Proposal for ACH Origination Services

Creating efficiency through evolving technology

Presented to:

State of Nebraska
Julie Schiltz/Annette Walton
Procurement Contacts

Submitted by:

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Due Date: August 18, 2020
RFP Number: RFP 6304 Z1

Government Banking Division
233 South 13th Street
Lincoln, Nebraska 68508
usbank.com

August 18, 2020

Julie Schiltz/Annette Walton
RFP # 6304 Z1
State Purchasing Bureau
1526 K Street, Suite 130
Lincoln, Nebraska 68508

Dear Julie and Annette,

The State of Nebraska (the State) and U.S. Bank have enjoyed a successful partnership for more than 40 years. The State can continue to rely on U.S. Bank for excellence in the provision of these banking services, once again described and offered here in response to your Request for Proposal (RFP). Your U.S. Bank team has delivered efficient solutions and remarkable service and together we will work toward enhancing the State's operations.

Our proposal demonstrates a logical and balanced choice, combining the security of one of the nation's strongest-performing banks with a decided commitment to innovative technology. Our commitment to technology affords you the flexibility you need; our seasoned practice of engaging in collaborative dialogue promises to deliver the most efficient and competitively priced suite of products and services. A methodical, deliberate approach to your unique requirements will continue to be the rule as we work together to customize solutions.

In this response, we present a review of your existing ACH origination services, highlighting improvements in function. We also introduce U.S. Bank eBill Service, a full-service, turnkey, digital bill presentment and payment solution built with the consumer and biller in mind. It streamlines operations, reduces costs and meets customer needs by providing a secure, simple and fast way to view and pay – how, when and where they want. eBill Service is a highly configurable solution with options to present bills digitally and collect payments from multiple payment channels and payment methods. A back-office interface provides consolidated electronic remittance and settlement reporting to update the State's internal system(s).

As you examine the enclosed offer in detail, consider the strength and dedication that position U.S. Bank to deliver the proposed banking services. Your choice to continue to work with U.S. Bank is a good one. As the fifth-largest and one of the highest rated, most stable commercial banks in the country, you benefit greatly from our ability to focus on perfecting financial functions for our clients. In addition, U.S. Bank was named as a 2020 World's Most Ethical Company® by the Ethisphere Institute. Our business model, operating philosophy and financial strength allow us to allocate significant resources, both in dollars and technology, toward the enhancement and development of products and services.

In addition to our aggressive fee schedule, we propose to begin contract pricing the month following the contract award date. Prior to the State converting from E-Payment Service to eBill Service, U.S. Bank will retrofit the E-Payment billing elements to match to that of the proposed eBill pricing as reflected in this bid. This offer has the potential to reduce fees by more than $96,000 in total, based on your current relationship with U.S. Bank, and the entire scope of services and volumes indicated within this proposal.

This incentive is in exchange for a five-year service agreement, with the option to renew for two additional one year periods, and the award of the totality of the business in this proposal. We are also waiving setup and implementation fees for all treasury management services.

With a compelling solution and price, we ask for the privilege of continuing to serve the State with these solutions. We look forward to our continued partnership and ongoing success.

Sincerely,

Greer Almquist

Greer Almquist
Vice President
Government Banking

Lisa Lefler

Lisa Lefler
Vice President
Global Treasury Management

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Disclaimers

Acknowledging information provided in this response to State of Nebraska RFP #6304 Z1 is subject to the Freedom of Information Laws governing disclosure of public information, U.S. Bank requests to be contacted before information is made public in order to request redaction of designated specific "Confidential" information given this proposal may contain certain nonpublic information about U.S. Bancorp and its subsidiaries and affiliates that we deem proprietary and confidential. By accepting these materials, you agree to use this information only to evaluate the proposal and to hold such designated confidential material in confidence, sharing it only with your employees and advisors on a need-to-know for the purpose of choosing a service provider. Confidential information potentially included in our proposed response includes business contracts/agreements, proprietary information regarding product functionality, custom process flows, pricing, operational procedures, processing site locations, human resources statistical data, service quality statistics, service manuals, data security, disaster recovery details, SOC and SSAE18 reports, and implementation and disclosure documents. Publication of this information could create an unfair competitive disadvantage and/or regulatory concern. Where possible, such confidential information as outlined above will also be marked "Confidential" within our response.

The prices quoted in this proposal are firm and irrevocable for not less than 180 days until contract award and documentation. Thereafter, prices quoted will be held fixed for the five-year term of the contract. However, should volumes, quality of work provided by State of Nebraska, or regulatory requirements significantly change, this pricing agreement may be subject to mutual renegotiation for impacted items. Notwithstanding anything contained herein to the contrary, all Treasury Management Services provided to State of Nebraska, are subject to U.S. Bank's Treasury Management Services Terms and Conditions as provided for mutual negotiation, and as the same may be amended from time to time. Additional new services will be offered at the same agreed upon prices if bid, or at similar offered discounts if newly requested services not previously included. This agreement can be terminated by either party with 30 days written notice.

U.S. Bank does not agree to contract terms solely by delivering this response to State of Nebraska's RFP #6304 Z1 Separate contract documentation will be mutually negotiated as provided by State of Nebraska within which the issued RFP, questions and answer responses, and this proposed response can be incorporated therein.

By your acceptance of these materials, you also acknowledge that U.S. Bancorp and U.S. Bank are not committing to extend credit or render services to State of Nebraska's or any other person or entity.

"World's Most Ethical Companies" and "Ethisphere" names and mark are registered trademarks of Ethisphere LLC.

Regulatory disclaimer

Our proposal is contingent on U.S Bank's completion of required AML/KYC processes and enhanced due diligence review and approval. We look forward to working with you to obtain the appropriate information to complete that process.

Regulation W disclaimer: U.S. Bank N.A. is not responsible for the obligations of its affiliates.

U.S. Bank RFP response relating to COVID-19

Our proposal reflects our service offerings during normal day-to-day operations. Some of our services may have temporary modifications or limitations due to the ongoing COVID-19 pandemic. For more information, please visit bit.ly/USBankCOVID19Response or contact your U.S. Bank representative if applicable.

Treasury solution overview

As the State considers the renewal of our long and successful banking partnership, consider the current products and services we provide today, along with the innovative solutions presented in this response.

ACH origination services

Your U.S. Bank team has a deep understanding of the State's requirements and expectations with your existing services. Over the years, we have continued to expand and refine how we provide and support your services. Today, we hope you agree that your ACH originations are processed in a reliable and predictable manner.

Your dedicated Commercial Customer Service (CCS) representative, Julie Monaghan, has worked with the State for the last six years and successfully navigates both routine and unique service issues on a regular basis. Julie will continue to work with the State for the foreseeable future.

As technology continues to advance, your U.S. Bank relationship team is ready to help you leverage emerging opportunities within the banking industry. Ongoing expansion and the introduction of numerous electronic and technological enhancements through monitoring of trends, industry developments and competitor evaluation help keep our products and services at the forefront of efficiency within the banking industry. U.S. Bank's ACH Origination via API, Account Validation and eBill Services are new products that are anticipated to create efficiency, enhance fraud protection and improve the taxpayers' payment experiences with the State.

Also, we have continued to work with different agencies to show the value of the ACH services that we provide. Nebraska Child Support is one agency that we worked with and showed the value of moving ACH processing for received items to U.S. Bank because of savings that we could provide to them with the contract. Once the transition was complete, Nebraska Child Support let us know we were able to save the agency more than $200,000; with those savings the agency was able to buy new equipment for their in-house lockbox processing department.

ACH Origination via API

ACH Origination via API would allow the State to send individual ACH payment instructions on a continual basis to U.S. Bank for processing. That State could enable web or mobile applications to send the information required for an ACH transaction to our ACH Origination API. U.S. Bank will create the required files and send them to the ACH network. Notification of return items will be sent via webhook subscriptions back to the State's desired application via API. Benefits include the following:

- The State can send ACH payments on a continual basis. Automatic Sunday processing for ACH origination via API allows transactions sent over the weekend before 10 p.m. CT to post on Monday (or Tuesday if Monday is a bank holiday).
- No requirement to create a NACHA formatted file. U.S. Bank will create the file from the ACH payment instructions sent via API
- Developer portal and sandbox allows the State to research and test the ACH API prior to formal implementation
- In 2021, tokenization will be added to the API functionality which will allow U.S. Bank to send the State a token for each new receiver account number, which can be sent in subsequent payment instructions instead of the actual account number.

Account Validation

Account Validation, which U.S. Bank presents in partnership with third-party service providers, is one of the most powerful tools introduced in recent banking history to mitigate fraud losses and transaction exceptions (e.g., rejects, returns). It serves as a last line of defense against business email compromise.

Account Validation allows the State to get status (e.g., account open/active) and ownership (e.g., John Smith is account owner) information on domestic bank accounts before attempting to credit or debit them. Once the State has this crucial information, decisions can be rendered on whether to initiate transactions or take additional steps to verify receiver or account information. It works for any account-based transaction (ACH, wire, check or RTP) and for consumer or corporate accounts.

Account Validation is possible because more than 1,500 banks and financial institutions contribute account status and ownership information to a secure national shared database owned by Early Warning Services, which also operates the Zelle network. Banks and their corporate clients, or authorized resellers of the national shared database access, can send account inquiries to the Database via web portal, API call or transmission. Account status information is updated on a nightly basis between midnight and 6 a.m. CT. Ownership information is updated over the weekend.

With Account Validation, the State can inquire against a National Shared Database of account status information. The database offers reach to up to 95% of domestic bank accounts and ownership information for 60-65% of domestic accounts. Responses for real-time inquiries are received in seconds and provide you with key information such as:

- Whether a routing number and account combination is valid.
- Whether an account is registered in the name of the business or consumer you need to pay.
- A matching score on how closely ownership-related information matches what has been reported to the National Shared Database.
- If an account is overdrawn or closed and the closure date.
- Whether an account has a post no debits status.
- Check stop payments, potential counterfeits or duplicates.
- The probability of return associated with specific ACH or check debit amounts.

eBill Service – replacing E-Payment service

Our eBill Service's proven capability is demonstrated by the more than 1,000 current entities using the platform. We provide electronic bill presentment and payment via all channels and methods. Our solution channels include real-time API, mobile, online web, point of sale, Text2Pay, Facebook Messenger, Amazon Alexa, Google Home, IVR and a call center. Funding sources include credit card, debit card and ACH. Slated future enhancements include Apple Pay and Android Pay integration (2020), integration with VantagePoint (2021), and integration with SinglePoint® (2022).

Our eBill Service platform (and associated processes) has demonstrated full compliance with the Level 1 PCI Data Security Standards v3.1, as well as with the HIPAA standards. Both of these audits and reviews are undertaken by Data Security and are renewed annually. The platform is currently hosted in the Amazon Web Services (AWS) North East Data Centers 1 & 2. Both data centers are located within the continental United States.

You can offer convenient and familiar payment methods, including:

- ACH.
- Credit and debit card (Visa, Mastercard, American Express and Discover).
- Coming soon: Real-Time Payments (RTP) and Zelle.

Your customers can choose how they communicate with you via a biller-hosted or eBill Service-hosted website. A mobile-optimized portal allows customers to:

- Enroll in text and email alerts, paperless billing and recurring payments.
- View current bills and access history online.
- Engage with an artificial intelligence chatbot 24/7 to answer questions.

- View payment history – funding sources and payment options.
- Set up payment frequency options:
  - Recurring (customer defines when to pay).
  - Autopay (pay on biller defined due date).
  - One-time pay.
  - Payment plan.

Benefits of eBill Service

You can manage online payments with ease and benefit from the following**:**

- **Reduce costs and accelerate cash flow**—Providing multiple digital payment options for bill presentment and payment drives customer adoption and reduces U.S. mail costs and mail float.
- **Increase payment rates**—Customer text and email alerts drive higher payment rates through timely payment reminders.
- **Streamline operations**—A rich administrative website empowers your staff to schedule and manage payments on behalf of customers, view payment history, answer general inquiries, and run and download comprehensive billing and payment reporting.
- **Choose peace-of-mind security**—Built-in security ensures data and privacy protection. Solution adheres to PCI DSS and ADA (online) compliance standards.

Other services

The State continues to explore ways to minimize cost and create efficiency. Your U.S. Bank team is ready to help you consider additional payment products and services to create savings in time and resources. The State may benefit from one or more of these innovative services.

Real-time Payments

Using real-time payments (RTP), you can transfer funds directly between financial institutions to your trading partners. Unlike wire transfers and ACH payments, funds can move at any time and settle instantly. This provides significant value for organizations that can benefit from 24/7 payment processing.

An RTP can be initiated via SinglePoint. Within SinglePoint you can send, receive and respond to RTP credits, requests for payment (RFP) and requests for information (RFI). You can also view the status of payments including remittance and payment acknowledgements and access multiple activity reports.

Zelle

Disbursements via Zelle will allow you to choose the speed of the payment, real-time or standard (two to three days), and fully supports onboarding of unenrolled consumers, saving you time and costs related to migrating to electronic payments. Further, the solution utilizes an alias to identify the recipient, in the form of a mobile number or email address, rather than sensitive banking information, so you do not have to gather and maintain this consumer data. Zelle reaches more than 64% of U.S. demand deposit accounts through the 480 financial institutions contracted to join the Zelle network. Benefits of this solution include:

- Saving time by leveraging the Zelle recipient registration process.
- Lowering costs by reducing the manual processes, including escheatment, associated with checks.
- Eliminating the handling of sensitive banking information of consumer recipients.
- Faster payment availability than typically offered with checks.
- Ability to default to check payment if the recipient does not enroll to receive payment through the Zelle network.

Disbursements via Zelle is currently available through SinglePoint, file transmission, consolidated payables and API integration. We are both an equity owner of Early Warning Systems, the company managing the Zelle network, and a member bank in the network.

AP Optimizer

AP Optimizer™ is an accounts payable automation solution that maximizes efficiency, creates financial value, improves visibility and reduces fraud by automating the entire invoice-to-pay process within a single system. Unlike manual AP processes and partially-automated payables solutions, AP Optimizer provides day-one payment automation through an established network of 425,000+ electronic payment-enabled suppliers, automates both invoice and payment within a single platform, facilitates disbursement and reconciliation of all electronic payment types within a single platform, expedites ROI through a simple, fast implementation process and is backed by the strength and stability of U.S. Bank.

AP Optimizer automates invoice management and payment in a single platform. It provides complete automation from invoice intake through approval, to payment and reconciliation. Because it connects into your ERP with minimal IT support and comes with a network of suppliers that are already accepting payment, you put the system to use and start creating value more quickly than alternative solutions. Reconciliation is easy because all payments are disbursed through the platform. You'll reduce fraud, and see day-one improvement in process efficiencies, cost savings and rebate, and visibility and control over payments. Additionally, AP Optimizer's network administers the secure storage of vendor bank credential information that would otherwise require storage by the State.

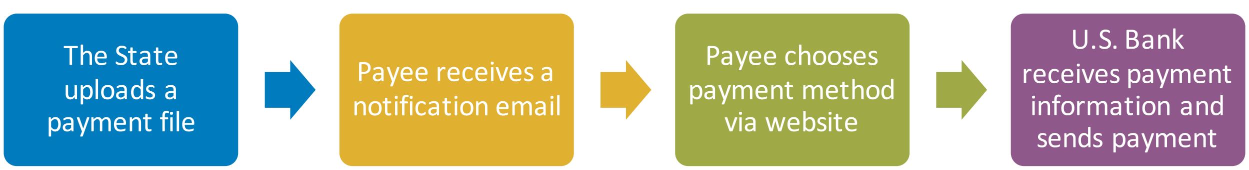
Payee Choice

The State may use a payment management website hosted by U.S. Bank's vendor Incedo, Inc. to:

- Customize a consumer enrollment website with the State's brand and payment options.
- Initiate payment notices and communications to your customers.
- Manage the State's users.
- Track payment status, search payment history and export reports.

The process is simple:

- When the State is ready to send payments, you upload a file with basic payment information (student/consumer name, email, dollar amount).
- Customized emails are then sent to students/consumer payees, letting them know a payment is pending and directing them to the State-branded enrollment website.
- Your customers access the enrollment website, choose a payment method and provide any additional details. Payment methods include direct deposit, Zelle® or check.
- Once your customer provides their payment choice, Incedo submits payment information back to U.S. Bank for initiation through standard payment channels (ACH, Disbursements via Zelle, check).



Since this is a new payment process, you will need to notify your customers of the options, so they know what communications to expect.

Trust U.S. Bank

The State's ultimate choice in banking partner will consider quality, service, capability and price. But the best value comes from the appropriate combination of these factors. U.S. Bank's proposal demonstrates this value, detailing innovative solutions and competitive pricing. We're confident you will find our focus on contributing to the State's continued success unparalleled and look forward to retaining and expanding our tenured banking partnership.

Part 1 – Corporate Overview

a. Bidder Identification and Information

The bidder should provide the full company or corporate name, address of the company's headquarters, entity organization (corporation, partnership, proprietorship), state in which the bidder is incorporated or otherwise organized to do business, year in which the bidder first organized to do business and whether the name and form of organization has changed since first organized.

U.S. Bancorp is headquartered at 800 Nicollet Mall, Minneapolis, Minnesota. We are a diversified financial service holding company with $547 billion in assets (as of June 30, 2020) and the parent company of U.S. Bank National Association, the nation's fifth-largest commercial bank. We are a publicly traded organization and incorporated in the state of Delaware.

Our 70,000 U.S. Bancorp employees come together to serve 18.8 million consumer, business and institutional customers through our four core lines of business: Payment Services, Consumer and Business Banking, Corporate & Commercial Banking, and Wealth Management and Investment Services. Through these lines of business, we offer a comprehensive suite of banking, investment, mortgage, trust and payments products.

We are a leader in the banking industry. Our outstanding track record of financial performance, coupled with our sound ethical business practices, earned us the honor of being named a 2020 World's Most Ethical Company® by the Ethisphere Institute, a leading international think tank dedicated to the advancement of best practices in business. This is our sixth consecutive year on this list. We were also named Fortune's 2020 "most admired superregional bank" for the 10th consecutive year. Fortune ranked U.S. Bank in the Top 10 among 680 companies across all industries for:

- #3 Social Responsibility
- #7 Use of Corporate Assets
- #9 Financial Soundness
- #10 Long-Term Investment Value
- #10 Management Quality

U.S. Bank continues to outpace peers across all key performance metrics – such as return on assets, return on equity and efficiency ratio – year over year, and in 2018 we also achieved record net revenue and diluted earnings per share. In addition, we maintain exceptional capital ratios and remain among the world's best in debt ratings across the industry.

Our size, strength and scale keep us well positioned for future growth. We are committed to invest in delivering innovative and remarkable solutions for our customers, shareholders, employees and communities as their most trusted financial partner.

Our history

Our history dates to 1863, when First National Bank of Cincinnati opened for business. As regional banks proliferated across the country in the years that followed, a few other predecessors were born. After a series of mergers at the turn of the 21st century, we formally took on the U.S. Bank name and established our headquarters in Minnesota.

b. Financial Statements

The bidder must provide financial statements applicable to the firm. Bidder should provide financial statements in a separate file. If publicly held, the bidder must provide a copy of the corporation's most recent audited financial reports and statements, and the name, address, and telephone number of the fiscally responsible representative of the bidder's financial or banking organization.

