses innovative or complex community development loans, qualified investments, or services; and
- The institution exhibits excellent responsiveness to credit and community development needs in the assessment area.

SCOPE OF EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a full-scope review. Please refer to the "Scope of Examination Section" for details. Full review examination procedures were used to evaluate the bank's operations in the Boston-Cambridge-Newton MA-NH MSA 14460. Results from this assessment area were used to determine the rating for the state of Massachusetts.

DESCRIPTION OF INSTITUTION'S OPERATIONS IN MASSACHUSETTS

The Northern Trust Company delineates the following MDs within the Boston-Cambridge-Newton, MA-NH MSA 14460 as its assessment area:

- Boston, MA MD 14454 (Norfolk County, Plymouth County, and Suffolk County)
- Cambridge-Newton-Framingham, MA MD 15764 (Essex County, Middlesex County)

The Rockingham County-Stratford County, NH MD 40484 that consists of Rockingham and Stratford Counties and is part of the MSA was excluded.

The assessment area in the previous performance evaluation of July 27, 2015, consisted only of the Boston, MA MD that contained 433 census tracts. The current assessment area reflects an additional 483 census tracts or 111.5 percent growth in the number of geographies. The bank operates one branch in an upper-income census tract. The June 30, 2017, FDIC market share report ranks the bank 96th out of 120 area institutions with 0.03 percent of the market. The three FDIC insured institutions with the largest deposit market share are State Street Bank and Trust Company, Bank of America NA, and Citizens Bank NA, who combined have 61 percent of the

deposit market.

The assessment area consists of a total of 916 census tracts; 112 (12.2 percent) are low-, 178 (19.4 percent) are moderate-, 340 (37.1 percent) are middle-, and 268 (29.3 percent) are upper-income, and 18 (2.0 percent) are of unknown income.

As the following table indicates the assessment area experienced a net increase of eight low-income census tracts and a net increase of five moderate-income census tracts.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	104	112	8
Moderate	173	178	5
Middle	353	340	(13)
Upper	270	268	(2)
Unknown	16	18	2
Total	916	916	0
<i>Source: U. S. Census Bureau: Decennial Census: American Community Survey Data: 2006-2010 U.S. Census Bureau: Decennial Census: American Community Survey Data: 2011-2015</i>			

Additional demographic information as of 2017 for the assessment area is presented in the following tables:

Assessment Area: 2017 Boston-Cambridge-Newton, MA-NH MSA 14460								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	112	12.2	92,887	9.1	24,541	26.4	241,129	23.7
Moderate-income	178	19.4	183,527	18.1	23,953	13.1	164,630	16.2
Middle-income	340	37.1	405,363	39.9	18,926	4.7	196,390	19.3
Upper-income	268	29.3	333,072	32.8	9,012	2.7	413,793	40.7
Unknown-income	18	2.0	1,093	0.1	163	14.9	0	0.0
Total Assessment Area	916	100.0	1,015,942	100.0	76,595	7.5	1,015,942	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	166,081	34,926	3.6	21.0	118,817	71.5	12,338	7.4
Moderate-income	347,412	141,348	14.6	40.7	179,665	51.7	26,399	7.6
Middle-income	687,674	427,678	44.1	62.2	217,442	31.6	42,554	6.2
Upper-income	515,268	363,775	37.5	70.6	123,706	24.0	27,787	5.4
Unknown-income	4,261	1,172	0.1	27.5	2,667	62.6	422	9.9
Total Assessment Area	1,720,696	968,899	100.0	56.3	642,297	37.3	109,500	6.4
	Total Businesses Tract		Businesses by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	13,584	6.9	11,915	6.8	1,585	7.4	84	7.2
Moderate-income	27,233	13.8	24,512	14.0	2,585	12.1	136	11.7
Middle-income	75,584	38.4	66,610	38.2	8,626	40.5	348	29.8
Upper-income	79,877	40.5	70,967	40.7	8,323	39.1	587	50.3
Unknown-income	750	0.4	573	0.3	165	0.8	12	1.0
Total Assessment Area	197,028	100.0	174,577	100.0	21,284	100.0	1,167	100.0
	Percentage of Total Businesses:			88.6		10.8		0.6
	Total Farms by Tract		Farms by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	30	2.7	26	2.4	4	13.3	0	0.0
Moderate-income	116	10.4	114	10.6	2	6.7	0	0.0
Middle-income	477	42.9	466	43.1	10	33.3	1	100.0
Upper-income	488	43.9	474	43.9	14	46.7	0	0.0
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	1,111	100.0	1,080	100.0	30	100.0	1	100.0
	Percentage of Total Farms:			97.2		2.7		0.1
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

Assessment Area: 2017 Boston, MA MD 14454								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	53	12.2	38,116	8.5	11,709	30.7	109,444	24.5
Moderate-income	92	21.1	90,795	20.3	13,873	15.3	70,978	15.9
Middle-income	146	33.6	164,671	36.8	8,435	5.1	83,137	18.6
Upper-income	128	29.4	152,430	34.1	4,762	3.1	183,546	41.1
Unknown-income	16	3.7	1,093	0.2	163	14.9	0	0.0
Total Assessment Area	435	100.0	447,105	100.0	38,942	8.7	447,105	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	71,202	12,459	3.0	17.5	52,686	74.0	6,057	8.5
Moderate-income	178,523	66,566	15.8	37.3	97,213	54.5	14,744	8.3
Middle-income	288,769	175,258	41.5	60.7	92,461	32.0	21,050	7.3
Upper-income	252,958	166,650	39.5	65.9	70,510	27.9	15,798	6.2
Unknown-income	4,261	1,172	0.3	27.5	2,667	62.6	422	9.9
Total Assessment Area	795,713	422,105	100.0	53.0	315,537	39.7	58,071	7.3
	Total Businesses Tract	Businesses by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
		#	%	#	%	#	%	#
Low-income	4,987	5.7	4,359	5.7	590	6.0	38	6.5
Moderate-income	12,620	14.4	11,464	14.9	1,092	11.1	64	10.9
Middle-income	28,319	32.3	25,327	32.8	2,864	29.1	128	21.8
Upper-income	40,881	46.7	35,403	45.9	5,132	52.1	346	58.8
Unknown-income	750	0.9	573	0.7	165	1.7	12	2.0
Total Assessment Area	87,557	100.0	77,126	100.0	9,843	100.0	588	100.0
	Percentage of Total Businesses:			88.1		11.2		0.7
	Total Farms by Tract	Farms by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
		#	%	#	%	#	%	#
Low-income	12	2.5	12	2.5	0	0.0	0	0.0
Moderate-income	56	11.5	54	11.3	2	20.0	0	0.0
Middle-income	221	45.4	217	45.5	4	40.0	0	0.0
Upper-income	198	40.7	194	40.7	4	40.0	0	0.0
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	487	100.0	477	100.0	10	100.0	0	0.0
	Percentage of Total Farms:			97.9		2.1		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

Assessment Area: 2017 Cambridge-Newton-Framingham, MA MD 15764								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	59	12.3	54,771	9.6	12,832	23.4	131,685	23.1
Moderate-income	86	17.9	92,732	16.3	10,080	10.9	93,652	16.5
Middle-income	194	40.3	240,692	42.3	10,491	4.4	113,253	19.9
Upper-income	140	29.1	180,642	31.8	4,250	2.4	230,247	40.5
Unknown-income	2	0.4	0	0.0	0	0.0	0	0.0
Total Assessment Area	481	100.0	568,837	100.0	37,653	6.6	568,837	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	94,879	22,467	4.1	23.7	66,131	69.7	6,281	6.6
Moderate-income	168,889	74,782	13.7	44.3	82,452	48.8	11,655	6.9
Middle-income	398,905	252,420	46.2	63.3	124,981	31.3	21,504	5.4
Upper-income	262,310	197,125	36.1	75.1	53,196	20.3	11,989	4.6
Unknown-income	0	0	0.0	0.0	0	0.0	0	0.0
Total Assessment Area	924,983	546,794	100.0	59.1	326,760	35.3	51,429	5.6
	Total Businesses Tract		Businesses by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	8,597	7.9	7,556	7.8	995	8.7	46	7.9
Moderate-income	14,613	13.3	13,048	13.4	1,493	13.0	72	12.4
Middle-income	47,265	43.2	41,283	42.4	5,762	50.4	220	38.0
Upper-income	38,996	35.6	35,564	36.5	3,191	27.9	241	41.6
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	109,471	100.0	97,451	100.0	11,441	100.0	579	100.0
	Percentage of Total Businesses:			89.0		10.5		0.5
	Total Farms by Tract		Farms by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
#	%	#	%	#	%	#	%	
Low-income	18	2.9	14	2.3	4	20.0	0	0.0
Moderate-income	60	9.6	60	10.0	0	0.0	0	0.0
Middle-income	256	41.0	249	41.3	6	30.0	1	100.0
Upper-income	290	46.5	280	46.4	10	50.0	0	0.0
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	624	100.0	603	100.0	20	100.0	1	100.0
	Percentage of Total Farms:			96.6		3.2		0.2
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

The following presentation of key demographics used to help inform the evaluation of bank activity in its assessment area is based on a comparison of two sets of ACS data, 2006-2010 and 2011-2015.

Population Characteristics

As presented in the table below, the assessment area experienced population growth in all counties between 2010 and 2015. Suffolk County, which contains the city of Boston, as well as Revere and Chelsea, had the highest rate of growth at 5.1 percent, which was slightly above the state of Massachusetts at 4.4 percent. The population of the assessment area represents 63.1 percent of the entire state's population. A community representative familiar with the business climate in the county indicated the growth rate has increased at a higher level than in the past due to a strong job market.

Population Change 2010 – 2015			
Area	2010 Population	2011-2015 Population	Percentage Change
Essex County, MA	743,159	763,849	2.8
Middlesex County, MA	1,503,085	1,556,116	3.5
Norfolk County, MA	670,850	687,721	2.5
Plymouth County, MA	494,919	503,681	1.8
Suffolk County, MA	722,023	758,919	5.1
Boston, MA MD 14454	1,887,792	1,950,321	3.3
Cambridge-Newton-Framingham, MA MD 15764	2,246,244	2,319,965	3.3
State of Massachusetts	6,547,629	6,705,586	2.4
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

The following table lists the five largest municipalities within the assessment area.

Five Largest Municipalities within the Assessment Area		
Municipality	Population (000)	County
Boston	685,094	Suffolk
Cambridge	113,630	Middlesex
Lowell	111,346	Middlesex
Brockton	95,672	Plymouth
Quincy	94,166	Norfolk
Source: U.S. Census Bureau 2017 Population Estimate		

Income Characteristics

As presented in the table below, the median family income in the assessment area varied, with the highest in Norfolk County at \$112,605 and the lowest in Suffolk County at \$62,050. However, income in the assessment area increased overall from 2010 to 2015, with Middlesex County increasing the most at 10.7 percent and Plymouth County the least at 6.3 percent. Overall, the median family income change in both Metropolitan Divisions (MDs) exceeded the 7.4 percent Consumer Price Index (CPI) inflation rate for the period of 2010-2015. The economic development community representative indicated that there is a significant amount of wage growth at the higher end of the income scale which is pulling up the overall average.

Median Family Income Change 2010 – 2015			
Area	2006 – 2010 Median Family Income	2011-2015 Median Family Income	Percentage Change
Essex County, MA	81,173	86,793	6.9
Middlesex County, MA	97,382	107,772	10.7
Norfolk County, MA	101,870	112,605	10.5
Plymouth County, MA	86,251	91,720	6.3
Suffolk County, MA	58,127	62,050	6.7
Boston, MA MD 14454	83,664	90,699	8.4
Cambridge-Newton-Framingham, MA MD 15764	90,625	100,380	10.8
State of Massachusetts	81,165	87,085	7.3
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

Housing Characteristics

Median housing values in the assessment area experienced declines between 2010 and 2015. However, median gross rents increased across the assessment area during the same time period. Additionally, the community representative indicated there has been an upward trend in housing values, and especially so in Suffolk County. The contact ascribed the increasing values directly to the increase in opportunities in the job market and population growth.

In terms of actual dollars, median housing values differ slightly across the assessment area, with the highest in Middlesex County at \$414,600 and the lowest in Plymouth County at \$328,600. Similarly, median gross rents vary somewhat, with the highest in Middlesex County at \$1,341 and the lowest in Essex County at \$1,076.

Housing Costs Change 2010 – 2015				
Area	2006 – 2010 Median Housing	2011-2015 Median Housing	2006 – 2010 Median Gross Rent	2011 – 2015 Median Gross Rent
Essex County, MA	372,400	353,100	977	1,076
Middlesex County, MA	420,800	414,600	1,213	1,341
Norfolk County, MA	408,100	399,500	1,205	1,332
Plymouth County, MA	360,700	328,600	1,042	1,132
Suffolk County, MA	384,500	377,100	1,181	1,298
Boston, MA MD 14454	385,093	370,715	1,166	1,279
Cambridge-Newton-Framingham, MA MD 15764	401,045	390,820	1,128	1,233
State of Massachusetts	352,300	331,100	1,006	1,102
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

The affordability ratio for Suffolk County indicates it has a higher housing expense compared to other counties in the MSA. The data for 2017 continues to display a decreasing percentage of owner occupied housing in each of the Metropolitan Divisions, with the Boston, MA MD 14454 at 53.0 percent and the Cambridge-Newton-Framingham, MA MD 15764 at 59.1 percent.

Housing Narrative Information				
Area	2006 – 2010 Affordability Ratio	2011-2015 Affordability Ratio	2006 – 2010 Percentage of Occupied Housing that is Owner Occupied	2011 – 2015 Percentage of Occupied Housing that is Owner Occupied
Essex County, MA	0.17	0.20	65.4	63.0
Middlesex County, MA	0.18	0.21	63.9	62.4
Norfolk County, MA	0.20	0.22	70.4	68.8
Plymouth County, MA	0.20	0.23	77.9	76.0
Suffolk County, MA	0.13	0.15	36.5	35.6
Boston, MA MD 14454	0.17	0.19	58.9	57.2
Cambridge-Newton-Framingham, MA MD 15764	0.18	0.20	64.4	62.6
State of Massachusetts	0.18	0.21	62.2	62.1
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

One economic development community representative was contacted to increase understanding of credit needs and market conditions within the assessment area. The contact indicated that the biggest community need is affordable housing, as escalating costs are creating an increasing number of rent and housing burdened individuals.

Employment Conditions

Unemployment rates across the assessment area from 2013 through 2016 declined within each of the counties and the state itself. During the same period, Gross Domestic Product (GDP) in the Boston-Cambridge-Newton, MA-NH MSA 14460 grew from \$364.8 billion to \$419.8 billion, or 15.1 percent compared to 12.6 percent for aggregate MSAs. The community representative indicated that employers are trying to expand their workforce; however, they are either having difficulty in finding individuals with the appropriate skills, or the wages offered are not sufficient in attracting potential employees into the high cost area. Per the Bureau of Labor Statistics, the major areas of occupations in excess of 130,000 employees within the MSA are Office and Administrative Support, Management, Sales and Related, Food Preparation and Service Related, and Business and Financial. The top five employers in the MSA are Massachusetts General Hospital (medical), Brigham and Women's Hospital (medical), Raytheon Systems International (missile and rocket), Oracle Corporation (computer software), and Massachusetts Institute of Technology (education).

Unemployment Rates 2013 - 2016				
Area	2013	2014	2015	2016
Essex County, MA	7.5	6.0	5.0	3.8
Middlesex County, MA	5.6	4.6	3.9	3.0
Norfolk County, MA	6.0	5.0	4.3	3.2
Plymouth County, MA	7.2	6.0	5.1	3.9
Suffolk County, MA	7.0	5.4	4.5	3.4
Boston, MA MD 14454	6.7	5.4	4.6	3.5
Cambridge-Newton-Framingham, MA MD 15764	6.2	5.1	4.3	3.3
State of Massachusetts	7.1	5.8	4.9	3.7

Source: U.S. Bureau of Labor Statistics

CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN BOSTON-CAMBRIDGE-NEWTON, MA-NH MSA 14460

Investment, Loan, and Service Activity

The Northern Trust Company has a high level of community development loans, qualified investments or community development services. The bank extensively uses innovative or complex qualified investments in the assessment area and exhibits excellent responsiveness to community development needs in the assessment area. Demographic and community contact

information reveals a substantial need for investments targeting affordable housing. TNTC's investments are responsive to this deficiency, as it made investments in Low Income Housing Tax Credits (LIHTCs) of \$15.0 million and purchased over \$2.3 million dollars in mortgage back securities consisting of loan originations to low- and moderate-income borrowers. In addition, the institution participated in a Social Impact Bond (SIB) to support employment efforts for unemployed and underemployed veterans and invested approximately \$17.5 million of new market tax credits to help build the construction of a facility to expand educational efforts for homeless children.

In the assessment area from July 27, 2015 through October 15, 2018, TNTC had investment activity including prior period maintained investments of approximately \$43.9 million representing a 334.7 percent increase in comparison to the previous 37 month evaluation period of \$10.1 million.

Community Development Lending

The bank did not originate any community development loans during the review period.

Community Development Investments

During the review period, the institution disbursed funds related to new investments of approximately \$29.1 million. It maintained investments from the prior review periods of approximately \$4.5 million. Investments included affordable housing initiatives, which was a need indicated by a community representative. Innovativeness and complexity were demonstrated through investments in a housing investment corporation and multiple initiatives and multiple LIHTCs. In addition, a social impact bond investment was made to facilitate employment for unemployed or underemployed veterans.

Qualified Community Development Investments by Type								
	Prior Period Investments \$ (000s)	Current Period Investments \$ (000s)					Total Investments \$ (000s)	Unfunded Commitments \$ (000s)
		CS	AH	ED	RS	Total		
TOTAL	4,540	17,685	11,408	0	0	29,093	33,633	10,316

TNTC also made \$124,500 in grants and donations to various organizations involved in and community services.

Community Development Services

The bank did not perform any community development services within the assessment area.

STATE OF MICHIGAN

CRA RATING FOR MICHIGAN: Satisfactory

Major factors supporting the bank's rating include the following:

- The institution has an adequate level of community development loans, community development services, or qualified investments, particularly investments that are not routinely provided by private investors;
- The institution occasionally uses innovative or complex qualified investments, community development loans, or community development services; and
- The institution exhibits adequate responsiveness to credit and community development needs in the assessment area.

SCOPE OF EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a full-scope review. Please refer to the "Scope of Examination Section" for details. Full review examination procedures were used to evaluate the bank's operations in the Detroit-Warren-Dearborn, MI MSA 19820 and limited examination procedures were used to evaluate the Grand Rapids-Wyoming, MI MSA 24340.

DESCRIPTION OF INSTITUTION'S OPERATIONS IN MICHIGAN

The Northern Trust Company delineates two assessment areas within the state of Michigan, a portion of the Detroit-Warren-Dearborn, MI MSA 19820 and a portion of the Grand Rapids – Wyoming, MI MSA 24340. This is unchanged from the previous performance evaluation of July 27, 2015.

The following table illustrates the composition of the assessment areas:

State of Michigan Assessment Area		
MSA/MD	Counties Included	Counties Excluded
Detroit-Warren-Dearborn, MI MSA 19820	See MDs	See MDs
Detroit-Dearborn-Livonia, MI MD 19804	Wayne County	None
Warren-Troy-Farmington Hills, MI MD 47644	Oakland County Macomb County	Lapeer County Livingston County St. Clair County
Grand Rapids-Wyoming, MI MSA 24340	Kent County	Barry County Montcalm County Ottawa County

TNTC operates one branch with a full-service ATM in an upper-income census tract in the Warren-Troy-Farmington Hills, MI MD 47644. A branch located in an upper-income census tract in the Detroit-Dearborn-Livonia, MI MD 19804 was closed in June of 2018 with the full-service ATM relocated to another upper-income census tract in the same community. The bank also has one branch and full-service ATM in an upper-income census tract in the Grand Rapids-Wyoming MSA 24340, which was relocated within the same census tract in June of 2017.

CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TESTS IN MICHIGAN

The bank's performance relative to the community development test is Satisfactory based on the following community development test characteristics:

- The institution has an adequate level of community development loans, community development services, or qualified investments, particularly investments that are not routinely provided by private investors;
- The institution occasionally uses innovative or complex qualified investments, community development loans, or community development services; and
- The institution exhibits adequate responsiveness to credit and community development needs in the assessment area.

Investment, Loan, and Service Activity

The Northern Trust Company has an adequate level of community development loans, community development services, or qualified investments, particularly investments that are not routinely provided by private investors. It occasionally uses innovative or complex qualified investments in the assessment area. The institution exhibits adequate responsiveness to credit and community development needs in the assessment area. Community contact information revealed a need for increased mortgage lending in the community. The majority of TNTC's investments are associated with affordable housing. There was also an expressed concern regarding the development of job skills, which the institution has responded to both through grants and investments.

Community Development activities are detailed below.

Community Development Lending

During the review period, the institution made three community development loans across both assessment areas, totaling \$15.0 million, to organizations that provide community services to low- and moderate-income individuals. There were an additional three loans, totaling \$1.2 million, to small businesses across the assessment area in low- and moderate-income census tracts. These loans qualify for economic development purposes.

The institution also originated two loans totaling \$1.025 million outside the assessment areas, but benefited the state of Michigan. Both were small business loans in low-or moderate-income census tracts.

Community Development Investments

During the review period, the institution disbursed funds related to new qualified investments of approximately \$15.2 million. It maintained qualified investments from prior review periods of approximately \$12.9 million. All investments met the community development purpose of affordable housing. These include investments of \$7.8 million in low housing tax credits. Three investments totaling \$1.5 million were originated outside the assessment area, but benefited the state of Michigan. One community service investment was for \$1.0 million and the other two were economic development investments for a combined \$500,000.

TNTC also made \$69,900 in donations to various community service and small business support organizations in the assessment area.

Community Development Services

Staff performed 420 hours of service to three different organizations on behalf of the bank. All of the organizations receiving the services are active in the provision of community services tailored to meet the needs of low-and moderate-income individuals. Bank management and staff serve on boards of directors, using their financial management expertise to help guide the decisions of nonprofit community-based organizations located in the assessment areas.

DETROIT-WARREN-DEARBORN, MI MSA 19820-FULL REVIEW

SCOPE OF EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a full-scope review. Please refer to the "Scope of Examination Section" for details.

DESCRIPTION OF INSTITUTION'S OPERATIONS IN DETROIT-WARREN-DEARBORN, MI MSA 19820

The Northern Trust Company's assessment area is unchanged from the previous performance evaluation dated July 27, 2015, as it delineates a portion of the Detroit-Warren-Dearborn MI MSA 19820. This includes all of the Detroit-Dearborn-Livonia, MI MD 19804, which consists of Wayne County, and a portion of the Warren-Troy-Farmington Hills, MI MD 47644, including Oakland County and Macomb County.

Within the assessment area TNTC has one branch and one full-service ATM located in an upper income census tract in the Warren-Troy-Farmington Hills, MI MD 47644. A branch located in an upper-income census tract in the Detroit-Dearborn-Livonia, MI MD 19804 was closed in June of 2018, and the full service ATM was relocated to another upper-income census tract in the same MD. The FDIC Deposit Market Share Report as of June 30, 2017, ranks the bank 24th of 41 area institutions with 0.11 percent market share. The top two institutions in the market, JP Morgan Chase Bank NA, and Comerica Bank, account for half of the aggregate deposits in the assessment area with 28.4 and 21.3 percent of the market, respectively.

The assessment area consists of a total of 1,166 census tracts; 169 (14.5 percent) are low-, 299 (25.6 percent) are moderate-, 339 (29.1 percent) are middle-, 336 (28.8 percent) are upper-income, and 23 (2.0 percent) are of unknown income.

Community development activity that took place in calendar years up to and including 2016 are evaluated based on ACS income level definitions from the five-year survey data set 2006-2010. Community development activity performed in 2017 and beyond are evaluated based on ACS income level definitions from the five-year survey data set 2011-2015.