If the bidder is not a publicly held corporation, either the reports and statements required of a publicly held corporation, or a description of the organization, including size, longevity, client base, areas of specialization and expertise, and any other pertinent information, should be submitted in such a manner that proposal evaluators may reasonably formulate a determination about the stability and financial strength of the organization. Additionally, a non-publicly held firm should provide a banking reference.

The bidder must disclose any and all judgments, pending or expected litigation, or other real or potential financial reversals, which might materially affect the viability or stability of the organization, or state that no such condition is known to exist.

The State may elect to use a third party to conduct credit checks as part of the corporate overview evaluation.

We attach this report separately as required, labeled as **Financial Statement. U.S. Bancorp 2019 Annual Report**.

We also offer our **2019 Annual Report** online at: ir.usbank.com/investor-relations/financial-information/annual-reports

From time to time, U.S. Bancorp and its affiliates (U.S. Bank) are subject to various regulatory examinations, inquiries and investigations (matters) by bank regulators as well as other government agencies. U.S. Bank does not currently believe that the ultimate resolution of any existing matter will have a material adverse effect on the financial condition of U.S. Bank or our ability to perform in connection with this proposal. Such matters and other interactions with government agencies are often highly confidential and we may thus be limited in our ability to disclose detailed information. Nevertheless, for further information regarding certain current matters, please see our most recent 10-K and 10-Q, available on our Investor Relations page at usbank.com/about/investor.

c. Change of Ownership

If any change in ownership or control of the company is anticipated during the twelve (12) months following the proposal due date, the bidder should describe the circumstances of such change and indicate when the change will likely occur. Any change of ownership to an awarded bidder(s) will require notification to the State.

No change of ownership of U.S. Bank is anticipated.

d. Office Location

The bidder's office location responsible for performance pursuant to an award of a contract with the State of Nebraska should be identified.

Your relationship team will continue to operate out of our location at 233 South 13th Street, Lincoln, Nebraska 68508.

e. Relationship with the State

The bidder should describe any dealings with the State over the previous five (5) years. If the organization, its predecessor, or any Party named in the bidder's proposal response has contracted with the State, the bidder should identify the contract number(s) and/or any other information available to identify such contract(s). If no such contracts exist, so declare.

U.S. Bank has enjoyed an expansive and diverse relationship with the State for more than 40 years. Some of those services are the result of a contract, while others have been provided outside of a contract. Specifically, we have provided the following contract services to the State:

- ACH Origination/E-Payment Contract 60870 (O4)
- Stored Value Card Contract 68856 (O4)
- Purchasing Card Contract 84289 (O4)
- Fleet Fueling Card Contract 76031 (O4)
- Payment (Credit and Debit) Card Processing Services 66533(O4)Ren(1)

f. Bidder's Employee Relations to State

If any Party named in the bidder's proposal response is or was an employee of the State within the past twelve (12) months, identify the individual(s) by name, State agency with whom employed, job title or position held with the State, and separation date. If no such relationship exists or has existed, so declare.

If any employee of any agency of the State of Nebraska is employed by the bidder or is a Subcontractor to the bidder, as of the due date for proposal submission, identify all such persons by name, position held with the bidder, and position held with the State (including job title and agency). Describe the responsibilities of such persons within the proposing organization. If, after review of this information by the State, it is determined that a conflict of interest exists or may exist, the bidder may be disqualified from further consideration in this proposal. If no such relationship exists, so declare.

To the best of our knowledge, no such relationship exists.

f. Contract Performance

If the bidder or any proposed Subcontractor has had a contract terminated for default during the past five (5) years, all such instances must be described as required below. Termination for default is defined as a notice to stop performance delivery due to the bidder's non-performance or poor performance, and the issue was either not litigated due to inaction on the part of the bidder or litigated and such litigation determined the bidder to be in default.

It is mandatory that the bidder submit full details of all termination for default experienced during the past five (5) years, including the other Party's name, address, and telephone number. The response to this section must present the bidder's position on the matter. The State will evaluate the facts and will score the bidder's proposal accordingly. If no such termination for default has been experienced by the bidder in the past five (5) years, so declare.

If at any time during the past five (5) years, the bidder has had a contract terminated for convenience, non-performance, non-allocation of funds, or any other reason, describe fully all circumstances surrounding such termination, including the name and address of the other contracting Party.

No such early termination of a contract has occurred.

g. Summary of Bidder's Corporate Experience

The bidder should provide a summary matrix listing the bidder's previous projects similar to this solicitation in size, scope, and complexity. The State will use no more than three (3) narrative project descriptions submitted by the bidder during its evaluation of the proposal.

The bidder should address the following:

1. Provide narrative descriptions to highlight the similarities between the bidder's experience and this solicitation. These descriptions should include:

   a. The time period of the project;

   b. The scheduled and actual completion dates;

   c. The bidder's responsibilities;

   d. For reference purposes, a customer name (including the name of a contact person, a current telephone number, a facsimile number, and e-mail address); and

   e. Each project description should identify whether the work was performed as the prime bidder or as a Subcontractor. If a bidder performed as the prime bidder, the description should provide the originally scheduled completion date and budget, as well as the actual (or currently planned) completion date and actual (or currently planned) budget.

2. Bidder and Subcontractor(s) experience should be listed separately. Narrative descriptions submitted for Subcontractors should be specifically identified as Subcontractor projects.

3. If the work was performed as a Subcontractor, the narrative description should identify the same information as requested for the bidders above. In addition, Subcontractors should identify what share of contract costs, project responsibilities, and time period were performed as a Subcontractor.

	State of Minnesota
Contact name	Cynthia Farrell
Title	Assistant Commissioner- Treasury
Address	Minnesota Management & Budget 658 Cedar Street 400 Centennial Building St Paul, Minnesota 55155
Telephone number	651.201.8012
Fax number	Not Available
Email address	Cindy.Farrell@state.mn.us
Time period of project	Since 1940; re-won in 2017; contract expires on 12.31.2022
Contract implementation and budget	We stayed within the agreed upon pricing schedule while meeting the deliverable dates.
Services utilized	Accelapay, Account Reconciliation, ACH Blocks & Filters, ACH Services, Cash Vault, Coin & Currency, Controlled Disbursement, Corporate Card, Corporate Payments, Corporate Trust, Courier, DDA Accounts, EDI, E-Payment, Focal Point Plus, Image, Image Cash Letter, Onsite Electronic Deposit, International Banking,

	Lockbox – Wholesale, Merchant Card, Positive Pay, SinglePoint®, Stop Payments, Warrants, Wires, ZBA Accounts
Narrative description	U.S. Bank is the leading depository bank and provider of Treasury Management products and services for the State of Minnesota. This relationship extends to colleges and universities as well as other state agencies. ACH is used for various purposes including payroll, investments, retirement disbursements, revenue collection, sweep products and child support payments. The colleges and universities utilize ACH for student loan payments, student payroll and distribution of student financial aid. U.S. Bank is the exclusive E-Payment provider to the State of Minnesota.

Name of client	State of Wisconsin
Contact name	Sharon Hughes
Title	Treasury Financial Manager
Address	Treasury Services 101 E. Wilson Street, 5th Floor Madison, Wisconsin 53707
Telephone number	608.266.6700
Fax number	Not Available
Email address	Sharon.hughes@wisconsin.gov
Time period of project	Since 1980; re-won in 2020; contract expires 06.30.2025
Contract implementation and budget	We stayed within the agreed upon pricing schedule while meeting the deliverable dates.
Services used	Services include depository, corporate trust, treasury management, money center, purchasing cards, prepaid cards, merchant, bank collected service fee and IT&C.
Narrative description	U.S. Bank is the leading depository bank and only provider of Treasury Management Services for the State of Wisconsin. This relationship extends to the University of Wisconsin System. ACH is used for various purposes including payroll, investments, retirement disbursements, revenue collection and child support payments. U.S. Bank is the leading E-Payment provider to the State of Wisconsin.

Name of client	State of Kansas
Contact name	Shauna Wake
Title	Director of Fiscal Services
Address	Office of State Treasurer 900 SW Jackson, Suite 201 Topeka, Kansas 66612-1235
Telephone number	785.296.4160
Fax number	785.296.6976
Email address	shauna@treasurer.ks.gov
Time period of project	Since 2011. Contracted through 2025.
Contract implementation and budget	We stayed within the agreed upon pricing schedule while meeting the deliverable dates.

Services used	We are the primary treasury management service provider for the State of Kansas which includes SinglePoint, ACH, wires, UPIC and account reconcilement services. We also provide the following services: foreign exchange, Corporate Payments Systems (health savings accounts), interest and non-interest-bearing accounts, leasing, lockbox, Institutional Trust and Custody and Money Center.
Narrative description	U.S. Bank is the primary depository and disbursement bank for the Kansas State Treasurer's Office. The State Treasury acts as the "bank" for all state agencies. In addition, U.S. Bank is the Institutional Trust and Custody agent for the Kansas Pooled Money Investment Board (PMIB).

Summary of Bidder's Proposed Personnel/Management Approach

The bidder should present a detailed description of its proposed approach to the management of the project.

The bidder should identify the specific professionals who will work on the State's project if their company is awarded the contract resulting from this solicitation. The names and titles of the team proposed for assignment to the State project should be identified in full, with a description of the team leadership, interface and support functions, and reporting relationships. The primary work assigned to each person should also be identified.

The bidder should provide resumes for all personnel proposed by the bidder to work on the project. The State will consider the resumes as a key indicator of the bidder's understanding of the skill mixes required to carry out the requirements of the solicitation in addition to assessing the experience of specific individuals.

Resumes should not be longer than three (3) pages. Resumes should include, at a minimum, academic background and degrees, professional certifications, understanding of the process, and at least three (3) references (name, address, and telephone number) who can attest to the competence and skill level of the individual. Any changes in proposed personnel shall only be implemented after written approval from the State.

All the U.S. Bank personnel assigned to the State relationship have the background, industry knowledge, experience and track record in implementing and maintaining large, complex banking, cash management and payment systems similar to the business requirements of State of Nebraska.

Each member of the relationship team assigned to the State for ACH and our online bill pay system, eBill Service, are part of the U.S. Bank Corporate & Commercial Banking line of business. Government Banking and Treasury Management are separate divisions but report to the same vice chairman. Government Banking is the lead business line for the State relationship. More importantly, it is the same team of personnel that currently work with the State.

Your U.S. Bank team includes the following individuals.

Greer Almquist
Vice President
Government Banking Relationship Manager
913.484.6908
greer.almquist@usbank.com

Greer serves as the relationship manager and primary contact for the State. He will work with strategic business partners to recommend products and services that meet the objectives of the State, including financing solutions, treasury management and other banking services.

Greer joined U.S. Bank in 2011 as a government banking relationship manager and works with public entities in Nebraska, South Dakota, Oklahoma, Louisiana and Texas. Prior to joining us, he worked with public entities throughout Missouri and Kansas to help provide solutions for their energy needs.

Greer received his Master of Business Administration from Webster University in 2008 and his Bachelor of Arts in political science from the University of Missouri in 2000.

Personal professional references

Laura Lapeze
Chief Financial Officer
State of Louisiana
1051 North Third Street, Baton Rouge, Louisiana 70802
225.342.0051

Donna Waller
Treasurer
City of Omaha
1819 Farnam Street, Suite 1007, Omaha, Nebraska 68102
402.444.5472

Kristen Anderson
Deputy Treasurer
Lancaster County
555 South 10th Street, Lincoln, NE 68508
402.441.7425

Lisa Lefler
Vice President
Treasury Management Consultant
402.434.1292
lisa.lefler@us.bank.com

As a treasury management consultant, Lisa is responsible for introducing cash management solutions to meet the unique needs of U.S. Bank clients. Lisa has 18 years of banking experience with U.S. Bank – the last 13 years of which include her current role in Global Treasury Management. In this role, Lisa supports both commercial and government relationships in Nebraska.

Lisa holds a Bachelor of Science degree in Management and Finance from Southwest Minnesota State University. She has been a Nebraska Association for Financial Professionals (AFP) board member for the past eight years.

Personal professional references

Tammy Wissing
Treasurer
City of Lincoln
555 South 10th Street, Lincoln, NE 68508
402-441-8304

Paul Barnett
Treasury – Senior Manager
Ameritas®
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Lincoln, Nebraska 68510-2234
402.467.7771

Lisa Finkner
Senior Vice President, Treasurer & Chief Financial Officer
Farmers Mutual of Nebraska
501 South 13th Street
Lincoln, Nebraska 68508
402.437.9272

Cheryl Lehotyak
Vice President
Technical Solutions Consultant
651.605.8004
cheryl.lehotyak@usbank.com

As a technical solutions consultant, Cheryl helps organizations optimize receivables processes by providing consultations on strategies and system integration. Her solution expertise is expansive from paper payments to virtual payments. Cheryl is a subject matter expert for accounts receivable processing and a recognized industry speaker. She works in commercial and corporate banking with 30 years of banking experience. Cheryl spent a decade in consumer banking with management experience for sales, operations and risk.

Cheryl attended Bellevue University, where she studied business administration. She served as past board member and officer for the Nebraska Association for Financial Professionals and has served for six years.

Personal professional references

Jennifer Niemann, CSM
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Julie Monaghan
Assistant Vice President
Commercial Customer Service
402.536.5117
julie.monaghan@usbank.com

Julie is your dedicated commercial banking client representative. As part of the U.S. Bank Commercial Customer Service (CCS) group, her sole focus is delivering prompt and knowledgeable assistance to our commercial and government clients. Julie and the CCS group provide comprehensive, local support for depository and treasury management servicing from 7 a.m.–7 p.m. CT every business day. The State is familiar with Julie and she will continue to assist with your service needs.

Julie has more than 28 years' experience in the banking industry, the majority of which she has spent in commercial banking and treasury management. Large, high-profile clients have rated the service they receive from Julie and her group with the highest ranking allowed: 4.0 (A).

Personal professional references

Lewis Hendrickson
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a. SUBCONTRACTORS

If the bidder intends to Subcontract any part of its performance hereunder, the bidder should provide:

1) name, address, and telephone number of the Subcontractor(s)

2) specific tasks for each Subcontractor(s)

3) percentage of performance hours intended for each Subcontract

4) total percentage of Subcontractor(s) performance hours

U.S. Bank is not specifically contracting with any third-party subcontractors to fulfill any portion of the required scope of services for our response to the State's RFP.

However, U. S. Bank does purchase services and/or software from several third-party vendors to provide portions of services to all our clients related to several products. Our third-party vendors are long-standing partners who work alongside us to provide you with the highest levels of customer service. They are held to the same standards as internal U.S. Bank resources; are well-vetted; and provide reliable, responsive services to our operational team. We are completely transparent about who we partner with to provide the full range of services you require, and we work with our partners, listed below, to ensure they understand and fully support all aspects of your program, including flowing down applicable portions of the contract and monitoring daily activities. Oversight of these vendors is maintained by both our operational teams and our Third-Party Risk Management team. All third-party vendors are subject to rigorous initial and annual audits conducted by our Third-Party Risk Management team who enforces not only U.S. Bank security and privacy standards, but standards imposed by the Office of Comptroller of the Currency.
Our vendor partners include:

- U.S. Bank has partnered with Alacriti Payments, LLC, who provides the development, hosting and processing services for our e-Bill Service. We are excited about this partnership, which is new this year. U.S. Bank e-Bill Service will replace our existing E-Payment Service and provide an enhanced product to the State. We anticipate this solution conversion to Alacriti will take place over the next 12–18 months, working in coordination with the State and your IT team.
- The vendor that hosts our Cash Concentration platform is FIS (formerly Metavante). They provide the IVR, voice and data exchange infrastructure, in addition to hosting the platform.

Financial Stability

Contractor has the financial stability to do business with the State of Nebraska.

The State benefits greatly from our ability to focus on perfecting financial functions for our clients. As the fifth-largest bank in the nation, our business model, operating philosophy and financial strength have allowed us to continue to post positive earnings. Our financial position and conservative business posture also allow us to allocate significant resources, both in dollars and technology, toward the enhancement and development of products and services.

U.S. Bancorp, with total assets of $547 billion (as of June 30, 2020), is a diversified financial services holding company and the parent company of U.S. Bank, the nation's fifth-largest commercial bank. Return on average assets (ROA) was 0.51% and return on average common equity (ROE) was 5.3% during the three months ending June 30, 2020.

Capital generation continues to reinforce our capital position with:

- Common equity tier 1 capital ratio of 9.0%.
- Tier 1 capital ratio of 10.6%.
- Total risk-based capital ratio of 12.8%.

Our website address is usbank.com. The most recent annual report and call reports are available at phx.corporate-ir.net/phoenix.zhtml?c=117565&p=irol-financialinfo.

Part 2 – Technical Approach/Project Description and Scope of Work

The technical approach section of the Technical Proposal should consist of the following subsections:

f. Understanding of the project requirements;

g. Proposed development approach;

h. Technical considerations;

i. Detailed project work plan; and

j. Deliverables and due dates.

A. Project Overview

Automated Clearing House (ACH) is an electronic network for financial transactions. ACH processes large volumes of credit and debit transactions in batches. ACH credit transfers include direct deposit payroll and vendor payments. ACH direct debit transfers include consumer payments on insurance premiums, revenue tax obligations, child support payment, and other kinds of payments. Rules and regulations that govern the ACH network are established by National Automated Clearing House Association (NACHA) and the Federal Reserve.

The State Treasurer's Office will be the point of contact for all daily banking functions and implementation of the banking services on behalf of State agencies. The State will continue to expand the use of electronic payments for State vendors, payroll, and government benefits payments to consumers and vendors. The State is seeking a state or national bank contractor that will work with State agencies to develop additional electronic solutions to receive payments via ACH, thus enabling the State to continue reducing check processing charges and to allow all agencies to continue to exercise the specific requirements of each agency's process of ACH credits and debits. All payments to vendors in excess of $25,000 or vendors receiving multiple payments per year are required to be sent electronically. The State will continue to reduce the number of warrants written by encouraging the use of Direct Deposit of government benefit payments (Department of Health and Human Services (DHHS) child care and child support payments have been mandated by the Nebraska State Legislature, Neb. Rev. Stat. §43-3342) and vendor payments. The State allows employees to receive payments by warrant, Direct Deposit to a savings/checking account, or loaded to a stored-value Visa branded debit card. The increased use of ACH payments across State programs will also decrease fees by the banks for clearing and processing State warrants, forgery, and expired warrant claims. The State will continue to work on expanding programs that will increase the dollar amount of receipts being paid and originated electronically by both ACH credit and ACH debit programs.

A historical count of ACH transactions, ACH returns, and return checks processed by the State and governmental entities under the State's current contract. These figures are not a guarantee of future transaction counts. Figures are provided for the benefit of bidders in the development of proposals.

Following is the number of Credit and Debit ACH transactions originated by all State agencies (except the Nebraska Child Support Payment Center (NCSPC) which is listed in Exhibit 2) for Fiscal Year 2018-19 and the first half of Fiscal Year 2019-2020 by month.