As the following table indicates, the assessment area experienced a net increase of 31 low-income census tracts and a net increase of nine moderate-income census tracts.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	138	169	31
Moderate	290	299	9
Middle	383	339	(56)
Upper	339	336	(3)
Unknown	16	23	7
Total	1,166	1,166	0
Source: U. S. Census Bureau: Decennial Census: American Community Survey Data: 2006-2010 U.S. Census Bureau: Decennial Census: America Community Survey Data: 2011-2015			

Additional demographic information as of 2017 for the assessment area is presented in the following tables:

Assessment Area: 2017 Detroit-Warren-Dearborn, MI MSA 19820								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	169	14.5	88,318	9.2	37,881	42.9	222,803	23.2
Moderate-income	299	25.6	209,941	21.8	48,409	23.1	156,431	16.3
Middle-income	339	29.1	314,093	32.7	27,823	8.9	177,526	18.5
Upper-income	336	28.8	348,036	36.2	14,427	4.1	405,220	42.1
Unknown-income	23	2.0	1,592	0.2	599	37.6	0	0.0
Total Assessment Area	1,166	100.0	961,980	100.0	129,139	13.4	961,980	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	217,771	65,819	6.5	30.2	92,699	42.6	59,253	27.2
Moderate-income	431,687	198,572	19.6	46.0	155,817	36.1	77,298	17.9
Middle-income	534,314	351,950	34.7	65.9	140,170	26.2	42,194	7.9
Upper-income	518,980	396,689	39.1	76.4	91,538	17.6	30,753	5.9
Unknown-income	6,352	1,466	0.1	23.1	2,423	38.1	2,463	38.8
Total Assessment Area	1,709,104	1,014,496	100.0	59.4	482,647	28.2	211,961	12.4
	Total Businesses Tract		Businesses by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	10,881	7.5	8,976	7.0	1,836	11.2	69	7.9
Moderate-income	28,969	20.0	24,769	19.4	4,056	24.8	144	16.5
Middle-income	43,675	30.1	39,408	30.9	4,028	24.6	239	27.3
Upper-income	60,511	41.8	53,898	42.2	6,196	37.8	417	47.7
Unknown-income	828	0.6	559	0.4	264	1.6	5	0.6
Total Assessment Area	144,864	100.0	127,610	100.0	16,380	100.0	874	100.0
	Percentage of Total Businesses:			88.1		11.3		0.6
	Total Farms by Tract		Farms by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	15	2.5	13	2.2	2	8.0	0	0.0
Moderate-income	75	12.4	72	12.4	3	12.0	0	0.0
Middle-income	267	44.1	259	44.6	8	32.0	0	0.0
Upper-income	248	40.9	236	40.6	12	48.0	0	0.0
Unknown-income	1	0.2	1	0.2	0	0.0	0	0.0
Total Assessment Area	606	100.0	581	100.0	25	100.0	0	0.0
	Percentage of Total Farms:			95.9		4.1		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

Assessment Area: 2017 Detroit-Dearborn-Livonia, MI MD 19804								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	126	20.6	57,042	13.7	27,802	48.7	108,087	25.9
Moderate-income	174	28.5	102,084	24.5	31,971	31.3	63,152	15.2
Middle-income	121	19.8	96,197	23.1	14,446	15.0	68,278	16.4
Upper-income	173	28.3	159,881	38.4	8,087	5.1	177,279	42.5
Unknown-income	17	2.8	1,592	0.4	599	37.6	0	0.0
Total Assessment Area	611	100.0	416,796	100.0	82,905	19.9	416,796	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	151,706	42,152	10.0	27.8	59,908	39.5	49,646	32.7
Moderate-income	229,311	90,329	21.5	39.4	79,064	34.5	59,918	26.1
Middle-income	175,623	103,237	24.6	58.8	51,925	29.6	20,461	11.7
Upper-income	254,664	183,093	43.6	71.9	53,682	21.1	17,889	7.0
Unknown-income	6,289	1,466	0.3	23.3	2,419	38.5	2,404	38.2
Total Assessment Area	817,593	420,277	100.0	51.4	246,998	30.2	150,318	18.4
	Total Businesses Tract		Businesses by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	5,774	11.1	5,050	10.9	695	12.9	29	9.8
Moderate-income	9,820	18.9	8,822	19.0	946	17.5	52	17.6
Middle-income	11,191	21.5	10,079	21.7	1,058	19.6	54	18.3
Upper-income	24,878	47.8	22,098	47.7	2,624	48.5	156	52.9
Unknown-income	413	0.8	326	0.7	83	1.5	4	1.4
Total Assessment Area	52,076	100.0	46,375	100.0	5,406	100.0	295	100.0
	Percentage of Total Businesses:			89.1		10.4		0.6
	Total Farms by Tract		Farms by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	11	6.7	9	5.8	2	22.2	0	0.0
Moderate-income	26	15.9	25	16.1	1	11.1	0	0.0
Middle-income	37	22.6	36	23.2	1	11.1	0	0.0
Upper-income	89	54.3	84	54.2	5	55.6	0	0.0
Unknown-income	1	0.6	1	0.6	0	0.0	0	0.0
Total Assessment Area	164	100.0	155	100.0	9	100.0	0	0.0
	Percentage of Total Farms:			94.5		5.5		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

Assessment Area: 2017 Warren-Troy-Farmington Hills, MI MD 47664								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	43	7.7	31,276	5.7	10,079	32.2	114,716	21.0
Moderate-income	125	22.5	107,857	19.8	16,438	15.2	93,279	17.1
Middle-income	218	39.3	217,896	40.0	13,377	6.1	109,248	20.0
Upper-income	163	29.4	188,155	34.5	6,340	3.4	227,941	41.8
Unknown-income	6	1.1	0	0.0	0	0.0	0	0.0
Total Assessment Area	555	100.0	545,184	100.0	46,234	8.5	545,184	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	66,065	23,667	4.0	35.8	32,791	49.6	9,607	14.5
Moderate-income	202,376	108,243	18.2	53.5	76,753	37.9	17,380	8.6
Middle-income	358,691	248,713	41.9	69.3	88,245	24.6	21,733	6.1
Upper-income	264,316	213,596	35.9	80.8	37,856	14.3	12,864	4.9
Unknown-income	63	0	0.0	0.0	4	6.3	59	93.7
Total Assessment Area	891,511	594,219	100.0	66.7	235,649	26.4	61,643	6.9
	Total Businesses by Tract		Businesses by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	5,107	5.5	3,926	4.8	1,141	10.4	40	6.9
Moderate-income	19,149	20.6	15,947	19.6	3,110	28.3	92	15.9
Middle-income	32,484	35.0	29,329	36.1	2,970	27.1	185	32.0
Upper-income	35,633	38.4	31,800	39.1	3,572	32.5	261	45.1
Unknown-income	415	0.4	233	0.3	181	1.6	1	0.2
Total Assessment Area	92,788	100.0	81,235	100.0	10,974	100.0	579	100.0
	Percentage of Total Businesses:			87.5		11.8		0.6
	Total Farms by Tract		Farms by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	4	0.9	4	0.9	0	0.0	0	0.0
Moderate-income	49	11.1	47	11.0	2	12.5	0	0.0
Middle-income	230	52.0	223	52.3	7	43.8	0	0.0
Upper-income	159	36.0	152	35.7	7	43.8	0	0.0
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	442	100.0	426	100.0	16	100.0	0	0.0
	Percentage of Total Farms:			96.4		3.6		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

The following presentation of key demographics used to help inform the evaluation of bank activity in its assessment area is based on a comparison of two sets of ACS data, 2006-2010 and 2011-2015.

Population Characteristics

As presented in the table below, from 2010 to 2015, the population change in the assessment area has not displayed any significant variance as the overall population in the three counties decreased by 763 residents. This is consistent with the state of Michigan, which also did not experience a significant change. The slight increase in population in the state of Michigan reversed a trend where it had been the only state to have a net loss of residents from 2000 to 2010. Overall, the assessment area composes 89.9 percent of the Detroit-Warren-Dearborn, MI MSA 1980, and 39.0 percent of the state of Michigan.

Population Change 2010 – 2015			
Area	2010 Population	2011-2015 Population	Percentage Change
Macomb County, MI	840,978	854,689	1.6
Oakland County, MI	1,202,362	1,229,503	2.3
Wayne County, MI	1,820,584	1,778,969	-2.3
Detroit-Dearborn-Livonia, MI MD 19804	1,820,584	1,778,969	-2.3
Warren-Troy-Farmington Hills, MI MD 47664	2,475,666	2,517,447	1.7
State of Michigan	9,883,640	9,900,571	0.2
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

The following table lists the five largest municipalities within the assessment area. Detroit continues to experience a decline in its population, as it decreased by approximately 40,000 residents, or 5.6 percent, from its 2010 population of 713,000.

Five Largest Municipalities within the Assessment Area		
Municipality	Population (000)	County
Detroit	673,104	Wayne
Warren	135,022	Macomb
Sterling Heights	132,631	Macomb
Dearborn	94,491	Wayne
Livonia	94,105	Wayne
Source: U.S. Census Bureau 2017 Population Estimates		

Income Characteristics

As displayed in the table below, the median family income in the assessment area varies somewhat, with the highest in Oakland County at \$87,216 and the lowest in Wayne County at \$52,733. Based on 2011-2015 U.S. Census Bureau data, the median income changes in both the assessment area and the state were well below the 7.4 percent Consumer Price Index (CPI) for the

five year period, indicating that income failed to keep pace with inflation. A community representative indicated that the decline in the housing market contributed to the loss of overall wealth.

Median Family Income Change 2010 – 2015			
Area	2006 – 2010 Median Family Income	2011-2015 Median Family Income	Percentage Change
Macomb County, MI	67,423	67,785	0.5
Oakland County, MI	84,783	87,216	2.9
Wayne County, MI	52,946	52,733	-0.4
Detroit-Dearborn-Livonia, MI MD 19804	52,946	52,733	-0.4
Warren-Troy-Farmington Hills, MI MD 47664	75,314	76,739	1.9
State of Michigan	60,341	62,247	3.2
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

Housing Characteristics

Median housing values in both the assessment area and in the state of Michigan experienced declines from 2010 to 2015. Wayne County, in particular, experienced a steep decline, with housing values dropping 31.5 percent. However, median gross rents experienced increases across both the assessment area and the state.

In terms of actual dollars, median housing values vary across the assessment area, with the highest in Oakland County at \$178,900 and the lowest in Wayne County at \$83,000. Median gross rents vary somewhat, with the highest in Oakland County at \$942 and the lowest in Wayne County at \$794.

Housing Costs Change 2010 – 2015				
Area	2006 – 2010 Median Housing	2011-2015 Median Housing	2006 – 2010 Median Gross Rent	2011 – 2015 Median Gross Rent
Macomb County, MI	157,000	126,000	752	861
Oakland County, MI	204,300	178,900	871	942
Wayne County, MI	121,100	83,000	759	794
Detroit-Dearborn-Livonia, MI MD 19804	121,092	83,027	759	793
Warren-Troy-Farmington Hills, MI MD 47664	177,745	156,639	812	894
State of Michigan	144,200	122,400	723	783
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

The affordability ratio increased within the assessment area and state from 2010 to 2015, with Wayne County being the most affordable. The percentage of owner occupied housing decreased across the assessment area and the state between 2010 and 2015.

Housing Narrative Information				
Area	2006 – 2010 Affordability Ratio	2011-2015 Affordability Ratio	2006 – 2010 Percentage of Occupied Housing that is Owner Occupied	2011 – 2015 Percentage of Occupied Housing that is Owner Occupied
Macomb County, MI	0.34	0.43	79.1	73.3
Oakland County, MI	0.32	0.38	74.6	70.5
Wayne County, MI	0.35	0.50	67.2	63.0
Detroit-Dearborn-Livonia, MI MD 19804	0.35	0.50	67.2	63.0
Warren-Troy-Farmington Hills, MI MD 47664	0.34	0.39	77.6	73.2
State of Michigan	0.34	0.41	73.7	71.0
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

Employment Conditions

From 2013 through 2016, unemployment rates declined within each of the counties and the state itself. During the same period, Gross Domestic Product (GDP) in the Detroit-Warren-Dearborn, MI MSA 19820 grew from \$220.3 billion to \$250.4 billion, or 13.7 percent compared to 12.6 percent for aggregate MSAs. The community representative indicated, besides manufacturing, the lack of investment in education has left residents without skills for employment in the various different job sectors. Per the Bureau of Labor Statistics, the major areas of occupations in excess of 125,000 employees within the MSA are Office and Administrative Support, Sales and Related, Production, Food and Preparation, and Health Practitioners and Technical. The top five employers in the assessment area are GM Tech Center (automotive), FCA US LLC (automotive), Henry Ford Hospital (medical), Delphi Thermal Systems (automotive), and Beaumont Hospitals (medical).

Unemployment Rates 2013 - 2016				
Area	2013	2014	2015	2016
Macomb County, MI	9.1	8.2	5.8	5.3
Oakland County, MI	8.1	6.8	4.8	4.2
Wayne County, MI	10.5	10.0	6.9	6.4
Detroit-Dearborn-Livonia, MI MD 19804	10.5	10.0	6.9	6.4
Warren-Troy-Farmington Hills, MI MD 47664	8.7	7.5	5.3	4.8
State of Michigan	8.8	7.3	5.4	4.9
Source: U.S. Bureau of Labor Statistics				

One community service community representative was contacted to increase understanding of credit needs and market conditions within the assessment area. The contact indicated that the area had a crucial need for additional mortgage lending. Another significant need is enhanced public transportation to allow city residents to reach employment opportunities in the suburbs. Further, they cited the lack of investment in education for leaving residents without the skills needed for employment outside of manufacturing.

CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN DETROIT-WARREN-DEARBORN, MI MSA 19820

Investment, Loan, and Service Activity

The Northern Trust Company has an adequate level of community development loans, qualified investments or community development services. The bank occasionally uses innovative or complex qualified investments in the assessment area and exhibits adequate responsiveness to community development needs in the assessment area. Demographic and community contact information reveals a substantial need for investments targeting affordable housing. TNTC's investments are primarily responsive to this deficiency as it made investments in a Low Income Housing Tax Credit of \$800,000 and purchased over \$9.8 million in mortgage back securities consisting of loan originations to low- and moderate-income borrowers. There are also additional investments totaling \$2.0 to a CDFI that provides support for workforce housing projects in high rent growth portions of the assessment area. The institution was also responsive to workforce development needs, as it extended a \$7.0 million loan to an organization that specializes in job training.

During the evaluation period, TNTC had community development lending and investment activity including prior period maintained investments of approximately \$36.8 million, representing a 162.9 percent increase in comparison to the previous evaluation period of \$14.0 million.

Community Development Lending

During the review period, the institution renewed two community development loans for \$13.0 million. Both loans were for the provision of community services in the assessment area.

Community Development Investment

During the review period, the institution disbursed funds related to new investments of approximately \$12.5 million. It maintained investments from the prior review periods of approximately \$11.2 million. Investments included affordable housing initiatives which was a need indicated by a community representative. Innovativeness and complexity was demonstrated through an investment in a low income housing tax credit which provided affordable rental housing.

Qualified Community Development Investments by Type								
	Prior Period Investments \$ (000s)	Current Period Investments \$ (000s)					Total Investments \$ (000s)	Unfunded Commitments \$ (000s)
		CS	AH	ED	RS	Total		
TOTAL	11,183	0	12,462	0	0	12,462	23,645	144

TNTC also made \$69,900 in grants and donations to various organizations involved in affordable housing, economic development, and community services.

Community Development Services

Staff performed 370 hours of service to two different organizations on behalf of the bank. Both of the organizations are active in the provision of community services tailored to meet the needs of low- and moderate-income individuals. Bank management and staff served on boards of directors, using their financial and management expertise to help guide the decisions of nonprofit community-based organizations located in the assessment area.

GRAND RAPIDS-WYOMING, MI MSA 24340 – LIMITED REVIEW

SCOPE OF THE EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a limited scope review. Please refer to the "Scope of Examination" section for details.

DESCRIPTION OF INSTITUTION'S OPERATIONS IN GRAND RAPIDS-WYOMING, MI MSA 24340

The Northern Trust Company delineates a portion of the Grand Rapids-Wyoming, MI MSA 24340. It includes Kent County in its entirety and excludes Barry, Ionia, and Newaygo Counties. The assessment area is unchanged from its previous performance evaluation of July 27, 2015. TNTC maintains operations through one branch with a full-service ATM located in an upper-income census tract that was relocated in June of 2017 within the same census tract.

As of June 30, 2017, the bank ranked 20th out of 25 FDIC-insured depository financial institutions that have a presence in the assessment area, with a market share of 0.41 percent. The top four financial institutions are Fifth Third Bank, Wells Fargo Bank NA, JP Morgan Chase NA, and Huntington National Bank with 22.2 percent, 13.1 percent, 11.2 percent, and 10.6 percent of deposits, respectively.

The assessment area consists of a total of 128 census tracts; 12 (9.4 percent) are low-, 31 (24.2 percent) are moderate-, 53 (41.4 percent) are middle-, and 32 (25.0 percent) are upper-income census tracts.

As the following table indicates the assessment area experienced a net increase of one moderate-income census tracts.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	12	12	(0)
Moderate	30	31	1
Middle	55	53	(2)
Upper	31	32	1
Unknown	0	0	0
Total	128	128	0
Source: U. S. Census Bureau: Decennial Census: American Community Survey Data: 2006-2010 U.S. Census Bureau: Decennial Census: American Community Survey Data: 2011-2015			

Assessment Area: 2017 Grand Rapids-Wyoming, MI MSA 24340								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	12	9.4	9,009	5.8	3,659	40.6	32,217	20.9
Moderate-income	31	24.2	30,446	19.7	5,630	18.5	26,886	17.4
Middle-income	53	41.4	64,950	42.1	4,931	7.6	33,444	21.7
Upper-income	32	25.0	50,012	32.4	1,773	3.5	61,870	40.1
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	128	100.0	154,417	100.0	15,993	10.4	154,417	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	15,901	4,920	3.1	30.9	8,781	55.2	2,200	13.8
Moderate-income	58,127	27,055	16.9	46.5	26,577	45.7	4,495	7.7
Middle-income	105,389	72,440	45.3	68.7	27,705	26.3	5,244	5.0
Upper-income	68,807	55,625	34.8	80.8	9,858	14.3	3,324	4.8
Unknown-income	0	0	0.0	0.0	0	0.0	0	0.0
Total Assessment Area	248,224	160,040	100.0	64.5	72,921	29.4	15,263	6.1
	Total Businesses by Tract	Businesses by Tract & Revenue Size						
		Less Than or = \$1 Million			Over \$1 Million		Revenue Not Reported	
		#	%	#	%	#	%	#
Low-income	1,039	4.7	775	4.1	258	8.1	6	4.4
Moderate-income	4,054	18.2	3,351	17.7	679	21.4	24	17.5
Middle-income	8,493	38.2	7,281	38.5	1,172	36.9	40	29.2
Upper-income	8,656	38.9	7,525	39.7	1,064	33.5	67	48.9
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	22,242	100.0	18,932	100.0	3,173	100.0	137	100.0
	Percentage of Total Businesses:			85.1		14.3		0.6
	Total Farms by Tract	Farms by Tract & Revenue Size						
		Less Than or = \$1 Million			Over \$1 Million		Revenue Not Reported	
		#	%	#	%	#	%	#
Low-income	0	0.0	0	0.0	0	0.0	0	0.0
Moderate-income	15	4.1	10	3.0	5	20.0	0	0.0
Middle-income	199	55.0	182	54.0	17	68.0	0	0.0
Upper-income	148	40.9	145	43.0	3	12.0	0	0.0
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	362	100.0	337	100.0	25	100.0	0	0.0
	Percentage of Total Farms:			93.1		6.9		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

CONCLUSIONS WITH RESPECT TO PERFORMANCE TESTS

Assessment Area: Grand Rapids- Wyoming, MI MSA 24340	Community Development Activity	Community Development Initiatives	Responsiveness to Community Development Needs
Rating	Consistent	Consistent	Consistent
<i>Community Development Activities include Qualified Loans, Investments and Services. Community Development Initiatives include Qualified Programs and Commitments.</i>			

STATE OF MINNESOTA

CRA RATING FOR MINNESOTA: Outstanding

Major factors supporting the bank's rating include the following:

- The institution has a high level of community development loans, community development services, or qualified investments, particularly investments that are not routinely provided by private investors;
- The institution extensively uses innovative or complex qualified investments, community development loans, or community development services; and
- The institution exhibits excellent responsiveness to credit and community economic development needs in the assessment area.

SCOPE OF EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a full-scope review. Please refer to the "Scope of Examination Section" for details. Full review examination procedures were used to evaluate the bank's operations in the Minneapolis-St. Paul-Bloomington, MN-WI MSA 33460. Results from this assessment area were used to determine the rating for the state of Minnesota.

DESCRIPTION OF INSTITUTION'S OPERATIONS IN MINNESOTA

The Northern Trust Company delineates a portion of the Minneapolis-St. Paul-Bloomington, MN-WI MSA 33460. Although the MSA crosses state boundaries, the bank only delineates Minnesota counties in the assessment area. The assessment area consists of Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, Sherburne, Washington, and Wright Counties. This represents an expansion from the assessment area delineated in the previous evaluation of July 27, 2015, reflecting the addition of Carver, Scott, Sherburne, and Wright Counties. Excluded counties within the MSA are Chisago, Isanti, Le Sueur, Millie Lacs and Sibley, all of which are located in Minnesota, and Pierce and St. Croix Counties in Wisconsin. The current assessment area reflects an additional 68 census tracts, or 10.2 percent growth, in the number of geographies. The bank operates one branch in a middle-income census tract. The June 30, 2017 FDIC deposit market share report ranks the bank 105th out of 131 area institutions with 0.2 percent of the market. The top two financial institutions in deposits with a presence in the assessment area are Wells Fargo NA and U.S. Bank NA with 41.2 percent and 37.8 percent market share, respectively.

The Minneapolis-St. Paul-Bloomington, MN-WI MSA 33460 consists of a total of 732 census tracts; 56 (7.7 percent) are low-, 164 (22.4 percent) are moderate-, 321 (43.9 percent) are middle-, and 184 (25.1 percent) are upper-income, and seven (1.0 percent) are of unknown income.

As the following table indicates the assessment area experienced a net decrease of seven low-income census tracts and a net increase of 24 moderate-income census tracts.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	63	56	(7)
Moderate	140	164	24
Middle	318	321	3
Upper	207	184	(23)
Unknown	4	7	3
Total	732	732	0
<i>Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data</i> <i>2011 – 2015 U.S. Census Bureau: American Community Survey Data</i>			

Additional demographic information as of 2017 for the assessment area is presented in the following table:

Assessment Area: 2017 Minneapolis-St. Paul-Bloomington, MN MSA 33460								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	56	7.7	36,237	4.6	12,676	35.0	159,593	20.2
Moderate-income	164	22.4	136,859	17.4	18,673	13.6	135,990	17.2
Middle-income	321	43.9	375,297	47.6	17,312	4.6	173,401	22.0
Upper-income	184	25.1	239,924	30.4	6,176	2.6	319,768	40.5
Unknown-income	7	1.0	435	0.1	125	28.7	0	0.0
Total Assessment Area	732	100.0	788,752	100.0	54,962	7.0	788,752	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied		Rental		Vacant		
		#	%	%	#	%	#	%
Low-income	76,034	19,972	2.4	26.3	49,763	65.4	6,299	8.3
Moderate-income	258,948	130,425	15.4	50.4	114,469	44.2	14,054	5.4
Middle-income	607,534	423,447	50.0	69.7	154,653	25.5	29,434	4.8
Upper-income	342,345	273,289	32.2	79.8	56,207	16.4	12,849	3.8
Unknown-income	4,250	478	0.1	11.2	3,290	77.4	482	11.3
Total Assessment Area	1,289,111	847,611	100.0	65.8	378,382	29.4	63,118	4.9
	Total Businesses by Tract	Businesses by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
	#	%	#	%	#	%	#	%
Low-income	6,148	4.4	5,078	4.1	999	6.6	71	6.0
Moderate-income	22,554	16.2	19,320	15.7	3,047	20.3	187	15.8
Middle-income	68,017	48.7	59,909	48.6	7,540	50.2	568	48.1
Upper-income	42,499	30.4	38,755	31.4	3,396	22.6	348	29.4
Unknown-income	375	0.3	319	0.3	48	0.3	8	0.7
Total Assessment Area	139,593	100.0	123,381	100.0	15,030	100.0	1,182	100.0
	Percentage of Total Businesses:			88.4		10.8		0.8
	Total Farms by Tract	Farms by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
#	%	#	%	#	%	#	%	
Low-income	15	0.8	14	0.7	1	2.4	0	0.0
Moderate-income	82	4.2	77	4.0	4	9.5	1	100.0
Middle-income	1,298	66.0	1,274	66.3	24	57.1	0	0.0
Upper-income	569	28.9	556	28.9	13	31.0	0	0.0
Unknown-income	2	0.1	2	0.1	0	0.0	0	0.0
Total Assessment Area	1,966	100.0	1,923	100.0	42	100.0	1	100.0
	Percentage of Total Farms:			97.8		2.1		0.1
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

The following presentation of key demographics used to help inform the evaluation of bank activity in its assessment area is based on a comparison of two sets of ACS data, 2006-2010 and 2011-2015.

Population Characteristics

As presented in the table below, from 2010-2015 the population of each of the counties in the assessment area increased at or above the rate of the state of Minnesota (2.2 percent). Scott County displayed the most significant increase at 5.7 percent, while Sherburne County experienced the least significant increase at 2.2 percent. The assessment area represents 58.5 percent of the state's population.

Population Change 2010 – 2015			
Area	2010 Population	2011-2015 Population	Percentage Change
Anoka County, MN	330,844	338,764	2.4
Carver County, MN	91,042	95,715	5.1
Dakota County, MN	398,552	408,456	2.5
Hennepin County, MN	1,152,425	1,197,776	3.9
Ramsey County, MN	508,640	527,411	3.7
Scott County, MN	129,928	137,322	5.7
Sherburne County, MN	88,499	90,401	2.2
Washington County, MN	238,136	246,670	3.6
Wright County, MN	124,700	128,691	3.2
Minneapolis-St. Paul-Bloomington, MN-WI MSA 33460	3,348,859	3,458,790	3.3
State of Minnesota	5,303,925	5,419,171	2.2
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

The following table lists the five largest municipalities in the assessment area. The city of Minneapolis has experienced a 10.4 percent increase in population as measured from the 2010 U.S. Census.

Five Largest Municipalities within the Assessment Area		
Municipality	Population	County
Minneapolis	422,331	Hennepin
St. Paul	306,621	Ramsey
Bloomington	85,866	Hennepin
Brooklyn Park	80,581	Hennepin
Plymouth	78,395	Hennepin
U.S. Census Bureau 2017 Population Estimates		

Income Characteristics

As displayed in the table below, the median family income in 2015 in the assessment area varied, with the highest in Carver County at \$101,963 and the lowest in Ramsey County at \$73,598. However, income in the assessment area and the state of Minnesota increased in all geographies from 2010 to 2015, with Carver County being the highest, at 10.3 percent which outpaced the Consumer Price Index (CPI) inflation rate of 7.4. However, Anoka, Dakota, Ramsey, Sherburne, and Washington counties failed to keep pace with inflation. Dakota County had the lowest percentage change, at 4.3 percent.

Median Family Income Change 2010 – 2015			
Area	2006 - 2010 Median Family Income	2011-2015 Median Family Income	Percentage Change
Anoka County, MN	78,603	83,676	6.5
Carver County, MN	92,412	101,963	10.3
Dakota County, MN	87,445	91,222	4.3
Hennepin County, MN	81,043	87,230	7.6
Ramsey County, MN	69,079	73,598	6.5
Scott County, MN	92,408	100,000	8.2
Sherburne County, MN	79,789	83,267	4.4
Washington County, MN	92,087	97,550	5.9
Wright County, MN	76,641	82,991	8.3
Minneapolis-St. Paul-Bloomington, MN-WI MSA 33460	79,301	85,636	8.0
State of Minnesota	71,307	77,055	8.1
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

Housing Characteristics

Median housing values in the assessment area and the state of Minnesota experienced declines from 2010 to 2015. However, median gross rents experienced increases during the same period of time. A community representative indicated that home prices have recently been trending upward and have returned to, if not exceeded, pre-2008 levels.

In terms of actual dollars, median housing values vary across the assessment area, with the highest in Carver County at \$267,000, and the lowest in Anoka County at \$187,600. Median gross rents similarly vary across the assessment area, with the highest in Washington County at \$1,144 and the lowest in Ramsey County at \$865.

Housing Costs Change 2010 – 2015				
Area	2006 – 2010 Median Housing	2011-2015 Median Housing	2006 – 2010 Median Gross Rent	2011 – 2015 Median Gross Rent
Anoka County, MN	223,100	187,600	870	971
Carver County, MN	287,100	267,000	867	950
Dakota County, MN	243,700	220,400	891	971
Hennepin County, MN	247,900	229,200	853	951
Ramsey County, MN	222,700	193,700	784	865
Scott County, MN	274,300	247,600	891	1,024
Sherburne County, MN	226,300	190,600	818	925
Washington County, MN	264,800	243,600	992	1,144
Wright County, MN	222,300	193,100	765	899
Minneapolis-St. Paul-Bloomington, MN-WI MSA 33460	237,991	213,862	838	931
State of Minnesota	206,200	186,200	759	848
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

A common method to compare relative affordability of housing across geographic areas is the affordability ratio, which is defined in Appendix C. A higher ratio supports more affordable housing opportunities. A community representative indicated that Carver and Scott Counties, which are somewhat more affordable areas, have seen a significant amount of single-family development in recent years. Hennepin and Ramsey Counties, which contain the larger municipalities of Minneapolis and St. Paul, displayed a much lower rate of owner occupied housing than the other counties in the assessment area.

Housing Narrative Information				
Area	2006 – 2010 Affordability Ratio	2011-2015 Affordability Ratio	2006 – 2010 Percentage of Occupied Housing that is Owner Occupied	2011 – 2015 Percentage of Occupied Housing that is Owner Occupied
Anoka County, MN	0.31	0.38	82.9	80.0
Carver County, MN	0.28	0.32	83.6	80.3
Dakota County, MN	0.30	0.34	78.3	74.7
Hennepin County, MN	0.25	0.29	65.2	62.7
Ramsey County, MN	0.23	0.29	62.2	59.0
Scott County, MN	0.30	0.35	86.6	83.1
Sherburne County, MN	0.32	0.39	85.3	80.9
Washington County, MN	0.30	0.34	84.4	80.1
Wright County, MN	0.31	0.38	85.1	82.8
Minneapolis-St. Paul-Bloomington, MN-WI MSA 33460	0.27	0.32	72.8	69.9
State of Minnesota	0.28	0.33	74.2	71.7
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

Employment Conditions

From 2013 through 2016, unemployment rates declined within each of the counties and the state itself; however, in several instances, rates increased from 2015 to 2016. During the same period, Gross Domestic Product (GDP) in the Minneapolis-St. Paul-Bloomington, MN-WI MSA 33460 grew from \$220.9 billion to \$250.4 billion, or 13.4 percent, compared to 12.6 percent growth for aggregate MSAs. The community representative indicated that employment opportunities exist; however, there is a mismatch between job seekers and available positions. However, in the Minneapolis- St. Paul area, there has been an overall strong performance of preserving small businesses. Per the Bureau of Labor Statistics, the major areas of occupations in excess of 130,000 employees within the assessment area are Office and Administrative Support, Sales and Related, Food Preparation and Service Related, Production, and Business and Financial. The top five employers in the assessment area are the University of Minnesota-Twin Cities (education), 3M Company (medical supplies and manufacturing), Target (retail), Park Nicollet Methodist Hospital (medical), and Park Nicollet Clinic (medical).