Fiscal Year	ACH Transactions	Dollar Amount
2018-2019	2,619,552	$12,110,525,243

Month	ACH Transactions	Dollar Amount
July 2019	180,095	$ 948,851,615
August 2019	191,728	$1,042,998,632
September 2019	168,105	$1,070,286,612
October 2019	180,794	$1,059,908,177
November 2019	177,009	$1,049,525,332
December 2019	202,155	$1,009,979,357
January 2020	178,182	$1,201,315,739
February 2020	417,329	$1,254,599,273
March 2020	329,433	$1,314,178,645

U.S. Bank understands and has been an ardent supporter of the State's desire and action to migrate many of your operations to more efficient and automated means, including migration of as many payments to ACH as possible. Given we also provide other services to the State that are outside of this ACH contract, we have a unique perspective of how the interaction between the State's electronic payments affect the processing and associated costs of other paper-based payments. Because of our position as a total solutions provider, we believe we are best suited to continue in the role as ACH processor and will continue to add value by bringing ideas to you such as RTP, Zelle®, ACH API and other services to help reduce paper.

We understand the scope of this contract as it relates to other municipal entities within the State and have taken this into account from a pricing perspective. We also understand it is our responsibility to work with those municipalities to solicit interest in participating under this contract and have been active in providing information to municipalities on the availability to use this contract.

√ **U.S. Bank currently provides this service to the State and will continue to comply with this requirement.**

B. Project Environment

While multiple State agencies will use the services, the Nebraska State Treasurer's Office will be the point of contact for all daily banking functions and implementation of the banking services.

U.S. Bank has worked closely with the Treasurer's Office as the point of contact with the ACH contract. This allows ideas or issues to flow seamlessly between the State and U.S. Bank.

√ **U.S. Bank currently provides this service to the State and will continue to comply with this requirement.**

ACH ORIGINATION SERVICES

Outlined below is a current list of entities authorized to send or transmit files on the State's behalf. Multiple agencies are also receiving NACHA-formatted files from the State's current ACH processor. Administrative Services processes all ACH vendor and payroll payments on behalf of State agencies excluding those listed below. The Nebraska Department of Revenue's (DOR) accounts will be set up as a subsidiary zero balance account (ZBA) with funds being moved to a main account.

1. SENDING AND RECEIVING ACH FILES

State Accounting (credit files only)……………………...Direct Transmission Administrative
State Accounting *IRS payments ………………………………………Website Transmission
Nebraska Lottery – (credit and debit files)………..……………..….Website Transmission
State Treasurer's Office – (credit and debit files)……………………..Website Transmission
State Treasurer's Office – NCSPC – (credit and debit files)……... Website Transmission
Department of Labor – (credit and debit files) ………………………...Direct Transmission
Department of Revenue – (credit and debit files) ……………………...Direct Transmission
University of Nebraska – (credit and debit files) ……………………......Direct Transmission

2. RECEIVING ACH TRAP FILES

Department of Revenue – (credit and reversal transactions)……….Direct Transmission

√ **U.S. Bank currently provides this service to the State and will continue to comply with this requirement.**

3. PROVIDE BANK ACCOUNT

A bank account will be established with the contractor where ACH files will be credited and debited. ACH debit files will be funded on settlement date, which could mean that the account will be in a daylight overdraft every morning. Treasury Management will wire money into the account daily so that an approximate balance of $4 million could be maintained. However, debits and credits flowing in and out of this account in one day could be as high as $425 million. A secure online solution is required so wires can be received and initiated by Treasury Management staff.

The Nebraska Department of Revenue (DOR) requires accounts set up as subsidiary zero balance accounts (ZBA) with funds being moved to the State's bank account every business day.

The following information provides a description of the project and additional State agency-specific requirements. The figures listed represent recent transaction counts and are not a guarantee of future volumes. The below narratives were based on the use of current services and are being provided to assist bidders in preparing a quality response.

√ **U.S. Bank currently provides this service to the State and will continue to comply with this requirement.**

4. NEBRASKA LOTTERY (LOTTERY)

a. ACH ORIGINATION

Current Process:

Lottery originates CCD+ credit and debit transactions to lottery retailers. This is a mandatory Electronic Funds Transfer (EFT) program. The file is sent to the bank on Monday for settlement on Wednesday.

Lottery receives the EFT batch file from their vendor, International Game Technology PLC (IGT). The file, which contains both debit and credit transactions, is uploaded using a Web-based application on the bank website by logging in using a unique ID and password. The staff fills out the batch data fields, which identify the file as being from Lottery, and uploads the file. After the file is uploaded, staff checks the directory listing within the Web application to make sure the file was processed correctly and there were no format errors.

Within 5-10 minutes, State staff calls a designated line at the bank and enters a four-digit PIN. The total number and dollar amount of credits and debits are entered for the bank to verify the file was correct. When finished, the bank then sends an email to designated staff when the batch file is processed correctly. See chart in Exhibit 2 for historical volumes.

√ **U.S. Bank currently provides this service to the State and will continue to comply with this requirement.**

b. CHARITABLE GAMING

See chart in Exhibit 2 for historical volumes.

Charitable Gaming is a division of the Nebraska Department of Revenue; it administers and collects taxes for the bingo, keno, lottery/raffle and pickle card games. The licensees (taxpayers) can file and pay taxes and fees through an EFT process.

Current Process:

After the licensee files the return information and indicates they want to pay the tax due electronically, an invoice of how much tax is due is created by SaleForce Inc. A licensee will log into the Nebraska Department of Revenue/Gaming Website (NEGAM), where a payment gateway is connected, process the charitable gaming tax return, and request to make an electronic payment for the charitable gaming tax. The application uses the URL to redirect to the banking site.

An invoice is generated by Salesforce and the invoice page sends HTML form data to the current Contractor. This including the total amount due, since the bank does not accept partial/overpayments nor allow payments of less than all invoices simultaneously. In addition, the session transfer message can accommodate data for up to five (5) invoices. If there are less than five (5) invoices on a record, some of these additional fields will be blank.

The bank processes payment and provides an itemized payment receipt to licensee.

√ **U.S. Bank currently provides this service to the State and will continue to comply with this requirement.**

5. NEBRASKA DEPARTMENT OF REVENUE (DOR)
See chart in Exhibit 2 for historical volumes.

a. ACH DEBIT ORIGINATION SERVICES

Current Process:

DOR receives ACH transactions for a variety of tax programs. ACH files are provided to the bank for debit origination. DOR originates its own ACH debit transactions through its Payment Plan and Electronic Funds Withdrawal (EFW) programs. Transactions are also generated by DOR vendors. All ACH files provided will be balanced files containing an offset credit for each debit.

The State Treasurer's Office has set aside bank accounts for DOR use to segregate funds for accounting purposes. DOR requires the bidder to provide this same level of service. Currently, DOR uses nine (9) bank accounts and reserves the right to add, eliminate, or combine accounts as needed. These accounts are for Individual Estimated Tax, Sales and Use Tax, Sales Tax, Business Consumer Use Tax, Withholding Tax, Individual Income Tax, Corporate Tax, Motor Fuels Tax, and E Payment.

√ **U.S. Bank currently provides this service to the State and will continue to comply with this requirement.**

b. ACH CREDIT PROCESSING SERVICES

Current Process:

The DOR supports receipt of credits to designated State-owned demand deposit accounts for tax payments. DOR uses Universal Payment Identification Codes (UPIC) for these designated State-owned demand deposit accounts. The DOR provides taxpayers with file format requirements and the appropriate UPIC for the type of tax being paid. The contractor must provide DOR with a daily file containing the offset credits from these ACH Credit files.

√ **U.S. Bank currently provides this service to the State and will continue to comply with this requirement.**

c. PAYMENT SCHEDULING SYSTEM.

Current Process:

DOR currently uses an Internet and IVR based application to initiate ACH debit entries in various tax filing and tax payment applications.

DOR utilizes a payment scheduling system to allow taxpayers to schedule ACH payments via the Web, an IVR interface, and operator-assisted entry. The Web and IVR interface allows the taxpayer to enter basic payment related information such as Nebraska taxpayer ID, type of tax being paid, tax period end date, amount, and RDFI information needed to complete the ACH transaction. The operator-assisted service allows the ACH payment scheduling system vendor to enter this same required information reported by the taxpayer by a toll-free telephone call.

This ACH payment scheduling system allows the taxpayer to log in via a secure application to initiate payments for all types of EFT tax payments supported by DOR. The IVR component of this service must provide toll-free access using a state specified telephone number. The application accepts Nebraska taxpayer ID number or social security number (SSN), and accommodate single entry and recurring payments. The application provides reports online, allow the taxpayer to easily review payment history and pending payments, and allows the taxpayer to set up bank account information for multiple bank accounts.

Requirements:

The ACH payment scheduling system must provide a public facing Web-based system, IVR system, and operator-assisted service used to collect payment data from taxpayers. If the payment system allows for mobile functionality, describe the interface. Functionality to include;

Schedule a tax payment – taxpayer should be able to enter:

a. Payment amount in dollars and cents.

   1) Scheduled Payment Date. This can be a future date. The system must allow payments to be warehoused for a period of up to one (1) year beyond the current date.

   2) Tax Period End Date (MMDDYYYY). This can be for past dates, but should not be for future dates or before 01011968 (January 1, 1968).

   3) Nebraska ID Number. The system must verify that the entered Nebraska ID Number is a valid licensed DOR taxpayer – be present on the DOR business master file.

   4) Tax Type. The system must allow the taxpayer to select a tax type from a list of tax types that taxpayer is licensed to pay.

Upon completion of scheduling a payment, the ACH payment scheduling system must issue a confirmation number to the taxpayer. The taxpayer must be given the opportunity to review and confirm the details of the payment and have the opportunity to cancel the transaction. A confirmation number must be issued each time a transaction is completed. This is a unique number assigned to a one-time payment when it is initiated, edited, or cancelled.

The system should provide taxpayer inquiry and payment history. The ACH payment scheduling system should

1) Allow the taxpayer to view pending payments and edit or delete, if necessary

2) Allow the taxpayer to view payment history

√ **U.S. Bank currently provides this service to the State and will continue to comply with this requirement.**

d. Register taxpayer banking information in the system. The ACH payment scheduling system should allow registrations to be made in real-time. Both registered and unregistered taxpayers should be able to originate payments. Payments originated by unregistered taxpayers should require fewer pages to navigate. Registered taxpayer should be allowed to create a profile that can be accessed through the application and have access to additional features, including the ability to store bank accounts for future use. Stored banking information would include

1) Bank routing number – system checks to ensure this is a valid entry

2) Bank account number

3) Re-enter bank account number for verification

4) Bank Account Type – checking or savings

5) Business Account – yes or no

6) Option to save account for future use by giving it a name.

√ **U.S. Bank currently provides this service to the State and will continue to comply with this requirement.**

e. Validate registration or payment information entered by the taxpayer.

1) Show payment detail

2) Show bank account detail

3) Allow taxpayer to enter email address and phone number for payment confirmation

4) Terms and conditions -- Taxpayer must read and accept the terms of the authorization and the

5) confirmation number to complete the transaction

6) Payment confirmation with confirmation number assigned and detailed information on transaction.

√ **U.S. Bank currently provides this service to the State and will continue to comply with this requirement.**

f. Manage taxpayer bank account information

1) Allows the taxpayer to add, edit or delete banking information saved in the system.

2) Multiple bank accounts may be listed for a single Nebraska taxpayer ID number or SSN.

√ **U.S. Bank currently provides this service to the State and will continue to comply with this requirement.**

g. Provide taxpayer authentication. Authentication functionality should include at a minimum the same functionality supported in the current ACH payment scheduling system.

1) Currently a taxpayer is authenticated using their Nebraska taxpayer ID number or SSN and system-specific password.

a. First time taxpayers use their Nebraska taxpayer ID numbers as their password and are required to change their passwords the first time into the system.

b. Nebraska taxpayer ID numbers and associated tax program data are provided to the contractor via a computer file as agreed upon by DOR and the selected bidder. Updates to this file are provided daily by DOR.

c. For taxpayers making individual income tax payments, DOR does not provide preregistration data to the contractor; instead taxpayers must self-register by entering their SSNs through the ACH Payment Scheduling system.

d. Bidders must provide descriptions of their solutions for taxpayer authentication.

1. Provide the taxpayer with the ability to change his or her password.

√ **U.S. Bank currently provides this service to the State and will continue to comply with this requirement.**

h. The ACH payment scheduling system must provide an internal Web-based administrative site for DOR taxpayers. This system will be used by DOR to perform a variety of functions:

1) Schedule payments at taxpayer request
2) Cancel payments at taxpayer request
3) Update payments at taxpayer request
4) Inquire on pending and past payments
5) Reset passwords at taxpayer request

√ **U.S. Bank currently provides this service to the State and will continue to comply with this requirement.**

i. The ACH payment scheduling system must be able to support all tax categories allowing EFT supported by DOR and allow for the addition of new tax programs at the request of the DOR throughout the life of this contract.

√ **U.S. Bank currently provides this service to the State and will continue to comply with this requirement.**

j. The ACH payment scheduling system must have the ability for taxpayers to schedule estimated payments for both individual and business taxes. These recurring payments must be able to be scheduled for dates as specified by the DOR. The current due dates for individual income estimated tax payments are April 15, June 15, September 15, and January 15. For corporation income tax, the current due dates are April 15, June 15, September 15, and December 15.

√ **U.S. Bank currently provides this service to the State and will continue to comply with this requirement.**

k. DOR receives and transmits files with the ACH payment scheduling system vendor via secure FTP. Exhibit 3 provides specifications for each file. These files include but not limited to:

l. Daily Remittance report containing payment information about debit transactions originated by the ACH payment scheduling system.

m. Pre-Registration Response File. This file serves as an acknowledgment from the ACH payment scheduling system that the DOR Pre-registration file has been received.

n. Revenue Pre-registration File. This is a copy of the DOR Business Master File used by the ACH payment scheduling system to authenticate taxpayers. Once this file is initially provided, only daily adds, changes, and deletes are sent.

√ **U.S. Bank currently provides this service (listed in k. through n.) to the State and will continue to comply with this requirement.**

6. UNIVERSITY OF NEBRASKA

a. ACH ORIGINATION SERVICES

Current Process:

SAP is a business software vendor used for the UN business enterprise solution. The UN and NSCS use SAP Payroll for processing monthly and biweekly net pay results. Employees may deposit into more than one bank account the transaction count reflects each deposit. Each pay cycle the University makes ACH deposits to vendors (such as retirement plan contributions or health insurance premiums) for the payroll deductions taken from the employees' pay. The vendor payments are included in the same file as net pay, as a separate batch. Once a month, the University processes a debit file to collect health insurance premiums from retirees that are participating in the University's group health insurance plan. The retiree health premium requires mandatory EFT participation. The University sends payroll files two days in advance. Retiree debit files are transmitted to the bank approximately 10 days in advance. A University staff member calls in file totals via an IVR. See chart in Exhibit 2 for historical volumes.

The University will use some or all of the requirements. There are no agency-specific requirements that need a response.

√ **U.S. Bank currently provides this service to the State and will continue to comply with this requirement.**

7. NEBRASKA CHILD SUPPORT PAYMENT CENTER

a. ACH ORIGINATION SERVICES

Current Process:

NCSPC transmits one file a day with multiple batches via a website. NCSPC makes payments to the Custodial Parent by an ACH transaction to a checking or savings account or to a VISA branded stored value card. The NCSPC also debits Non-Custodial parents checking and savings accounts via an ACH transaction for child support payments. The State Treasurer's Office will maintain a separate demand deposit account for NCSPC. All NCSPC analysis activity must be billed monthly to NSCPC. See chart in Exhibit 2 for historical volumes.

The bank account ledger balance must be collateralized at the level required by State statute individually of other State bank accounts. Currently $10 million is pledged.

NCSPC staff will need access to NCSPC bank account via an Internet-based information reporting application.

NCSPC will use some or all of the requirements listed. There are no agency-specific requirements that need a response.

√ **U.S. Bank currently provides this service to the State and will continue to comply with this requirement.**

8. NEBRASKA DEPARTMENT OF LABOR - UNEMPLOYMENT INSURANCE

a. ACH ORIGINATION SERVICES

Current Process:

The Department of Labor has three (3) daily files, which are both debit and credit files. The batch information is verified by a secure email, it includes the number of transactions and the file amounts, and whether they are debits or credits. After information is received and verified a confirmation is made electronically. Tax payments are accepted via UIConnect, their online data and payment system, which can push or pull payment from employer accounts. Batches of unemployment benefit payments are produced by GeoSolutions. See chart in Exhibit 2 for historical volumes.

√ **U.S. Bank currently provides this service to the State and will continue to comply with this requirement.**

9. TREASURY MANAGEMENT

a. ACH ORIGINATION SERVICES

Current Process:

The Treasury Management Division of the State Treasurer's Office (TM) submits ACH files for daily processing. Files often contain multiple batches and are transmitted via a secure website with dual authentication credentials. Criteria for selecting an originating bank will include the ability to provide a secure online solution with at least the minimum industry authentication standards. ACH files are initiated from both TM, as well as Administrative Services' Accounting Division. The State Treasurer's Office works with many State agencies to offer debit programs, this option continues to grow. See chart in Exhibit 2 for historical volumes.

Treasury Management handles the ACH returns for State Agencies other than NCSPC and the Department of Labor. Daily Return Settlement report is printed and staff identifies which agency the money should be returned to. An entry for the return is made in the accounting system and a copy of the entry is sent to the proper agency. Returns should be listed on the previous and current day reports separately and not netted from receipts.

Treasury Management requires the contractor to provide an online application to initiate a re-presented check entry (RCK) through the ACH network in attempt to collect the debt on insufficient fund checks. This is a service that TM provides to any agencies that want to use it.

√ **U.S. Bank currently provides this service to the State and will continue to comply with this requirement.**

10. STATE ACCOUNTING
    a. ACH ORIGINATION

Current Process:

State Accounting coordinates all payments flowing out of the State's accounting system to the bank except those listed individually. Two NACHA ACH formatted files with multiple batches per file are created daily and sent to the bank via direct transmission. Most of the batches in the files are sent with an effective date two or more days in advance, but there is generally at least one batch of limited transactions in the file which is for one-day settlement. Employees may direct their payroll deposits into more than one bank account, so transaction count includes multiples. The contractor will be required to provide a PC or Internet-based batch database solution for use by State Accounting to transmit IRS tax payments and occasional payroll PPD credits. See chart in Exhibit 2 for historical volumes.

State Accounting will use some or all of the requirements. There are no agency-specific requirements that need a response.

√ **U.S. Bank currently provides this service to the State and will continue to comply with this requirement.**

11. Universal Payment Identification Code (UPIC)

The State requires the contractor to use UPIC account numbers. The State has been using UPICs with different ACH credit payments being paid to the State electronically monthly. The State will continue to expand the use of the UPICs when the opportunity. The State will use the existing UPIC numbers that are in place and expand the use in the right situation. UPIC offers the State fraud protection, the ability to block incoming wires, and ACH debits. It also reduces State expenses by allowing the portability of the UPIC to future selected vendors under the State origination agreement without having to do mass postal mailings to thousands of entities/consumers paying the State by ACH credit.