Unemployment Rates 2013 - 2016				
Area	2013	2014	2015	2016
Anoka County, MN	5.1	4.0	3.6	3.8
Carver County, MN	4.7	3.6	3.2	3.3
Dakota County, MN	4.7	3.7	3.3	3.4
Hennepin County, MN	4.7	3.7	3.3	3.4
Ramsey County, MN	5.0	3.9	3.6	3.6
Scott County, MN	4.7	3.5	3.1	3.3
Sherburne County, MN	5.6	4.4	4.0	4.1
Washington County, MN	4.6	3.6	3.2	3.4
Wright County, MN	5.4	4.1	3.7	3.9
Minneapolis-St. Paul-Bloomington, MN-WI MSA 33460	4.9	3.9	3.5	3.6
State of Minnesota	5.1	4.1	3.7	3.9
<i>Source: U.S. Bureau of Labor Statistics</i>				

One economic development community representative was contacted to increase understanding of credit needs and market conditions within the assessment area. They indicated that the area still has a high need for financing of affordable housing and expanded lending to entrepreneurs and small businesses. Concerns were also expressed that, without retraining or bringing back long-term unemployed persons into the labor force, employment opportunities would go unfilled.

CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN MINNEAPOLIS-St. PAUL-BLOOMINGTON, MN-WI MSA 33460

Investment, Loan, and Service Activity

The Northern Trust Company has a high level of community development loans, qualified investments or community development services. The bank extensively uses innovative or complex qualified investments in the assessment area, and exhibits excellent responsiveness to community development needs in the assessment area. Demographic and community contact information reveals a substantial need for investments targeting affordable housing. TNTC's investments are primarily responsive to this deficiency as it made investments in multiple Low Income Housing Tax Credits (LIHTCs) exceeding \$20.4 million. In addition, the institution made two separate \$2.0 million investments; one to a CDFI to increase its capital base for lending to nonprofits and one to a nonprofit, whose purpose is the acquisition of affordable rental property. TNTC also purchased over \$11.8 million dollars in mortgage back securities consisting of loan originations to low- and moderate-income borrowers.

In the assessment area, from July 27, 2015 through October 15, 2018, TNTC had community development lending and investment activity, including prior period maintained investments of

approximately \$82.8 million, representing a 51.9 percent increase in comparison to the previous 37 month evaluation period of \$54.5 million. The variation of approximately three months in terms of the current performance evaluation period as compared to the previous does not materially impact the strength of the institution's performance.

Community Development Lending

During the review period, the institution renewed three community development loans for \$7.8 million. All three loans were for the provision of community services in the assessment area.

Community Development Investments

During the review period, the institution disbursed funds related to new investments of approximately \$22.4 million. It maintained investments from the prior review periods of approximately \$39.5 million. Investments included affordable housing initiatives which was a need indicated by a community representative. Innovativeness and complexity was demonstrated through investments in a housing investment corporation and multiple LIHTCs.

Qualified Community Development Investments by Type								
	Prior Period Investments \$ (000s)	Current Period Investments \$ (000s)					Total Investments \$ (000s)	Unfunded Commitments \$ (000s)
		CS	AH	ED	RS	Total		
TOTAL	39,492	2,400	19,957	0	0	22,357	61,849	13,159

TNTC also made \$112,500 in grants and donations to various organizations involved in community services.

Community Development Services

The bank did not perform any community development services within the Minneapolis-St. Paul-Bloomington assessment area.

STATE OF MISSOURI

CRA RATING FOR MISSOURI: Satisfactory

Major factors supporting the bank's rating include the following:

- The institution has an adequate level of community development loans, community development services, or qualified investments, particularly investments that are not routinely provided by private investors; and
- The institution exhibits adequate responsiveness to community development needs in the assessment area.

SCOPE OF EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a full-scope review. Please refer to the "Scope of Examination Section" for details. Full review examination procedures were used to evaluate the bank's operations in the assessment area, which consists of portions of the St. Louis, MO-IL MSA 41180. Results from this assessment area were used to determine the rating for the state of Missouri.

DESCRIPTION OF INSTITUTION'S OPERATIONS IN MISSOURI

The Northern Trust Company delineates a portion of the St. Louis MO-IL MSA 41180 as its assessment area. The MSA crosses state boundaries and the bank delineates counties in both Illinois and Missouri. The assessment area consists of the city of St. Louis, and Jefferson, St. Louis and St. Charles Counties in Missouri and Madison, Monroe, and St. Clair Counties in Illinois. This is an expansion from the assessment area delineated in the previous evaluation of July 27, 2015, reflecting the addition of Jefferson County in Missouri and the Illinois counties. The current assessment area includes an additional 169 census tracts, or 44.0 percent growth, in the number of geographies. Excluded counties within the MSA are Crawford, Franklin, Lincoln, and Warren in Missouri, and Bond, Calhoun, Clinton, Jersey, and Macoupin in Illinois. The bank operates one branch and one full-service ATM in an upper-income census tract in Missouri. TNTC closed a branch with ATM in March of 2017, and established the current office in April of 2017, within the same census tract. The June 30, 2017 FDIC market share report ranks the bank 60th out of 97 area institutions with 0.08 percent of the market. The top four financial institutions in deposits with a presence in the assessment are Scottrade Bank, U.S. Bank NA, Stifel Bank, and Bank of America NA, with 16.0 percent, 13.7 percent, 12.4 percent, and 11.4 percent, respectively. This indicates a somewhat fragmented and competitive market.

The St. Louis, MO-IL MSA 41180 consists of a total of 553 census tracts; 79 (14.3 percent) are low-, 117 (21.2 percent) are moderate, 184 (33.3 percent) are middle-, and 169 (30.6 percent) are upper-, and four (0.7 percent) of unknown income.

As the following table indicates, the assessment area experienced a net increase of four low-income census tracts and 11 moderate-income census tracts.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	75	79	4
Moderate	106	117	11
Middle	206	184	(22)
Upper	164	169	5
Unknown	2	4	2
Total	553	553	0
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

Additional demographic information as of 2017 for the assessment area is presented in the following table:

Assessment Area: 2017 St. Louis, MO-IL MSA 41180								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	79	14.3	52,106	8.2	18,802	36.1	136,582	21.5
Moderate-income	117	21.2	117,418	18.5	18,568	15.8	107,379	16.9
Middle-income	184	33.3	231,668	36.5	15,923	6.9	124,711	19.7
Upper-income	169	30.6	231,628	36.5	7,439	3.2	265,587	41.9
Unknown-income	4	0.7	1,439	0.2	642	44.6	0	0.0
Total Assessment Area	553	100.0	634,259	100.0	61,374	9.7	634,259	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	123,787	37,507	5.6	30.3	55,877	45.1	30,403	24.6
Moderate-income	227,522	116,553	17.3	51.2	81,158	35.7	29,811	13.1
Middle-income	394,961	258,727	38.4	65.5	105,144	26.6	31,090	7.9
Upper-income	348,113	260,342	38.6	74.8	66,347	19.1	21,424	6.2
Unknown-income	3,118	858	0.1	27.5	1,906	61.1	354	11.4
Total Assessment Area	1,097,501	673,987	100.0	61.4	310,432	28.3	113,082	10.3
	Total Businesses by Tract	Businesses by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
		#	%	#	%	#	%	#
Low-income	5,493	6.3	4,635	6.1	774	7.4	84	10.5
Moderate-income	15,414	17.6	13,108	17.2	2,160	20.6	146	18.2
Middle-income	29,550	33.8	26,025	34.1	3,263	31.1	262	32.7
Upper-income	36,267	41.4	32,017	42.0	3,951	37.7	299	37.3
Unknown-income	813	0.9	463	0.6	339	3.2	11	1.4
Total Assessment Area	87,537	100.0	76,248	100.0	10,487	100.0	802	100.0
	Percentage of Total Businesses:			87.1		12.0		0.9
	Total Farms by Tract	Farms by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
		#	%	#	%	#	%	#
Low-income	12	1.0	9	0.8	3	11.1	0	0.0
Moderate-income	90	7.4	86	7.2	4	14.8	0	0.0
Middle-income	566	46.5	559	47.0	7	25.9	0	0.0
Upper-income	548	45.1	535	45.0	13	48.1	0	0.0
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	1,216	100.0	1,189	100.0	27	100.0	0	0.0
	Percentage of Total Farms:			97.8		2.2		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

The following presentation of key demographics used to help inform the evaluation of bank activity in its assessment area is based on a comparison of two sets of ACS data, 2006-2010 and 2011-2015.

Population Characteristics

As presented in the table below, from 2010 to 2015, population changes in the assessment area varied, with some counties experiencing increases, others decreasing slightly, and some remaining relatively unchanged. St. Charles County experienced the most growth at 4.0 percent, while St. Clair County experienced a decrease of 1.1 percent. St. Charles County contains three of the five largest municipalities in the assessment area.

Population Change 2010 – 2015			
Area	2010 Population	2011-2015 Population	Percentage Change
Jefferson County, MO	218,733	221,577	1.3
St. Charles County, MO	360,485	374,805	4.0
St. Louis County, MO	998,954	1,001,327	0.2
St. Louis City, MO	319,294	317,850	-0.5
Madison County, IL	269,282	267,356	-0.7
Monroe County, IL	32,957	33,539	1.8
St. Clair County, IL	270,056	267,029	-1.1
St. Louis, MO-IL MSA 41180	2,787,701	2,801,914	0.5
State of Missouri	5,988,927	6,045,448	0.9
State of Illinois	12,830,632	12,873,761	0.3
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

The following table indicates the five largest municipalities within the assessment area. The city of St. Louis continues to lose population falling from 348,191 in 2000 to 319,294 in 2010 to the 2017 estimate of 309,000, which represents an 11.2 percent overall decline. A community representative, whose organization is primarily involved in affordable housing, indicated that lack of available housing, relocation of jobs, and quality of life issues were contributing to the decrease of population.

Five Largest Municipalities within the Assessment Area		
Municipality	Population	County
St. Louis	308,626	NA-City Municipality
O'Fallon	87,597	St. Charles
St. Charles	70,329	St. Charles
St. Peters	57,178	St. Charles
Florissant	51,443	St. Louis

Source: U.S. Census Bureau 2017 Population Estimates

Income Characteristics

As displayed in the table below the median family income in the assessment area varies significantly, with the highest in St. Charles County at \$85,806 and the lowest in St. Louis City at \$46,334. However, income in the assessment area, with the exception of Jefferson County, which experienced a decrease of 1.6 percent, increased overall for the period of 2010 to 2015. St. Louis City experienced an increase of 11.9 percent, outpacing the Consumer Price Index (CPI) inflation rate of 7.4 percent for the period of 2010 to 2015. In all other instances, income failed to keep pace with inflation.

Median Family Income Change 2010 – 2015			
Area	2006 – 2010 Median Family Income	2011-2015 Median Family Income	Percentage Change
Jefferson County, MO	65,671	64,639	-1.6
St. Charles County, MO	82,226	85,806	4.4
St. Louis County, MO	73,910	77,399	4.7
St. Louis City, MO	41,395	46,334	11.9
Madison County, IL	64,630	67,860	5.0
Monroe County, IL	80,832	82,994	2.7
St. Clair County, IL	61,042	64,168	5.1
St. Louis, MO-IL MSA 41180	66,798	70,718	5.9
State of Missouri	57,661	60,809	5.5
State of Illinois	68,236	71,546	4.9

Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data
2011 – 2015 U.S. Census Bureau: American Community Survey Data

Housing Characteristics

Median housing values in the assessment area, with the exception of Madison County, experienced declines during the period of 2010 to 2015. However, median gross rents experienced increases across the entire assessment area. The community representative noted that housing prices, which peaked in 2008, have currently rebounded to those levels.

In terms of actual dollars, median housing values vary across the assessment area, with the highest in Monroe County at \$191,200 and the lowest in St. Louis City and St. Clair County, both at \$120,400. Similarly, median gross rent vary with the highest in St. Charles County at \$931 and the lowest in St. Louis City at \$748.

Housing Costs Change 2010 – 2015				
Area	2006 – 2010 Median Housing	2011-2015 Median Housing	2006 – 2010 Median Gross Rent	2011 – 2015 Median Gross Rent
Jefferson County, MO	154,700	149,900	670	783
St. Charles County, MO	197,300	188,200	819	931
St. Louis County, MO	179,300	173,400	789	882
St. Louis City, MO	122,200	120,400	658	748
Madison County, IL	122,600	126,500	712	778
Monroe County, IL	197,400	191,200	730	830
St. Clair County, IL	122,400	120,400	734	796
St. Louis, MO-IL MSA 41180	160,312	157,100	730	815
State of Missouri	137,700	138,400	667	746
State of Illinois	202,500	173,800	834	907
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

A common method to compare relative affordability of housing across geographic areas is the affordability ratio, which is defined in Appendix C. A higher ratio supports more affordable housing opportunities. The affordability ratios indicate a higher cost for housing in the city of St. Louis as compared to other portions of the assessment area. Also, the city of St. Louis has a much lower percentage of owner occupied housing of 43.9 percent when compared to other geographies in the assessment area.

Housing Narrative Information				
Area	2006 – 2010 Affordability Ratio	2011-2015 Affordability Ratio	2006 – 2010 Percentage of Occupied Housing that is Owner Occupied	2011 – 2015 Percentage of Occupied Housing that is Owner Occupied
Jefferson County, MO	0.37	0.37	83.9	81.0
St. Charles County, MO	0.36	0.38	82.0	79.2
St. Louis County, MO	0.32	0.34	72.5	70.2
St. Louis City, MO	0.28	0.30	47.2	43.9
Madison County, IL	0.42	0.42	74.5	70.9
Monroe County, IL	0.35	0.37	81.7	82.1
St. Clair County, IL	0.40	0.41	67.7	66.3
St. Louis, MO-IL MSA 41180	0.33	0.35	71.7	69.4
State of Missouri	0.34	0.35	71.4	67.2
State of Illinois	0.28	0.33	69.2	66.4
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

Employment Conditions

From 2013 to 2016, unemployment rates have generally declined across the assessment area. In 2016, most geographies in the assessment area had a lower rate of unemployment than the states of Illinois and Missouri, though St. Clair and Madison Counties were above both the states' averages. During the same period, Gross Domestic Product (GDP) in the St. Louis, MO-IL MSA 41180 grew from \$146.3 billion to \$157.7 billion, or 7.8 percent. The community representative indicated that lower skill-set jobs have replaced many higher paying jobs and the acquisition of smaller companies by larger firms has also played a role in unemployment. Per the Bureau of Labor Statistics, the major areas of occupations in excess of 80,000 employees within the MSA are Office and Administrative Support, Sales and Related, Food Preparation and Service Related, Health Care Practitioners, Material Moving, and Production. The top five employers in the MSA are Viasystems (printed and etched circuits), Express Scripts (pharmacy), Washington University Medical Center (medical), Barnes-Jewish Hospital (medical), and St. Louis University (education).

Unemployment Rates 2013 - 2016				
Area	2013	2014	2015	2016
Jefferson County, MO	6.9	6.3	4.8	4.3
St. Charles County, MO	5.6	4.8	3.8	3.5
St. Louis County, MO	6.5	5.8	4.6	4.2
St. Louis City, MO	9.1	7.7	6.0	5.4
Madison County, IL	8.4	7.1	5.9	5.9
Monroe County, IL	6.6	5.4	4.3	4.1
St. Clair County, IL	9.5	7.9	6.5	6.1
St. Louis, MO-IL MSA 41180	7.2	6.3	5.0	4.6
State of Missouri	6.5	6.1	5.0	4.5
State of Illinois	9.2	7.1	5.9	5.9
<i>Source: U.S. Bureau of Labor Statistics</i>				

One affordable housing community representative was contacted to increase understanding of credit needs and market conditions within the assessment area. They indicated that the area has a need for financial organizations to perform more outreach to encourage traditional banking relationships with low- and moderate-income individuals.

CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN ST. LOUIS, MO-IL MSA 41180

Investment, Loan, and Service Activity

The Northern Trust Company has an adequate level of community development loans, qualified investments or community development services. The bank extensively uses innovative or complex qualified investments in the assessment area and exhibits adequate responsiveness to community development needs in the assessment area. Demographic and community contact information reveals a need for investments targeting affordable housing. TNTC's investments are primarily responsive to this deficiency as it made investments in Low Income Housing Tax Credits of \$9.7 million and purchased approximately \$6.4 million dollars in mortgage back securities consisting of loan originations to low- and moderate-income borrowers. In addition, a \$1.0 million investment was made to a nonprofit that provides affordable housing, homeownership, and support services to promote individual and community asset building. The institution also participated in a \$2.7 million new market tax credit that will provide comprehensive housing, employment, health, and education services for low-income individuals in the St. Louis area.

In the assessment area, from July 27, 2015 through October 15, 2018, TNTC had community development lending and investment activity, including prior period maintained investments, of approximately \$32.1 million, representing a 20.0 percent decrease in comparison to the previous 37 month evaluation period of \$40.1 million. The variation of approximately three months in terms of the current performance evaluation period as measured to the previous does not materially impact

the comparisons of the institution's performance.

Community Development Lending

During the review period, the institution originated three community development loans for \$4.7 million. All three loans were for the provision of affordable housing in the assessment area. Two additional loans to small businesses were originated in the assessment area in the amount of \$1.0 million. By supporting these businesses in low- or moderate-income census tracts, the loan qualifies as economic development.

Community Development Investments

During the review period, the institution disbursed funds related to new investments of approximately \$15.2 million. It maintained investments from the prior review periods of approximately \$5.3 million. Investments included affordable housing initiatives, which was a need indicated by a community representative. Innovativeness and complexity was demonstrated through investment in an equity fund, which was initiated to facilitate tax credits created by the Low Income Housing Tax Credit Act of 1986 to help create and rehabilitate affordable housing and the institution's involvement in a new market tax credit to support community services.

Qualified Community Development Investments by Type								
	Prior Period Investments \$ (000s)	Current Period Investments \$ (000s)					Total Investments \$ (000s)	Unfunded Commitments \$ (000s)
		CS	AH	ED	RS	Total		
TOTAL	5,325	937	10,282	4,011	0	15,230	20,555	5,823

TNTC also made \$100,375 in grants and donations to various organizations involved in affordable housing and community services.

Community Development Services

During the review period, staff performed 302 hours of service to four different organizations on behalf of the bank. Two of the organizations receiving the services are active in the provision of community services tailored to meet the needs of low- and moderate-income individuals. The two other organizations are involved in the affordable housing sector. Bank management and staff serve on boards of directors, using their financial and management expertise to help guide the decisions of nonprofit community-based organizations located in the assessment area.

Qualified Community Development Services By Type													
Affordable Housing			Economic Development			Community Services			Revitalization/ Stabilization			Total	
#	Hours	%	#	Hours	%	#	Hours	%	#	Hours	%	#	Hours
2	202	66.9	0	0	2	2	100	33.1	0	0	0.0	4	302

STATE OF NEVADA

CRA RATING FOR NEVADA: Outstanding

Major factors supporting the bank's rating include the following:

- The institution has a high level of community development loans, community development services, or qualified investments, particularly investments that are not routinely provided by private investors; and
- The institution exhibits excellent responsiveness to community development needs in the assessment area.

SCOPE OF EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a full-scope review. Please refer to the "Scope of Examination Section" for details. Full review examination procedures were used to evaluate the bank's operations in the Las Vegas-Henderson-Paradise, NV MSA 29820. Results from this assessment area were used to determine the rating for the state of Nevada.

DESCRIPTION OF INSTITUTION'S OPERATIONS IN NEVADA

The Northern Trust Company delineates Las Vegas-Henderson-Paradise, NV MSA 29820 in its entirety as its assessment area. The MSA consists solely of Clark County and is unchanged from the previous performance evaluation of July 27, 2015. The bank operates one branch in an upper-income census tract. The June 30, 2017 FDIC market share report ranks the bank 25th out of 39 area institutions with 0.18 percent of the market. The top three financial institutions in deposits with a presence in the assessment are Wells Fargo Bank NA, Bank of America NA, and Wells Fargo Financial National Bank with 24.4 percent, 23.0 percent, and 12.9 percent, respectively.

The Las Vegas-Henderson-Paradise, NV MSA 29820 consists of a total of 487 census tracts; 28 (5.7 percent) are low-, 128 (26.3 percent) are moderate-, 181 (37.2 percent) are middle-, 149 (30.6 percent) are upper-income, and one (0.2 percent) is of unknown income.

As the following table indicates the assessment area experienced a net increase of 15 moderate-income census tracts and no net change in the number low-income census tracts.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	28	28	0
Moderate	113	128	15
Middle	201	181	(20)
Upper	145	149	4
Unknown	0	1	1
Total	487	487	0
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

Additional demographic information as of 2017 for the assessment area is presented in the following table:

Assessment Area: 2017 Las Vegas-Henderson-Paradise, NV MSA 29820								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	28	5.7	19,625	4.2	7,662	39.0	96,196	20.7
Moderate-income	128	26.3	104,903	22.5	23,375	22.3	85,415	18.4
Middle-income	181	37.2	184,975	39.7	17,254	9.3	95,475	20.5
Upper-income	149	30.6	155,834	33.5	7,057	4.5	188,356	40.5
Unknown-income	1	0.2	105	0.0	37	35.2	0	0.0
Total Assessment Area	487	100.0	465,442	100.0	55,385	11.9	465,442	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	47,951	7,232	1.9	15.1	30,033	62.6	10,686	22.3
Moderate-income	213,646	64,256	16.9	30.1	113,530	53.1	35,860	16.8
Middle-income	331,753	158,649	41.7	47.8	126,932	38.3	46,172	13.9
Upper-income	262,157	150,241	39.5	57.3	72,752	27.8	39,164	14.9
Unknown-income	1,624	47	0.0	2.9	774	47.7	803	49.4
Total Assessment Area	857,131	380,425	100.0	44.4	344,021	40.1	132,685	15.5
	Total Businesses by Tract	Businesses by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
		#	%	#	%	#	%	#
Low-income	2,100	3.9	1,818	3.8	257	4.6	25	6.5
Moderate-income	12,529	23.3	10,809	22.6	1,645	29.6	75	19.5
Middle-income	20,711	38.5	18,422	38.5	2,157	38.8	132	34.3
Upper-income	18,147	33.7	16,571	34.6	1,437	25.9	139	36.1
Unknown-income	333	0.6	259	0.5	60	1.1	14	3.6
Total Assessment Area	53,820	100.0	47,879	100.0	5,556	100.0	385	100.0
	Percentage of Total Businesses:			89.0		10.3		0.7
	Total Farms by Tract	Farms by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
		#	%	#	%	#	%	#
Low-income	2	1.0	2	1.0	0	0.0	0	0.0
Moderate-income	32	15.8	31	15.8	1	16.7	0	0.0
Middle-income	80	39.6	77	39.3	3	50.0	0	0.0
Upper-income	88	43.6	86	43.9	2	33.3	0	0.0
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	202	100.0	196	100.0	6	100.0	0	0.0
	Percentage of Total Farms:			97.0		3.0		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

The following presentation of key demographics used to help inform the evaluation of bank activity in its assessment area is based on a comparison of two sets of ACS data, 2006-2010 and 2011-2015.

Population Characteristics

As the following table indicates, from 2010 to 2015 the population of Clark County, which comprises the assessment area in its entirety, has grown at a faster rate (4.3 percent) than the state of Nevada (3.6 percent). The assessment area represents 72.7 percent of the state's population. A community representative, whose organization is involved in affordable housing, indicated that the area has seen a recent influx of people coming into the area from California, Florida, Texas, and Puerto Rico, due to natural disasters in their communities.

Population Change 2010 – 2015			
Area	2010 Population	2011-2015 Population	Percentage Change
Clark County, Nevada	1,951,269	2,035,572	4.3
State of Nevada	2,700,551	2,798,636	3.6
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

The following table indicates the five largest municipalities within the assessment area. Henderson City, which is located southeast of Las Vegas, had the 15th largest numeric increase in residents among U.S. cities from mid-2016 to mid-2017 with a population growth of 10,534.

Five Largest Municipalities within the Assessment Area		
Municipality	Population	County
Las Vegas	641,676	Clark
Henderson	302,539	Clark
North Las Vegas	242,975	Clark
Paradise (CDP)*	223,167	Clark
Spring Valley(CDP)*	178,395	Clark
Source: U.S Census Bureau 2017 Population Estimates *Paradise and Spring Valley are based on 2010 U.S Census Bureau Data		

Income Characteristics

As displayed in the table below, the assessment area experienced a sharp decline in Median Family Income between 2010 and 2015 of 6.1 percent, compared to the decline of 5.4 percent in the state of Nevada. The impact of this reduction in income is further exacerbated as income failed to keep pace with the Consumer Price Index (CPI) inflation rate of 7.4 percent.

Median Family Income Change 2010 – 2015			
Area	2006 – 2010 Median Family Income	2011-2015 Median Family Income	Percentage Change
Clark County, Nevada	63,888	59,993	-6.1
State of Nevada	64,418	60,916	-5.4

Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data
2011 – 2015 U.S. Census Bureau: American Community Survey Data

Housing Characteristics

Median housing values in the assessment area and the state of Nevada experienced significant declines between 2010 and 2015, but in terms of actual dollars were in alignment with the state as a whole. While data indicates a decline in median housing value through 2015, the community representative noted that affordable housing has become a major issue as single family home prices have recently increased to over \$300,000. Median gross rents similarly experienced declines in the state and assessment area during the same period of time.

Housing Costs Change 2010 – 2015				
Area	2006 – 2010 Median Housing	2011-2015 Median Housing	2006 – 2010 Median Gross Rent	2011 – 2015 Median Gross Rent
Clark County, Nevada	257,300	170,400	1,036	999
State of Nevada	254,200	173,700	998	973

Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data
2011 – 2015 U.S. Census Bureau: American Community Survey Data

A common method to compare relative affordability of housing across geographic areas is the affordability ratio which is defined in Appendix C. A higher ratio supports more affordable housing opportunities. The affordability ratio across the assessment area is similar to that of the state of Nevada. The assessment area has a high vacancy rate of 15.5 percent.

Housing Narrative Information				
Area	2006 – 2010 Affordability Ratio	2011-2015 Affordability Ratio	2006 – 2010 Percentage of Occupied Housing that is Owner Occupied	2011 – 2015 Percentage of Occupied Housing that is Owner Occupied
Clark County, Nevada	0.22	0.30	58.2	52.5
State of Nevada	0.22	0.30	60.2	55.1

Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data
2011 – 2015 U.S. Census Bureau: American Community Survey Data

Employment Conditions

Unemployment rates in the assessment area were similar to the state of Nevada. From 2013 through 2016, unemployment rates declined within the assessment area and the state itself, which in 2013 had the highest state unemployment rate in the nation. During the same period, Gross Domestic Product (GDP) in the Las Vegas-Henderson-Paradise, NV MSA 29820 grew from \$90.4 billion to \$107.5 billion or 18.9 percent compared to 12.6 percent for aggregate MSAs. The community representative indicated that opportunities exist in the trades and construction; however, those sectors are finding it difficult to hire for skilled positions. Per the Bureau of Labor Statistics, the major areas of occupations in excess of 60,000 employees within the MSA are Food Preparation and Servicing, Office and Administrative Support, Sales and Related, Transportation and Material, and Personal Care and Service. The top five employers in the MSA are Venetian Hotel and Casino (hotel), U.S. Air Force Base (military), Las Vegas Metropolitan Police (police department), MGM Grand (casino), and Aquarius Casino Resort (casino).