In the calendar year 2018, UPIC numbers were used 948,104 times with a dollar volume of $4,686,459,281. UPIC numbers were used 1,406,765 times with a dollar volume of $5,130,838,567 in the calendar year 2019. These figures represent a historical count of prior activity by the State and are not a guarantee of future transaction accounts.

The State is not willing to change the account numbers that are already in place using UPIC.

√ **U.S. Bank currently provides this service to the State and will continue to comply with this requirement.**

12. Daily Export

The State requires the contractor to provide a daily Comma Separated Value (CSV) export of designated bank accounts' prior day activity by 10 a.m. CT. Four format options are available. This file will be imported into the State ERP system as a part of an automated daily reconciliation process unique to the State. The State requires this information to be exported from a Web-based information reporting application. See Exhibit 1 for descriptions of the formats available.

√ **U.S. Bank currently provides this service to the State and will continue to comply with this requirement.**

C. Business Requirements

1. The Contractor is responsible to research Nebraska Revised Statutes for legal responsibilities when doing business with the State. State statutes and the Nebraska Constitution include but are not limited to:

Neb. Rev. Stat. § 48-1122—Prohibition of Discrimination
Neb. Rev. Stat § 73-205(3)—Technology Access Standards
Neb. Rev. Stat § 73-506(1)—The State cannot pay for deliverables not received
Neb. Rev. Stat § 73-506(2)—Service contracts with unspecified or unlimited duration
Neb. Rev. Stat § 77-2301—The bank must be a state or national bank licensed to do business in the State and will cash State warrants free of charge
Neb. Rev. Stat § 77-2387 to 77-2398—Collateral Requirements
Neb. Rev. Stat § 81-2401 to 81-2408—Prompt Payment Act
Neb. Rev. Stat § 81-118.01-Electronic Payment; acceptance; conditions
Nebraska State Constitution, Article XIII, § 3—Prohibits indemnification and limitations of liability

√ **U.S. Bank understands and will adhere to the Nebraska State Statutes.**

2. Collateral Requirements

The contractor shall be responsible to meet State statute requirements for collateralization of State deposits. References to collateralization requirements are found in Neb. Rev. Stat. Section §77-2395, §77-2389, §77-2398, and §77-2387. Collateral requirements are applicable to all State agency accounts serviced under this contract and the contractor is required to pledge 102 percent of the bank account ledger balance. The State requires a statement of collateral be provided on a calendar month basis by the bank and the holding company emailed to NST.TMStaff@nebraska.gov. The agreement for collateral arrangements must require the signature of a State designated representative before collateral for the State is released. The contractor must provide statutorily required collateral, currently estimated to be up to $50 million, without exceptions or be excluded from further award consideration.

Collateral requirement are required for the maximum daily ledger balance, below is the monthly average from July 2019 to December 2019:

January 2019	$4,404,271
February 2019	$3,725,272
March 2019	$3,938,049
April 2019	$4,117,922
May 2019	$3,405,645
June 2019	$3,184,488
July 2019	$3,409,620

August 2019	$2,466,095
September 2019	$2,588,483
October 2019	$2,979,269
November 2019	$3,143,192
December 2019	$3,577,684

U.S. Bank will continue to collateralize the deposits of the State Treasurer's Office with a letter of credit issued by the Federal Home Loan Bank.

√ **U.S. Bank will meet State Statute requirements for collateralization of State Deposits**.

3. ACH Origination Business Requirements

The contractor must comply with the following items:

a. The contractor must allow all State bank accounts except Nebraska Unemployment and NCSPC be grouped for the purposes of compensating balance. All charges for services must be charged on a calendar month account analysis. The account analysis must be made available online or mailed to the State entity no later than the 15th of each month.

This is the current structure of State bank accounts with U.S. Bank. This structure would remain in place as detailed above.

Analysis statements are currently provided through SinglePoint Information Reporting on the ninth business day of the month.

b. Per Neb. Rev. Stat. 77-2301, the contractor will be required to cash State Treasury warrants and warrants issued by the NCSPC free of charge and without requiring a fingerprint at any branch of the contractor.

Cleared State Warrants

January 2019	21,773	$33,072,059
February 2019	30,873	$30,963,022
March 2019	43,882	$32,390,474
April 2019	56,428	$36,366,996
May 2019	39,073	$36,338,948
June 2019	28,125	$26,136,292
July 2019	24,827	$27,725,441
August 2019	21,608	$26,931,084
September 2019	22,462	$30,898,863
October 2019	23,087	$30,049,204
November 2019	20,403	$27,508,178
December 2019	19,707	$34,351,366

Cleared NCSPC Warrants

January 2019	1961	$423,061.30
February 2019	1889	$362,595.44
March 2019	2738	$674,004.14
April 2019	2825	$695,547.85
May 2019	2433	$515,931.39
June 2019	1839	$365,405.52
July 2019	2131	$396,399

August 2019	1878	$345,155
September 2019	1845	$385,074
October 2019	1981	$393,227
November 2019	1939	$411,445
December 2019	1906	$413,202

U.S. Bank is currently in compliance with this requirement and has put significant effort into creating awareness of this statutory requirement across our branch network in the State of Nebraska.

c. The contractor must follow all applicable Nebraska DHHS rules and regulations, and may view them at: www.sos.ne.gov/rules-and-regs/regsearch/index.html. NCSPC staff will work with the contractor to resolve questions or issues regarding compliance of these rules and regulations.

U.S. Bank has read, and to the best of our knowledge has been and will remain in compliance with, the rules and regulations as referenced above. In the event of an issue, U.S. Bank would work with NCSPC staff to expeditiously correct any discrepancies.

d. The contractor will be required to provide an annual report for the period July 1 to June 30 to the State Treasurer's Office for all transaction counts processed. The report will be due August 1 of each year. The report would give transaction counts by Standard Entry Class code and dollars processed per entity using the contract.

On a monthly basis, U.S. Bank provides a UPIC report that provides a breakdown of both the transaction counts processed, and related dollars, per each UPIC number in production.

e. The contractor must keep the State educated on all changes to the rules and regulations by providing training or materials.

√ **U.S. Bank understands and will continue to comply with this requirement.**

f. The contractor will detail the process the State will use to export using a CSV format the daily bank activity from an online/internet based information reporting application, and in which format the contractor will allow the State to use. (Examples are listed in Exhibit 1 and the contractor must use one of the four formats.

√ **U.S. Bank understands and will continue to comply with this requirement.**

g. The contractor must provide credit limit for the day on State accounts of $400 million to allow a wire to be posted to cover the debits for the day.

√ **U.S. Bank understands and will continue to comply with this requirement.**

h. The contractor must provide debit limit for the day on State accounts of $400 million. Largest to date was $373,933,963 for one (1) day.

√ **U.S. Bank understands and will continue to comply with this requirement.**

i. Provide the State Treasurer's Office, through a mutually agreed electronic transmission method, the amount of receipted funds credited to those accounts designated by the State by open of business Central Time on the effective settlement date. The money must be available for withdrawal by 8:30 AM CT.

√ **U.S. Bank understands and will continue to comply with this requirement.**

j. Retain existing UPIC numbers with the option to add or delete numbers.

√ **U.S. Bank understands and will continue to comply with this requirement.**

ATTACHMENT A
RFP # 6304 Z1

Mandatory Project Requirements

Bidder Name: ___U.S. Bank___________________________________

Please answer the following seven mandatory questions with a check mark after the appropriate response. Any "No" answer will eliminate the contractor from further evaluations.

Yes_X__No_____ Does the contractor agree, without exceptions, to meet State Statute requirements for collateralization of State Deposits?

Yes X___No_____ Does the contractor agree, without exceptions, to provide a statement of collateral every month along with the holding companies pledged securities?

Yes X___No_____ Does the contractor agree, without exceptions, that collateral arrangements must require a signature of a State designated representative before release of collateral or line of credit?

Yes X___No_____ Is the contractor a state or national bank licensed to do business in the State of Nebraska and of approved standing and responsibility pursuant to Neb. Rev. Stat. § 77-2301?

Yes_X___No___ Does the contractor agree to cash Nebraska State Treasury warrants and warrants issued by the NCSPC free of charge and without requiring a fingerprint as required in Neb. Rev. Stat. § 77-2301?

Yes X___No_____ Does the contractor agree to continue the use of the State of Nebraska's UPIC numbers?

ATTACHMENT A
RFP # 6304 Z1

Baseline Functional

Bidder must provide a narrative response describing how the solution will meet each of the following statements.

FR 1 – Technical/Hardware/Software Requirements	
a.	Describe hardware/software requirements to access a secure online solution.

Response:

SinglePoint technical recommendations are stated below at supported (minimum) and optimal levels.

Supported browser versions based on your operating system

Operating system	Optimal*	Minimum**
Windows® 7	Internet Explorer 11 Chrome 30+ Firefox 27+	Internet Explorer 8, 9 or 10 Firefox 24 through 26
Windows 8	Internet Explorer 11 Chrome 30+ Firefox 27+	Internet Explorer 10 Firefox 24 through 26
Windows 10	Internet Explorer 11 Edge 12+ Chrome 30+ Firefox 27+	N/A
Apple® Mac OS® X	Chrome 30+ Firefox 27+ Safari 7+	Firefox 24 through 26
Mobile		
Android 4.1 through 4.4.4	Chrome 30+	Google Android™ browser
Android 5.0+	Chrome 30+	N/A
iOS 5+	Safari 5+	N/A

* TLS 1.2 will be automatically enabled. (Includes version shown or current version.)
** You will need to manually enable TLS 1.2 in browser security settings.

Workstation requirements and recommendations

Component	Optimal	Minimum
Screen resolution	1280 × 1024 or higher	1024 × 768
CPU	2.0 GHz processor or faster	500MHz or faster
Modem	Broadband internet connection	56 KBPS
Memory	4 GB or more	1 GB or more
Hard drive disk space	100 MB or more	35 MB or more

Users may also need Adobe® Reader® and Microsoft Excel® or compatible application to view and print certain reports.

FR 2 – Online Bank Reporting/Internet Functionality	
a.	Describe how a secure online solution to view bank activity is provided.

Response:

The State can continue to leverage SinglePoint® to achieve new levels of efficiency through the one easy-to-use website with a single point of access for all your global treasury management service needs. As you are aware, SinglePoint does not require dedicated PCs or software installation.

With SinglePoint, you can continue monitor account activity; view, manipulate and download images; transfer and manage payments, including Disbursements via Zelle®; process and deposit collections; prevent fraud; and manage your employees' system use. The following services are available within SinglePoint and are accessible with the same user login ID and password.

SinglePoint Information Reporting

SinglePoint Information Reporting enables the State to manage your financial position with superior reporting tools. SinglePoint displays account summary, detail and transaction information for accounts and transactions online. Benefits can include:

- **Simplify daily account reconcilement**—You can view current and previous day transaction and balance summary totals, including interim collected balance totals. Users can view images of paid checks, returned checks and deposited returned items. You can also review incoming wire detail and return wires online.
- **Transfer funds easily from your account summary view**—SinglePoint Book Transfers allow you to view your previous day or current day account summary and act within Information Reporting to immediately transfer funds between accounts.
- **Search for transactions**—SinglePoint allows you to search by account, transaction type, date range, amount and transaction reference (such as check number). Users can view, sort and print search results in PDF or comma separated value (CSV) formats and drill down to transaction detail within the application.
- **View standard and special reports in various formats**—Standard reports include five previous day and 10 current day reports, including the highly useful ACH and Wire Detail reports. With SinglePoint, you can quickly select report dates with the clickable calendar tool. Report formats include browser, PDF and text for human readable reports and BAI2 and CSV to integrate with internal systems.
- **Customize reports with robust filtering**—Users employ the report builder to select accounts, date ranges and data fields like transaction types, as well as save and name personal report filters, then reuse and share with other users.
- **Manage delivery of reports via email or transmission**—You can set up delivery schedules of previous, current day and custom reports on your accounts to be delivered to an email address or transmission mailbox.
- **Decision your current day returned items**—Your employees can easily review returned items, view images and decide to charge back or redeposit eligible items or request a reversal, and view their decision history.

b.	Provide a link to demo the online solution website and describe how to use.

Response:

The State can access the SinglePoint online demo at www.usbank.com/sptdemo.

c.	Describe a web-based system, IVR system and operator-assisted service to collect payment data from taxpayers. Describe any mobile functionality available.

Response:

U.S. Bank eBill Service is a highly customizable electronic bill presentment and payment solution designed to meet the complex needs of large-scale enterprises that need to collect and mange payments on demand.

Our eBill Service is an omnichannel solution supporting IVR and web-based payment solutions that are deployed in a mobile optimized environment via responsive web design (RWD) technology.

Key features

- Payment channels include mobile/web, IVR, pay-by-text, agent, walk-in, messenger and intelligent personal assistants.
- Payment methods include credit cards and debit cards (Visa, Mastercard, Discover and American Express), ACH, cash, checks and point-of-sale payments.
- Payment options:
  - One-time payments (same day and future dated)
  - Recurring payments
  - Autopay
  - Payment plans
  - Balance reloads
- **Customer portal**—Empower your customers to choose one-time guest payments or enroll quickly for full-service capabilities. The customer portal can be customized to reflect the unique look and feel of your brand.
- **Payment center**—Provide your customer service staff the ability to access profiles, view payment history, schedule and manage payments on behalf of customers, view reports, and perform other day-to-day customer service tasks through role-based user access. All your customers' billing and payments information is easily accessible in the payment center.
- **Bill and invoice presentment**—Present summary and detailed bill and invoice data to customers within the customer portal, customized with your company's branding. Customers can also view and download PDF versions of their bills.
- **Reporting**—Give your staff unparalleled visibility into your customers' billing history and payment behavior. Access reports including payments processed, returned payments and fee/settlement, all downloadable in multiple file formats. The data warehousing features allow for a consolidated view of customer and payment information across channels and multiple lines of business, giving you operational and analytical insight that empowers faster business decisions.
- **Paperless billing**—Enable your customers to access bills electronically and manage their paperless billing preferences.
- **Alerts and notifications**—Keep your customers up to date with billing and payment-related alerts and notifications. Customers can set up and manage email and/or SMS text message alerts and notifications via the customer portal.
- **Security and compliance**—Built-in security features ensure data and privacy protection to give you and your customers peace of mind. U.S. Bank eBill Service meets the following security and compliance standards:
  - **PCI DSS**—For payment card security
  - **HIPAA/HiTech**—For healthcare information security
- **Integration suite**—Developers can choose the approach that best fits your organization's business requirements, preferred integration method and security requirements.
- **Developer API**—Our comprehensive developer API provides flexible options to integrate your customer-facing channels and applications with the eBill Service platform. API integration options include web redirect, SSO, REST and web services.
- **Invoice billing**—The customer portal supports invoice presentment, full or partial invoice payments, single payments applied to multiple invoices, and applying credit balances to invoices.

Additional features

- **Secure messaging**—Send secure online messages between customers and staff to facilitate Q&A anytime.

- **Forms and documents**—Make forms, policies or financial applications available to your customers within the customer portal.
- **Payment plans**—Set up and manage flexible payment plans for your customers to pay over time.
- **Chatbot**—Consider using our Chatbot channel that can answer your customers' generic customer service questions without login and help customers pay their bills.

d.	Allow taxpayers to initiate payments via IVR and web until 5:00 PM CT for next-day settlement. Discuss cut-off times and ACH processing schedules. Provide customer service support times for the IVR.

Response:

U.S. Bank eBill Service is configurable to your 5 p.m. CT cutoff time for next-day settlement.

You may elect to receive either a same day or next day remittance file. Next-day files are available by 7 a.m. CT, Monday through Friday, excluding federal holidays. Same-day remittance files are available within two hours after the payment cutoff time defined by the State, Sunday through Friday, excluding federal holidays. Both versions of the file include ACH debit and credit/debit card payment activity for the most recent payment effective date.

The U.S. Bank Depository Account settlement deposits for a given postdate should reconcile to the transaction data included in the remittance file.

For e-check/ACH payments, the effective date on the remittance file is the date that the payment will settle (or "post") to your U.S. Bank Depository Settlement Account.

The reconciliation process may be defined as:

The total U.S. Bank Settlement Account Deposits for a given post date equals the total amount of transactions processed on the remittance file.

We support cutoff times at 1, 3, 5 and 8 p.m. CT. Those are aligned to the back-office ACH processing windows. If an application accepts card payments, the cutoff for cards can be up to 10:59 p.m. CT. At the cutoff time, we do an end-of-day consolidation, so all the reports and files are done for that business day. ACH files go out for next-day settlement. Remittance files are ready about an hour after the cutoff time.

The U.S. Bank eBill Service Production Support team is available Monday through Friday, (excluding Federal holidays) from 7 a.m. to 5:30 p.m. CT, with extended 24/7 support available for critical/urgent system issues (e.g., multiple clients unable to make payments or access payment channels) and file transmission support. We are exploring moving to a 24/7 support model for all issues in 2021.

e.	Describe the security levels that are available in the online solution, including whether security levels can be set by user, account, dollar amount, or type of transaction.

Response:

System administrators can modify user entitlements, account access and transaction limits at any time with immediate updates or change user status for interim periods. Entitlements can be assigned by service area, function and account access. Your system administrator can set user payment limits for ACH, book transfers and wire transfers. The following table describes SinglePoint user entitlement by service.

Service	Entitlements	Access and Limits
ACH	Batches: ▪ Initiate batches ▪ Approve batches Templates: ▪ Create template ▪ Approve template	▪ Access to accounts ▪ Providence level limits ▪ User level batch initiation limits • Per batch • Daily cumulative limit ▪ User level batch approval limits • Per batch • Daily cumulative limit

	▪ Export template	
ACH additional services	Allow access to the ACH activity schedule, control totals, positive pay warehouse search services	Access to accounts
Book transfer	▪ Initiate ▪ Approve	Access to only U.S. Bank accounts
Cash vault	▪ Allow access to online ordering ▪ Allow access to reports	Access to cash vault locations
External messaging	Enable messages	Delivery options: ▪ Primary email ▪ Secondary email ▪ Mobile device ▪ LaunchPoint page ▪ Fax
Image access	Allow access to image service. (Images may be viewable in other services, such as reporting, without access to image access service.)	Access to accounts
Information reporting	▪ View current and previous day ▪ View and generate special ▪ View images ▪ View returned item images	▪ Access to accounts ▪ Access to specific special reports
Reverse positive pay	▪ View transactions ▪ Decision	▪ Access to accounts ▪ Adjust amount
Wire transfer	Initiate ▪ Domestic repetitive ▪ International repetitive ▪ Domestic non-repetitive ▪ International non-repetitive ▪ Repeat code request Approve ▪ Wire transfer ▪ Templates ▪ Repeat code requests ▪ Create templates	Access to accounts Limits—Up to eight levels: Initiate ▪ Per transaction semi-repetitive ▪ Per transaction repetitive ▪ Per transaction non-repetitive ▪ Daily cumulative (all types) Approve ▪ Per transaction semi-repetitive ▪ Per transaction repetitive ▪ Per transaction non-repetitive ▪ Daily cumulative (all types)

f. Describe the security measures for which Treasury Management System Administrator(s) will be responsible. How many System Administrators can be assigned?

Response:

The State currently leverages SinglePoint's dual-system administration. As such, all changes to user access or limits require a second system administrator's approval to process.

System administrators have the authority to:

- Create, modify and delete users.
- Assign user access to services, functions within services, accounts for viewing and transfer dollar limits.
- Inactivate and reactivate users.
- Reset user passwords.

- Rename (nickname) accounts and reordering how accounts appear when listed in SinglePoint.
- Change settings at the global (client-wide) level. For example, system administrators can set or change the number of required approvals for a wire transfer.
- View, audit and profile reports for all users.

g.	Describe the secure online solution and the methods of dual authentication available to initiate ACH files for debit and credit programs.

Response:

SinglePoint offers the State dual-system administration to initiate ACH files for debit and credit programs. All changes to user access or limits require a second system administrator's approval to process.

SinglePoint ACH Positive Pay can allow the State to have ACH debits matched to predetermined authorization records. You can selectively accept ACH debits by using ACH positive pay. Various criteria are used to authorize some ACH debits and/or credits for posting while excluding others.

U.S. Bank filtering criteria, which may be used individually or in any combination, includes:

- **Trancode**—Credits, debits or both.
- **Customer**—Only allows transactions to post from a defined company ID or company name.
- **Dollar threshold**—Sets exact or maximum dollar amount limit. For example, if you establish a maximum limit of $50,000, ACH filter would allow all items up to $50,000 to post. Items over that amount would be returned to the originator of the transaction.
- **Date range**—Allows you to authorize items to post between certain dates.
- **Number of ACH transactions by vendor**—Authorizes a specific number of ACH items by vendor. For example, you can authorize ACH debits from a particular vendor to post six times. If a seventh item were submitted, it would be rejected.
- **Single item**—One-time item. For example, if you have a maximum threshold on the account and is expecting a large dollar item, you can instruct U.S. Bank to allow that item to post. Other items over the specified maximum amount will continue to be filtered out.
- **Recurring item**—Authorizes specific recurring items.
- **SEC code**—ARC, POP, RCK WEB and TEL via the U.S. Bank Business eCheck Block service.

h.	Describe how Treasury Management staff can create users and assign access levels to agency personnel to the online solution.

Response:

With SinglePoint's dual-system administration, all changes to user access or limits require a second system administrator's approval to process. System administrators have the authority to:

- Create, modify and delete users.
- Assign user access to services, functions within services, accounts for viewing and transfer dollar limits.
- Inactivate and reactivate users.
- Reset user passwords.
- Rename (nickname) accounts and reordering how accounts appear when listed in SinglePoint.
- Change settings at the global (client-wide) level. For example, system administrators can set or change the number of required approvals for a wire transfer.
- View, audit and profile reports for all users.

i.	Describe how users can be set up for access to zba accounts.

Response:

	The designated SinglePoint system administrators set up users for access to ZBA accounts and the functionalities they can access within the system.
j.	Describe the formats available to receive ACH addenda online (both translated and raw data).

Response:

ACH addenda are reported, in both translated human readable format and in a raw data format, within the Special Reports section of SinglePoint Information Reporting, as found under the reports titled EDI Remittance report and EDI Supplement report.

k.	Describe the firewalls to protect customer information on the bank side.

Response:

U.S. Bank deploys several layers of industry standard firewalls and intrusion detection systems. For security, SinglePoint employs 128-bit encryption, SSLv3, and individual customer IDs and passwords. Additionally, VeriSign Tokens are required to transmit ACH transactions.

l.	Describe if additional online authentication can be used beside user ID and password.

Response:

U.S. Bank encrypts all passwords and PINs using the highest HTTPS encryption routine supported by your browser. We also require Entrust tokens to access payment functions.

m.	Describe the number of users that can have access to the contractor's online solution and how many users can be in the solution at one time.

Response:

There is no limit to the number of users who can have access to SinglePoint. Access for each user is managed by the State's administrative user via role-based access controls.

n.	Describe how online solution upgrades are communicated and implemented. Including if emails are sent or easily viewable on the online solution?

Response:

System upgrades are automatically implemented with the SinglePoint application.

o.	Can the information for current day reporting be available by 8 AM? Describe the time of day (CT) information is retrieved from the ACH network and made available for current day reporting. How often is the bank activity updated and are there set times?

Response:

Yes. Current day reports are available by 8 a.m. CT. SinglePoint Current Day Reporting updates occur at different times for different applications and different processing sites, as listed in the following table.

Type of Data	Update Schedule
Wire transfer information	Updated continuously and in real time
ACH data	Updated four times during business hours: by 5 a.m., 8 a.m., 12 p.m. and 3 p.m. PT
Deposit reporting	Continuous and updated according to site-specific schedules
Federal Reserve Bank Settlement Activity	Updated upon login to banking system
Other items, such as ATM, phone and branch-initiated transactions	Updated upon login to banking system

p.	Describe the process to ensure **previous day** information will be available by 8:00 AM CT.

Response:

Per the State's requirements, U.S. Bank provides previous day information by 8 a.m. CT through SinglePoint.

q.	Provide a detailed listing and samples of all reports available online. Describe how these reports can be customized for each user.

Response:

The State will have access through SinglePoint to current day, previous day and customized reporting. Please refer to **Sample Current Day Reports** and **Sample Previous Day Reports**, **Exhibits 1** and **2**.

Below are the available reports on SinglePoint.

SinglePoint Current Day Reporting		
Summary Reporting		
Opening ledger balance	Interim one-day float	Number of debits
Current day credits	Interim three-plus-day float	Interim collected
Current day summary and detail	Controlled Disbursement draft summary	ACH summary
Current day summary	Lockbox detail	Interim ledger
Current day debits	Opening collected balance	Interim two-day float
Number of credits		
Detail Reporting		
Current day detail	Controlled Disbursement check debits	Lockbox deposit
ACH detail	Controlled disbursement/draft detail	Wire transfer transactions
ACH transactions	Federal Reserve Bank settlement activity	Other paper deposits
Wire transfer detail	Foreign exchange and global trade	Other items, such as ATM, phone and branch-initiated transactions

SinglePoint Previous Day Reporting		
Summary Reporting		
Ledger balance	Opening collected balance	Total credits
One-day Float	Opening ledger balance (optional)	Total number of credits
Two-day float	Month-to-date (MTD) average collected	Total debits
Three-day-plus float	MTD average negative collected	Total number of debits
Collected plus one-day float		
Detail Reporting		
ACH debit and credit transactions (addenda are reported on the EDI remittance report or can be added to previous and current day reporting)	ACH originated item detail reporting (reporting of items within a settlement can be added to previous day reporting)	Deposited items returned
Coin and currency purchases	Complete wire transfer transaction details	Location numbers

Wire transfer credits	Controlled disbursement presentments	Lockbox deposits
Wire transfer debits	Checks paid	ZBA credits

SinglePoint allows the State to create custom reports based on your specified criteria. (Available options are described below). Your users can save the filters they build and share them with other users.

Available Criteria for Custom Reports	
Remove and reorder accounts	Date range
Transaction types (BAI codes): summary code groups, transaction detail groups, Individual BAI codes	Transaction amount or range of amounts
Transaction amount or range of amounts	Transaction reference number or range of transaction reference numbers

Additional customization is available for exporting files in CSV format, which allows you to remove fields and designate field position order.

r.	Describe the ability to view, print, and download daily reports for previous day and current day activity in one (1) or more of the formats listed in Exhibit 1.

Response:

The State can continue to view, print, and download daily reports for both previous and current day activity. The daily deposit activity detail file is available in BAI2, ANSI and X12 821 formats, as well as custom flat file.

The data is available through direct transmission or by accessing SinglePoint. Internet Explorer 11.0 or higher is required to access SinglePoint.

Our supported transmission methods include:

- Three internet-based options:
  - Secure file transfer protocol (SFTP).
  - Secure command line file transfer protocol (FTP).
  - Secure hypertext transfer protocol (HTTPS).
- Frame relay and virtual private network (VPN) leased connections.
- Value added network (VAN) transmissions.

Technical requirements vary depending on the option selected.

s.	Describe all the information on current day and previous day reports. Example: trace number, effective entry date, payment description, originator's company ID number and amount.

Response:

U.S. Bank recently enhanced our prior and current day reporting in order to provide additional information to our clients. Field tags were added to enhance the reporting, as well to help with reconciliation.

ACH received transactions provide the following data:

- ENTRY DESCRIPTION
- COMPANY NAME
- COMPANY DISCRETIONARY DATA
- EFFECTIVE DATE
- TRANSACTION CODE
- ORIGINATING BANK NAME
- COMPANY ID
- SEC CODE
- INDIVIDUAL ID
- ITEM TRACE
- INDIVIDUAL OR RECEIVING COMPANY NAME

ACH settlement transactions provide the following data:

- ENTRY DESCRIPTION
- SEC CODE
- COMPANY ID
- COMPANY DISCRETIONARY DATA

▪ INDIVIDUAL ID ACH originated item detail transactions (detailed settlement reporting) provide the following data: ▪ SETTLEMENT TRANSACTION CODE ▪ INDIVIDUAL ID ▪ INDIVIDUAL OR RECEIVING COMPANY NAME ▪ EFFECTIVE DATE ▪ DETAIL TRANSACTION CODE ▪ TRACE NUMBER	
t.	Provide an example where the ACH trace numbers are located and describe how the State will access the ACH trace numbers. Example: on current day, previous day, or ACH received item addenda reports (whether translated or raw data).
Response: The ACH system PAR number (trace number) is available through the ACH warehouse search function in SinglePoint. SinglePoint's ACH Warehouse Search gives you inquiry access to the ACH system database. The State can view the status of files submitted and view detailed information at the file, batch, item and addenda levels. It allows the State to view detail related to ACH debits or credits that have affected your accounts. The service also gives the State the ability to view addenda record information, which assists in applying payments. Optionally, we can provide unformatted addenda through SinglePoint current and unformatted addenda report.	
u.	Describe how fees will be billed monthly on an analysis statement and if the analysis statement will be provided online or via email Provide an example of the analysis statement and describe how it could be downloaded from the online solution. Describe if the analysis statement could be downloaded in an editable file format.
Response: Analysis statements are available online within SinglePoint on the 10th business day of the month following month-end. Analysis statements can be made available in PDF, CSV and TXT formats. Users can request a message alert when the statements are available. A monthly invoice is included with the analysis statement. We anticipate the State will continue to remit payment via ACH.	
v.	Describe the normal data retention policy and the proposal for the ACH payment scheduling system. Include details such as time period, data storage capabilities and processes, disposal of records, and any other relevant details regarding data retention.
Response: SinglePoint retains previous day data for 60 days and current day data for 10 days. Additional retention periods of 90 day, six, 12, 18 and 24 months for previous day information are available for an account-level surcharge. The retention period within the SinglePoint ACH Origination module is 45 days. SinglePoint users can future date ACH batches up to 30 days or use the Recurring Batch Scheduler tool to define settlement dates and/or frequencies up to a year in advance.	
w.	Describe any options for extending the time frame on data retention.
Response: Please see our response to **question v.** for detail on the retention periods for SinglePoint Information Reporting and SinglePoint ACH Origination. The State also has the ability to download SinglePoint reports for your own internal retention. When researching ACH received items via the SinglePoint ACH Warehouse module, searches allow the State to view file, batch, item and addenda (where applicable) detail related to received credits or debits. The data retention period under the Search for Received Items by Account Number inquiry extends to the full 60 calendar days.	

When researching ACH originated items via the SinglePoint ACH Warehouse module, two types of searches are available. These include a general search for originated items or a search for originated items by account number. A description of the two searches follows.

- If the receiver's account number is known, then the Search for Originated Items by Account Number option should be used. This search allows the State to quickly define your search parameters and find originated item more quickly. The data retention period under the Search Originated Items by Account Number option spans 60 calendar days.
- If less information on the originated item is known, then the Search for Originated Items option should be used. This search allows the State to perform continual refinements to the search query at the file and batch levels. Under the Search for Originated Items option, data is accessible for seven calendar days.

x.	Describe your online solution to initiate and complete wires using reoccurring templates and intrabank transfers with a back-up phone process.

Response:

As currently utilized, the State can continue to initiate and complete wires and intrabank transfers using reoccurring templates and repeat codes as further described via the below options:

- **Internet—**The State can request repeat codes online via SinglePoint. Additionally, you can create wire transfer templates that provide repetitive wire data for your use. The wire transfer system treats templates as nonrepetitive transactions since they can be modified by a single individual with SinglePoint access.
- **Mail—**Mailing the authorized request for is the standard method to request repeat codes if you do not use SinglePoint Wire Transfer.
- **Voice initiation (Voice)—**Voice offers the flexibility of initiating wire transfers immediately and provides a back-up process to the State when you do not have access to a workstation.
- **Other—**You can request the setup of a repeat code for use as a repetitive wire transfer by completing our Wire Transfer Repetitive Transfer Authorization form. Repeat codes are uploaded into SinglePoint for use.

y.	Describe how same-day intrabank transfers can be made and at what time the last transfer can be made for same day posting.

Response:

The cutoff time is 5 p.m. CT for same-day credit on incoming wire transfers.

z.	Describe how the contractor will deposit funds as directed by DOR.

Response:

DOR defines a U.S. Bank Depository Account for settlement deposits. The DOR deposit for a given post date should reconcile to the transaction data included in the remittance file.

For e-check/ACH payments, the effective date on the remittance file is the date that the payment will settle (or "post") to your U.S. Bank Depository Settlement Account.

For credit card and debit card payments, the effective date on the remittance file is the date the transaction was sent to the credit card processor for approval.

The reconciliation process may be defined as:

- The total bank settlement account deposits for a given post date equals the total amount of transactions processed on the remittance file.
- The credit card transactions on the remittance file equal the sum of the transaction amounts on the U.S Bank Merchant Services Credit Card Information for a given post date.

aa.	Describe the online solution to create templates for repetitive ACH transactions.
Response:	

As currently utilized, the State can continue to create and maintain templates of repetitive transactions within SinglePoint ACH Origination.

ab.	Describe the ability to provide DOR with a product description, system capabilities, and a sample application or website, if available, for consideration for their ACH Payment scheduling system. Disclose all potential fees associated with the transaction processing, reporting, or file creation for this type of program if not listed in the cost proposal.
Response:	

U.S. Bank eBill Service allows taxpayers the ability to initiate one-time or recurring estimated payments for future dates. For recurring payments, we offer the option of custom dates which allows the user to specify the exact dates of payment.

Our eBill Service provides a biller-branded landing page from which the user interface can be branded with your logo and color scheme that provides the same look and feel as DOR's website. In addition, we support inline frames, if DOR wishes to embed our eBill Service within the State's website.

Nearly everything is configurable. At a high level, the channels, payment types and funding sources are configurable within an application (entity).

Business rules and limits are then configurable at the channel, payment type, funding source and funding source sub-type levels.

There are several technology options available to implement with eBill Service. Those include integrated voice response (IVR), direct access/URL redirect, simple Single Sign-On (SSO), full SSO (SAML), hosted payment form (checkout), and full API.

Key features

- Payment channels include mobile/web, IVR, pay-by-text, agent, walk-in, messenger and intelligent personal assistants.
- Payment methods include credit cards and debit cards (Visa, Mastercard, Discover and American Express), ACH, cash, checks and (POS) payments.
- Payment options:
  - One-time payments (same day and future dated)
  - Recurring payments
  - Autopay
  - Payment plans
  - Balance reloads

Upon request, U.S. Bank will provide demo of the website.

FR 3 – Return/Notification of Change Reporting	
a.	Describe in detail all methods by which agencies could receive ACH notifications of change and returned items. Department of Labor should receive reporting separately.
Response:	

U.S. Bank offers three notification service options: SinglePoint, data transmission and fax. ACH returns are listed in SinglePoint with key data from the batch header and specific details about each item, including:

SinglePoint ACH Returns	
Company name and company ID number	Receiver's account number
Date and processing cycle of the item	Individual ID and name
Settlement date of the transaction	Amount
Transaction code	Return reason code and description
Originating RDFI	Addenda information

b. If the State would need the Returns and Notifications of Changes sorted by company ID's, describe how multiple reports could be produced or obtained.

Response:

The standard ACH Return and NOC reporting delivered via direct file transmission is delivered in NACHA format. The batch headers contain the ACH company ID associated with the transactions originated under that same company ID. U.S. Bank can configure separate file transmissions for each company ID if needed.

c. Describe when the Returns and Notifications of Change would be available for viewing. (Example: posting day, or next day after settlement of the ACH notification of change or return and what time CT)

Response:

The ACH Return and NOC report includes previous day settled items. Information about NOCs and returns is available on SinglePoint by 10 a.m. CT.

d. Describe how a separate file of returned items can be viewed, printed, and downloaded.

Response:

The State can access the ACH Settlement and ACH Return and NOC reports from the Special Reports in SinglePoint. The ACH Return Transmission file provides previous day settled returns or current day returns that will settle at end of day and is available by 9 a.m. CT.

e. Describe and provide an example of how the contractor can prepare a NACHA-formatted raw data file of ACH returns and Notifications of Change entries by specified company IDs.

Response:

U.S. Bank can provide the file per the State's requirements.

f. Describe how the contractor will make an entry for each ACH return. Can the entries be made per return item? Describe how that return can be identified by the State on previous and current day reporting.

Response:

U.S. Bank does not list post returns to bank statements. ACH items returned to us are summary posted to bank statements and appear as a single settlement item on the State's statement. Item detail or list posted returned items are on the ACH Settlement Report. This report contains all the individual ACH settlements generated by U.S. Bank for the previous day.

g. Describe how returns are listed on the reporting, as single items or multiple returns grouped to make an entry, etc. Currently returned items are **not netted** from receipts, netting will not be an option. Describe how the State Treasurer's Office would return the payment(s) through the ACH Network.

Response:

ACH reversal/deletion requests can be submitted by the State via SinglePoint ACH Adjustments or by contacting the U.S. Bank Commercial Customer Service (CCS) team for assistance.

h.	Describe in detail the methods which agencies will receive ACH Notification of Change and returned items. Describe how each agency could receive reporting separately.

Response:

U.S. Bank offers three options for the State to receive ACH Return and NOC reporting: SinglePoint, data transmission and fax.

The ACH Return and NOC report includes previous day settled items. Information about NOCs and returns is available on SinglePoint by 10 a.m. CT.

ACH returns are listed in SinglePoint with key data from the batch header and specific details about each item, including:

- Company name and company ID number.
- Date and processing cycle of the item.
- Settlement date of the transaction.
- Transaction code.
- Originating RDFI.
- Receiver's account number.
- Individual ID and name.
- Amount.
- Return reason code and description.
- Addenda information.

Each agency's unique ACH origination company IDs can be configured to achieve separate ACH return and NOC reporting.

i.	Describe the ability to provide a NOC management solution and how this would assist the State in preventing reoccurring NOC returns.