Unemployment Rates 2013 - 2016				
Area	2013	2014	2015	2016
Clark County, Nevada	10.0	7.8	6.9	5.8
State of Nevada	9.8	7.8	6.8	5.7
Source: U.S. Bureau of Labor Statistics				

One affordable housing community representative was contacted to increase understanding of credit needs and market conditions within the assessment area. They indicated that the area has a high need for affordable housing, as well as financial education, including budgeting, saving, and home buyer education.

CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN LAS VEGAS-HENDERSON-PARADISE, NV MSA 29820

Investment, Loan, and Service Activity

The Northern Trust Company has a high level of community development loans, qualified investments or community development services. The bank occasionally uses innovative or complex qualified investments in the assessment area and exhibits excellent responsiveness to community development needs in the assessment area. Demographic and community contact information reveals a substantial need for investments targeting affordable housing. TNTC's investments are primarily responsive to this deficiency, as it made investments in two Low Income Housing Tax Credits (LIHTCs) totaling \$16.8 million and purchased over \$49.8 million dollars in mortgage back securities consisting of loan originations to low- and moderate-income borrowers.

In the assessment area from July 27, 2015 through October 15, 2018, TNTC had community development lending and investment activity including prior period maintained investments of approximately \$81.0 million, representing a 330.9 percent increase in comparison to the previous 37 month evaluation period of \$18.8 million. The variation of approximately three months in terms of the current performance evaluation period as compared to the previous does not materially impact the strength of the institution's performance.

Community Development Lending

During the review period, the institution originated two community development loans for \$5.6 million. Both loans were for the provision of affordable housing in the assessment area. Two additional loans to small businesses were originated in the assessment area in the amount of \$800,000. By supporting these businesses in low- or moderate-income census tracts, the loans qualify as economic development.

Community Development Investments

During the review period, the institution disbursed funds related to new investments of approximately \$50.6 million. It maintained investments from the prior review periods of approximately \$7.9 million. Investments included affordable housing initiatives, which was a need indicated by a community representative. Innovativeness and complexity was demonstrated through multiple investments in LIHTCs.

Qualified Community Development Investments by Type								
	Prior Period Investments \$ (000s)	Current Period Investments \$ (000s)					Total Investments \$ (000s)	Unfunded Commitments \$ (000s)
		CS	AH	ED	RS	Total		
TOTAL	7,943	0	50,645	0	0	50,645	58,588	16,013

TNTC also made \$16,000 in grants and donations to various organizations involved in affordable housing and community services.

Community Development Services

During the review period, staff performed 70 hours of service to one organization on behalf of the bank. The organization is active in the provision of community services focused on public education of low- and moderate-income students.

STATE OF NEW YORK

CRA RATING FOR NEW YORK: Satisfactory

Major factors supporting the bank's rating include the following:

- The institution has an adequate level of community development loans, community development services, or qualified investments, particularly investments that are not routinely provided by private investors;
- The institution occasionally uses innovative or complex qualified investments, community development loans, or community development services;
- The institution exhibits adequate responsiveness to community development needs in the assessment area.

SCOPE OF EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a full-scope review. Please refer to the "Scope of Examination Section" for details. Full review examination procedures were used to evaluate the bank's operations in the assessment area portions of the New York-Newark-Jersey City, NY-NJ-PA MSA 35620. Results from this assessment area were used to determine the rating for the state of New York.

DESCRIPTION OF INSTITUTION'S OPERATIONS IN New York-Newark-Jersey City NY-NJ-PA MSA 35620

The Northern Trust Company delineates a portion of the New York-Newark-Jersey City, NY-NJ-PA MSA 35620 as its assessment area. The following is a summary table breakdown of the New York assessment area's composition:

State of New York Assessment Area		
MSA/MD	Counties Included	Counties Excluded
New York- New Jersey City, NY-NJ-PA MSA 35620	See MDs	See MDs
Dutchess County–Putnam County, NY MD 20524	Putnam County, NY	Dutchess County, NY
Nassau County–Suffolk County, NY MD 35004	Nassau County NY, Suffolk County NY	None
Newark, NJ-PA MD 35084	None	Essex County, NJ; Hunterdon County, NJ; Morris County, NJ; Somerset County, NJ; Sussex County, NJ; Union County, NJ; Pike County, PA
New York-Jersey City-White Plains, NY-NJ MD 35614	Bronx County, NY; Kings County, NY; New York County, NY; Queens County, NY; Richmond County, NY; Rockland County, NY; Westchester County, NY.	Bergen County, NJ; Hudson County, NJ; Middlesex County, NJ; Monmouth County, NJ; Ocean County, NJ; Passaic County, NJ; Orange County, NY

The above assessment area reflects the addition of Putnam, Nassau, Suffolk, Rockland, and Westchester Counties. In total, the current assessment area includes an additional 916 census tracts or 42.4 percent growth in the number of geographies. The bank operates one branch in an upper-income census tract. The June 30, 2017 FDIC market share report ranks the bank 86th out of 130 area institutions with 0.02 percent of the market. JP Morgan Chase NA, with 37.6 percent market share, holds a dominant position within the assessment area.

The New York-Newark-New Jersey City, NY-NJ-PA MSA 35620 consists of a total of 3,081 census tracts; 371 (12.0 percent) are low-, 746 (24.2 percent) are moderate-, 1,042 (33.8 percent) are middle-, 841 (27.3 percent) are upper-income, and 81 (2.6 percent) are of unknown-income.

As the following table indicates the assessment area experienced a net increase of 13 low-income census tracts and a net decrease of 17 moderate-income census tracts.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	358	371	13
Moderate	763	746	(17)
Middle	1,076	1,042	(34)
Upper	806	841	35
Unknown	79	81	2
Total	3,082	3,081	(1)
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

Additional demographic information as of 2017 for the assessment area is presented in the following tables:

Assessment Area: 2017 New York-Newark-Jersey City, NY-NJ-PA MSA 35620								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	371	12.0	402,602	13.8	147,598	36.7	806,858	27.7
Moderate-income	746	24.2	700,540	24.1	129,491	18.5	467,122	16.1
Middle-income	1,042	33.8	971,026	33.4	74,550	7.7	498,413	17.1
Upper-income	841	27.3	831,821	28.6	31,035	3.7	1,136,697	39.1
Unknown-income	81	2.6	3,101	0.1	434	14.0	0	0.0
Total Assessment Area	3,081	100.0	2,909,090	100.0	383,108	13.2	2,909,090	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied		Rental		Vacant		
		#	%	%	#	%	#	%
Low-income	657,575	57,434	2.8	8.7	553,890	84.2	46,251	7.0
Moderate-income	1,180,976	312,200	15.3	26.4	761,666	64.5	107,110	9.1
Middle-income	1,547,371	845,680	41.4	54.7	569,901	36.8	131,790	8.5
Upper-income	1,575,973	825,982	40.4	52.4	586,707	37.2	163,284	10.4
Unknown-income	10,543	2,469	0.1	23.4	6,857	65.0	1,217	11.5
Total Assessment Area	4,972,438	2,043,765	100.0	41.1	2,479,021	49.9	449,652	9.0
	Total Businesses by Tract	Businesses by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
	#	%	#	%	#	%	#	%
Low-income	35,502	6.9	32,512	7.1	2,815	5.1	175	5.6
Moderate-income	85,891	16.7	78,168	17.2	7,332	13.3	391	12.4
Middle-income	158,412	30.9	143,890	31.6	13,671	24.8	851	27.1
Upper-income	224,587	43.7	194,412	42.7	28,533	51.7	1,642	52.2
Unknown-income	9,087	1.8	6,195	1.4	2,807	5.1	85	2.7
Total Assessment Area	513,479	100.0	455,177	100.0	55,158	100.0	3,144	100.0
	Percentage of Total Businesses:			88.6		10.7		0.6
	Total Farms by Tract	Farms by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
	#	%	#	%	#	%	#	%
Low-income	68	4.8	64	4.8	4	6.0	0	0.0
Moderate-income	242	17.1	228	16.9	14	20.9	0	0.0
Middle-income	495	35.0	472	35.0	23	34.3	0	0.0
Upper-income	600	42.4	574	42.6	26	38.8	0	0.0
Unknown-income	9	0.6	9	0.7	0	0.0	0	0.0
Total Assessment Area	1,414	100.0	1,347	100.0	67	100.0	0	0.0
	Percentage of Total Farms:			95.3		4.7		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

Assessment Area: 2017 New York-Jersey City-White Plains, NY-NJ MD 35614								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	358	14.6	386,969	17.8	144,665	37.4	658,136	30.2
Moderate-income	650	26.5	588,244	27.0	118,964	20.2	338,961	15.6
Middle-income	683	27.8	542,810	24.9	58,699	10.8	334,882	15.4
Upper-income	693	28.2	657,273	30.2	27,113	4.1	845,738	38.8
Unknown-income	71	2.9	2,421	0.1	299	12.4	0	0.0
Total Assessment Area	2,455	100.0	2,177,717	100.0	349,740	16.1	2,177,717	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	633,409	48,080	3.8	7.6	540,934	85.4	44,395	7.0
Moderate-income	1,001,297	209,898	16.5	21.0	707,222	70.6	84,177	8.4
Middle-income	917,227	379,307	29.9	41.4	467,007	50.9	70,913	7.7
Upper-income	1,335,461	630,410	49.7	47.2	563,176	42.2	141,875	10.6
Unknown-income	9,305	1,957	0.2	21.0	6,216	66.8	1,132	12.2
Total Assessment Area	3,896,699	1,269,652	100.0	32.6	2,284,555	58.6	342,492	8.8
	Total Businesses by Tract	Businesses by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
	#	%	#	%	#	%	#	%
Low-income	32,915	9.2	30,169	9.6	2,592	6.4	154	7.8
Moderate-income	64,868	18.2	59,510	19.0	5,112	12.6	246	12.4
Middle-income	67,814	19.0	62,447	19.9	5,075	12.5	292	14.7
Upper-income	181,893	51.0	155,745	49.6	24,939	61.6	1,209	60.9
Unknown-income	8,937	2.5	6,063	1.9	2,791	6.9	83	4.2
Total Assessment Area	356,427	100.0	313,934	100.0	40,509	100.0	1,984	100.0
	Percentage of Total Businesses:			88.1		11.4		0.6
	Total Farms by Tract	Farms by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
	#	%	#	%	#	%	#	%
Low-income	63	8.5	59	8.3	4	11.8	0	0.0
Moderate-income	108	14.5	104	14.6	4	11.8	0	0.0
Middle-income	141	19.0	133	18.7	8	23.5	0	0.0
Upper-income	423	56.9	405	57.0	18	52.9	0	0.0
Unknown-income	9	1.2	9	1.3	0	0.0	0	0.0
Total Assessment Area	744	100.0	710	100.0	34	100.0	0	0.0
	Percentage of Total Farms:			95.4		4.6		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

Assessment Area: 2017 Dutchess County-Putnam County, NY MD 20524								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	0	0.0	0	0.0	0	0.0	3,600	13.9
Moderate-income	0	0.0	0	0.0	0	0.0	3,984	15.4
Middle-income	8	42.1	11,247	43.4	453	4.0	5,537	21.3
Upper-income	11	57.9	14,690	56.6	314	2.1	12,816	49.4
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	19	100.0	25,937	100.0	767	3.0	25,937	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	0	0	0.0	0.0	0	0.0	0	0.0
Moderate-income	0	0	0.0	0.0	0	0.0	0	0.0
Middle-income	16,831	11,849	42.4	70.4	3,007	17.9	1,975	11.7
Upper-income	21,458	16,097	57.6	75.0	3,137	14.6	2,224	10.4
Unknown-income	0	0	0.0	0.0	0	0.0	0	0.0
Total Assessment Area	38,289	27,946	100.0	73.0	6,144	16.0	4,199	11.0
	Total Businesses Tract	Businesses by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
		#	%	#	%	#	%	#
Low-income	0	0.0	0	0.0	0	0.0	0	0.0
Moderate-income	0	0.0	0	0.0	0	0.0	0	0.0
Middle-income	1,829	39.5	1,683	39.5	120	38.1	26	48.1
Upper-income	2,798	60.5	2,575	60.5	195	61.9	28	51.9
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	4,627	100.0	4,258	100.0	315	100.0	54	100.0
	Percentage of Total Businesses:			92.0		6.8		1.2
	Total Farms by Tract	Farms by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
#		%	#	%	#	%	#	%
Low-income	0	0.0	0	0.0	0	0.0	0	0.0
Moderate-income	0	0.0	0	0.0	0	0.0	0	0.0
Middle-income	14	35.0	14	35.0	0	0.0	0	0.0
Upper-income	26	65.0	26	65.0	0	0.0	0	0.0
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	40	100.0	40	100.0	0	0.0	0	0.0
	Percentage of Total Farms:			100.0		0.0		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

Assessment Area: 2017 Nassau County-Suffolk County, NY MD 35004								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	13	2.1	15,633	2.2	2,933	18.8	145,122	20.6
Moderate-income	96	15.8	112,296	15.9	10,527	9.4	124,177	17.6
Middle-income	351	57.8	416,969	59.1	15,398	3.7	157,994	22.4
Upper-income	137	22.6	159,858	22.7	3,608	2.3	278,143	39.4
Unknown-income	10	1.6	680	0.1	135	19.9	0	0.0
Total Assessment Area	607	100.0	705,436	100.0	32,601	4.6	705,436	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	24,166	9,354	1.3	38.7	12,956	53.6	1,856	7.7
Moderate-income	179,679	102,302	13.7	56.9	54,444	30.3	22,933	12.8
Middle-income	613,313	454,524	60.9	74.1	99,887	16.3	58,902	9.6
Upper-income	219,054	179,475	24.1	81.9	20,394	9.3	19,185	8.8
Unknown-income	1,238	512	0.1	41.4	641	51.8	85	6.9
Total Assessment Area	1,037,450	746,167	100.0	71.9	188,322	18.2	102,961	9.9
	Total Businesses by Tract	Businesses by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
	#	%	#	%	#	%	#	%
Low-income	2,587	1.7	2,343	1.7	223	1.6	21	1.9
Moderate-income	21,023	13.8	18,658	13.6	2,220	15.5	145	13.1
Middle-income	88,769	58.2	79,760	58.2	8,476	59.1	533	48.2
Upper-income	39,896	26.2	36,092	26.3	3,399	23.7	405	36.6
Unknown-income	150	0.1	132	0.1	16	0.1	2	0.2
Total Assessment Area	152,425	100.0	136,985	100.0	14,334	100.0	1,106	100.0
	Percentage of Total Businesses:			89.9		9.4		0.7
	Total Farms by Tract	Farms by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
	#	%	#	%	#	%	#	%
Low-income	5	0.8	5	0.8	0	0.0	0	0.0
Moderate-income	134	21.3	124	20.8	10	30.3	0	0.0
Middle-income	340	54.0	325	54.4	15	45.5	0	0.0
Upper-income	151	24.0	143	24.0	8	24.2	0	0.0
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	630	100.0	597	100.0	33	100.0	0	0.0
	Percentage of Total Farms:			94.8		5.2		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

The following presentation of key demographics used to help inform the evaluation of bank activity in its assessment area is based on a comparison of two sets of ACS data, 2006-2010 and 2011-2015.

Population Characteristics

As presented in the table below, from 2010 to 2015, the population changes varied in each of the counties with all experiencing some growth, with the exception of Putnam County. Putnam County displayed negative 0.2 percent growth and Kings County experienced the largest growth at 3.6 percent. Overall, the assessment area represents 64.4 percent of the population of the state of New York.

Population Change 2010 – 2015			
Area	2010 Population	2011-2015 Population	Percentage Change
Bronx County, NY	1,385,108	1,428,357	3.1
Kings County, NY	2,504,700	2,595,259	3.6
Nassau County, NY	1,339,532	1,354,612	1.1
New York County, NY	1,585,873	1,629,507	2.8
Putnam County, NY	99,710	99,488	-0.2
Queens County, NY	2,230,722	2,301,139	3.2
Richmond County, NY	468,730	472,481	0.8
Rockland County, NY	311,687	320,688	2.9
Suffolk County, NY	1,493,350	1,501,373	0.5
Westchester County, NY	949,113	967,315	1.9
Dutchess County- Putnam County, NY MD 20524	397,198	396,416	-0.2
Nassau County-Suffolk County, NY MD 35004	2,832,882	2,855,985	0.8
New York-Jersey City-White Plains, NY-NJ MD 35614	13,866,159	14,229,588	2.6
State of New York	19,378,102	19,673,174	1.5
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

The following table provides a list of the five largest municipalities in the assessment area. New York City continues to maintain its position as the largest municipality in the United States as it increased by 447,565 inhabitants or 5.5 percent since the 2010 U.S. Census.

Five Largest Municipalities within the Assessment Area		
Municipality	Population	County
New York	8,622,698	Bronx, Kings, New York, Queens, & Richmond
Yonkers	202,019	Westchester
New Rochelle	79,946	Westchester
Mount Vernon	68,703	Westchester
White Plains	59,047	Westchester

Source: U.S Census Bureau 2017 Population Estimates

Income Characteristics

As displayed in the table below, the median family income in the assessment area displays a wide variance, with the highest in Nassau County at \$114,662 and the lowest in the Bronx at \$38,517. By percentage, the New York-Jersey City-White Plains-NJ, MD 35614, at 57.6 percent, has over twice the amount of families below the poverty level in low-and moderate-income census tracts than the 28.2 percent in the Nassau County-Suffolk County, NY MD 35004.

Median Family Income Change 2010 – 2015			
Area	2006 – 2010 Median Family Income	2011-2015 Median Family Income	Percentage Change
Bronx County, NY	38,431	38,517	0.2
Kings County, NY	48,777	53,808	10.3
Nassau County, NY	107,934	114,662	6.2
New York County, NY	75,629	89,291	18.1
Putnam County, NY	101,576	111,425	9.7
Queens County, NY	62,459	64,475	3.2
Richmond County, NY	83,264	85,788	3.0
Rockland County, NY	96,836	98,801	2.0
Suffolk County, NY	96,220	102,582	6.6
Westchester County, NY	100,863	108,108	7.2
Duchess County–Putnam County NY MD 20524	86,488	94,443	9.2
Nassau County–Suffolk County NY MD 35004	101,543	108,193	6.5
New York–Jersey City – White Plains, NYNJ MD 35614	68,006	72,047	5.9
State of New York	67,405	71,913	6.7

Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data
2011 – 2015 U.S. Census Bureau: American Community Survey Data

Housing Characteristics

Median housing values in the assessment area, with the exception of Kings County and New York County, experienced declines between 2010 and 2015. However, median gross rents experienced increases during that same period of time. A community representative indicated that there has been a recent upward trend in home prices as housing has spread to previously undeveloped areas, and there has been a corresponding rise in the cost of construction.

In terms of actual dollars, median housing values vary significantly across the assessment area, with the highest in New York County at \$848,700 and the lowest in Bronx County at \$363,400. Similarly, median gross rents vary across the assessment area, with the highest in Nassau County at \$1,578 and the lowest in Bronx County at \$1,074.

Housing Costs Change 2010 – 2015				
Area	2006 – 2010 Median Housing	2011-2015 Median Housing	2006 – 2010 Median Gross Rent	2011 – 2015 Median Gross Rent
Bronx County, NY	386,200	363,400	923	1,074
Kings County, NY	562,400	570,200	1,021	1,215
Nassau County, NY	487,900	446,400	1,407	1,578
New York County, NY	825,200	848,700	1,234	1,519
Putnam County, NY	418,100	354,900	1,216	1,234
Queens County, NY	479,300	450,300	1,181	1,367
Richmond County, NY	461,700	439,500	1,107	1,169
Rockland County, NY	476,900	419,100	1,240	1,335
Suffolk County, NY	424,200	375,100	1,427	1,544
Westchester County, NY	556,900	506,900	1,203	1,364
Dutchess County–Putnam County, NY MD 20524	346,139	293,968	1,059	1,146
Nassau County–Suffolk County, NY MD 35004	457,037	406,895	1,418	1,559
New York–Jersey City–White Plains, NY-NJ MD 35614	447,924	413,786	1,097	1,261
State of New York	303,900	283,400	977	1,132
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

Bronx, Kings, and New York Counties exhibit low affordability ratio indicating that housing is more expensive to the area's residents. The percentage of owner occupied housing is also low in each of the counties. The community representative commented that there have been dramatic increases in rents in areas where there are no rent controls.

Housing Narrative Information				
Area	2006 – 2010 Affordability Ratio	2011-2015 Affordability Ratio	2006 – 2010 Percentage of Occupied Housing that is Owner Occupied	2011 – 2015 Percentage of Occupied Housing that is Owner Occupied
Bronx County, NY	0.09	0.09	20.7	19.0
Kings County, NY	0.08	0.08	30.3	29.3
Nassau County, NY	0.19	0.22	82.1	80.3
New York County, NY	0.08	0.09	22.8	22.9
Putnam County, NY	0.21	0.27	84.6	82.0
Queens County, NY	0.12	0.13	45.5	43.6
Richmond County, NY	0.15	0.17	70.3	68.8
Rockland County, NY	0.17	0.20	71.0	68.9
Suffolk County, NY	0.20	0.24	81.4	79.5
Westchester County, NY	0.14	0.17	62.7	61.5
Dutchess County–Putnam County, NY MD 20524	0.21	0.26	74.0	72.2
Nassau County–Suffolk County, NY MD 35004	0.19	0.23	81.7	79.8
New York–Jersey City–White Plains, NY-NJ MD 35614	0.13	0.15	45.7	44.0
State of New York	0.18	0.21	55.3	53.6
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

Employment Conditions

From 2013 through 2016, unemployment rates declined within each of the counties and the state itself; however, Bronx County had an unemployment rate significantly higher than other counties in the assessment area. During the same period, Gross Domestic Product (GDP) in the New York-Newark-Jersey City, NY-NJ-PA MSA 35620 grew from \$1,477.0 billion to \$1,662.7 billion, or 12.6 percent, equaling the 12.6 percent for aggregate MSAs. The community representative indicated that he has seen a dramatic increase in the number of young adults employed in part-time positions. Per the Bureau of Labor Statistics, the major areas of occupations in excess of 575,000 employees within the MSA are Office and Administrative Support, Sales and Related, Food Preparation and Service Related, Education, Training and Library, and Transportation and Material Moving. The top five employers in the assessment area are New York Presbyterian Hospital (medical), Gate Gourmet Inc. (culinary), Montefiore Medical Center (medical), Merrill Lynch & Co. Inc. (financial), and NYU Hospitals (medical).

Unemployment Rates 2013 - 2016				
Area	2013	2014	2015	2016
Bronx County, NY	11.8	9.8	7.8	7.1
Kings County, NY	9.4	7.7	5.9	5.3
Nassau County, NY	5.9	4.8	4.2	3.9
New York County, NY	7.2	6.1	4.9	4.5
Putnam County, NY	5.8	4.9	4.3	4.0
Queens County, NY	7.8	6.4	5.0	4.5
Richmond County, NY	7.8	7.2	5.8	5.2
Rockland County, NY	5.9	5.1	4.5	4.2
Suffolk County, NY	6.4	5.3	4.7	4.3
Westchester County, NY	6.3	5.1	4.5	4.2
Dutchess County–Putnam County NY MD 20524	6.5	5.2	4.4	4.1
Nassau County–Suffolk County NY MD 35004	6.2	5.1	4.5	4.1
New York–Jersey City–White Plains, NY-NJ MD 35614	8.2	6.7	5.5	4.9
State of New York	7.7	6.3	5.3	4.8
<i>Source: U.S. Department of Labor</i>				

One affordable housing community representative was contacted to increase understanding of credit needs and market conditions within the assessment area. They indicated that the area has a need for access to permanent and reasonable financing for multifamily properties and cooperatives.

CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN NEW YORK-NEWARK-JERSEY CITY, NY-NJ-PA MSA 35620

Investment, Loan, and Service Activity

The institution has an adequate level of community development loans, community development services, or qualified investments. The bank occasionally uses innovative or complex qualified investments in the assessment area and exhibits adequate responsiveness to community development needs in the assessment area. Demographic and community contact information reveals a substantial need for investments targeting affordable housing. TNTC's investments are responsive to this need, as it made investments in a Low Income Housing Tax Credit (LIHTC) of \$15.0 million and purchased \$45.2 million dollars in mortgage back securities consisting of loan originations to low- and moderate-income borrowers. In addition, the institution made a Social Impact Bond (SIB) investment to facilitate employment for unemployed or underemployed veterans.

In the assessment area, from July 27, 2015 through October 15, 2018, TNTC had community development investment activity, including prior period maintained investments, of approximately \$70.6 million, representing a 231.5 percent increase in comparison to the previous

37 month evaluation period of \$21.3 million.

Community Development Lending

During the review period, the institution did not originate any community development loans.

Community Development Investments

During the review period, the institution disbursed funds related to new investments of approximately \$45.4 million. It maintained investments from the prior review periods of approximately \$9.5 million. Investments included affordable housing initiatives, which was a need indicated by a community representative. Innovativeness and complexity was demonstrated through investments in multiple low income housing tax credits. Innovativeness was also apparent in TNTC's participation in a social impact bond investment to facilitate employment for unemployed or underemployed veterans.

Qualified Community Development Investments by Type								
	Prior Period Investments \$ (000s)	Current Period Investments \$ (000s)					Total Investments \$ (000s)	Unfunded Commitments \$ (000s)
		CS	AH	ED	RS	Total		
TOTAL	9,509	214	45,199	0	0	45,413	54,922	15,785

TNTC also made \$109,925 in grants and donations to various organizations involved in providing a variety of community services to low- and moderate-income individuals.

Community Development Services

During the review period, staff performed 200 hours of service to one organization on behalf of the bank. The organization is active in the provision of community services tailored to meet the needs of low- and moderate-income individuals.

STATE OF OHIO

CRA RATING FOR OHIO: Satisfactory

Major factors supporting the bank's rating include the following:

- The institution has an adequate level of community development loans, community development services, or qualified investments, particularly investments that are not routinely provided by private investors;
- The institution occasionally uses innovative or complex qualified investments, community development loans, or community development services; and
- The institution exhibits adequate responsiveness to community development needs in the assessment area.

SCOPE OF EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a full-scope review. Please refer to the "Scope of Examination Section" for details. Full review examination procedures were used to evaluate the bank's operations in the assessment area portions of the Cleveland-Elyria, OH MSA 17460. Results from this assessment area were used to determine the rating for the state of Ohio.

DESCRIPTION OF INSTITUTION'S OPERATIONS IN OHIO

The Northern Trust Company delineates a portion of the Cleveland-Elyria, OH MSA 17460. The assessment area consists of Cuyahoga, Geauga, Lake and Medina Counties. This is an expansion from the assessment area delineated in the previous evaluation of July 27, 2015, reflecting the addition of Geauga, Lake and Medina Counties. Lorain County, which is in the MSA, remains excluded from the assessment area. The current assessment area reflects an additional 118 census tracts, or 26.5 percent growth in the number of geographies. The bank operates one branch in a middle-income census tract. The June 30, 2017 FDIC market share report ranks the bank 26th out of 32 area institutions with 0.03 percent of the market. The top four financial institutions in deposits with a presence in the assessment are KeyBank NA, Citizens Bank NA, PNC Bank NA, and the Huntington National Bank with 23.0 percent, 14.3 percent, 14.2 percent, and 13.1 percent, respectively. This indicates a highly competitive market.