Response:

NOC manager is an optional product offering in addition to our standard ACH return and NOC reporting. It provides the capability to translate an item's routing number, account number or transaction code for an item being originated based on information received on the NOC from the receiving bank. Since failure to respond to NOC requests can be a NACHA rules violation, NOC manager can help ACH origination clients avoid potential fines.

The information from received NOCs is stored on a database within our ACH processing platform. As the State sends new files to the bank for processing, your ACH origination file will run against the NOC information stored on the database; the items are reviewed; and if a match of an account, routing transit number, and transaction code exists, the original information will be swapped for the new information requested by the Receiving Depository Financial Institution (RDFI). This helps ensure accurate transaction information is delivered that reflects the requested updates sent by the receiving bank.

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FR 4 – ACH Reversals/Deletes

a.	Describe how reversals or deletions are accepted from multiple designated individuals at State agencies.

Response:

As designated by the State's SinglePoint system administrators, specific SinglePoint users can be provided permission to request ACH reversals and/or deletions via the SinglePoint ACH Adjustments module. ACH reversals and/or deletions can also be requested manually by contacting our Commercial Customer Service (CCS) team.

b.	Describe how reversals/deletions are handled at the bank and what time frame (CT) the State is required to meet. Inform the State how the bank will handle reversed or deleted ACH transactions (i.e., by phone, FAX, or Internet).

Response:

The State has several options for requesting an adjustment to a file, batch or item. You can submit adjustment requests to our ACH operations area through SinglePoint ACH Adjustments or by emailing a request form to our ACH operations group. We recommend using SinglePoint ACH Adjustments, which allows specific users to be entitled to the service, and access to information on requests that have been submitted. Under the ACH rules, ACH reversals must be completed within five banking days of the settlement date of the original transaction. After five days, the letter of indemnity service option can be used to request that the other bank returns the transaction. However, the other bank is under no obligation to do so.

A file, batch or item previously transmitted to the ACH operator may be reversed up to five days after settlement date for errors specified under the NACHA rules and within the timeframes specified by the rules.

- If the item, file or batch is still in the ACH warehouse, and has not been released for processing, U.S. Bank processes the adjustment as requested.
- If the item, file or batch has already been processed, we attempt the adjustment or notify you that the adjustment may not be completed as requested.
- If an item is past the five banking-day timeline for reversals, our ACH Customer Service department issues a letter of indemnity to the receiving bank to recall the funds.

Note: Same-day effective dated transactions destined for other banks are submitted to the ACH network operator midday, so timeframes to delete transactions are very limited. Reversals of Same Day ACH payments are allowed.

c.	Explain the procedure the State would use to reverse an ACH payment that was credited to one bank account (zba account), but have the main relationship account debited.

Response:

If the State requests a reversal using the ACH adjustment service, the same settlement account that was used to originate the item must be used for the reversal settlement. If the State wants the item to settle to a different account, a reversing entry could be used instead of the reversal process outlined in the NACHA rules for erroneous transactions. The State must have authorization from the receiver to initiate a reversing entry themselves.

d.	Describe the process of reversing or deleting individual transactions, batches, or entire files on behalf of the State in accordance with NACHA regulations.

Response:

A file, batch or item previously transmitted to the ACH operator may be reversed up to five days after settlement date for errors specified under the NACHA rules and within the time frames specified by the rules.

If the item, file or batch is still in the ACH warehouse and has not been released for processing, U.S. Bank processes the adjustment as requested.

If the item, file or batch has already been processed, U.S. Bank attempts the adjustment or notifies the State that the adjustment may not be completed as requested.

e.	Describe how the contractor can be notified if a file can be held if a transaction needs to be deleted from the file.

Response:	

U.S. Bank distributes ACH transactions to the network at various intervals throughout each day. They occur at approximately 7 a.m., 10 a.m., 2 p.m., 5 p.m. and 10 p.m. CT. In the event an ACH item/batch/file deletion can be successfully processed between the time in which the file is received and the time in which the file is distributed to the network, there is potential for a deletion to be administered while U.S. Bank is still holding the file.

f.	Describe how the confirmation for deletions and reversals are provided.

Response:

To confirm deletions and reversals, the State can:

- Call ACH Customer Service
- Access SinglePoint's ACH Settlement Report details
- View online through SinglePoint ACH Adjustments.

Note: All deletions and reversals must be submitted within five days per NACHA rules. U.S. Bank is able to process return requests via a letter of indemnity process after the five-day period.

g.	Describe and provide an example how the State can identify reversed or deleted entries the bank would make on previous or current day reporting.

Response:

Please refer to the above response for **item f**.

FR 5 – Settlement/Funding

a.	Describe the method used to allow funding on a settlement date. Including but not limited to allowing the account to be in a daylight overdraft most mornings.

Response:

U.S. Bank follows NACHA guidelines for posting ACH entries and making funds available on the effective date. U.S. Bank sends and receives files from the ACH network operators several times throughout the day.

For any overdraft, our current process is to call and speak with the Treasurer's Office to let them know the account is overdrawn. We inquire about moving funds to cover the overdraft. We then process all items for the State accordingly.

b.	Describe how the contractor is able to process ACH credit and debit files for next day, two day, or more settlement date.

Response:

Below is information on the processing times for ACH credit and debit files.

Client Input Method	Same Day Settlement	Next Day Settlement	Two or More Days Settlement
Secure File Transmission	10:30 p.m. CT	10:30 p.m. CT	10:30 p.m. CT
Internet Origination	9:00 p.m. CT	9:00 p.m. CT	9:00 p.m. CT

c.	Describe the process of when ACH credits would be available and when the money would be available to transfer.

Response:

	ACH credits and debits, ledger and collected posting on the intraday postings, are posted twice daily, 3 a.m. CT and 5 a.m. CT.
d.	Describe the order that the bank posts transactions. Example: credits post before debits.
Response:	
	Credits post first, and then debits are posted. Credit transactions received during the morning processing window are posted by 9 a.m. CT and are considered collected. Debit transactions are memo-posted during processing windows and hard-posted at the end of the day, at which point the collected balance is affected.
e.	Describe an online solution for electronic submission of NACHA formatted files; including but not limited to multiple SEC formats for debit and credit transactions.
Response:	
	U.S. Bank SinglePoint ACH Origination enables the State to originate ACH transactions online through a web browser. SinglePoint is a full-service ACH application that creates, stores and originates ACH transactions from any location, at any time. Unique features include: ▪ Robust, customizable import options supporting NACHA, CSV and fixed field file formats. ▪ An export function that sends ACH data from SinglePoint to other accounting applications. ▪ A function that automatically updates transactions with detail provided in NOCs. ▪ Option to send email notification of pending debits or credits to transaction receivers. ▪ Recurring batch schedules for automated transaction initiation on a predetermined or custom schedule. ▪ SinglePoint's interface pages, feedback messages and field and page help assist you with your entries. ▪ Detailed audit and activity reports that track vital system and user information.
f.	Describe the process for file balancing, verification, and confirmation.
Response:	
	The procedures include: ▪ For files originated through direct transmission, ACH file totals can be communicated via the ACH file confirmation system by touch-tone phone. The State enters transaction totals as prompted by an IVR. The IVR compares entered amounts with amounts on the file and confirms matches and discrepancies within 30 minutes of submission. The control totals and file should be submitted simultaneously. ▪ The ACH file confirmation process detects missing files by matching the reported control totals to the transmitted files. The ACH system detects duplicate files by comparing newly transmitted files with customer files processed in the prior 30 calendar days. U.S. Bank notifies you by phone regarding any possible duplication or loss of files. ▪ In addition to touch-tone phone, ACH file totals can be communicated via SinglePoint. ▪ Optionally, ACH file receipt confirmations are available via email.
g.	Describe the time windows which same-day transactions are updated.
Response:	
	U.S. Bank offers Same Day ACH origination services on an opt-in basis. By opting into Same Day ACH origination, the State can originate both credit and debit transactions to post to a receiver's account at another financial institution the same day. The final cutoff time for direct file transmission of Same Day ACH files is 12 p.m. CT for clients sending a NACHA formatted file. The cutoff is 11:15 a.m. CT for clients originating Same Day ACH transactions using SinglePoint ACH Origination.

h.	Describe cut off times to process files for next day settlement. Describe how the contractor can process files according to the times needed by the agency, such as processing by 12:00 CT.

Response:

The State initiates ACH transactions via the following options:

- **U.S. Bank ACH Direct File Transmission**—Accepts both industry standard and proprietary data formatted files and provides a confirmation notice that your file was received for processing.
- **SinglePoint ACH Origination**—Allows manual entry of transactions and import in NACHA, CSV and fixed length file formats. Immediate detailed audit and activity reporting are available.
- **Third-party service providers**—Originate ACH transactions through U.S. Bank using a third-party service provider.

The following are our cutoff times in Central Time for your initiation of ACH transactions:

Input Method	Standard ACH Deadlines	Same Day ACH Deadlines for Transit Items*	Same Day Transfer Deadlines for On-Us items (U.S. Bank Accounts Only)
SinglePoint ACH Origination (Web)	9 p.m.	11:15 a.m.	3 p.m. for afternoon posting 9 p.m. for end-of-day posting
ACH Direct File Transmission – NACHA Format	10:30 p.m.	Noon	3 p.m. for afternoon posting 10:30 p.m. for end-of-day posting
ACH via Data Translation Services	4 p.m.	10:15 a.m.	Not applicable
Consolidated Payables	4 p.m.	10:15 a.m.	Not applicable
ACH Adjustment Requests	7 p.m.	Noon	3 and 7 p.m.
ACH Positive Pay Exception Decisions	7 p.m.	7 p.m.	7 p.m.

*The deadline for same business day on-us processing when sending a file in EDI or custom format is 4 p.m. CT.

Our ACH data warehouse retains future-dated transactions for up to 30 days from the initial transaction.

You may schedule future-dated transactions through SinglePoint ACH Origination up to 10 years into the future. SinglePoint stores ACH file information in its own database until two days prior to the effective date, at which time SinglePoint queues the files for processing in the ACH system. SinglePoint's scheduled transactions do not affect your risk limits until they are queued for processing two days prior to the effective date.

U.S. Bank follows established NACHA guidelines for posting ACH entries and making funds available on the effective date. We send and receive files from the ACH network operators several times throughout the day.

- Credit transactions are posted from morning processing windows by 9 a.m. CT, at which point they are considered collected and affect the collected balance.
- Debit transactions are memo-posted during those same windows and hard-posted at end of day. Debit transactions also affect the collected balance.
- Transactions received from the ACH network with a same day effective date are posted during the afternoon and affect the collected balances.

FR 6 – Fraud Prevention – ACH Filters/ACH Blocks	
a.	Describe in detail the filters or fraud prevention services available.
Response: U.S. Bank offers an ACH filter and block service that enables the State to protect deposit accounts against unauthorized ACH debit and credit transactions. Business eCheck block is also available and allows you to block WEB and TEL payment types, and the converted check payment types ARC, POP and RCK. Additionally, you can use SinglePoint ACH Positive Pay to add new authorizations to your accounts online. Authorizations are a set of rules you can establish to determine which incoming ACH credits and debits should be allowed to post to your accounts. We also offer the UPIC secure account identifier which the State currently uses. UPIC is a unique account number that allows ACH credit transactions to post to a designated U.S. Bank account while blocking ACH debits from your account. A UPIC looks and acts just like a regular bank account. It masks your account number, allowing you to receive electronic credit payment without revealing sensitive bank information to your business associates. Using a UPIC, you can publish account information freely to encourage your trading partners to send electronic payments without the fear of fraud on your business DDA. Only credit transactions can be sent using a UPIC account number, which helps protect your account from fraud.	
b.	Describe the ability to block all ACH debits on accounts, including consumer and corporate.
Response: U.S. Bank ACH Block effectively blocks all ACH debit transactions, except generated settlement items. Optionally, the State can also configure ACH block to block incoming credits.	
c.	Describe if the State is allowed to designate certain companies to debit the State's bank account and block all other companies.
Response: U.S. Bank ACH Positive Pay and ACH Filter allow the State to place parameters, such as identifying company IDs and/or dollar thresholds, to prevent unauthorized activity With ACH filter, SinglePoint Information Reporting offers reporting on existing ACH authorizations, as well as recently rejected items: ▪ ACH Filter Rejected Item report (for filtered and rejected items). ▪ ACH Filter Authorization report (for items authorized to post to an account), Modifications to ACH filter authorizations are communicated to U.S. Bank via email by an authorized treasury management signer. Modifications are completed within 3 to 5 business days. With ACH Positive Pay, existing ACH authorizations and exception items are accessible through ACH Additional Services. Modifications to ACH authorizations are administered by SinglePoint users with the necessary permission. ACH positive pay modifications occur in real time and are immediate. Alternatively, you can search for exception items daily through SinglePoint ACH Positive Pay service. SinglePoint External Messaging (e.g., email, text message) can be configured to notify when there are ACH positive pay exceptions to review.	
d.	Describe how the State would notify the bank of an unauthorized debit on the State's bank account. Describe how the State would pull the report and how the debit would show on the bank report.
Response:	

ACH positive pay allows the State to perform online review and decisioning (acceptance or rejection) of ACH items by 7 p.m. CT on the item's effective settlement date. Optionally, unauthorized debits can be communicated to U.S. Bank's Commercial Customer Service team.

U.S. Bank's Commercial Customer Service team can accept email requests for return of unauthorized debits when the email is received from known State contacts where the email domain can be verified.

If the ACH is a CCD or CTX, requests for return must be submitted within 24 hours of posting. CCS processes the return and credit posts back to the account same day. If outside of the 24 hour timeframe, CCS will submit a 'request for return.' These are not guaranteed as the originating bank may not honor the request for late return.

If the ACH is a PPD, TEL or SEC code other than CCD/CTX, the State completes and submits an ACH Claim form signed by an authorized signer. Upon receipt of the form, CCS opens a Claim to ACH Fraud to recover funds. Credit back to the account posts when/if funds are returned.

Most credits received for an Unauthorized ACH transaction report as an ACH Adjustment or as a Return Offset Settlement.

FR 7 – Online Solution for RCK Entries	
a.	Describe an online solution to initiate RCK entries through the ACH network in an attempt to collect on insufficient funds checks.
Response: The State can leverage SinglePoint ACH Origination in order to manually originate RCK entries/transactions.	
b.	Describe how to enter the information to collect on a returned item.
Response: RCK entries may be submitted in a batch within an ACH file with other transaction types. There are some specific requirements for the initiating of RCK transactions, as outlined in the NACHA Rules and Operating Guidelines. These rules define the eligibility requirements and limits on the kinds of checks that may be re-presented via the ACH network. The most important requirements are that only checks returned for insufficient or uncollected funds can be collected using RCK, and they must be certain kinds of consumer checks under $2,500. The item must be dated 180 days or less from the date on which the RCK entry is sent. There are also some formatting requirements to note for RCK entries: ▪ The dollar amount must be for $2,500 or less. ▪ The original payee on the face of the check must appear on the company name field in the batch header record. ▪ The company entry description must be REDEPCHECK. ▪ The check serial number of the check to which the RCK entry relates to must be placed in the check serial number field of the RCK entry detail record (field 7, positions 40-54).	
c.	Describe what security measures are put in place to initiate and authorize RCK entries.
Response: The State defines security levels for SinglePoint as part of the integration process. Security levels are set at account, function and user levels. You can also set a dollar amount limit at the company level and individual user level for initiation, approval and send. Additional security controls, such as locking and confidentiality, prevent unauthorized users from modifying transaction detail or initiating invalid batches. The integration team at U.S. Bank establishes State-defined security levels during setup. System administrators at your site may change user and account security levels using SinglePoint's system administration service. By default, modifications by system administrators are subject to dual approval. Alternately, a customer may also request that integration representatives at U.S. Bank complete desired security changes. SinglePoint allows system administrator users to modify certain ACH security settings, including: ▪ General entitlement of user access to the ACH module in SinglePoint. ▪ User-level transaction limits. ▪ Global template and batch approvals. ▪ Account and SEC code access (including RCK).	

d.	Describe how the RCK entry would show on the bank statement and provide an example.

Response:

Settlement Transaction for ACH Origination:

Dollar Amount Transaction Details
$2000.00 ENTRY DESCRIPTION: REDEPCHECK COMPANY ID: SETTLEMENT
COMPANY NAME: AAAAAAAAAAAAAAAA SEC CODE: PPD
COMPANY DISCRETIONARY DATA: GENERATED
INDIVIDUAL ID: EFFECTIVE ENTRY DATE: 200723
Bank Reference: 999999999999999Y00
Transaction Reference: GENERATED

Note: Settlement transactions will all use the SEC code of PPD.

For consumers, the details of what will appear on their bank statement will vary by bank. However, the following fields usually are typically included:

- Account number.
- Dollar amount.
- Transaction date.
- Originating company name.
- Originating company ID.
- Entry description (for RCK entries this should be REDEPCCHECK).

For RCK items, this is the original check serial number to which the re-presented check entry relates to also needs to be displayed. This is populated by the originator in the detail record, Field 7 positions 40 – 54.

FR 8 – Other

a.	Describe what training options are available to new users. Including if the training is in person, by phone and any charge associated for this service.

Response:

SinglePoint training can be provided to new users in person, via WebEx and/or by phone. There is no charge for training.

Additionally, U.S. Bank offers one-hour online training sessions on Tuesdays and Thursdays at 1 pm CT. Sessions walk through logging in, navigating, and the basics of information reporting, system administration, book transfers, stop payments and external messaging. All callers are muted to protect anonymity.

The SinglePoint Training Center portal is designed to enhance and augment the Help and User Guide system built into SinglePoint. Content includes illustrated step-by-step, task-based user guides in online, PDF and video formats.

Your treasury management consultant, Lisa Lefler, is also available for in-person training on SinglePoint as needed.

b.	Describe the hours of customer service and what information customer service would be able to assist with.

Response:

CCS provides a premier level of service on your depository, loan and treasury management products. Our specially trained staff will respond to both routine and complex inquiries through on-line access to the bank's many systems and product databases.

Your Omaha CCS team is available each business day from 7 a.m. – 7 p.m. CT. Below are the day-to-day support provided by CCS for the State depository and treasury management services.

Commercial Customer Service		
Depository Services		
Depository Servicing	Answer inquiries about statement or bank procedures	Issue stop payments
	Assist with fraud issues	Transfer funds
	Open and close accounts	Perform routine maintenance, such as address changes, special handling requests, returned items
	Correct deposit errors and provide correction documentation	Provide copies of specific transactions at your request
	Research errors, missing deposits, etc.	Reorder depository supplies
Treasury Management Services		
Account Reconciliation	Deposit recap	Deposit reconciliation
	Full/partial reconciliation	Positive pay
Collection and Concentration	Cash vault	eBill Service
	Focus Point Plus	Interstate Banking
	Lockbox	On-site Electronic Deposits
	Returned check management	
Disbursement	ACH	Bill consolidator payments
	Controlled Disbursement	EDI
	Wires	Zero balance accounts
Information Reporting	SinglePoint	
Image	Paid check images	Deposit ticket images
	Deposited item images	Adjustment images
	Miscellaneous debits and credits	
Loan Services		
Loan Servicing	Perform loan payments and advances	Confirm availability of funds
	Provide transaction history	Answer invoice questions
	Retrieve specific invoices at your request	Research errors, missing transactions, etc.
	Perform routine maintenance such as address changes	

c. The bidder must provide a listing by month of the prior 12 months Earnings Credit Rate (ECR) used for bank account analysis as well as the current rate. The December 2019 ECR for the Nebraska State Treasurer's account was 1.55%. Describe how earning credits are calculated.

Response:

Month	Rate
August 2019	2.13
September	2.04
October	1.83
November	1.55
December	1.55

January 2020	1.55
February	1.58
March	0.65
April	0.30
May	0.30
June	0.30
July	0.30
August 2020	0.30

The offered Earnings Credit Rate (ECR) will be equal to the greater of:

1) the Average Federal Funds Rate flat or

2) the Minimum Rate of 30 basis points (0.30%), for as long as the Average Federal Funds Rate is equal to or greater than zero. Should the rate fall below zero, the Minimum Rate will revert to a bank managed rate.

The earnings credit is calculated as follows:

$$\frac{\textbf{Collected Balance Available for Earnings Credit} \times \textbf{ECR} \times \textbf{Actual Days in the Month}}{\textbf{365 or 366*}}$$

*The actual number of days in the year is used.

d.	Describe if the bank charges for use of uncollected funds. If so, describe how the charge is calculated. Would the contractor allow these charges to be offset by earnings credit allowance?

Response:

In the event an account is overdrawn, we will reach out to the Treasurer's Office to see if we need to pay the item or return the item. We will waive these fees for the State.

A charge for negative collected balances may also apply. The Negative Collected Balance for each day is totaled and divided by the number of days in the month to produce an Average Negative Collected Balance. The fee is calculated as follows:

(Average Negative Collected Balance x Rate) x Actual Days in the Month / 360

e.	Describe if the bank will assist the State to receive monthly holding reports for collateral? Describe how collateral will be pledged, Letter of credit or securities.

Response:

U.S. Bank will continue to provide a Federal Home Loan Bank letter of credit to collateralize the deposits of the State. With this letter of credit, the State will always know the dollar amount we have provided for collateral. If an additional letter of credit is needed, the State can reach out to your relationship manager of collateral group to receive an additional letter of credit.

f.	Describe the process when the contractor receives the EFT batch from International Game Technology PLC (IGT), including confirmation of file accuracy and verification from bank of completed processing (including totals).

Response:

As indicated in section FR 5 – Settlement/Funding, Item f, the procedures include:

- For files originated through direct transmission, ACH file totals can be communicated via the ACH file confirmation system by touch-tone phone. The State enters transaction totals as prompted by an IVR.

The IVR compares entered amounts with amounts on the file and confirms matches and discrepancies within 30 minutes of submission. The control totals and file should be submitted simultaneously.

- The ACH file confirmation process detects missing files by matching the reported control totals to the transmitted files. The ACH system detects duplicate files by comparing newly transmitted files with customer files processed in the prior 30 calendar days. U.S. Bank notifies you by phone regarding any possible duplication or loss of files.
- In addition to touch-tone phone, ACH file totals can be communicated via SinglePoint.
- Optionally, ACH file receipt confirmations are available via email.

g.	Describe the interface options with Salesforce to accept electronic invoices for Charitable Gaming.

Response:

U.S. Bank currently provides this service to the State and will continue to comply with this requirement. Optionally, U.S. Bank eBill Service offers a variety of options to integrate.

Matching the current setup, U.S. Bank eBill Service can be accessed from a payment link on the NEGAM's website. The link to the U.S. Bank website will include various data fields including the amount due along with invoice data from Salesforce. eBill can support the current requirement of up to five invoices, and the system has the ability to be configured for additional invoices, and data if desired.

eBill will send NEGAM a real-time payment confirmation (memo post) for each customer payment. This real-time service provides information to NEGAM via a web hook immediately after a payment is completed by the customer or a NEGAM representative.

Webhooks are user-defined HTTP callbacks. They are used to connect two different applications. When an event happens on the trigger application, it serializes data about that event and sends it to a webhook URL from the action application. Webhooks can be used to create Real-Time Notifications to billers or their customers

U.S. Bank will provide a daily file of payments completed, with all pertinent posting information included. This daily remittance file is delivered within two hours of the selected cutoff time. Files can be transmitted. Our supported transmission methods include:

- Three internet-based options:
  - Secure file transfer protocol (SFTP)
  - Secure command line file transfer protocol (FTP)
  - Secure hypertext transfer protocol (HTTPS)
- Frame relay and virtual private network (VPN) leased connections
- Value added network (VAN) transmissions

There are several technology options available to implement with eBill Service. Those include integrated voice response (IVR), direct access/URL redirect, simple Single Sign-On (SSO), full SSO (SAML), hosted payment form (checkout), and full API.

h.	Describe the ability to process transactions in real time.

Response:

For eBill payments (website, mobile and IVR), real transactions can be supported with the following:

- REST API—The payments API covers customers, their billing accounts, funding sources and payments. It supports create, update and delete options in these areas.
- Webhook notifications—Allows you to subscribe to receive real-time notifications of payment events in which you are interested. Typically, this is payment creation, but all payment events are covered.
- Hosted web forms—This supports an embedded hosted form into your site to enable seamless payments, but without having handling funding source data.

	Outside of eBill, the State can consider using Real-Time Payments (RTP). You can transfer funds directly between financial institutions to your trading partners. Unlike wire transfers and ACH payments, funds can move at any time and settle instantly. This provides significant value for organizations that can benefit from 24/7 payment processing. An RTP can be initiated via SinglePoint. Within SinglePoint you can send, receive and respond to RTP credits, requests for payment (RFP) and requests for information (RFI). You can also view the status of payments including remittance and payment acknowledgements and access multiple activity reports.
i.	Describe the ability to update same day transactions. If there are daily specific time, please list the times update occur.
Response:	
	U.S. Bank offers Same Day ACH origination services on an opt-in basis. By opting into Same Day ACH origination, the State can originate both credit and debit transactions to post to a receiver's account at another financial institution the same day. The final cutoff time for direct file transmission of Same Day ACH files is 12 p.m. CT for clients sending a NACHA formatted file. The cutoff is 11:15 a.m. CT for clients originating same day ACH transactions using SinglePoint ACH Origination.
j.	Describe options available for licensees (taxpayers) to file and pay taxes and fees through an EFT process.
Response:	
	U.S. Bank eBill Service can support the current setup. After clicking the payment link on the DOR site, the taxpayer is prompted for their bank information and other information required by DOR, including payment amount, payment date, tax period end date, Nebraska ID and tax type. U.S. Bank will continue to enforce the rules currently in place for each of the fields collected during the payment process. After entering payment details, the taxpayer is asked to review before being prompted to submit the payment for processing. Upon payment submission, eBill will generate a unique payment confirmation number on screen and sent via email. For modified or cancelled payments, a new confirmation number is issued that represents the changes. A new option with eBill is to offer taxpayers the option to enroll in text notifications. Pricing is available upon request. There are several technology options available to create seamless integration with eBill Service. Those include integrated voice response (IVR), direct access/URL redirect, simple Single Sign-On (SSO), full SSO (SAML), hosted payment form (checkout), and full API.
k.	Describe the options available to confirm bank file totals electronically.
Response:	
	The State can send files via ACH direct transmission or another method (third-party originator), Electronic file confirmations, confirming the file was received and will be processed, can be provided by secure email, flat file via direct transmission or fax. U.S. Bank allows for an unlimited number of email addresses or fax numbers to receive file confirmation notices. Fees are based upon each fax, email and file confirmation provided. In addition to the file confirmations, ACH control total entry is available. When control totals are implemented, the State is required to submit the total dollar amount of the file(s) submitted for processing. U.S. Bank's ACH production team only processes received file(s) if the control total entry matches the amount submitted for processing. You can choose to enter the control totals using our SinglePoint platform or via IVR.

	The confirmation is available within 30 minutes, but no longer than one hour, after submission of the file. The file confirmation includes a message that the file was received for processing, or it reports there was an error and directs you to contact ACH Production Services. If you have not received your confirmation within one hour, you should contact ACH Production Services for further assistance. You can opt to receive an ANSI X12 formatted file confirmation, such as an 824, if desired.
l.	Describe and provide an example of how credit transactions will post and all options to download this information.

Response:

U.S. Bank provides ACH reports, including ACH Summary and ACH Detail reports, via SinglePoint, direct transmission and fax. ACH return and NOC reporting for both current and prior day is also available.

In addition to providing transaction detail and summary information through its information reporting service,

SinglePoint also provides the following ACH special reports:

- ACH Return and NOC
- ACH Received Item
- ACH Redeposit
- ACH Settlement
- ACH Filter Rejected Item
- ACH Filter Authorization
- ACH Transaction Capture
- EDI Remittance
- Same Day ACH Status

Current day ACH detail information is updated on SinglePoint at 7 a.m., 10 a.m., 2 p.m. and 5 p.m. CT.

m.	Describe the ability to originate ACH debits from files provided to the contractor from multiple sources.

Response:

U.S. Bank currently provides this to the State and can accept ACH files from multiple sources, including those that are originated via eBill and those sent via ACH direct. Files originated via a third-party provider are accommodated as well.

n.	Describe the ability to provide RDFI services, including depositing received funds into specified bank accounts and what options are available to DOR with files containing offsetting credits.

Response:

U.S. Bank currently provides this to DOR and is able to deposit funds into specified bank accounts and provide DOR with files containing the offsetting credits and supporting detail that is necessary for appropriately applying/posting those incoming funds.

o.	Describe options available to combine electronic posting or a Trap file of all ACH credit files received daily and all ACH debit originations from various application sources into one file and provide this file in NACHA standard CCD+ and PPD+ formats. Describe what options are available for FTP via SSL and what time the day following the effective settlement date the file would be available.

Response:

The State currently sends U.S. Bank ACH origination files that debit external accounts and contain offset transactions that will credit another account set up using a UPIC code. U.S. Bank receives these items back from the ACH operator and they are captured using the received items trap. U.S. Bank offers several transmission protocols for the sending of these files, including Secure FTP via SSL. This information is currently sent to the State at approximately 8:30 a.m. CT.

p.	Describe the process to work with agencies and their vendors to test debit and credit electronic funds transfers through the ACH network and test all components of auxiliary systems as requested by the DOR.

Response:

The U.S. Bank Transmission Help Desk is available 24/7 and is the appropriate resource to open test tickets for the purpose of testing non-production debit and credit files for file format validation.

q.	Describe what standard entry class codes are supported. Describe how the contractor will support implementation of additional standard entry class codes.

Response:

Code and Application Title	Application Description	Consumer	Corporate	Debit/Credit
ARC Accounts Receivable Check	Converted checks received via the US mail or at a drop box location		X	Single debit only
BOC Back Office Conversion	Converted checks received by merchant at the point-of-purchase or at manned bill payment locations, and processed during back office operations		X	Single debit only
CCD Cash Concentration or Disbursement	Transfer of funds between business accounts or to consolidate funds from several accounts of the same business		X	Debit or credit
CIE Customer Initiated Entry	Credit entry initiated by an individual (usually through a bill payment service) used to pay some sort of obligation	X	X	Credit only
CTX Corporate Trade Exchange	Payment or collection of obligations between separate businesses		X	Debit or credit
IAT International ACH Transaction	Transaction involving a financial agency's office that is not located in the territorial jurisdiction of the United States	X	X	Debit or credit
POP Point-of-Purchase Entry	Converted checks received by merchant at the point-of-sale		X	Single debit only
POS Point-of-Sale Entry	Entry initiated by individual at a merchant location using a merchant-issued card for payment of goods or services		X	Single debit only
PPD Prearranged Payment and Deposit Entry	Recurring entry for direct deposit of payroll, pension, etc., or for direct payment of recurring bills such as utilities, loans, insurance.		X	Debit or credit
RCK Represented Check Entry	Merchant collection of checks that had been returned as NSF or Uncollected Funds	X	Single debit only	
TEL Telephone Authorized Entry	Entry submitted pursuant to an oral authorization obtained solely via the telephone	X	Single or recurring debit	
WEB Internet Authorized Entry	Entry submitted pursuant to an authorization obtained solely via the Internet	X	Single or recurring debit or credit	
XCK Destroyed Check Entry	Replacement entry for check that is lost or destroyed while within the check clearing system	X	Single debit only	

r.	Describe how the contractor will meet the requirements of the ACH payment scheduling system.

Response:

For U.S. Bank eBill Service, the State can decide how far out a future payment can be scheduled. Payers can edit or cancel payments up until two hours before payment is processed. Entitled back office users can edit the schedule in the Payment Center, too.

s.	Describe how the contractor can combine ACH credit and ACH debit files from various application sources into one file. If the contractor can combine files, could the file be available by 5:00 AM CT? If not available by 5:00 AM CT, what time could it be available?

Response:

For ACH Origination, U.S. Bank offers a standard originated data capture service that can supply a NACHA formatted file that contains all the items the State has sent to the bank for processing the prior day. The file can be sent to the State using one of the supported transmission protocols, which includes Secure FTP. The standard is to send this file after end-of-day processing completes, typically around 1 a.m. CT.

For ACH Received items, U.S. Bank offers a standard received data capture service that can supply a NACHA formatted file that contains all of the items sent to the State from the ACH network. U.S. Bank offers both consolidated and individual settlement options to the bank account for ACH received data capture, which impact the number of transactions that post to the bank account. In both cases, the State will receive the NACHA file via transmission. The State can choose to receive the data capture file once per day, or multiple times per day, depending on what is needed to support its business processes. U.S. Bank can combine the originated and received data capture files in a single outbound transmission with a small project.

As previously described the State has a customized received data capture file that is based off the offset transactions from an originated ACH file, which is currently sent to the State at approximately 8:30 a.m. CT. U.S. Bank can continue to provide this information and understands that the State may wish to make additional modifications to this setup or create additional data capture reporting. U.S. Bank will work with the State to understand any specific requirements for these changes.

Here are the options for delivery times for data capture files. State can elect one or more.

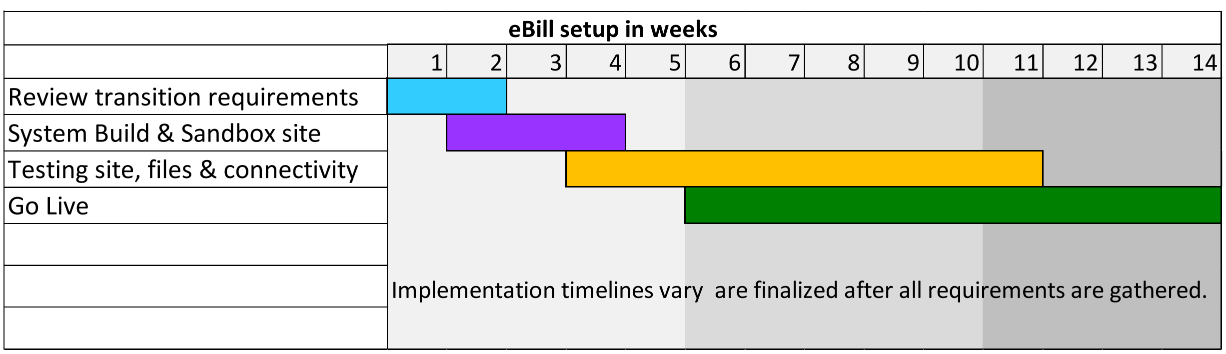
a) Once from the 0530 window (finishes around 5 a.m. CT)
b) Once from the 1100 window (finishes around 8:30 a.m. CT) **current deliverable**
c) Once from the 1600 window (finishes around 5 p.m. CT)
d) Once from the 1900 window (finishes around 12 a.m. CT)

t.	Describe the timeline from award to implementation.

U.S. Bank currently provides the services requested in this RFP. We are moving to a new platform with our eBill service so the only implementation would be a transition to this technology.

Below is an overview of the timeline for the transition from E-Payment to eBill Service. The integration timeline for the service is approximately 12-14 weeks. U.S, Bank will work with the State to establish a workable project plan to transition from E-Payment to eBill. You may continue to utilize the existing E-Payment solution until transitions are completed.

A key benefit is that U.S. Bank will transition taxpayer saved funding sources where applicable.



Please refer to the **Nebraska E-Payment Transition to eBill Service Overview**, **Exhibit 3**.

u.	Provide the State Treasurer's Office, through a mutually agreed electronic transmission method, the amount of receipted funds credited to those accounts designated by the State by open of business Central Time on the effective settlement date. The money must be available for withdrawal by 8:30 AM CT. Describe the time which money would be available for transfer.

Response:

Previous day information is scheduled for availability by 6 a.m. CT in SinglePoint; however, the data is often available sooner.

SinglePoint updates current day information at different times for different applications and different processing sites, as listed in the following table.

Type of Data	Update Schedule
Wire transfer information	Updated continuously and in real time
ACH data	Updated four times during business hours: by 7 a.m., 10 a.m., 2 p.m. and 5 p.m. CT
Deposit reporting	Continuous and updated according to site-specific schedules
Lockbox	Continuous and updated according to site-specific schedules
Controlled Disbursement	Data is updated twice daily according to the site schedule.
Foreign exchange and global trade, Federal Reserve Bank Settlement Activity	Updated upon login to banking system
Other items, such as ATM, phone and branch-initiated transactions	Updated upon login to banking system

SinglePoint Wire Transfers (along with all other origination methods) are available at 7:30 a.m. CT.

v. Describe ability to assist the State with Office of Foreign Assets Control (OFAC) compliance in relation to the NACHA Operating Rules.

Response:

All transactions processed within U.S. Bank are screened for OFAC, as per the regulatory requirement, including all required fields. If we identify a potential OFAC match, our compliance team contacts the State to obtain additional information. U.S. Bank manages the OFAC reporting internally.

Form A
Bidder Proposal Point of Contact
Request for Proposal Number 6304 Z1

Form A should be completed and submitted with each response to this solicitation. This is intended to provide the State with information on the bidder's name and address, and the specific person(s) who are responsible for preparation of the bidder's response.

Preparation of Response Contact Information	
Bidder Name:	U.S. Bank N.A.
Bidder Address:	233 South 13th Street Lincoln, Nebraska 68508
Contact Person & Title:	Greer Almquist, Vice President
E-mail Address:	greer.almquist@usbank.com
Telephone Number (Office):	913.484.6908
Telephone Number (Cellular):	913.484.6908
Fax Number:	402.536.5124

Each bidder should also designate a specific contact person who will be responsible for responding to the State if any clarifications of the bidder's response should become necessary. This will also be the person who the State contacts to set up a presentation/demonstration, if required.