The Cleveland-Elyria, OH MSA 17460 consists of a total of 564 census tracts; 107 (19.0 percent) are low-, 129 (22.9 percent) are moderate-, 175 (31.0 percent) are middle-, 142 (25.2 percent) upper-income, and 11 (2.0 percent) are of unknown income.

As the following table indicates the assessment area experienced a net increase of 11 low-income census tracts and 12 moderate-income census tracts.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	96	107	11
Moderate	117	129	12
Middle	198	175	(23)
Upper	147	142	(5)
Unknown	6	11	5
Total	564	564	0
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

Additional demographic information as of 2017 for the assessment area is presented in the following table:

Assessment Area: 2017 Cleveland-Elyria, OH MSA 17460								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	107	19.0	45,824	10.4	19,512	42.6	101,485	23.0
Moderate-income	129	22.9	83,365	18.9	15,993	19.2	72,841	16.5
Middle-income	175	31.0	150,764	34.2	10,651	7.1	84,107	19.1
Upper-income	142	25.2	159,947	36.2	4,948	3.1	183,005	41.5
Unknown-income	11	2.0	1,538	0.3	663	43.1	0	0.0
Total Assessment Area	564	100.0	441,438	100.0	51,767	11.7	441,438	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	119,347	29,584	6.3	24.8	59,381	49.8	30,382	25.5
Moderate-income	187,463	76,993	16.4	41.1	80,561	43.0	29,909	16.0
Middle-income	270,805	173,647	37.0	64.1	76,183	28.1	20,975	7.7
Upper-income	244,308	188,217	40.1	77.0	41,182	16.9	14,909	6.1
Unknown-income	5,934	949	0.2	16.0	3,613	60.9	1,372	23.1
Total Assessment Area	827,857	469,390	100.0	56.7	260,920	31.5	97,547	11.8
	Total Businesses Tract		Businesses by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	5,721	7.8	4,756	7.5	931	10.6	34	6.3
Moderate-income	11,316	15.5	9,637	15.1	1,611	18.4	68	12.5
Middle-income	23,735	32.5	21,107	33.1	2,445	27.9	183	33.6
Upper-income	31,707	43.4	27,852	43.7	3,598	41.0	257	47.2
Unknown-income	600	0.8	406	0.6	192	2.2	2	0.4
Total Assessment Area	73,079	100.0	63,758	100.0	8,777	100.0	544	100.0
	Percentage of Total Businesses:			87.2		12.0		0.7
	Total Farms by Tract		Farms by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	16	2.9	14	2.7	2	9.5	0	0.0
Moderate-income	36	6.6	34	6.5	2	9.5	0	0.0
Middle-income	234	42.8	228	43.3	6	28.6	0	0.0
Upper-income	261	47.7	250	47.5	11	52.4	0	0.0
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	547	100.0	526	100.0	21	100.0	0	0.0
	Percentage of Total Farms:			96.2		3.8		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

The following presentation of key demographics used to help inform the evaluation of bank activity in its assessment area is based on a comparison of two sets of ACS data, 2006-2010 and 2011-2015.

Population Characteristics

As presented in the table below, from 2010 to 2015, the overall population in the assessment area decreased by 14,553, or 0.8 percent, with the individual counties experiencing either slight increases or slight decreases. The assessment area represents 85.3 percent of the Cleveland-Elyria, OH MSA 17460 and 17.8 percent of the population of the state of Ohio.

Population Change 2010 – 2015			
Area	2010 Population	2011-2015 Population	Percentage Change
Cuyahoga County, OH	1,280,122	1,263,189	-1.3
Geauga County, OH	93,389	93,874	0.5
Lake County, OH	230,041	229,437	-0.3
Medina County, OH	172,332	174,831	1.5
Cleveland-Elyria, OH MSA 17460	2,077,240	2,064,483	-0.6
State of Ohio	11,536,504	11,575,977	0.3
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

The following table provides a list of the five largest municipalities in the assessment area. Cleveland's population continues to decline. In the 2000 census, it was at 478,453 and at 396,815 in the 2010 census.

Five Largest Municipalities within the Assessment Area		
Municipality	Population	County
Cleveland	385,525	Cuyahoga
Parma	79,167	Cuyahoga
Lakewood	50,249	Cuyahoga
Euclid	47,201	Cuyahoga
Mentor	47,121	Lake
Source: U.S. Census Bureau 2017 Population Estimates		

Income Characteristics

As displayed in the table below, median family incomes in the assessment area varied, with the highest in Geauga County at \$85,884 and the lowest in Cuyahoga County at \$60,554. However, income in the assessment area increased overall for the period of 2010 to 2015, with Geauga County and Lake County increasing by 11.9 percent and 7.8 percent, respectively, outpacing the Consumer Price Index (CPI) inflation rate of 7.4 percent. However, income in Cuyahoga and Medina Counties failed to keep pace with inflation. A community representative familiar with housing concerns in Cuyahoga County indicated that underemployment was an issue as

individuals were not employed at a level to bring themselves out of poverty.

Median Family Income Change 2010 – 2015			
Area	2006 – 2010 Median Family Income	2011-2015 Median Family Income	Percentage Change
Cuyahoga County, OH	58,064	60,554	4.3
Geauga County, OH	76,780	85,884	11.9
Lake County, OH	67,206	72,462	7.8
Medina County, OH	76,699	79,147	3.2
Cleveland-Elyria, OH MSA 17460	62,627	65,821	5.1
State of Ohio	59,680	62,817	5.3
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

Housing Characteristics

Median housing values in the assessment area experienced declines from 2010 to 2015. However, median gross rents experienced increases during the same period of time. In terms of actual dollars, median housing values vary across the assessment area, with the highest in Geauga County at \$218,800 and the lowest in Cuyahoga at \$121,800. Median gross rents vary, with the highest in Medina County at \$824 and the lowest in Cuyahoga County at \$730. The community representative indicated that areas of Cuyahoga County are still impacted by the effects of the past foreclosure crisis and is still having a negative effect on housing values.

Housing Costs Change 2010 – 2015				
Area	2006 – 2010 Median Housing	2011-2015 Median Housing	2006 – 2010 Median Gross Rent	2011 – 2015 Median Gross Rent
Cuyahoga County, OH	137,200	121,800	698	730
Geauga County, OH	230,900	218,800	751	800
Lake County, OH	158,100	147,900	757	814
Medina County, OH	184,900	179,500	784	824
Cleveland-Elyria, OH MSA 17460	149,576	138,894	707	743
State of Ohio	136,400	129,900	678	730
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

Geauga County has a lower affordability ratio and a higher owner occupied housing percentage than the other counties and the state of Ohio, indicating that housing was comparatively more expensive in the county. The community representative also noted that, even though some homes were sold at low levels in Cuyahoga County, they were being converted into rental properties and

the tenants were paying at a higher rate than they ordinarily would have on a mortgage.

Housing Narrative Information				
Area	2006 – 2010 Affordability Ratio	2011-2015 Affordability Ratio	2006 – 2010 Percentage of Occupied Housing that is Owner Occupied	2011 – 2015 Percentage of Occupied Housing that is Owner Occupied
Cuyahoga County, OH	0.32	0.36	62.4	59.3
Geauga County, OH	0.28	0.33	87.3	85.1
Lake County, OH	0.35	0.39	77.0	73.9
Medina County, OH	0.36	0.37	81.8	79.4
Cleveland-Elyria, OH MSA 17460	0.32	0.36	68.1	65.2
State of Ohio	0.35	0.38	69.2	66.3
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

Employment Conditions

From 2013 through 2016, unemployment rates declined within each of the counties and the state itself. During the same period, Gross Domestic Product (GDP) in the Cleveland-Elyria, OH MSA 17460 grew from \$118.3 billion to \$131.7 billion, or 11.3 percent compared to 12.6 percent for aggregate MSAs. The community representative indicated healthcare and educational institutions had replaced manufacturing as the major industries. Per the Bureau of Labor Statistics, the major areas of occupations in excess of 50,000 employees within the MSA are Office and Administrative Support, Production, Sales and Related, Food Preparation and Service Related, Health Care Practitioners, and Transportation and Material Moving. The top five employers in the MSA are Cleveland Clinic (medical), Cleveland Clinic Health Systems (medical), Rainbow Babies and Children (medical), University Hospitals Health (medical), and Veterans Health Administration (medical).

Unemployment Rates 2013 – 2016				
Area	2013	2014	2015	2016
Cuyahoga County, OH	7.7	6.4	5.2	5.4
Geauga County, OH	6.4	5.1	4.2	4.4
Lake County, OH	6.9	5.6	4.5	4.8
Medina County, OH	6.5	5.2	4.1	4.3
Cleveland-Elyria, OH MSA 17460	7.5	6.2	5.0	5.3
State of Ohio	7.4	5.7	4.9	4.9
Source: U.S. Department of Labor				

One affordable housing community representative was contacted to increase understanding of credit needs and market conditions within the assessment area. They indicated that the area still has a high need for affordable housing as the underemployed are not able to afford purchasing a home. They also noted the need for education and job training and the lack of programs to inform individuals on how to potentially start their own businesses.

CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN CLEVELAND-ELYRIA, OH MSA 17460

Investment, Loan, and Service Activity

The Northern Trust Company has an adequate level of community development loans, qualified investments or community development services. The bank occasionally uses innovative or complex qualified investments in the assessment area and exhibits adequate responsiveness to community development needs in the assessment area. Demographic and community contact information reveals a substantial need for investments targeting affordable housing and economic development. TNTC's investments are responsive to this need, as it made investments in private placements totaling \$1.3 million of mortgages originated by an organization whose primary purpose is the development of low- and moderate-income housing. The institution purchased over \$456,000 in mortgage back securities consisting of loan originations to low- and moderate-income borrowers. The institution also made an investment of \$1.0 million in a CDFI that provides financing and comprehensive technical assistance services to small business owners throughout Ohio.

In the assessment area, from July 27, 2015 through October 15, 2018, TNTC had community development lending and investment activity, including prior period maintained investments, of approximately \$29.6 million, representing a 15.2 percent increase in comparison to the previous 37 month evaluation period of \$25.7 million. The variation of approximately three months in terms of the current performance evaluation period as compared to the previous evaluation does not materially impact the strength of the institution's performance.

Community Development Lending

During the review period, the institution renewed seven community development loans for \$21.3 million. All seven loans were for the provision of community services in the assessment area. One additional loan to a small business was originated in low-income census tract in the assessment area for the amount of \$1.0 million. By supporting this business in a low income census tract, the loan qualifies as economic development.

Community Development Investments

During the review period, the institution disbursed funds related to new investments of approximately \$2.8 million. It maintained investments from the prior review periods of approximately \$4.6 million. Investments included affordable housing initiatives which was a need indicated by a community representative. Innovativeness and complexity were demonstrated through participation in a private placement of mortgages originated by a nonprofit affordable housing organization.

Qualified Community Development Investments by Type								
	Prior Period Investments \$ (000s)	Current Period Investments \$ (000s)					Total Investments \$ (000s)	Unfunded Commitments \$ (000s)
		CS	AH	ED	RS	Total		
TOTAL	4,570	0	1,758	1,000	0	2,758	7,328	0

TNTC also made \$80,506 in grants and donations to various organizations involved in economic development and community services.

Community Development Services

During the review period, staff performed 20 hours of service to one organization on behalf of the bank. The organization is active in the provision of community services tailored to meet the needs of low- and moderate-income individuals.

TEXAS

CRA RATING FOR TEXAS: Outstanding

Major factors supporting the bank's rating include the following:

- The institution has a high level of community development loans, community development services, or qualified investments, particularly investments that are not routinely provided by private investors; and
- The institution exhibits excellent responsiveness to credit and community development needs in the assessment area.

SCOPE OF EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation. Please refer to the "Scope of Examination" sections for details.

A full review was conducted for evaluation under Wholesale/Limited Purpose CRA Examination Procedures for the Austin-Round Rock, TX MSA 12420, Houston-The Woodlands-Sugar Land, TX MSA 26420, and Dallas-Fort Worth-Arlington, TX MSA 19100. A summary table is presented below, and a detailed breakout of TNTC's assessment delineations can be found under each assessment area summary.

State of Texas Assessment Areas		
MSA/MD	Counties Included	Counties Excluded
Austin-Round Rock, TX MSA 12420	Travis County, Hays County, Williamson County	Bastrop County, Caldwell County
Dallas-Fort Worth-Arlington, TX MSA 19100	<u>Dallas-Plano-Irving MD 19124</u> Collin County, Dallas County, Ellis County, Rockwall County	Denton County, Hunt County, Kaufmann County
	<u>Fort Worth-Arlington TX MD 23104</u> Johnson County, Tarrant County	Hood County, Parker County, Somervell County, Wise County
Houston-The Woodlands-Sugar Land, TX MSA 26420	Brazoria County, Chambers County, Harris County, Galveston County, Fort Bend County	Austin County, Liberty County, Montgomery County, Waller County

DESCRIPTION OF INSTITUTION'S OPERATIONS IN TEXAS

The Northern Trust Company operates six branches, three full-service ATMs and one cash-only ATM in the state of Texas. One full-service ATM was opened in a middle-income census tract in September of 2015. The following table displays the bank's presence in the state:

Northern Trust Branches and ATMs Texas									
MD	Branches by Census Tracts				ATMs by Census Tracts				
	Low	Moderate	Middle	Upper	Low	Moderate	Middle	Upper	Unknown
Dallas-Plano-Irving, TX MD 19124	0	0	0	2	0	0	0	2	0
Fort Worth-Arlington, TX MD 23104	0	0	0	1	0	0	0	0	0
Houston-The Woodlands-Sugar Land, TX MSA 26420	0	0	0	2	0	0	0	2	0
Austin-Round Rock, TX MSA 12420	0	0	0	1	0	0	0	0	0
Total	0	0	0	6	0	0	0	4	0

CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TESTS IN TEXAS

The bank's performance relative to the community development test is Outstanding, based on the following community development test characteristics:

- The institution has a high level of community development loans, community development services, or qualified investments, particularly investments that are not routinely provided by private investors; and
- The institution exhibits excellent responsiveness to credit and community development needs in the assessment area.

Investment, Loan, and Service Activity

The Northern Trust Company has a high level of community development loans, qualified investments or community development services. The bank occasionally uses innovative or complex qualified investments in the assessment area and exhibits excellent responsiveness to credit and community economic development community development needs in the assessment area. Community representatives in each of the assessment areas identified affordable housing and workforce development as growing needs. TNTC's investments fall into these categories as well as a portion of its donations and community service activities.

Community Development activities are detailed below.

Community Development Lending

During the review period, the institution made seven community development loans across the assessment area for \$10.9 million. TNTC made two community development loans outside the assessment area, but benefited the state of Texas, for \$15.5 million, bringing the overall total to \$26.4 million. Five of the loans supported affordable housing. The other four supported community service activities.

The institution originated an additional 11 small business loans, qualifying for economic development purposes. The loans totaled \$4.7 million and helped address small business needs within the assessment area.

Community Development Investments

During the review period, the institution disbursed funds related to new qualified investments of approximately \$303.8 million. Of these investments approximately \$6.5 million were outside the assessment area, but benefited the state of Texas. It maintained qualified investments from prior review years of approximately \$17.6 million, including \$6.9 million outside the assessment area, but benefited the state. In addition, there were \$20.4 million of unfunded commitments, of which approximately \$17.8 million benefited other geographies of the state outside the assessment areas. Investments met the community development purposes of affordable housing and economic development.

TNTC also made \$200,439 in donations and grants to various affordable housing, community service, and small business support organizations in the assessment area. In addition, donations totaling \$9,000 were made to a community service organization outside the assessment area, but benefited the state of Texas.

Community Development Services

During the review period, bank staff performed 316 hours of service to five different organizations on behalf of the bank. Three of the organizations are active in the provision of community services tailored to meet the needs of low-and moderate income individuals. The remaining two organizations primary focus is on affordable housing. Bank management and staff serve on boards of directors, using their financial and management expertise to help guide the decisions of nonprofit community based organizations located in the assessment area.

AUSTIN-ROUND ROCK, TX MSA 12420-FULL REVIEW

SCOPE OF EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a full-scope review. Please refer to the "Scope of Examination Section" for details.

DESCRIPTION OF INSTITUTION'S OPERATIONS IN AUSTIN-ROUND ROCK, TX MSA 12420

The Northern Trust Company assessment area expanded from Travis County, which had been the delineated assessment area in the previous performance evaluation dated July 27, 2015, with the addition of Hays and Williamson Counties. Bastrop County and Caldwell County, which are located in the MSA, were not included in the assessment area. The current assessment area reflects an additional 114 census tracts, or 52.3 percent growth in the number of geographies.

Within the assessment area, TNTC has one branch located in an upper-income census tract. The FDIC Deposit Market Share Report as of June 30, 2017 ranks the bank 50th of 63 area institutions with 0.05 percent market share. The top three institutions in the market, Wells Fargo NA, Bank of America NA, and JP Morgan Chase Bank NA, account for 57.6 percent of the market. The high level of deposits in the three institutions indicates a heavily concentrated market with a limited presence by TNTC.

The assessment area consists of a total of 332 census tracts; 37 (11.1 percent) are low-, 67 (20.2 percent) are moderate-, 121 (36.4 percent) are middle-, 101 (30.4 percent) are upper-income, and six (1.8 percent) are of unknown income.

Community development activity that took place in calendar years up to and including 2016 are evaluated based on ACS income level definitions from the five-year survey data set 2006-2010. Community development activity performed in 2017 and beyond are evaluated based on ACS income level definitions from the five-year survey data set 2011-2015.

As the following table indicates, the assessment area experienced a net increase of one low-income census tract and a net decrease of nine moderate-income census tracts.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	36	37	1
Moderate	76	67	(9)
Middle	115	121	6
Upper	102	101	(1)
Unknown	3	6	3
Total	332	332	0
Source: U. S. Census Bureau: Decennial Census: American Community Survey Data: 2006-2010 U.S. Census Bureau: Decennial Census: America Community Survey Data: 2011-2015			

The following presentation of key demographics used to help inform the evaluation of bank activity in its assessment area is based on a comparison of two sets of ACS data, 2006-2010 and 2011-2015.

Assessment Area: 2017 Austin-Round Rock, TX MSA 12420								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	37	11.1	33,566	8.4	10,948	32.6	88,879	22.1
Moderate-income	67	20.2	70,973	17.7	11,936	16.8	66,079	16.5
Middle-income	121	36.4	153,648	38.3	10,164	6.6	79,163	19.7
Upper-income	101	30.4	141,722	35.3	3,775	2.7	167,144	41.7
Unknown-income	6	1.8	1,356	0.3	723	53.3	0	0.0
Total Assessment Area	332	100.0	401,265	100.0	37,546	9.4	401,265	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	75,528	15,212	4.1	20.1	53,398	70.7	6,918	9.2
Moderate-income	131,578	58,510	15.8	44.5	62,984	47.9	10,084	7.7
Middle-income	264,991	146,646	39.5	55.3	99,203	37.4	19,142	7.2
Upper-income	225,053	150,325	40.5	66.8	59,344	26.4	15,384	6.8
Unknown-income	6,623	712	0.2	10.8	5,039	76.1	872	13.2
Total Assessment Area	703,773	371,405	100.0	52.8	279,968	39.8	52,400	7.4
	Total Businesses Tract		Businesses by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	5,790	6.8	5,010	6.4	733	10.7	47	4.6
Moderate-income	10,924	12.7	9,862	12.7	978	14.3	84	8.2
Middle-income	28,414	33.1	25,865	33.2	2,265	33.2	284	27.7
Upper-income	39,463	46.0	36,200	46.5	2,720	39.8	543	53.0
Unknown-income	1,134	1.3	935	1.2	132	1.9	67	6.5
Total Assessment Area	85,725	100.0	77,872	100.0	6,828	100.0	1,025	100.0
	Percentage of Total Businesses:			90.8		8.0		1.2
	Total Farms by Tract		Farms by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	36	3.7	35	3.6	1	9.1	0	0.0
Moderate-income	126	13.0	121	12.6	5	45.5	0	0.0
Middle-income	363	37.4	362	37.7	1	9.1	0	0.0
Upper-income	444	45.7	441	45.9	3	27.3	0	0.0
Unknown-income	2	0.2	1	0.1	1	9.1	0	0.0
Total Assessment Area	971	100.0	960	100.0	11	100.0	0	0.0
	Percentage of Total Farms:			98.9		1.1		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

Population Characteristics

As presented in the table below, from 2010 to 2015, the population in each of the counties within the assessment area experienced significant growth, and grew at a much greater rate than the state of Texas. Overall, the assessment area represents 93.8 percent of the population of the Austin-Round Rock, TX MSA 12420 and 6.7 percent of the population of the state of Texas.

Population Change 2010 – 2015			
Area	2010 Population	2011-2015 Population	Percentage Change
Hays County, TX	157,107	177,562	13.0
Travis County, TX	1,024,266	1,121,645	9.5
Williamson County, TX	422,679	473,592	12.0
Austin-Round Rock, TX MSA 12420	1,716,289	1,889,094	10.1
State of Texas	25,145,561	26,538,614	5.5
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

The following table lists the five largest municipalities within the assessment area. Between mid-2016 and mid-2017, the city of Austin had the 12th largest numeric increase in population among U.S. cities, adding 12,515 residents.

Five Largest Municipalities within the Assessment Area		
Municipality	Population	County
Austin	950,715	Travis
Round Rock	123,678	Travis
Cedar Park	75,204	Travis
Pflugerville	63,359	Travis
San Marcos	63,071	Hays
Source: U.S. Census Bureau 2017 Population Estimate		

Income Characteristics

As displayed in the table below, the median family income in the assessment area varied, with the highest in Williamson County at \$84,838 and the lowest in Hays County at \$76,838. However, income in the assessment area increased overall for the period of 2010 to 2015. Travis County and Williamson County increased by 11.5 percent and 8.7 percent, respectively, outpacing the Consumer Price Index (CPI) inflation rate of 7.4 percent. In Hays County income failed to keep pace with inflation with a percentage change of 3.2 percent.

Median Family Income Change 2010 – 2015			
Area	2006 – 2010 Median Family Income	2011-2015 Median Family Income	Percentage Change
Hays County, TX	74,471	76,838	3.2
Travis County, TX	69,646	77,688	11.5
Williamson County, TX	78,040	84,838	8.7
Austin-Round Rock, TX MSA 12420	71,602	78,997	10.3
State of Texas	58,142	62,717	7.9
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

Housing Characteristics

Median housing values in the assessment area and state of Texas experienced increases from 2010 to 2015. Median gross rents similarly experienced increases. In terms of actual dollars, median housing values vary somewhat across the assessment area, with the highest in Travis County at \$237,100 and the lowest in Hays County at \$180,900. Nevertheless, median housing values in the assessment area are significantly higher than the state of Texas overall, with Travis County at 74.3 percent above that of the state. Median gross rents are similar, with the highest in Williamson County at \$1,072 and the lowest in Hays County at \$973. A community representative indicated that a continuing influx of new residents along with stringent building codes lead to longer development times causing a lag in the supply of housing.

Housing Costs Change 2010 – 2015				
Area	2006 – 2010 Median Housing	2011-2015 Median Housing	2006 – 2010 Median Gross Rent	2011 – 2015 Median Gross Rent
Hays County, TX	173,300	180,900	807	973
Travis County, TX	200,300	237,100	891	1,054
Williamson County, TX	172,200	196,500	977	1,072
Austin-Round Rock, TX MSA 12420	180,141	208,741	896	1,043
State of Texas	123,500	136,000	786	882
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

The low affordability ratio in both Hays and Travis Counties indicates that housing expenses are relatively high compared to the rest of the state. The community representative noted that people moving in from other cities are coming from more expensive areas, making the housing appear to be more reasonable; therefore, there is more willingness to purchase homes or pay higher rents, thus pricing out lifelong residents.

Housing Narrative Information				
Area	2006 – 2010 Affordability Ratio	2011-2015 Affordability Ratio	2006 – 2010 Percentage of Occupied Housing that is Owner Occupied	2011 – 2015 Percentage of Occupied Housing that is Owner Occupied
Hays County, TX	0.33	0.32	67.8	63.9
Travis County, TX	0.27	0.26	52.6	51.7
Williamson County, TX	0.40	0.38	70.3	68.5
Austin-Round Rock, TX MSA 12420	0.32	0.30	59.3	58.0
State of Texas	0.40	0.39	64.9	62.2
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

One affordable housing community development representative and one economic community development representative were contacted to increase understanding of credit needs and market conditions within the assessment area. Both noted that affordable housing was becoming an increasing need, even affecting middle-income households who were having difficulty in finding homes in their price range. The affordable housing that is available tends to be a distance from public transportation and is often in food deserts. Workforce development is also becoming a growing concern as job opportunities in the health and tourism field are going unmet due to the time it takes to train individuals for the positions.

Employment Conditions

Unemployment rates across the assessment area were below the state of Texas. From 2013 through 2016, unemployment rates declined within each of the counties and the state itself. During the same period, Gross Domestic Product (GDP) in the Austin-Round Rock, TX MSA 12420 grew from \$111.7 billion to \$135.9 billion or 21.7 percent compared to 12.6 percent for aggregate MSAs. The community representative indicated that the technology sector is a fast growing industry in the assessment area. Per the Bureau of Labor Statistics, the major areas of occupations in excess of 60,000 employees within the MSA are Office and Administrative Support, Sales and Related, Food Preparation and Service Related, Business and Financial, Education and Training, and Computer and Mathematical. The top five employers in the MSA are Dell Inc. (technology), University of Texas at Austin (education), Texas Department of Transportation (government), Apple Inc.- Customer Service Center (technology), and Honorable Scott Jenkins (government).

Unemployment Rates 2013 – 2016				
Area	2013	2014	2015	2016
Hays County, TX	5.2	4.2	3.4	3.3
Travis County, TX	5.1	4.0	3.3	3.1
Williamson County, TX	5.3	4.3	3.5	3.3
Austin-Round Rock, TX MSA 12420	5.2	4.2	3.4	3.2
State of Texas	6.3	5.1	4.5	4.6
Source: U.S. Department of Labor				

CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN AUSTIN-ROUND ROCK, TX MSA 12420

Investment, Loan, and Service Activity

The Northern Trust Company has an adequate level of community development loans, qualified investments or community development services. The bank occasionally uses innovative or complex qualified investments in the assessment area and exhibits adequate responsiveness to community development needs in the assessment area. Demographic and community contact information reveals a substantial need for investments targeting affordable housing and workforce development. TNTC's investments are responsive to this deficiency as it made investments in a Low Income Housing Tax Credit (LIHTC) of \$3.0 million and purchased approximately \$2.9 million dollars in mortgage back securities consisting of loan originations to low- and moderate-income borrowers. In addition, \$2.0 million in investments was made to a CDFI that provides comprehensive technical services to small business owners in low- and moderate income communities.

In the assessment area from July 27, 2015 through October 15, 2018, TNTC had community development investment activity, including prior period maintained investments, of approximately \$10.3 million, representing a 119.1 percent increase in comparison to the previous 37 month evaluation period of \$4.7 million. The variation of approximately three months in terms of the current performance evaluation period as compared to the previous evaluation does not materially impact the strength of the institution's performance.

Community Development Lending

During the review period, the institution did not originate any community development loans.

Community Development Investments

During the review period, the institution disbursed funds related to new investments of

approximately \$5.5 million. It maintained investments from the prior review periods of approximately \$2.4 million. Investments included affordable housing initiatives which was a need indicated by a community representative. Innovativeness and complexity were demonstrated through investments in a low income housing tax credit.

Qualified Community Development Investments by Type								
	Prior Period Investments \$ (000s)	Current Period Investments \$ (000s)					Total Investments \$ (000s)	Unfunded Commitments \$ (000s)
		CS	AH	ED	RS	Total		
TOTAL	2,386	0	3,480	2,000	0	5,480	7,866	2,401

TNTC also made \$50,000 in grants and donations to various organizations involved in community services.

Community Development Services

The bank did not provide any community development services during the evaluation period.

DALLAS-FORT WORTH-ARLINGTON, TX MSA 19100 – FULL REVIEW

SCOPE OF THE EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a full scope review. Please refer to the “Scope of Examination” section for details.

DESCRIPTION OF INSTITUTION'S OPERATIONS IN DALLAS-FORT WORTH-ARLINGTON MSA 19100

The Northern Trust Company delineates portions of the MSA as indicated in the following table:

Dallas-Fort Worth-Arlington MSA 19100	<u>Dallas-Plano-Irving, TX MD 19124</u> Collin County, Dallas County, Ellis County, Rockwall County	Excluded Counties: Denton County, Hunt County, Kaufmann County
	<u>Fort Worth-Arlington, TX MD 23104</u> Johnson County, Tarrant County	Excluded Counties: Hood County, Parker County, Somervell County, Wise County

The current delineation reflects the addition of Collin, Ellis, Rockwell, and Johnson Counties from the previous performance evaluation of July 27, 2015. The inclusion of the four aforementioned counties to the assessment area reflects an additional 222 census tracts, or 25.1 percent growth in the number of its geographies. TNTC maintains operations in the Dallas-Fort Worth-Arlington, TX MSA 1910 through three branches, all located in upper income census tracts. In addition, the bank has one full-service ATM and one cash-only ATM located in upper-income census tracts. In June of 2018, the institution closed a branch with a full-service ATM located in a middle-income census tract.

As of June 30, 2017, the bank ranked 26th out of 145 FDIC-insured depository financial institutions that have a presence in the assessment area with a market share of 0.40 percent. The major two financial institutions are Bank of America NA and JP Morgan Chase NA, with 30.4 percent and 22.3 percent of area deposits, respectively.

The assessment area consists of a total of 1,108 census tracts; 163 (14.7 percent) are low-, 298 (26.9 percent) are moderate-, 296 (26.7 percent) are middle-, 344 (31.0 percent) are upper-income, and seven (0.6 percent) are of unknown income.

As the following table indicates the assessment area experienced a net increase of 21 low-income census tracts and a net decrease of one moderate-income census tracts.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	142	163	21
Moderate	299	298	(1)
Middle	319	296	(23)
Upper	344	344	0
Unknown	4	7	3
Total	1,108	1,108	0
Source: U. S. Census Bureau: Decennial Census: American Community Survey Data: 2006-2010 U.S. Census Bureau: Decennial Census: America Community Survey Data: 2011-2015			

Additional demographic information as of 2017 for the assessment area is presented in the following table:

Assessment Area: 2017 Dallas-Fort Worth-Arlington, TX MSA 19100								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	163	14.7	148,675	10.8	51,002	34.3	337,954	24.6
Moderate-income	298	26.9	336,970	24.5	64,207	19.1	231,834	16.9
Middle-income	296	26.7	398,897	29.0	34,031	8.5	249,240	18.1
Upper-income	344	31.0	488,881	35.6	17,934	3.7	555,883	40.4
Unknown-income	7	0.6	1,488	0.1	273	18.3	0	0.0
Total Assessment Area	1,108	100.0	1,374,911	100.0	167,447	12.2	1,374,911	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	276,881	71,756	6.2	25.9	167,866	60.6	37,259	13.5
Moderate-income	546,205	244,734	21.0	44.8	253,438	46.4	48,033	8.8
Middle-income	621,207	353,685	30.3	56.9	226,130	36.4	41,392	6.7
Upper-income	713,754	494,105	42.4	69.2	179,543	25.2	40,106	5.6
Unknown-income	4,922	1,248	0.1	25.4	3,133	63.7	541	11.0
Total Assessment Area	2,162,969	1,165,528	100.0	53.9	830,110	38.4	167,331	7.7
	Total Businesses Tract		Businesses by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	21,060	8.1	18,124	7.7	2,830	11.9	106	4.6
Moderate-income	54,059	20.7	47,445	20.2	6,292	26.5	322	13.9
Middle-income	70,480	27.0	63,679	27.1	6,253	26.4	548	23.6
Upper-income	113,826	43.6	104,699	44.6	7,793	32.9	1,334	57.4
Unknown-income	1,542	0.6	992	0.4	537	2.3	13	0.6
Total Assessment Area	260,967	100.0	234,939	100.0	23,705	100.0	2,323	100.0
	Percentage of Total Businesses:			90.0		9.1		0.9
	Total Farms by Tract		Farms by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	77	3.8	73	3.7	4	8.5	0	0.0
Moderate-income	249	12.4	242	12.3	7	14.9	0	0.0
Middle-income	648	32.3	630	32.1	18	38.3	0	0.0
Upper-income	1,027	51.1	1,010	51.5	17	36.2	0	0.0
Unknown-income	7	0.3	6	0.3	1	2.1	0	0.0
Total Assessment Area	2,008	100.0	1,961	100.0	47	100.0	0	0.0
	Percentage of Total Farms:			97.7		2.3		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

Assessment Area: 2017 Dallas-Plano-Irving, TX MD 19124								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	112	15.5	105,851	12.2	35,390	33.4	221,884	25.6
Moderate-income	204	28.2	229,036	26.4	43,445	19.0	147,322	17.0
Middle-income	160	22.1	211,742	24.4	18,361	8.7	150,231	17.3
Upper-income	241	33.3	319,631	36.8	12,267	3.8	348,311	40.1
Unknown-income	6	0.8	1,488	0.2	273	18.3	0	0.0
Total Assessment Area	723	100.0	867,748	100.0	109,736	12.6	867,748	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	197,909	47,610	6.7	24.1	124,581	62.9	25,718	13.0
Moderate-income	362,666	165,329	23.1	45.6	168,156	46.4	29,181	8.0
Middle-income	330,061	180,374	25.2	54.6	128,361	38.9	21,326	6.5
Upper-income	475,987	320,997	44.9	67.4	128,427	27.0	26,563	5.6
Unknown-income	4,910	1,248	0.2	25.4	3,133	63.8	529	10.8
Total Assessment Area	1,371,533	715,558	100.0	52.2	552,658	40.3	103,317	7.5
	Total Businesses Tract		Businesses by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	14,826	8.4	12,684	8.1	2,073	12.3	69	4.3
Moderate-income	36,849	21.0	32,279	20.6	4,340	25.7	230	14.4
Middle-income	43,081	24.5	38,468	24.5	4,264	25.2	349	21.9
Upper-income	79,274	45.2	72,598	46.2	5,741	33.9	935	58.6
Unknown-income	1,466	0.8	954	0.6	500	3.0	12	0.8
Total Assessment Area	175,496	100.0	156,983	100.0	16,918	100.0	1,595	100.0
	Percentage of Total Businesses:			89.5		9.6		0.9
	Total Farms by Tract		Farms by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	55	4.2	52	4.0	3	11.1	0	0.0
Moderate-income	169	12.8	164	12.6	5	18.5	0	0.0
Middle-income	396	29.9	387	29.8	9	33.3	0	0.0
Upper-income	697	52.6	688	53.0	9	33.3	0	0.0
Unknown-income	7	0.5	6	0.5	1	3.7	0	0.0
Total Assessment Area	1,324	100.0	1,297	100.0	27	100.0	0	0.0
	Percentage of Total Farms:			98.0		2.0		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

Assessment Area: 2017 Fort Worth-Arlington, TX MD 23104								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	51	13.2	42,824	8.4	15,612	36.5	116,070	22.9
Moderate-income	94	24.4	107,934	21.3	20,762	19.2	84,512	16.7
Middle-income	136	35.3	187,155	36.9	15,670	8.4	99,009	19.5
Upper-income	103	26.8	169,250	33.4	5,667	3.3	207,572	40.9
Unknown-income	1	0.3	0	0.0	0	0.0	0	0.0
Total Assessment Area	385	100.0	507,163	100.0	57,711	11.4	507,163	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	78,972	24,146	5.4	30.6	43,285	54.8	11,541	14.6
Moderate-income	183,539	79,405	17.6	43.3	85,282	46.5	18,852	10.3
Middle-income	291,146	173,311	38.5	59.5	97,769	33.6	20,066	6.9
Upper-income	237,767	173,108	38.5	72.8	51,116	21.5	13,543	5.7
Unknown-income	12	0	0.0	0.0	0	0.0	12	100.0
Total Assessment Area	791,436	449,970	100.0	56.9	277,452	35.1	64,014	8.1
	Total Businesses Tract		Businesses by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	6,234	7.3	5,440	7.0	757	11.2	37	5.1
Moderate-income	17,210	20.1	15,166	19.5	1,952	28.8	92	12.6
Middle-income	27,399	32.1	25,211	32.3	1,989	29.3	199	27.3
Upper-income	34,552	40.4	32,101	41.2	2,052	30.2	399	54.8
Unknown-income	76	0.1	38	0.0	37	0.5	1	0.1
Total Assessment Area	85,471	100.0	77,956	100.0	6,787	100.0	728	100.0
	Percentage of Total Businesses:			91.2		7.9		0.9
	Total Farms by Tract		Farms by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	22	3.2	21	3.2	1	5.0	0	0.0
Moderate-income	80	11.7	78	11.7	2	10.0	0	0.0
Middle-income	252	36.8	243	36.6	9	45.0	0	0.0
Upper-income	330	48.2	322	48.5	8	40.0	0	0.0
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	684	100.0	664	100.0	20	100.0	0	0.0
	Percentage of Total Farms:			97.1		2.9		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

Population Characteristics

As presented in the table below, from 2010 to 2015, the overall population in the assessment area increased by a range of 3.0 percent in Johnson County to 10.2 percent in Collin County. The assessment area composes 82.9 percent of the Dallas-Fort Worth-Arlington, TX MSA 19100 and 21.3 percent of the state of Texas.

Population Change 2010 – 2015			
Area	2010 Population	2011-2015 Population	Percentage Change
Collin County, TX	782,341	862,215	10.2
Dallas County, TX	2,368,139	2,485,003	4.9
Ellis County, TX	149,610	157,058	5.0
Johnson County, TX	150,934	155,450	3.0
Rockwall County, TX	78,337	85,536	9.2
Tarrant County, TX	1,809,034	1,914,526	5.8
Dallas-Plano-Irving TX MD 19124	4,230,520	4,519,004	6.8
Fort Worth Arlington, TX MD 23104	2,195,694	2,314,416	5.4
State of Texas	25,145,561	26,538,614	5.5
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

The following table lists the five largest municipalities within the assessment area. Between mid-2016 and mid-2017, Dallas ranked third in the United States among all municipalities by numeric increase as it added 18,935 residents. Fort Worth ranked fourth during the same period with the addition of 18,664 residents.

Five Largest Municipalities within the Assessment Area		
Municipality	Population	County
Dallas	1,341,075	Dallas
Fort Worth	874,168	Tarrant
Arlington	396,394	Tarrant
Plano	286,143	Collin-Denton
Irving	240,373	Dallas-Collin-Rockwell
Source: U.S. Census Bureau 2017 Population Estimates		

Income Characteristics

As displayed in the table below, median family income in the assessment area varied, with the highest in Collin County at \$100,839 and the lowest in Dallas County at \$55,897. However, income in the assessment area increased overall for the period of 2010 to 2015, with Rockwall County increasing by 14.9 percent, far outpacing the Consumer Price Index (CPI) inflation rate of 7.4 percent.

In all other instances, income failed to keep pace with inflation. Although the rate of increase of income, except Rockwall County, was below that of the state (7.9 percent), median family income in five of the six counties exceeded the state of Texas with Collin County at 161 percent of the state's median.

Median Family Income Change 2010 – 2015			
Area	2006 – 2010 Median Family Income	2011-2015 Median Family Income	Percentage Change
Collin County, TX	94,785	100,839	6.4
Dallas County, TX	53,849	55,897	3.8
Ellis County, TX	69,000	71,647	3.8
Johnson County, TX	61,462	65,585	6.7
Rockwall County, TX	83,639	96,065	14.9
Tarrant County, TX	65,351	69,896	7.0
Dallas-Plano-Irving, TX MD 19124	67,175	71,149	5.9
Fort Worth-Arlington, TX MD 23104	64,976	69,817	7.5
State of Texas	58,142	62,717	7.9
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

Housing Characteristics

Median housing values in the assessment area and the state of Texas experienced increases from 2010 to 2015. Median gross rents similarly experienced increases for the same period of time. A community representative indicated that the trend has continued upward due to increased housing demand as the population increases.

In terms of actual dollars, median housing values vary across the assessment area, with the highest in Collin County at \$223,400 and the lowest in Johnson County at \$119,200. Median gross rents similarly vary with the highest in Rockwall County at \$1,231 and the lowest in Johnson County at \$883.

Housing Costs Change 2010 – 2015				
Area	2006 – 2010 Median Housing	2011-2015 Median Housing	2006 – 2010 Median Gross Rent	2011 – 2015 Median Gross Rent
Collin County, TX	199,000	223,400	968	1,119
Dallas County, TX	129,700	132,700	831	907
Ellis County, TX	136,100	145,400	855	907
Johnson County, TX	111,800	119,200	830	883
Rockwall County, TX	189,000	193,300	1,134	1,231

Tarrant County, TX	134,900	141,000	833	913
Dallas-Plano-Irving, TX MD 19124	155,697	165,937	857	950
Fort Worth-Arlington, TX MD 23104	133,767	140,494	831	910
State of Texas	123,500	136,000	786	882
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

From 2010 to 2015, counties in the assessment area did not display any significant changes in affordability. Johnson County appeared to be the most affordable while Collin and Dallas County experienced higher housing expense.

Housing Narrative Information				
Area	2006 – 2010 Affordability Ratio	2011-2015 Affordability Ratio	2006 – 2010 Percentage of Occupied Housing that is Owner Occupied	2011 – 2015 Percentage of Occupied Housing that is Owner Occupied
Collin County, TX	0.40	0.38	70.8	66.5
Dallas County, TX	0.37	0.38	54.7	51.2
Ellis County, TX	0.45	0.43	76.3	72.0
Johnson County, TX	0.49	0.49	76.6	73.5
Rockwall County, TX	0.41	0.45	84.3	80.4
Tarrant County, TX	0.41	0.42	63.4	60.9
Dallas-Plano-Irving, TX MD 19124	0.37	0.36	61.5	58.4
Fort Worth-Arlington, TX MD 23104	0.41	0.42	66.0	63.5
State of Texas	0.40	0.39	64.9	62.2
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

Employment Conditions

From 2013 through 2016, unemployment rates declined within each of the counties and the state itself. During the same period, Gross Domestic Product (GDP) in the Dallas-Fort Worth-Arlington, TX, MSA 19100 grew from \$448.2 billion to \$503.7 billion, or 12.4 percent, which was slightly below the 12.6 percent for aggregate MSAs. The community representative indicated that there has been an influx of new major corporate businesses into the area with over 94,000 new jobs created in Dallas since 2017. Per the Bureau of Labor Statistics, the major areas of occupations in excess of 280,000 employees within the MSA are Office and Administrative Support, Sales and Related, Food Preparation and Service Related, and Transportation and Material Moving. The top five employers in the MSA are Dallas-Fort Worth International Airport (transportation), Lockheed Martin (defense contractors), Parkland Health and Hospital System (medical), DXC Technology

Co. (technology information), and Texas Instruments (semiconductors).

Unemployment Rates 2013 - 2016				
Area	2013	2014	2015	2016
Collin County, TX	5.7	4.5	3.6	3.5
Dallas County, TX	6.7	5.4	4.3	4.0
Ellis County, TX	6.3	4.9	3.9	3.8
Johnson County, TX	6.0	5.0	4.4	4.3
Rockwall County, TX	5.8	4.5	3.8	3.5
Tarrant County, TX	6.1	5.0	4.2	3.9
Dallas-Plano-Irving TX MD 19124	6.3	5.0	4.0	3.8
Fort Worth-Arlington TX MD 23104	6.1	5.0	4.2	4.0
State of Texas	6.3	5.1	4.5	4.6
<i>Source: U.S. Department of Labor</i>				

One economic community representative was contacted to increase understanding of credit needs and market conditions within the assessment area. They indicated that there is a need for a better transportation system to allow people access to job opportunities, as well more workforce training to address income inequality issues. Training is needed in both professional skills and financial literacy for young adults. The representative also cited the rising cost of housing driven by the increasing population in the assessment area.

CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN DALLAS-FORT WORTH-ARLINGTON, TX MSA 19100

Investment, Loan, and Service Activity

The Northern Trust Company has a high level of community development loans, qualified investments or community development services. The institution extensively uses innovative or complex qualified investments, and exhibits excellent responsiveness to community development needs in the assessment area. Demographic and community contact information reveals a substantial need for investments targeting affordable housing and workforce development. TNTC's investments are primarily responsive to this need as it made investments in a Low Income Housing Tax Credit (LIHTC) for \$2.0 million and also purchased bonds in two low- and moderate-income housing developments that combined provided 510 affordable housing units. In addition, the institution purchased over \$162.5 million dollars in mortgage back securities consisting of loan originations to low- and moderate-income borrowers. TNTC also placed four investments for \$1.45 million in an organization that provides employment opportunities and training to women who lived in extreme poverty.

In the assessment area from July 27, 2015 through October 15, 2018, TNTC had community development lending and investment activity, including prior period maintained investments, of approximately \$190.0 million, representing a 654.0 percent increase in comparison to the previous 37 month evaluation period of \$25.2 million. The variation of approximately three months in terms of the current performance evaluation period as compared to the previous evaluation does not materially impact the strength of the institution's performance.

Community Development Lending

During the review period, the institution renewed four community development loans for \$3.4 million. All four loans were for the provision of community services in the assessment area. Nine additional loans to small businesses were originated in the assessment area in the amount of \$3.8 million. By supporting these businesses in low- or moderate-income census tracts, the loan qualifies as economic development.

Community Development Investments

During the review period, the institution disbursed funds related to new investments of approximately \$173.5 million. It maintained investments from the prior review periods of approximately \$9.2 million. Investments included affordable housing initiatives, which was a need indicated by a community representative. Innovativeness and complexity were demonstrated through investments in a LIHTC, which provided a significant number of affordable unites. TNTC also displayed innovativeness in its investments in a nonprofit that provides employment for women living in extreme poverty.

Qualified Community Development Investments by Type								
	Prior Period Investments \$ (000s)	Current Period Investments \$ (000s)					Total Investments \$ (000s)	Unfunded Commitments \$ (000s)
		CS	AH	ED	RS	Total		
TOTAL	9,189	0	171,089	2,451	0	173,540	182,729	65

TNTC also made \$60,100 in grants and donations to various organizations involved in affordable housing and community services.

Community Development Services

During the review period staff performed 48 hours of service to two different organizations on behalf of the bank. The organizations receiving the services are active in the provision of community services tailored to meet the needs of low- and moderate-income individuals. Bank management and staff served on boards of directors, using their financial and management expertise to help guide the decisions of nonprofit community-based organizations located in the assessment area.

Qualified Community Development Services By Type													
Affordable Housing			Economic Development			Community Services			Revitalization/ Stabilization			Total	
#	Hours	%	#	Hours	%	#	Hours	%	#	Hours	%	#	Hours
1	23	47.9	0	0	0	1	25	52.1	0	0	0.0	2	48

HOUSTON-THE WOODLANDS-SUGAR LAND, TX MSA 26420 - FULL REVIEW

SCOPE OF EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a full-scope review. Please refer to the "Scope of Examination Section" for details

DESCRIPTION OF INSTITUTION'S OPERATIONS IN HOUSTON-THE WOODLANDS-SUGAR LAND, TX MSA 26420

The Northern Trust Company assessment area reflects an adjustment from the previous performance evaluation dated July 27, 2015. The prior evaluation consisted solely of Harris County. The current assessment area delineation has added Brazoria, Chambers, Fort Bend, Galveston, and San Jacinto Counties. Austin, Liberty, Montgomery, and Waller Counties, which are part of the MSA, are not included in the assessment area. The current assessment area reflects an additional 201 census tracts, or 25.6 percent growth in the number of geographies.

Within the assessment area, TNTC has two branches and two full-service ATMs located in upper-income census tracts. The FDIC Deposit Market Share Report as of June 30, 2017, ranks the bank 29th of 91 area institutions with 0.28 percent market share. JP Morgan Chase Bank NA, with 45.4 percent in deposit share, is the dominant institution within the assessment area, followed by Wells Fargo Bank NA, at 10.2 percent.

The MSA 41860 assessment area consists of a total of 987 census tracts; 156 (15.8 percent) are low-, 291 (29.5 percent) are moderate-, 240 (24.3 percent) are middle-, 289 (29.3 percent) are upper-income, and 11 (1.1 percent) are of unknown income.

Community development activity that took place in calendar years up to and including 2016 are evaluated based on ACS income level definitions from the five-year survey data set 2006-2010. Community development activity performed in 2017 and beyond are evaluated based on ACS income level definitions from the five-year survey data set 2011-2015.

As the following table indicates the assessment area experienced a net increase of 27 low-income census tracts and three moderate-income census tracts.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	129	156	27
Moderate	288	291	3
Middle	255	240	(15)
Upper	307	289	(18)

Unknown	8	11	3
Total	987	987	0
Source: U. S. Census Bureau: Decennial Census: American Community Survey Data: 2006-2010 U.S. Census Bureau: Decennial Census: America Community Survey Data: 2011-2015			

Additional demographic information as of 2017 for the assessment area is presented in the following table:

Assessment Area: 2017 Houston-Woodlands-Sugar Land, TX MSA 26420								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	156	15.8	157,382	11.5	56,413	35.8	339,099	24.8
Moderate-income	291	29.5	338,141	24.8	66,183	19.6	221,371	16.2
Middle-income	240	24.3	370,255	27.1	36,852	10.0	232,023	17.0
Upper-income	289	29.3	497,376	36.4	19,116	3.8	572,966	42.0
Unknown-income	11	1.1	2,305	0.2	999	43.3	0	0.0
Total Assessment Area	987	100.0	1,365,459	100.0	179,563	13.2	1,365,459	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	288,011	66,886	5.8	23.2	176,123	61.2	45,002	15.6
Moderate-income	553,462	247,280	21.4	44.7	243,017	43.9	63,165	11.4
Middle-income	559,140	329,347	28.6	58.9	183,870	32.9	45,923	8.2
Upper-income	746,764	509,072	44.1	68.2	183,956	24.6	53,736	7.2
Unknown-income	6,183	789	0.1	12.8	4,770	77.1	624	10.1
Total Assessment Area	2,153,560	1,153,374	100.0	53.6	791,736	36.8	208,450	9.7
	Total Businesses by Tract	Businesses by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
		#	%	#	%	#	%	#
Low-income	25,749	11.0	21,726	10.4	3,893	16.6	130	6.3
Moderate-income	46,806	20.0	41,098	19.7	5,438	23.2	270	13.0
Middle-income	53,337	22.8	48,082	23.0	4,848	20.7	407	19.7
Upper-income	107,812	46.0	97,323	46.6	9,230	39.3	1,259	60.8
Unknown-income	467	0.2	409	0.2	53	0.2	5	0.2
Total Assessment Area	234,171	100.0	208,638	100.0	23,462	100.0	2,071	100.0
	Percentage of Total Businesses:			89.1		10.0		0.9
	Total Farms by Tract	Farms by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
		#	%	#	%	#	%	#
Low-income	69	4.2	64	4.0	5	13.5	0	0.0
Moderate-income	202	12.4	192	12.0	10	27.0	0	0.0
Middle-income	510	31.3	501	31.4	9	24.3	0	0.0
Upper-income	848	52.0	835	52.4	13	35.1	0	0.0
Unknown-income	3	0.2	3	0.2	0	0.0	0	0.0
Total Assessment Area	1,632	100.0	1,595	100.0	37	100.0	0	0.0
	Percentage of Total Farms:			97.7		2.3		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

The following presentation of key demographics used to help inform the evaluation of bank activity in its

assessment area is based on a comparison of two sets of ACS data, 2006-2010 and 2011-2015.

Population Characteristics

As presented in the table below, from 2010 to 2015, the population in each of the counties in the assessment area increased between 12.5 percent and 5.8 percent, and at a greater rate than the state of Texas (5.5 percent). A community representative indicated that Fort Bend County's population increase correlates with economic upswings in the energy market. The assessment area consists of 89.7 percent of the population of the Houston-The Woodlands-Sugarland TX MSA 26420 and 21.4 percent of the state of Texas.

Population Change 2010 – 2015			
Area	2010 Population	2011-2015 Population	Percentage Change
Brazoria County, TX	313,166	331,741	5.9
Chambers County, TX	35,096	37,251	6.1
Fort Bend County, TX	585,375	658,331	12.5
Galveston County, TX	291,309	308,163	5.8
Harris County, TX	4,092,459	4,356,362	6.5
Houston-The Woodlands-Sugarland, TX MSA 26420	5,920,416	6,346,653	7.2
State of Texas	25,145,561	26,538,614	5.5
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

The following table lists the five largest cities within the assessment area. Conroe at 7.8 percent was the fastest growing city by percentage in the United States between mid-2015 and mid-2016.

Five Largest Municipalities within the Assessment Area		
Municipality	Population	County
Houston	2,312,717	Harris
The Woodland(CDP)*	93,847	Harris and Montgomery
Sugar Land	88,485	Fort Bend
Conroe	84,378	Montgomery
Baytown	76,804	Harris
Source: U.S. Census Bureau 2017 Population Estimate *Based on 2010 U.S. Census Data		

Income Characteristics

As displayed in the in the table below, median family income in the assessment area varied, with the highest in Fort Bend County at \$99,214 and the lowest in Harris County at \$62,210. Income in the assessment area increased overall for the period of 2010 to 2015, with all counties, except Harris County, outpacing the Consumer Price Index (CPI) inflation rate of 7.4 percent. Harris County, at

6.3 percent, had the lowest percentage change in the assessment area, while Chambers County had the highest at 12.7 percent.

Median Family Income Change 2010 – 2015			
Area	2006 – 2010 Median Family Income	2011-2015 Median Family Income	Percentage Change
Brazoria County, TX	76,018	81,727	7.5
Chambers County, TX	74,705	84,206	12.7
Fort Bend County, TX	88,454	99,214	12.2
Galveston County, TX	70,870	77,702	9.6
Harris County, TX	58,505	62,210	6.3
Houston-The Woodlands-Sugarland, TX MSA 26420	63,898	69,373	8.6
State of Texas	58,142	62,717	7.9
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

Housing Characteristics

Median housing values and median gross rent experienced increases across the assessment area from 2010 to 2015, with Ford Bend County having the largest increase at 16.7 percent. In terms of actual dollars, median housing values vary across the assessment area, with the highest in Fort Bend County at \$200,200 and the lowest in Harris County at \$137,800. Similarly, median gross rents vary, with the highest in Fort Bend County at \$1,211 and the lowest in Chambers County at \$871. A community representative indicated that one of the reasons Fort Bend is experiencing higher housing values is it has its own school district, which increases the demand from families.

Housing Costs Change 2010 – 2015				
Area	2006 – 2010 Median Housing	2011-2015 Median Housing	2006 – 2010 Median Gross Rent	2011 – 2015 Median Gross Rent
Brazoria County, TX	140,300	152,900	821	904
Chambers County, TX	136,600	151,200	715	871
Fort Bend County, TX	171,500	200,200	1,062	1,211
Galveston County, TX	141,400	155,000	839	912
Harris County, TX	131,700	137,800	820	906
Houston-The Woodlands-Sugarland, TX MSA 26420	138,343	149,324	830	923
State of Texas	123,500	136,000	786	882
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

The following table indicates that housing expenses are comparable, if not more affordable, in the assessment area than the state of Texas, with Chambers County being the most affordable. Subsequent to 2015, there were three major disaster declarations which have impacted housing, causing both an increase in unoccupied homes, but also creating an economic barrier to the purchase of new homes, where a community representative indicated that new construction typically begins at \$250,000.

Housing Narrative Information				
Area	2006 – 2010 Affordability Ratio	2011-2015 Affordability Ratio	2006 – 2010 Percentage of Occupied Housing that is Owner Occupied	2011 – 2015 Percentage of Occupied Housing that is Owner Occupied
Brazoria County, TX	0.47	0.46	75.8	71.8
Chambers County, TX	0.49	0.47	86.2	80.9
Fort Bend County, TX	0.47	0.45	80.8	78.7
Galveston County, TX	0.41	0.40	69.5	66.9
Harris County, TX	0.39	0.40	57.8	54.9
Houston-The Woodlands-Sugarland, TX MSA 26420	0.40	0.40	63.3	60.6
State of Texas	0.40	0.39	64.9	62.2
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

Employment Conditions

Unemployment rates fluctuated between 2013 and 2016 and generally stayed above the rates for the state of Texas. During the same period, Gross Domestic Product (GDP) in the Houston-The Woodlands-Sugar Land, TX MSA 26420 declined from \$488.4 billion to \$472.3 billion, or a negative 3.3 percent compared to a positive 12.6 percent for aggregate MSAs. One community representative indicated that the local economy did suffer a loss in energy related jobs. Per the Bureau of Labor Statistics, the major areas of occupations in excess of 200,000 employees within the MSA are Office and Administrative Support, Sales and Related, Food Preparation and Service Related, and Transportation and Material Moving. The top five employers in the MSA are University of Texas-MD Anderson Clinic (medical), Shell Deepwater Development (oil and gas), MD Anderson Cancer Center (medical), UTMB General Surgery (medical), and University of Houston (education).

Unemployment Rates 2013 – 2016				
Area	2013	2014	2015	2016
Brazoria County, TX	6.6	5.0	4.6	5.2
Chambers County, TX	7.0	5.7	5.3	6.1
Fort Bend County, TX	5.7	4.5	4.3	5.0
Galveston County, TX	6.8	5.5	5.0	5.3
Harris County, TX	6.2	4.9	4.6	5.3
Houston-The Woodlands-Sugarland TX MSA 26420	6.2	4.9	4.6	5.2
State of Texas	6.3	5.1	4.5	4.6
Source: U.S. Department of Labor				

One economic community development representative and one affordable housing representative were contacted to increase understanding of credit needs and market conditions within the assessment area. They indicated that the area has a high need for affordable housing as the cost of new construction homes continues to rise. Workforce development is another concern as job openings, especially in the energy sector, go unfilled. More working capital for small businesses is also needed especially for those that have been impacted by the recent natural disasters.

CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN HOUSTON-WOODLANDS-SUGAR LAND, TX, MSA 26420

Investment, Loan, and Service Activity

The Northern Trust Company has a high level of community development loans, qualified investments or community development services. The bank occasionally uses innovative or complex qualified investments in the assessment area, and exhibits excellent responsiveness to community development needs in the assessment area. Demographic and community contact information reveals a substantial need for investments targeting affordable housing. TNTC's investments are responsive to this need, as it made an investment in a Low Income Housing Tax Credit (LIHTC) for \$2.0 million and provided a line of credit for \$2.5 million to an organization whose primary purpose is the new construction of affordable housing. The institution also purchased over \$89.4 million dollars in mortgage back securities consisting of loan originations to low- and moderate-income borrowers. TNTC also made an investment in a CDFI that was working with small businesses that were impacted by Hurricane Harvey.

In the assessment area from July 27, 2015 through October 15, 2018, TNTC had community development lending and investment activity, including prior period maintained investments, of approximately \$132.6 million, representing a 365.3 percent increase in comparison to the previous 37 month evaluation period of \$28.5 million. The variation of approximately three months in terms of the current performance evaluation period as compared to the previous evaluation does not materially impact the strength of the institution's performance.

Community Development Lending

During the review period, the institution originated three community development loans for \$7.5 million. All three loans were for the provision of affordable housing in the assessment area. Two additional loans to small businesses were originated in the assessment area in the amount of \$818,000. By supporting these businesses in low- or moderate-income census tracts, the loans qualify as economic development.

Community Development Investments

During the review period, the institution disbursed funds related to new investments of approximately \$118.3 million. It maintained investments from the prior review periods of approximately \$5.9 million. Investments included affordable housing initiatives, which was a need indicated by a community representative. Innovativeness and complexity was demonstrated through investment in a low income housing tax credit which resulted in a significant number of rental units.

Qualified Community Development Investments by Type								
	Prior Period Investments \$ (000s)	Current Period Investments \$ (000s)					Total Investments \$ (000s)	Unfunded Commitments \$ (000s)
		CS	AH	ED	RS	Total		
TOTAL	5,933	0	117,517	750	0	118,267	124,200	65

TNTC also made \$90,339 in grants and donations to various organizations involved in affordable housing and community development services.

Community Development Services

During the review period staff performed 268 hours of service to three different organizations on behalf of the bank. Two of the organizations receiving the services are active in the provision of community services tailored to meet the needs of low- and moderate-income individuals, while the other is involved in affordable housing.

Qualified Community Development Services By Type													
Affordable Housing			Economic Development			Community Services			Revitalization/ Stabilization			Total	
#	Hours	%	#	Hours	%	#	Hours	%	#	Hours	%	#	Hours
1	10	3.7	0	0	0.0	2	258	96.3	0	0	0.0	3	268

STATE OF WASHINGTON

CRA RATING FOR WASHINGTON: Outstanding

Major factors supporting the bank's rating include the following:

- The institution has a high level of community development loans, community development services, or qualified investments, particularly investments that are not routinely provided by private investors;
- The institution extensively uses innovative or complex community development loans, qualified investments, or services; and
- The institution exhibits excellent responsiveness to community development needs in the assessment area.

SCOPE OF EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a full-scope review. Please refer to the "Scope of Examination Section" for details. Full review examination procedures were used to evaluate the bank's operations in the assessment area consisting of the Seattle-Tacoma-Bellevue, WA MSA 42660 in its entirety. Results from this assessment area were used to determine the rating for the state of Washington.

DESCRIPTION OF INSTITUTION'S OPERATIONS IN WASHINGTON

The Northern Trust Company delineates the Seattle-Bellevue-Everett, WA MSA 42660 in its entirety, which consists of the following MDs:

- Seattle-Bellevue-Everett, WA 42660 MD (King County, Snohomish County)
- Tacoma-Lakewood, WA 45104 MD (Pierce County)

The current assessment area reflects the addition of Pierce and Snohomish Counties since the previous performance evaluation. The addition of the two counties expanded the assessment area by 324 census tracts, or 81.6 percent. The bank operates one branch in an upper-income census tract. The June 30, 2017 FDIC market share report ranks the bank 40th out of 53 area institutions with 0.05 percent of the market. The top four financial institutions in deposit share with institutions that have a presence in the market are Bank of America NA, Wells Fargo NA, JP Morgan Chase NA, and U.S. Bank NA, with market shares of 27.1 percent, 13.4 percent, 12.6 percent, and 10.5 percent, respectively.

The Seattle-Bellevue-Everett, WA MSA 42660 consists of 721 census tracts; 40 (5.5 percent) are low-, 163 (22.6 percent) are moderate-, 309 (42.9 percent) are middle-, 203 (28.2 percent) are upper-income, and six (0.8 percent) are of unknown income.

As the following table indicates, the assessment area experienced a net increase of nine low-income census tracts and 10 moderate-income census tracts.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	31	40	9
Moderate	153	163	10
Middle	334	309	(25)
Upper	199	203	4
Unknown	4	6	2
Total	721	721	0
Source: U. S. Census Bureau: Decennial Census: American Community Survey Data: 2006-2010 U.S. Census Bureau: Decennial Census: American Community Survey Data: 2011-2015			

Additional demographic information as of 2017 for the assessment area is presented in the following tables:

Assessment Area: 2017 Seattle-Tacoma-Bellvue, WA MSA 42660								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	40	5.5	41,657	4.7	10,928	26.2	186,513	21.2
Moderate-income	163	22.6	185,728	21.2	23,306	12.5	154,425	17.6
Middle-income	309	42.9	387,406	44.1	22,482	5.8	182,642	20.8
Upper-income	203	28.2	262,669	29.9	8,233	3.1	354,194	40.4
Unknown-income	6	0.8	314	0.0	50	15.9	0	0.0
Total Assessment Area	721	100.0	877,774	100.0	64,999	7.4	877,774	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	83,989	22,094	2.6	26.3	55,212	65.7	6,683	8.0
Moderate-income	335,422	148,884	17.8	44.4	161,126	48.0	25,412	7.6
Middle-income	642,902	386,755	46.2	60.2	214,742	33.4	41,405	6.4
Upper-income	432,979	279,227	33.4	64.5	128,075	29.6	25,677	5.9
Unknown-income	2,060	88	0.0	4.3	1,800	87.4	172	8.3
Total Assessment Area	1,497,352	837,048	100.0	55.9	560,955	37.5	99,349	6.6
	Total Businesses by Tract		Businesses by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	8,466	5.5	7,137	5.1	1,263	9.5	66	7.4
Moderate-income	28,897	18.8	26,068	18.7	2,666	20.1	163	18.3
Middle-income	60,745	39.6	55,529	39.9	4,882	36.8	334	37.4
Upper-income	54,870	35.7	50,160	36.0	4,382	33.0	328	36.8
Unknown-income	520	0.3	445	0.3	74	0.6	1	0.1
Total Assessment Area	153,498	100.0	139,339	100.0	13,267	100.0	892	100.0
	Percentage of Total Businesses:			90.8		8.6		0.6
	Total Farms by Tract		Farms by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	25	1.8	24	1.9	1	1.3	0	0.0
Moderate-income	176	12.8	164	12.7	11	14.1	1	100.0
Middle-income	702	51.2	664	51.4	38	48.7	0	0.0
Upper-income	466	34.0	438	33.9	28	35.9	0	0.0
Unknown-income	2	0.1	2	0.2	0	0.0	0	0.0
Total Assessment Area	1,371	100.0	1,292	100.0	78	100.0	1	100.0
	Percentage of Total Farms:			94.2		5.7		0.1
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

Assessment Area: 2017 Seattle-Bellevue-Everett, WA MD 42644								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	31	5.6	34,305	5.1	8,470	24.7	145,540	21.5
Moderate-income	125	22.8	143,790	21.3	17,147	11.9	117,971	17.5
Middle-income	228	41.5	286,477	42.4	14,785	5.2	139,130	20.6
Upper-income	160	29.1	210,499	31.2	6,483	3.1	272,737	40.4
Unknown-income	5	0.9	307	0.0	50	16.3	0	0.0
Total Assessment Area	549	100.0	675,378	100.0	46,935	6.9	675,378	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	67,377	19,460	3.0	28.9	43,116	64.0	4,801	7.1
Moderate-income	261,687	118,166	18.1	45.2	125,857	48.1	17,664	6.8
Middle-income	480,868	291,863	44.8	60.7	160,007	33.3	28,998	6.0
Upper-income	354,052	222,319	34.1	62.8	111,769	31.6	19,964	5.6
Unknown-income	1,999	80	0.0	4.0	1,780	89.0	139	7.0
Total Assessment Area	1,165,983	651,888	100.0	55.9	442,529	38.0	71,566	6.1
	Total Businesses by Tract	Businesses by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
		#	%	#	%	#	%	#
Low-income	7,187	5.6	6,016	5.2	1,118	9.9	53	7.3
Moderate-income	23,743	18.6	21,437	18.5	2,175	19.3	131	17.9
Middle-income	48,366	37.9	44,183	38.2	3,923	34.7	260	35.6
Upper-income	47,957	37.5	43,666	37.7	4,005	35.5	286	39.1
Unknown-income	515	0.4	440	0.4	74	0.7	1	0.1
Total Assessment Area	127,768	100.0	115,742	100.0	11,295	100.0	731	100.0
	Percentage of Total Businesses:			90.6		8.8		0.6
	Total Farms by Tract	Farms by Tract & Revenue Size						
		Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported		
		#	%	#	%	#	%	#
Low-income	22	2.0	21	2.0	1	1.6	0	0.0
Moderate-income	138	12.5	128	12.3	9	14.1	1	100.0
Middle-income	563	51.0	532	51.3	31	48.4	0	0.0
Upper-income	378	34.3	355	34.2	23	35.9	0	0.0
Unknown-income	2	0.2	2	0.2	0	0.0	0	0.0
Total Assessment Area	1,103	100.0	1,038	100.0	64	100.0	1	100.0
	Percentage of Total Farms:			94.1		5.8		0.1
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

Assessment Area: 2017 Tacoma-Lakewood, WA MD 45104								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	9	5.2	7,352	3.6	2,458	33.4	40,973	20.2
Moderate-income	38	22.1	41,938	20.7	6,159	14.7	36,454	18.0
Middle-income	81	47.1	100,929	49.9	7,697	7.6	43,512	21.5
Upper-income	43	25.0	52,170	25.8	1,750	3.4	81,457	40.2
Unknown-income	1	0.6	7	0.0	0	0.0	0	0.0
Total Assessment Area	172	100.0	202,396	100.0	18,064	8.9	202,396	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	16,612	2,634	1.4	15.9	12,096	72.8	1,882	11.3
Moderate-income	73,735	30,718	16.6	41.7	35,269	47.8	7,748	10.5
Middle-income	162,034	94,892	51.2	58.6	54,735	33.8	12,407	7.7
Upper-income	78,927	56,908	30.7	72.1	16,306	20.7	5,713	7.2
Unknown-income	61	8	0.0	13.1	20	32.8	33	54.1
Total Assessment Area	331,369	185,160	100.0	55.9	118,426	35.7	27,783	8.4
	Total Businesses by Tract		Businesses by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	1,279	5.0	1,121	4.8	145	7.4	13	8.1
Moderate-income	5,154	20.0	4,631	19.6	491	24.9	32	19.9
Middle-income	12,379	48.1	11,346	48.1	959	48.6	74	46.0
Upper-income	6,913	26.9	6,494	27.5	377	19.1	42	26.1
Unknown-income	5	0.0	5	0.0	0	0.0	0	0.0
Total Assessment Area	25,730	100.0	23,597	100.0	1,972	100.0	161	100.0
	Percentage of Total Businesses:			91.7		7.7		0.6
	Total Farms by Tract		Farms by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	3	1.1	3	1.2	0	0.0	0	0.0
Moderate-income	38	14.2	36	14.2	2	14.3	0	0.0
Middle-income	139	51.9	132	52.0	7	50.0	0	0.0
Upper-income	88	32.8	83	32.7	5	35.7	0	0.0
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	268	100.0	254	100.0	14	100.0	0	0.0
Percentage of Total Farms:			94.8		5.2		0.0	
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

The following presentation of key demographics used to help inform the evaluation of bank activity in its

assessment area is based on a comparison of two sets of ACS data, 2006-2010 and 2011-2015.

Population Characteristics

As presented in the table below, the population in the assessment area increased from 2010 to 2015, with King County, which contains the city of Seattle, experiencing the largest growth among the three counties at 5.9 percent. The assessment area represents 51.7 percent of the entire population for the state of Washington.

Population Change 2010 – 2015			
Area	2010 Population	2011-2015 Population	Percentage Change
King County, WA	1,931,249	2,045,756	5.9
Pierce County, WA	795,225	821,952	3.4
Snohomish County, WA	713,335	746,653	4.7
Seattle-Bellevue-Everett, WA MD 42644	2,644,584	2,792,409	5.6
Tacoma-Lakewood, WA MD 45104	795,225	821,952	3.4
State of Washington	6,724,540	6,985,464	3.9
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

The following table lists the five largest municipalities within the assessment area. Seattle continues to grow at a rapid pace and added 17,490 residents between mid-2016 and mid-2017, which placed it sixth among all cities in numeric increase during that time period.

Five Largest Municipalities within the Assessment Area		
Municipality	Population	County
Seattle	724,745	King
Tacoma	213,418	Pierce
Bellevue	144,444	King
Kent	128,458	King
Everett	110,079	Snohomish
Source: U.S. Census Bureau: 2017 Population Estimates		

Income Characteristics

As displayed in the table below, median family income in the assessment area varied between \$96,853 in King County and \$71,304 in Pierce County. Income in the assessment area increased overall for the period of 2010 to 2015, with King County increasing by 11.3 percent and outpacing the Consumer Price Index (CPI) inflation rate of 7.4 percent. Income failed to keep pace with inflation in Pierce and Snohomish counties, with Pierce having the lowest percentage change at 4.2 percent. A community representative, whose organization is involved in economic development, cited the fact that Seattle has one of the highest minimum wage rates in the country.

Median Family Income Change 2010 – 2015			
Area	2006 – 2010 Median Family Income	2011-2015 Median Family Income	Percentage Change
King County, WA	87,010	96,853	11.3
Pierce County, WA	68,462	71,304	4.2
Snohomish County, WA	77,479	82,807	6.9
Seattle-Bellevue-Everett, WA MD 42644	83,852	92,317	10.1
Tacoma-L Lakewood, WA MD 45104	68,462	71,304	4.2
State of Washington	69,328	74,025	6.8
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

Housing Characteristics

Median housing values in the assessment area declined from 2010 to 2015. However, median gross rents increased during the same period of time. The community representative indicated that housing prices have been trending upward, but the rate of increase has recently slowed. They also indicated that many areas in Seattle are gentrifying, and current residents in those locations are relocating to more affordable areas.

In terms of actual dollars, median housing values vary across the assessment area, with the highest in King County at \$384,300 and the lowest in Pierce County at \$232,600. Median gross rents similarly vary somewhat, with the highest in King County at \$1,204 and the lowest in Pierce County at \$1,029.

Housing Costs Change 2010 – 2015				
Area	2006 – 2010 Median Housing	2011-2015 Median Housing	2006 – 2010 Median Gross Rent	2011 – 2015 Median Gross Rent
King County, WA	407,700	384,300	999	1,204
Pierce County, WA	269,300	232,600	902	1,029
Snohomish County, WA	338,600	293,000	994	1,153
Seattle-Bellevue-Everett, WA MD 42644	383,836	354,655	997	1,191
Tacoma-Lakewood, WA MD 45104	269,329	232,642	902	1,029
State of Washington	285,400	259,500	882	1,014
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

Pierce County, which composes the Tacoma-Lakewood MD, has a higher affordability ratio, indicating a more reasonable cost of housing than either in the Seattle-Bellevue-Everett MD or the state of Washington. The community representative noted that in Seattle homes cannot be built fast enough to accommodate the increase in population and there are not enough resources to develop affordable housing. Areas south of the city that have been more affordable are experiencing rising housing costs as well.

Housing Narrative Information				
Area	2006 – 2010 Affordability Ratio	2011-2015 Affordability Ratio	2006 – 2010 Percentage of Occupied Housing that is Owner Occupied	2011 – 2015 Percentage of Occupied Housing that is Owner Occupied
King County, WA	0.17	0.20	59.9	57.4
Pierce County, WA	0.21	0.26	63.3	61.0
Snohomish County, WA	0.20	0.24	68.1	66.0
Seattle-Bellevue-Everett, WA MD 42644	0.18	0.21	62.0	59.6
Tacoma-Lakewood, WA MD 45104	0.21	0.26	63.3	61.0
State of Washington	0.20	0.24	64.7	62.5
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

Employment Conditions

From 2013 through 2016, unemployment rates declined within each of the counties and the state itself. During the same period, Gross Domestic Product (GDP) in the Seattle-Tacoma-Bellevue, WA MSA 42660 grew from \$280.3 billion to \$334.4 billion, or 19.3 percent compared to 12.6 percent for the aggregate MSAs. The community representative indicated that many employees in the technology industry are being hired from other geographic areas, as there is a shortage of local residents who possess the required skills. Per the Bureau of Labor Statistics, the major areas of occupations in excess of 140,000 employees within the MSA are Office and Administrative Support, Sales and Related, Food Preparation and Service Related, Business and Financial, and Transportation and Material Moving. The top five employers in the MSA are Microsoft (computer and software), Boeing (aircraft manufacturer), the University of Washington (education), the University of Washington Medical Center (medical), and Virginia Mason Hospital (medical).

Unemployment Rates 2013 – 2016				
Area	2013	2014	2015	2016
King County, WA	5.2	4.6	4.3	3.9
Pierce County, WA	8.1	7.3	6.5	6.3
Snohomish County, WA	5.8	5.1	4.6	4.4
Seattle-Bellevue-Everett, WA MD 42644	5.4	4.7	4.3	4.0
Tacoma-Lakewood, WA MD 45104	8.1	7.3	6.5	6.3
State of Washington	7.0	6.2	5.6	5.4
<i>Source: U.S. Department of Labor</i>				

One economic development community representative was contacted to increase understanding of credit needs and market conditions within the assessment area. They indicated that one of the biggest challenges facing small businesses in Seattle was commercial affordability in terms of the cost to rent space, and the need for gap financing in facilitating certain business transactions. A lack of homes and residential units is also a major barrier to affordable housing.

CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN SEATTLE-TACOMA-BELLVUE, WA MSA 42660

Investment, Loan, and Service Activity

The Northern Trust Company has a high level of community development loans, qualified investments or community development services. The institution extensively uses innovative or complex qualified investments in the assessment area and exhibits excellent responsiveness to community development needs in the assessment area. Demographic and community representative information reveals a substantial need for investments for affordable housing and economic development purposes. TNTC's investments are primarily responsive to this deficiency as it made investments in multiple Low Income Housing Tax Credits (LIHTCs) of \$20 million and purchased approximately \$12.7 million dollars in mortgage back securities consisting of loan originations to low- and moderate-income borrowers. In addition, the institution made investments in multiple new market tax credits totaling \$14.7 million, contributing to the economic development of distressed areas in two municipalities within the assessment area.

In the assessment area, TNTC had community development investment activity, including prior period maintained investments and unfunded commitments, of approximately \$63.5 million representing a 116.7 percent increase in comparison to the previous 37 month evaluation period of \$29.3 million.

Community Development Lending

During the review period, the institution did not originate any community development loans in the assessment area.

Community Development Investments

During the review period, the institution disbursed funds related to new investments of approximately \$35.4 million. It maintained investments from the prior review periods of approximately \$14.0 million. Primarily, the investments were for affordable housing purposes which was a need indicated by a community representative. Innovativeness and complexity were demonstrated through investments in a CDFI, multiple new market tax credit initiatives and multiple LIHTCs.

Qualified Community Development Investments by Type								
	Prior Period Investments \$ (000s)	Current Period Investments \$ (000s)					Total Investments \$ (000s)	Unfunded Commitments \$ (000s)
		CS	AH	ED	RS	Total		
TOTAL	14,042	10,179	20,672	4,563	0	35,414	49,456	14,005

TNTC also made \$46,000 in grants and donations to various organizations involved in community services.

Community Development Services

During the review period, staff performed 100 hours of service to one organization on behalf of the bank. The organization receiving the services is active in the provision of community services tailored to meet the needs of low- and moderate-income individuals.

STATE OF WISCONSIN

CRA RATING FOR WISCONSIN: Satisfactory

Major factors supporting the bank's rating include the following:

- The institution has an adequate level of community development loans, community development services, or qualified investments, particularly investments that are not routinely provided by private investors;
- The institution occasionally uses innovative or qualified complex investments, community development loans, or community development services; and
- The institution exhibits adequate responsiveness to community development needs in the assessment area.

SCOPE OF EXAMINATION

The scope for this assessment area is consistent with the scope presented in the overall section of this performance evaluation and was a full-scope review. Please refer to the "Scope of Examination Section" for details. Full review examination procedures were used to evaluate the bank's operations in the assessment area consisting of the Milwaukee-Waukesha-West Allis, WI MSA 33340 in its entirety. Results from this assessment area were used to determine the rating for the state of Wisconsin.

DESCRIPTION OF INSTITUTION'S OPERATIONS IN WISCONSIN

The Northern Trust Company delineates the Milwaukee-Waukesha-West Allis, WI MSA 33340 in its entirety, which consists of Milwaukee County, Ozaukee County, Washington County, and Waukesha County.

The current assessment area is unchanged from the previous performance evaluation of July 27, 2015. The bank operates one branch and one ATM in a middle-income census tract. The June 30, 2017 FDIC market share report ranks the bank 36th out of 47 area institutions with 0.18 percent of the market. U.S Bank NA, with 43.1 percent has the largest market share of deposits within the assessment area.

The Milwaukee-Waukesha-West Allis, WI MSA 33340 consists of a total of 431 census tracts; 99 (23.0 percent) are low-, 68 (15.8 percent) are moderate-, 139 (32.3 percent) are middle-, 122 (28.3 percent) are upper-income, and three (0.7 percent) are of unknown income.

As the following table indicates the assessment area experienced a net increase of 13 low-income census tracts and a net decrease of nine moderate-income census tracts.

Census Tract Designation Changes American Community Survey Data (ACS)			
Tract Income Designation	2016 Designations (#)	2017 Designations (#)	Net Change (#)
Low	86	99	13
Moderate	77	68	(9)
Middle	151	139	(12)
Upper	114	122	8
Unknown	3	3	0
Total	431	431	0
Source: U. S. Census Bureau: Decennial Census: American Community Survey Data: 2006-2010 U.S. Census Bureau: Decennial Census: America Community Survey Data: 2011-2015			

Additional demographic information as of 2017 for the assessment area is presented in the following table:

Assessment Area: 2017 Milwaukee-Waukesha-West Allis, WI MSA 33340								
Income Categories	Tract Distribution		Families by Tract Income		Families < Poverty Level as % of Families by Tract		Families by Family Income	
	#	%	#	%	#	%	#	%
Low-income	99	23.0	55,507	14.3	21,425	38.6	91,092	23.5
Moderate-income	68	15.8	52,916	13.6	9,611	18.2	62,808	16.2
Middle-income	139	32.3	131,758	33.9	8,381	6.4	75,400	19.4
Upper-income	122	28.3	148,028	38.1	3,857	2.6	158,909	40.9
Unknown-income	3	0.7	0	0.0	0	0.0	0	0.0
Total Assessment Area	431	100.0	388,209	100.0	43,274	11.1	388,209	100.0
	Housing Units by Tract	Housing Types by Tract						
		Owner-Occupied			Rental		Vacant	
		#	%	%	#	%	#	%
Low-income	107,954	27,582	7.3	25.5	63,396	58.7	16,976	15.7
Moderate-income	101,593	44,855	11.9	44.2	49,497	48.7	7,241	7.1
Middle-income	237,589	136,495	36.2	57.5	89,277	37.6	11,817	5.0
Upper-income	224,332	167,637	44.5	74.7	45,407	20.2	11,288	5.0
Unknown-income	0	0	0.0	0.0	0	0.0	0	0.0
Total Assessment Area	671,468	376,569	100.0	56.1	247,577	36.9	47,322	7.0
	Total Businesses by Tract		Businesses by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	5,142	10.4	4,381	10.5	746	10.0	15	5.3
Moderate-income	5,767	11.6	4,987	11.9	771	10.4	9	3.2
Middle-income	17,816	36.0	14,990	35.9	2,715	36.6	111	39.2
Upper-income	20,768	41.9	17,433	41.7	3,187	42.9	148	52.3
Unknown-income	22	0.0	18	0.0	4	0.1	0	0.0
Total Assessment Area	49,515	100.0	41,809	100.0	7,423	100.0	283	100.0
	Percentage of Total Businesses:			84.4		15.0		0.6
	Total Farms by Tract		Farms by Tract & Revenue Size					
			Less Than or = \$1 Million		Over \$1 Million		Revenue Not Reported	
	#	%	#	%	#	%	#	%
Low-income	6	1.3	6	1.3	0	0.0	0	0.0
Moderate-income	13	2.7	12	2.6	1	7.1	0	0.0
Middle-income	217	45.9	212	46.2	5	35.7	0	0.0
Upper-income	237	50.1	229	49.9	8	57.1	0	0.0
Unknown-income	0	0.0	0	0.0	0	0.0	0	0.0
Total Assessment Area	473	100.0	459	100.0	14	100.0	0	0.0
	Percentage of Total Farms:			97.0		3.0		0.0
2017 FFIEC Census Data & 2017 Dun & Bradstreet information according to 2015 ACS								
Note: Percentages may not add to 100.0 percent due to rounding								

The following presentation of key demographics used to help inform the evaluation of bank activity in its assessment area is based on a comparison of two sets of ACS data, 2006-2010 and 2011-2015.

Population Characteristics

As presented in the table below, from 2010 to 2015, the overall population in the assessment area has exhibited nominal growth, consistent with the state of Wisconsin in general. The MSA represents 27.3 percent of the population of the state.

Population Change 2010 – 2015			
Area	2010 Population	2011-2015 Population	Percentage Change
Milwaukee County, WI	947,735	955,939	0.9
Ozaukee County, WI	86,395	87,273	1.0
Washington County, WI	131,887	132,921	0.8
Waukesha County, WI	389,891	393,873	1.0
Milwaukee-Waukesha-West Allis, WI 33340	1,555,908	1,570,006	0.9
State of Wisconsin	5,686,986	5,742,117	1.0
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

The following table provides a list of the five largest municipalities in the assessment area. Milwaukee's population has been virtually unchanged over the last two census periods. In the 2000 census, it was at 597,102 and 594,833 in the 2010 census.

Five Largest Municipalities within the MSA 33340		
Municipality	Population	County
Milwaukee	595,351	Milwaukee
Waukesha	72,489	Waukesha
West Allis	59,934	Milwaukee
Wauwatosa	48,277	Milwaukee
Brookfield	38,045	Waukesha
Source: U.S. Census Bureau 2017 Population Estimate		

Income Characteristics

As displayed in the table below, median family income in the assessment area varied, with the highest in Waukesha County at \$94,831 and the lowest in Milwaukee County at \$56,079. Income in the assessment area increased overall for the period of 2010 to 2015. However, the median family income by percentage change in the assessment area did not keep pace with the state of Wisconsin, and only Washington County exceeded the Consumer Price Index (CPI) inflation rate of 7.4 percent during the period of 2011-2015. This indicates that in all other instances, income failed to keep pace with inflation. A community representative, whose organization is active in

economic development, indicated that wage growth has continued at a suboptimal pace, especially in West Milwaukee and Metro Milwaukee.

Median Family Income Change 2010 – 2015			
Area	2006 – 2010 Median Family Income	2011-2015 Median Family Income	Percentage Change
Milwaukee County, WI	54,539	56,079	2.8
Ozaukee County, WI	90,133	93,461	3.7
Washington County, WI	77,154	83,226	7.9
Waukesha County, WI	89,799	94,831	5.6
Milwaukee-Waukesha-West Allis, WI 33340	68,787	71,764	4.3
State of Wisconsin	64,869	68,064	4.9
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data			

Housing Characteristics

Median housing values in the assessment area and the state experienced declines from 2010 to 2015. Median housing costs displayed a decrease of 5.4 percent in the MSA. Milwaukee County had the largest decline by percentage at 8.4 and Ozaukee the lowest at 3.9. However, median gross rents experienced increases for the same period of time. The community representative noted that housing and rental costs have remained reasonable.

In terms of actual dollars, median housing values vary across the assessment area, with the highest in Waukesha County at \$249,300 and the lowest in Milwaukee County at \$151,700. Median gross rents display similar trends.

Housing Costs Change 2010 – 2015				
Area	2006 – 2010 Median Housing	2011-2015 Median Housing	2006 – 2010 Median Gross Rent	2011 – 2015 Median Gross Rent
Milwaukee County, WI	165,700	151,700	752	806
Ozaukee County, WI	255,600	245,700	769	845
Washington County, WI	228,000	215,400	770	829
Waukesha County, WI	262,200	249,300	869	933
Milwaukee-Waukesha-West Allis, WI 33340	204,774	193,639	769	827
State of Wisconsin	169,000	165,800	713	776
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

A common method to compare relative affordability of housing across geographic areas is the affordability ratio, which is defined in Appendix C. A higher ratio supports more affordable housing opportunities. Milwaukee County has a lower affordability ratio than the other counties and the state of Wisconsin indicating that housing was comparatively more expensive. In the period between 2010 and 2015, housing became more affordable in each of the counties.

Housing Narrative Information				
Area	2006 – 2010 Affordability Ratio	2011-2015 Affordability Ratio	2006 – 2010 Percentage of Occupied Housing that is Owner Occupied	2011 – 2015 Percentage of Occupied Housing that is Owner Occupied
Milwaukee County, WI	0.26	0.29	53.4	49.9
Ozaukee County, WI	0.29	0.31	78.3	76.7
Washington County, WI	0.28	0.32	78.2	78.0
Waukesha County, WI	0.29	0.31	77.7	76.3
Milwaukee-Waukesha-West Allis, WI 33340	0.26	0.28	62.8	60.3
State of Wisconsin	0.31	0.32	69.4	67.3
Source: 2006 – 2010 U.S. Census Bureau: American Community Survey Data 2011 – 2015 U.S. Census Bureau: American Community Survey Data				

Employment Conditions

From 2013 through 2016, unemployment rates declined in each of the counties and the state itself. During the same period, Gross Domestic Product (GDP) in the Milwaukee-Waukesha-West Allis, WI 33340 grew from \$97.0 billion to \$102.8 billion, or 6.0 percent compared to 12.6 percent for aggregate MSAs. The community representative indicated that employment opportunities exist; however, employers are finding it difficult to hire qualified workers. Per the Bureau of Labor Statistics, the major areas of occupations in excess of 50,000 employees within the MSA are Office and Administrative Support, Production, Sales and Related, Food Preparation and Service Related, Health Care Practitioners, and Transportation and Material Moving. The top five employers in the MSA are Kohl's (retail), Riverwoods Urgent Care (medical), General Mitchell International Airport (transportation), Rockwell Automation (automation systems), and Froedtert Hospital (medical).

Unemployment Rates 2013 - 2016				
Area	2013	2014	2015	2016
Milwaukee County, WI	8.3	7.0	5.8	5.1
Ozaukee County, WI	5.5	4.3	3.7	3.5
Washington County, WI	6.1	4.6	3.8	3.5
Waukesha County, WI	5.9	4.5	3.8	3.6
Milwaukee-Waukesha-West Allis, WI 33340	7.3	6.0	4.9	4.5
State of Wisconsin	6.7	5.5	4.6	4.1
Source: U.S. Department of Labor				

One economic community representative was contacted to increase understanding of credit needs and market conditions within the assessment area. The representative indicated that manufacturers and large firms were expressing more optimism with respect to sales than non-manufacturers and smaller firms. Financial firms have also been responsive to the needs of the community.

CONCLUSIONS WITH RESPECT TO THE COMMUNITY DEVELOPMENT TEST IN MILWAUKEE-WAUKESHA-WEST ALLIS, WI MSA 33340

Investment, Loan, and Service Activity

The Northern Trust Company has an adequate level of community development loans, qualified investments or community development services, particularly investments that are not routinely provided by private investors. The bank occasionally uses innovative or complex qualified investments in the assessment area and exhibits adequate responsiveness to community development needs in the assessment area. Demographic information reveals a need for investments targeting affordable housing. TNTC's investments are primarily responsive to this deficiency as they purchased \$8.8 million in mortgage back securities composed of loans originated to low- and moderate-income borrowers. In addition, an investment was made to support a business initiative to encourage micro lending to women-owned small businesses.

During the evaluation period, TNTC had community development lending and investment activity including prior period maintained investments of approximately \$23.1 million, representing a 12.1 percent increase in comparison to the previous 37 month evaluation period of \$20.6 million. The variation of approximately three months in terms of the current performance evaluation period as compared to the previous does not materially impact the strength of the institution's performance.

Community Development Lending

During the review period, the institution originated one community development loan of \$3.8 million for the provision of community services by providing health care to low- and moderate-income individuals.

Community Development Investments

During the review period, the institution disbursed funds related to new investments of approximately \$9.8 million. It maintained investments from the prior review periods of approximately \$9.5 million including a Low Income Housing Tax Credit and purchased \$8.8 in mortgage back securities consisting of loan originations to low- and moderate-income borrowers. Innovativeness was demonstrated through investments in a micro loan program for woman owned businesses.

Qualified Community Development Investments by Type								
	Prior Period Investments \$ (000s)	Current Period Investments \$ (000s)					Total Investments \$ (000s)	Unfunded Commitments \$ (000s)
		CS	AH	ED	RS	Total		
TOTAL	9,498	0	8,757	1,039	0	9,797	19,295	0

TNTC also made \$147,500 in grants and donations to various organizations involved in economic development and community services.

Community Development Services

During the review period, staff performed 267 hours of service to two different organizations on behalf of the bank. The overwhelming majority of the hours were in the provision of community services tailored to meet the needs of low- and moderate- income individuals. Bank management and staff serve on boards of directors, using their financial and management expertise to help guide the decisions of nonprofit community-based organizations located in the assessment area.

Qualified Community Development Services By Type													
Affordable Housing			Economic Development			Community Services			Revitalization/ Stabilization			Total	
#	Hours	%	#	Hours	%	#	Hours	%	#	Hours	%	#	Hours
0	0	0.0	0	0	0.0	1	200	74.9	1	67	25.1	2	267

OTHER ACTIVITIES

TNTC originated \$2.8 million in small business loans in low-and moderate-income census tracts that serve community development needs on a nationwide basis.

The institution made investments totaling \$47.4 million outside of its assessment areas serving community development needs on a nationwide basis. In addition, the bank had \$46.8 million in unfunded commitments and had an additional \$19.8 million in prior period investments still outstanding.

These activities did not affect the overall rating of the institution.

APPENDIX A – Scope of Examination

SCOPE OF EXAMINATION			
TIME PERIOD REVIEWED	July 27, 2015 to October 15, 2018		
FINANCIAL INSTITUTION The Northern Trust Company			PRODUCTS REVIEWED Community Development Activities only
AFFILIATE(S)	AFFILIATE RELATIONSHIP		PRODUCTS REVIEWED
None	N/A		N/A
LIST OF ASSESSMENT AREAS AND TYPE OF EXAMINATION			
ASSESSMENT AREA	TYPE OF EXAMINATION	BRANCHES VISITED	OTHER INFORMATION
Washington-Arlington-Alexandria, DC-VA- MD-WV MULTISTATE MSA 47900	Full Scope		

Chicago-Naperville-Elgin, IL-IN-WI MSA 16980	Full Scope		
PHOENIX-MESA-SCOTTSDALE, AZ MSA 38060	Full Scope		
TUCSON, AZ MSA 46060	Limited Scope		
LOS ANGELES-LONG BEACH-ANAHEIM CA MSA 31080	Full Scope		
SAN FRANCISCO-OAKLAND- HAYWARD, CA MSA 41860	Full Scope		
SAN DIEGO-CARLSBAD, CA MSA 41740	Limited Scope		
SANTA MARIA-SANTA BARBARA, CA MSA 42200	Full Scope		
BRIDGEPORT-STAMFORD-NORWALK, CT MSA 14860	Full Scope		
DENVER-AURORA-LAKEWOOD, CO MSA 19740	Full Scope		
BRIDGEPORT-STAMFORD-NORWALK, CT MSA 14860	Full Scope		
MIAMI-FORT LAUDERDALE-WEST PALM BEACH, FL MSA 33100	Full Scope		
CAPE CORAL-FORT MYERS, FL MSA 15980	Full Scope		
NAPLES-IMMOKALEE-MARCO ISLAND, FL MSA 34940	Full Scope		
NORTH PORT-SARASOTA-BRADENTON, FL MSA 35840	Limited Scope		
PORT ST. LUCIE, FL MSA 38940	Limited Scope		
SEBASTIAN-VERO BEACH, FL, MSA 42680	Limited Scope		
TAMPA-ST. PETERSBURG- CLEARWATER, FL MSA 45300	Limited Scope		

KEY WEST, FL MICROPLANTAN STATISTICAL AREA 28580	Limited Scope		
ATLANTA-SANDY SPRINGS-ROSWELL, GA MSA 12060	Full Scope		
BOSTON-CAMBRIDGE-NEWTON, MA- NH, MSA 14460	Full Scope		
DETROIT-WARREN-DEARBORN, MI MSA 19820	Full Scope		
GRAND RAPIDS-WYOMING, MI MSA 24340	Limited Scope		
MINNEAPOLIS-ST. PAUL- BLOOMINGTON, MN-WI MSA 33460	Full Scope		
ST. LOUIS, MO-IL, MSA 41180	Full Scope		
LAS VEGAS-HENDERSON-PARADISE, NV 29820	Full Scope		
NEW YORK-JERSEY CITY, NY-NJ-PA, MSA 35620	Full Scope		
CLEVELAND-ELYRIA, OH MSA 17460	Full Scope		
AUSTIN-ROUND ROCK, TX MSA 12420	Full Scope		
DALLAS-FORT WORTH-ARLINGTON, TX, MSA 19100	Full Scope		
HOUSTON-THE WOODLANDS-SUGAR LAND, TX MSA 26420	Full Scope		
SEATTLE-TACOMA-BELLEVUE, WA MSA 42660	Full Scope		
MILWAUKEE-WAUKESHA-WEST ALLIS, WI MSA 33340	Full Scope		

APPENDIX B - SUMMARY OF STATE AND MULTISTATE METROPOLITAN AREA RATINGS

STATE OR MULTISTATE METROPOLITAN AREA NAME	RATING
Washington-Arlington-Alexandria, DC-VA-MD-WV Multistate MSA 47900	Outstanding
ILLINOIS	Outstanding
ARIZONA	Outstanding
CALIFORNIA	Outstanding
COLORADO	Outstanding
CONNECTICUT	Satisfactory
FLORIDA	Outstanding
GEORGIA	Outstanding
MASSACHUSETTS	Outstanding
MICHIGAN	Satisfactory
MINNESOTA	Outstanding
MISSOURI	Satisfactory
NEVADA	Outstanding
NEW YORK	Satisfactory
OHIO	Satisfactory
TEXAS	Outstanding
WASHINGTON	Outstanding
WISCONSIN	Satisfactory

APPENDIX C - GLOSSARY

Affiliate: Any company that controls, is controlled by, or is under common control with another company. A company is under common control with another company if the same company directly or indirectly controls both companies. A bank subsidiary is controlled by the bank and is, therefore, an affiliate.

Affordability ratio: To determine housing affordability, the affordability ratio is calculated by dividing median household income by median housing value. This ratio allows the comparison of housing affordability across assessment areas and/or communities. An area with a high ratio generally has more affordable housing than an area with a low ratio.

Aggregate lending: The number of loans originated and purchased by all lenders subject to reporting requirements as a percentage of the aggregate number of loans originated and purchased by all lenders in the MSA/assessment area.

American Community Survey Data (ACS): The American Community Survey (ACS) data is based on a nationwide survey designed to provide local communities with reliable and timely demographic, social, economic, and housing data each year. The Census Bureau first released data for geographies of all sizes in 2010. This data is known as the “five-year estimate data.” The five-year estimate data is used by the FFIEC as the base file for data used in conjunction with consumer compliance and CRA examinations.¹

Area Median Income (AMI): AMI means –

1. The median family income for the MSA, if a person or geography is located in an MSA, or for the metropolitan division, if a person or geography is located in an MSA that has been subdivided into metropolitan divisions; or
2. The statewide nonmetropolitan median family income, if a person or geography is located outside an MSA.

Assessment area: Assessment area means a geographic area delineated in accordance with section 228.41

Automated teller machine (ATM): An automated teller machine means an automated, unstaffed banking facility owned or operated by, or operated exclusively for, the bank at which deposits are received, cash dispersed or money lent.

¹ Source: FFIEC press release dated October 19, 2011.

Bank: Bank means a state member as that term is defined in section 3(d)(2) of the Federal Deposit Insurance Act (12 USC 1813(d)(2)), except as provided in section 228.11(c)(3), and includes an uninsured state branch (other than a limited branch) of a foreign bank described in section 228.11(c)(2).

Branch: Branch refers to a staffed banking facility approved as a branch, whether shared or unshared, including, for example, a mini-branch in a grocery store or a branch operated in conjunction with any other local business or nonprofit organization.

Census tract: Small subdivisions of metropolitan and other densely populated counties. Census tract boundaries do not cross county lines; however, they may cross the boundaries of metropolitan statistical areas. They usually have between 2,500 and 8,000 persons, and their physical size varies widely depending upon population density. Census tracts are designed to be homogeneous with respect to population characteristics, economic status, and living conditions to allow for statistical comparisons.

Combined Statistical Area (CSAs): Adjacent metropolitan statistical areas/metropolitan divisions (MSA/MDs) and micropolitan statistical areas may be combined into larger Combined Statistical Areas based on social and economic ties as well as commuting patterns. The ties used as the basis for CSAs are not as strong as the ties used to support MSA/MD and micropolitan statistical area designations; however, they do bind the larger area together and may be particularly useful for regional planning authorities and the private sector. Under Regulation BB, assessment areas may be presented under a Combined Statistical Area heading; however, all analysis is conducted on the basis of median income figures for MSA/MDs and the applicable state-wide non metropolitan median income figure.

Community Development: The financial supervisory agencies have adopted the following definition for community development:

1. Affordable housing, including for multi-family housing, for low- and moderate-income households;
2. Community services tailored to meet the needs of low- and moderate-income individuals;
3. Activities that promote economic development by financing businesses or farms that meet the size eligibility standards of the Small Business Administration's Development Company or Small Business Investment Company programs (13 CFR 121.301) or have gross annual revenues of \$1 million or less; or
4. Activities that revitalize or stabilize low- or moderate-income geographies.

Effective September 1, 2005, the Board of Governors of the Federal Reserve System, Office of the Comptroller of the Currency and the Federal Deposit Insurance Corporation have adopted the following additional language as part of the revitalize or stabilize definitions of community development. Activities that revitalize or stabilize:

- 1) Low- or moderate-income geographies;

- 2) Designated disaster areas; or
- 3) Distressed or underserved nonmetropolitan middle-income geographies designated by the Board, Federal Deposit Insurance Corporation and Office of the Comptroller of the Currency based on:
 - a. Rates of poverty, unemployment or population loss; or
 - b. Population size, density and dispersion. Activities that revitalize and stabilize geographies designated based on population size, density and dispersion if they help to meet essential community services including the needs of low- and moderate-income individuals.

Community Development Loan: A community development loan means a loan that:

- 1) Has as its primary purpose community development; and
- 2) Except in the case of a wholesale or limited purpose bank –
 - a. Has not been reported or collected by the bank or an affiliate for consideration in the bank's assessment as a home mortgage, small business, small farm, or consumer loan, unless it is a multi-family housing loan (as described in the regulation implementing the Home Mortgage Disclosure Act); and
 - b. Benefits the bank's assessment area(s) or a broader statewide or regional area that includes the bank's assessment area(s).

Community Development Service: A community development service means a service that:

- 1) Has as its primary purpose community development; and
- 2) Is related to the provision of financial services.

Consumer loan: A loan(s) to one or more individuals for household, family, or other personal expenditures. A consumer loan does not include a home mortgage, small business, or small farm loan. This definition includes the following categories of loans: motor vehicle, credit card, other consumer secured loan, includes loans for home improvement purposes not secured by a dwelling, and other consumer unsecured loan, includes loans for home improvement purposes not secured.

Family: Includes a householder and one or more other persons living in the same household who are related to the householder by birth, marriage, or adoption. The number of family households always equals the number of families; however, a family household may also include non-relatives living with the family. Families are classified by type as either a married couple family or other family, which is further classified into "male householder" (a family with a male household and no wife present) or "female householder" (a family with a female householder and no husband present).

Fair market rent: Fair market rents (FMRs) are gross rent estimates. They include the shelter rent plus the cost of all tenant-paid utilities, except telephones, cable or satellite television service, and

internet service. HUD sets FMRs to assure that a sufficient supply of rental housing is available to their program participants. To accomplish this objective, FMRs must be both high enough to permit a selection of units and neighborhoods and low enough to serve as many low-income families as possible. The level at which FMRs are set is expressed as a percentile point within the rent distribution of standard-quality rental housing units. The current definition used is the 40th percentile rent, the dollar amount below which 40 percent of the standard-quality rental housing units are rented. The 40th percentile rent is drawn from the distribution of rents of all units occupied by recent movers (renter households who moved to their present residence within the past 15 months). HUD is required to ensure that FMRs exclude non-market rental housing in their computation. Therefore, HUD excludes all units falling below a specified rent level determined from public housing rents in HUD's program databases as likely to be either assisted housing or otherwise at a below-market rent, and units less than two years old.

Full review: Performance under the Lending, Investment, and Service Tests is analyzed considering performance context, quantitative factors (for example, geographic distribution, borrower distribution, and amount of qualified investments) and qualitative factors (for example, innovativeness, complexity and responsiveness).

Geography: A census tract delineated by the U.S. Bureau of the Census in the most recent decennial census.

Home Mortgage Disclosure Act: The statute that requires certain mortgage lenders that do business or have banking offices in metropolitan statistical areas to file annual summary reports of their mortgage lending activity. The reports include data such as the race, gender and income of the applicant(s) and the disposition of the application(s) (for example, approved, denied, and withdrawn).

Home mortgage loans: Are defined in conformance with the definitions of home mortgage activity under the Home Mortgage Disclosure Act and include closed end mortgage loans secured by a dwelling and open-end lines of credit secured by a dwelling. This includes loans for home purchase, refinancing and loans for multi-family housing. It does not include loans for home improvement purposes that are not secured by a dwelling.

Household: Includes all persons occupying a housing unit. Persons not living in households are classified as living in group quarters. In 100 percent tabulations, the count of households always equals the count of occupied housing units.

Income Level: Income level means:

- 1) Low-income – an individual income that is less than 50 percent of the area median income, or a median family income that is less than 50 percent in the case of a census tract;
- 2) Moderate-income – an individual income that is at least 50 percent and less than 80 percent

- of the area median income, or a median family income that is at least 50 percent and less than 80 percent in the case of a census tract;
- 3) Middle-income – an individual income that is at least 80 percent and less than 120 percent of the area median income, or a median family income that is at least 80 percent and less than 120 percent in the case of a census tract; and
 - 4) Upper-income – an individual income that is at least 120 percent of the area median income, or a median family income that is at least 120 percent in the case of a census tract.

Additional Guidance: .12(m) Income Level: The median family income levels (MFI) for census tracts are calculated using the income data from the United States Census Bureau's American Community Survey and geographic definitions from the Office of Management and Budget (OMB) and are updated approximately every five years (.12(m) Income Level).

Limited-purpose bank: This term refers to a bank that offers only a narrow product line such as credit card or motor vehicle loans to a regional or broader market and for which a designation as a limited-purpose bank is in effect, in accordance with section 228.25(b).

Limited review: Performance under the Lending, Investment and Services test is analyzed using only quantitative factors (for example, geographic distribution, borrower distribution, amount of investments and branch office distribution).

Loan location: Under this definition, a loan is located as follows:

- 1) Consumer loan is located in the census tract where the borrower resides;
- 2) Home mortgage loan is located in the census tract where the property to which the loan relates is located;
- 3) Small business and small farm loan is located in the census tract where the main business facility or farm is located or where the loan proceeds have been applied as indicated by the borrower.

Loan product office (LPO): This term refers to a staffed facility, other than a branch, that is open to the public and that provides lending-related services, such as loan information and applications.

Market share: The number of loans originated and purchased by the institution as a percentage of the aggregate number of loans originated and purchased by all reporting lenders in the MA/assessment area.

Median Family Income (MFI): The median income determined by the U.S. Census Bureau every ten years and used to determine the income level category of geographies. Also, the median income determined by the Department of Housing and Urban Development (HUD) annually that is used to determine the income level category of individuals. For any given area, the median is the point at which half of the families have income above it and half below it.

Metropolitan Area: A metropolitan statistical area (MSA) or a metropolitan division (MD) as defined by the Office of Management and Budget. A MSA is a core area containing at least one urbanized area of 50,000 or more inhabitants, together with adjacent communities having a high degree of economic and social integration with that core. A MD is a division of a MSA based on specific criteria including commuting patterns. Only a MSA that has a single core population of at least 2.5 million may be divided into MDs. A metropolitan statistical area that crosses into two or more bordering states is called a multistate metropolitan statistical area.

Multifamily: Refers to a residential structure that contains five or more units.

Nonmetropolitan area: This term refers to any area that is not located in a metropolitan statistical area or metropolitan division. Micropolitan statistical areas are included in the definition of a nonmetropolitan area; a micropolitan statistical area has an urban core population of at least 10,000 but less than 50,000.

Owner-occupied units: Includes units occupied by the owner or co-owner, even if the unit has not been fully paid for or is mortgaged.

Qualified Investment: This term refers to any lawful investment, deposit, membership share, or grant that has as its primary purpose community development.

Rated area: This term refers to a state or multistate metropolitan area. For institutions with domestic branch offices in one state only, the institution's CRA rating is the state's rating. If the institution maintains domestic branch offices in more than one state, the institution will receive a rating for each state in which those branch offices are located. If the institution maintains domestic branch offices in at least two states in a multistate metropolitan statistical area, the institution will receive a rating for the multistate metropolitan area.

Small Bank: This term refers to a bank that as of December 31 of either of the prior two calendar years, had assets of less than \$1.252 billion. Intermediate small bank means a small bank with assets of at least \$313 million as of December 31 of both of the prior two calendar years and less than \$1.252 billion as of December 31 of either of the prior two calendar years.

Annual Adjustment: The dollar figures in paragraph (u)(1) of this section shall be adjusted annually and published by the Board, based on the year-to-year change in the average of the Consumer Price Index for Urban Wage Earners and Clerical Workers, not seasonally adjusted, for each 12-month period ending in November, with rounding to the nearest million.

Small Business Loan: This term refers to a loan that is included in "loans to small businesses" as defined in the instructions for preparation of the Consolidated Report of Condition and Income. The loans have original amounts of \$1 million or less and are either secured nonfarm,

nonresidential properties or are classified as commercial and industrial loans.

Small Farm Loan: This term refers to a loan that is included in “loans to small farms” as defined in the instructions for preparation of the Consolidated Report of Condition and Income. These loans have original amounts of \$500,000 or less and are either secured by farmland, including farm residential and other improvements, or are classified as loans to finance agricultural production and other loans to farmers.

Wholesale Bank: This term refers to a bank that is not in the business of extending home mortgage, small business, small farm or consumer loans to retail customers, and for which a designation as a wholesale bank is in effect, in accordance with section 228.25(b).