Communication with the State Contact Information	
Bidder Name:	U.S. Bank N.A.
Bidder Address:	233 South 13th Street Lincoln, Nebraska 68508
Contact Person & Title:	Greer Almquist, Vice Presdient
E-mail Address:	greer.almquist@usbank.com
Telephone Number (Office):	913.484.6908
Telephone Number (Cellular):	913.484.6908
Fax Number:	402.536.5124

ADDENDUM ONE
QUESTIONS and ANSWERS

Date: July 10, 2020

To: All Bidders

From: Julie Schiltz, Buyer
AS Materiel State Purchasing Bureau

RE: Addendum for Request for Proposal 6304 Z1 to be opened on August 18, 2020, at 2:00 P.M. Central Time

Questions and Answers

Following are the questions submitted and answers provided for the above mentioned Request for Proposal. The questions and answers are to be considered as part of the Request for Proposal. It is the Bidder's responsibility to check the State Purchasing Bureau website for all addenda or amendments.

Question Number	RFP Section Reference	RFP Page Number	Question	State Response
1	4b Nebraska Lottery – Charitable Gaming	30-31	For Charitable Gaming, is there a need to support over and under payments at the invoice level?	Payments must be the exact amount. Payments must equal the invoice amount.
2	4b Nebraska Lottery – Charitable Gaming	30-31	Regarding Charitable Gaming, does the State wish to expand the total number of invoices beyond five (5) invoices?	At this time, the State does not intend to expand beyond five (5) invoices.
3	General Question		What is the average ACH single payment amount? If you need to list by departments listed, please provide the highest and lowest payment average amounts for a single payment across all departments.	**NE Lottery** Average $1,000.00 Highest $301,455 Lowest $1.00 **NE Department of Revenue** Average $6,000.00 Highest $10,000,000.00 Lowest $.01 **NE Child Support Payment** Center Average $242.86 Highest $55,000.00 Lowest $.01 **NE Department of Labor** Average $342.21 Highest $440.00 Lowest $70.00 **State Accounting**: Average $6,540.30 Highest $40,621,260.71 Lowest $.01

4	General Question		For IVR toll free numbers, do you already have toll free numbers that a vendor will take over? Or do you need new toll free numbers to be provided by your chosen vendor? How many toll free numbers in total will be required?	Agency's that use an IRV are NE Department of Revenue and NE Child Support Payment Center. NE Department of Revenue would need one (1) toll free number provided by the contractor. NE Child Support Payment Center would not need a toll free number provided by the contractor.
5	General Question		Does the DOR have real time validation capabilities? Or is validation of taxpayers IDs only available through the DOR business master file?	The first question is unclear, however, as the question relates to real-time validation of taxpayer ID's so users can initiate a payment through the payment site, no. Each workday, DOR provides a pre-registration file to the current contractor. This file acts as the gateway to allow a payment from the specific taxpayer. The pre-registration file validates those taxpayers who can initiate payments through the payment site.
6	General Question		Does DOR have any type of existing taxpayer username/password account logins?	No, DOR does not store username/password information for account logins to the current e-pay system.
7	General Question		If yes to #4, do you have any type of secured Single Sign On (SSO) technology in use across the State departments? Example technology may be SAML 2.0 which is Security Assertion Markup Language and is a standard tool for users logging into multiple applications.	See response to question 6.
8	General Question		How many billing systems do you utilize across all of these departments listed?	**NE Lottery -** 2 systems. **NE Department of Revenue –** 4 systems **NE Child Support Payment** - systems. **State Accounting** -1 system.

9	General Question		Which billing systems have real time capabilities to allow for immediate payment posting to the billing systems?	State Accounting EnterpriseOne (State's Accounting System).
10	General Question		Please describe with a use case and your requirements around "standard entry class codes".	The use of the standard entry class codes would be in accordance with the NACHA operating rules.
11	General Question		Related to taxpayer payment dates, do you want to only allow taxpayer payments to be made for certain ranges of dates up to the final due dates? Example would be business taxpayers who have payments due for June 15th, may only be allowed to make those payments from June 1st to June 15th at midnight CST?	No.
12	General Question		For the Child support payments processed via an ACH file, do you want those reported back via a file or real time?	Currently, Child Support receives a report via file. However Child Support is interested in receiving via real-time in conjunction with a file or other API posting process either batch driven or real-time driven.
13	General Question		For what monetary disbursement categories do you specifically anticipate the use of prepaid cards?	Prepaid cards are part of a separate contract and is not in the scope of this RFP.
14	General Question		How many cards do you anticipate in total, by category?	See response to question 13.
15	General Question		What are the anticipated load amounts for cards across each category of disbursements?	See response to question 13.
16	General Question		Is it a requirement that the vendor be a bank? We are one of the top FinTechs in the U.S. for payment processing and have strong relationships with many of the leading banks that would make us a good fit for the requirements of this RFP.	Yes, it is a requirement to be a National Bank. Refer to Section V.C.1 Neb. Rev. Stat § 77-2301—The bank must be a state or national bank licensed to do business in the State and will cash State warrants free of charge.

This addendum will become part of the RFP and should be acknowledged with the Request for Proposal response.

U.S. Bank acknowledges and understands the information contained herein. August 14, 2020

ADDENDUM TWO
QUESTIONS and ANSWERS

Date: July 31, 2020

To: All Bidders

From: Julie Schiltz, Annette Walton Buyers
AS Materiel State Purchasing Bureau

RE: Addendum for Request for Proposal 6304 Z1 to be opened on August 18, 2020, at 2:00 P.M. Central Time

Questions and Answers

Following are the questions submitted and answers provided for the above mentioned Request for Proposal. The questions and answers are to be considered as part of the Request for Proposal. It is the Bidder's responsibility to check the State Purchasing Bureau website for all addenda or amendments.

Question Number	RFP Section Reference	RFP Page Number	Question	State Response
1.	General		Does State of NE offer online gambling (via lottery ticket sales – only)? If "Yes", then please answer question #2 below.	No.
2.	General		Does State of NE have procedures in place to meet requirements of regulations implementing the Unlawful Internet Gambling Enforcement Act of 2006?	N/A
3.	O & S	11	Please describe the purpose for the Trap file from a State perspective.	The Department of Revenue (DOR) uses the TRAP file contents as an input to our processing systems. Ultimately, these transactions are used to update the taxpayer accounts within these Revenue processing systems. The file must contain a copy of all ACH Credit transactions that go into the bank accounts designated for the DOR.

Question Number	RFP Section Reference	RFP Page Number	Question	State Response
4.	O & S	11	Please describe the desired contents within the Trap file(s) from an ACH Origination perspective, if any. For instance, are the Trap files to mirror the ACH Origination files the State initiates (aka: file level)? Are the Trap files to mirror the originated items within the ACH Origination files (aka: transaction level)?	The Trap file contains all credits, both those originated and received. Note, there is one offsetting credit for each originated debit from the taxpayers account in the origination files. This is in contrast to the possibility of a single offsetting credit transaction for the originated debits. No, the file must contain both originated and received transactions. See above. The trap file must contain all transactions so that the taxpayer accounts can be correctly updated showing the receipt of funds.
5.	O & S	11	Please describe the desired contents within the Trap file(s) from an ACH Receiver perspective, if any. For instance, are the Trap files to mirror the incoming ACH credit transactions received by the State from its Vendors? Are the Trap files to mirror the received debit transactions by the State from its Vendors?	The trap file doesn’t relate to the ACH Receiver.
6.	Liquidated Damages	15	Given the importance noted by the State for quick resolution of connectivity issues between chosen contractor and yourself for exchanging various ACH files and Daily Account Activity Reporting, is it your desire that multiple channels be implemented for business resiliency and continuity purposes? This is recommended because the root cause may not always be within the Contractor’s control.	The bidder should provide a response that best meets the requirements in the RFP.

Question Number	RFP Section Reference	RFP Page Number	Question	State Response
7.	ACH Trap File	15	Regarding your existing ACH Trap File service. We understand this to be reporting of prior-day incoming ACH credit payments made to the State agencies. These transactions are provided to the State in the original NACHA file format via direct transmission for Accounts Receivable processing. They are not converted to an EDI 820 format. Can you confirm that Is correct?	Yes, that is correct the files are not converted to an EDI 820 format.
8.	Project Overview	29	Please describe the State's process for the enrollment and collection of bank account information for payment to new vendors or employees. Is Bank Account Ownership verification and authentication an area the State would like to enhance?	State agencies instruct vendors to complete the Nebraska W-9 & ACH Enrollment Form (http://das.nebraska.gov/accounting/forms/ACH__W9_Fillable.pdf) with one of the listed attachments. For ACH changes, the vendor must fill in the prior routing and account number information. The agency uploads the form and attachments into the state accounting system. State Accounting monitors the address book queue for final review and creation of the vendor record. The State currently uses the pre-note process to confirm banking information for vendor payments. The bidder should provide a response that best meets the requirements of the RFP including optional enhancements.

Question Number	RFP Section Reference	RFP Page Number	Question	State Response
9.	Project Overview	29	Does the State wish to continue collecting and storing sensitive bank account information and managing the needed controls within your internal environment for all processes? Or, is there an interest in outsourcing any of the collection or storage functions to the chosen contractor?	The bidder should provide a response that best meets the requirements of the RFP. The bidder may provide options including storing sensitive bank account information for State Accounting and the payment scheduling system for DOR.
10.	Bank Account	30	Your Treasury staff initiates wires via a secure online portal solution. Has the State investigated the usage of Real Time Payments in the past, to replace some of your wire payment activity? If so, were there any challenges discovered in doing so?	We have investigated Real Time Payments, however, some small banks where the wires are sent, will not accept Real Time Payments and the transaction limit is an issue.
11.	Nebraska Lottery	30	The State currently follows a web-based ACH file verification procedure, manually confirming Lottery payment files and totals. In addition, you utilize balanced ACH files with control totals. Is there a desire to seek a more automated ACH file confirmation and reporting process requiring less manual intervention?	Nebraska Lottery would prefer to use the current procedures so they can reconcile the unique activity for Lottery operations.
12.	Nebraska DOR	31	It was noted that the NOR creates debit ACH files to the contractor, by providing a "one for one" offsetting ACH credit entry for every single ACH debit entry in the file. Can you describe why this practice is currently being done, rather than creating one offsetting ACH credit entry for all the items in the batch? Would it be a benefit to have the bank create all the individual ACH offset entries instead?	The offsetting entries are used to update individual taxpayer accounts. If a single offsetting credit is used, the debit information would need to be provided to DOR and DOR would need to change its processing methodology. No, deviating from the existing process would create additional programming effort on the part of DOR.

Question Number	RFP Section Reference	RFP Page Number	Question	State Response
13.	R	31	For Operator Assisted payments, is the Operator State labor or Contractor provided labor? If Contractor provided, please provide the annualized # of payments.	Contractor provided labor for DOR. The three year average for Operator Assisted calls in calendar years 2017, 2018, and 2019 is 1,511 annual payments.
14.	D	31	Is the State interested in the acceptance of credit and debit cards as a method of payment by Web, IVR, or Operator Assisted Channels as part of this Request for Proposal?	NE Child Support uses EPayment services for Echecks (IVR initiated transactions that use a routing and account number Acceptance of credit and debit cards are a separate contract and is not in the scope of this RFP.
15.	D	31	If the acceptance of credit and debit cards as a method of payment are in scope for this Request for Proposal, please provide annualized # of payments and $ value of payments by card type (credit/debit) and by payment channel (Web, IVR, Operator Assisted) for each unique departmental application.	Refer to response to question 14.
16.	D	31	If the acceptance of credit and debit cards as a method of payment are in scope for this Request for Proposal, please provide the desired funding model (A, B, or C) for each unique departmental application. Funding Model options: a. State/"Biller" Funded Model - No Convenience Fee b. State/"Biller" Funded Model - State Collected Service/Convenience Fee c. "No Cost" Service / Convenience Fee - Funded Managed Model	Refer to response to question 14.

Question Number	RFP Section Reference	RFP Page Number	Question	State Response
17.	Nebraska Child Support	33	Please describe why some Child Support payments are currently being made to a VISA branded stored value card. Is this because the custodial parent does not have a bank account, or other reasons? Is the State open to newer digital technology solutions?	This is out of scope of the RFP. The bidder should provide a response that best meets the requirements of the RFP.

This addendum will become part of the RFP and should be acknowledged with the Request for Proposal response.

U.S. Bank acknowledges and understands the information contained herein. August 14, 2020

REQUEST FOR PROPOSAL FOR CONTRACTUAL SERVICES FORM

By signing this Request for Proposal for Contractual Services form, the Bidder guarantees compliance with

BIDDER MUST COMPLETE THE FOLLOWING

the procedures stated in this Solicitation, and agrees to the terms and conditions unless otherwise indicated in writing and certifies that bidder maintains a drug free work place.

Per Nebraska's Transparency in Government Procurement Act, Neb. Rev Stat § 73-603 DAS is required to collect statistical information regarding the number of contracts awarded to Nebraska Contractors. This information is for statistical purposes only and will not be considered for contract award purposes.

__XX__ NEBRASKA CONTRACTOR AFFIDAVIT: Bidder hereby attests that bidder is a Nebraska Contractor. "Nebraska Contractor" shall mean any bidder who has maintained a bona fide place of business and at least one employee within this state for at least the six (6) months immediately preceding the posting date of this Solicitation.

_____ I hereby certify that I am a Resident disabled veteran or business located in a designated enterprise zone in accordance with Neb. Rev. Stat. § 73-107 and wish to have preference, if applicable, considered in the award of this contract.

_____ I hereby certify that I am a blind person licensed by the Commission for the Blind & Visually Impaired in accordance with Neb. Rev. Stat. §71-8611 and wish to have preference considered in the award of this contract.

FORM MUST BE SIGNED USING AN INDELIBLE METHOD (NOT ELECTRONICALLY)

FIRM:	U.S. Bank National Association
COMPLETE ADDRESS:	233 South 13th Street, Lincoln, Nebraska 68508
TELEPHONE NUMBER:	913.484.6908
FAX NUMBER:	402.536.5124
DATE:	8.14.2020
SIGNATURE:	
TYPED NAME & TITLE OF SIGNER:	Greer Almquist, Vice President

Current Day Summary and Detail

Sample Company A
SinglePoint
Reported Activity as of 11/07/20XX
Printed on 11/07/20XX at 12:27 PM CST

Bank Name	USBMN - US BANK OF MINNESOTA
Account Number	123456789012
Account Name	Sample Account A
Opening Ledger Balance	$7,551,044.80
Interim Ledger	$11,450,964.83
Opening Collected Balance	$1,237,959.88
Interim 1 Day Float	$2,316.89
Interim 2 Day Float	$0.00
Interim 3 + Day Float	$0.00
Collected Balance + 1 Day Float	$1,240,276.77
Number of Credits	15
Total Amount of Credits	$4,057,796.59
Number of Debits	10
Total Amount of Debits	$158,146.56

CREDITS

Customer Deposit

Dollar Amount	Transaction Details
$3,901,247.75	Bank Reference: 1627983 00000000000
$46,000.00	Bank Reference: 1611246 00000000000
$8,400.00	Bank Reference: 7890123 00000000000
$12,600.00	Bank Reference: 3456789 00000000000
$8,400.00	Bank Reference: 8901234 00000000000
$12,600.00	Bank Reference: 4567890 00000000000
$8,400.00	Bank Reference: 67890123 00000000000
$0.00	DEPOSIT/FLOAT ADJUSTMENT Bank Reference: 1122334 00000000000 One Day Float: $2,316.89 Two Day Float: 0 Three Day+ Float: 0

Subtotal: 8 Customer Deposit(s)
$3,997,647.75

Internal Wire Transfer Credit

Dollar Amount	Transaction Details	
$0.33	Amount:	$0.33
	PAR Number:	0X1107000111
	Date/Time:	Date: 11/07/20XX Time: 12:33:03 PM CST
	Debit Account:	XXXXXXX12345 - SINGLEPOINT ACCOUNT B
	Originator:	Sample Company ABC City State
	Details:	For further credit Sample Recipient XXXXXXX
$1.00	Amount:	$1.00
	PAR Number:	0X1107000112
	Date/Time:	Date: 11/07/20XX Time: 12:33:03 PM CST
	Debit Account:	XXXXXXX12345 - SINGLEPOINT ACCOUNT B
	Originator:	Sample Company ABC City State
	Details:	For further credit Sample Recipient XXXXXXX
$3.00	Amount:	$3.00
	PAR Number:	0X1107000113
	Date/Time:	Date: 11/07/20XX Time: 12:33:03 PM CST
	Debit Account:	XXXXXXX12345 - SINGLEPOINT ACCOUNT B
	Originator:	Sample Company ABC City State
	Details:	For further credit Sample Recipient XXXXXXX
$9.51	Amount:	$9.51
	PAR Number:	0X1107000114
	Date/Time:	Date: 11/07/20XX Time: 12:33:03 PM CST
	Debit Account:	XXXXXXX12345 - SINGLEPOINT ACCOUNT B
	Originator:	Sample Company ABC City State
	Details:	For further credit Sample Recipient XXXXXXX
$33.00	Amount:	$33.00
	PAR Number:	0X1107000115
	Date/Time:	Date: 11/07/20XX Time: 12:33:03 PM CST
	Debit Account:	XXXXXXX12345 - SINGLEPOINT ACCOUNT B
	Originator:	Sample Company ABC City State
	Details:	For further credit Sample Recipient XXXXXXX
$102.00	Amount:	$102.00
	PAR Number:	0X1107000116
	Date/Time:	Date: 11/07/20XX Time: 12:33:03 PM CST
	Debit Account:	XXXXXXX12345 - SINGLEPOINT ACCOUNT B
	Originator:	Sample Company ABC City State
	Details:	For further credit Sample Recipient XXXXXXX

Subtotal: 6 Incoming Internal Wire Transfer(s)
$148.84

Incoming Fedwire

Dollar Amount	Transaction Details
$60,000.00	Bank Reference: 987654321011 Transaction Reference: 48982571 Amount: $60,000.00 Beneficiary Bank: XYZ Bank Beneficiary Ref: RFB FIELD* Credit Account: XXXXXXXX9012 Details: For further credit Sample Recipient XXXXXXX Fed Ref: 000111 Initiated By: SampleUser2 on Fri November 07 16:54:16 CST 20XX OMAD: Originator: Sample Company ABC City State PAR Number: 0X1107000117 Receiving Bank: 091000000 BANK STATE Repeat Code: 1234 Send Date: Friday, November 07, 20XX Source: SPT Control Number: 123456

Subtotal: 1 Incoming Fedwire
$60,000.00

Total Credits: 15
$4,057,796.59

DEBITS

ACH Debit

Dollar Amount	Transaction Details
$58,000.00	USATAXPMT1234567890 01234567890

Subtotal: 1 ACH Debit
$58,000.00

Internal Wire Transfer Debit

Dollar Amount	Transaction Details	
$0.22	Amount:	$0.22
	PAR Number:	0X1107000321
	Send Date:	Friday, November 7, 20XX
	Repeat Code:	Wire 38
	Credit Account:	XXXXXXX1234 - SAMPLE CO 1234
	Details:	For further credit Sample Recipient XXXXXXX
	Initiated by:	User1 on Fri Nov 7 08:42:26 CST 20XX
	Approved by:	User2 on Fri Nov 7 08:44:26 CST 20XX
$1.00	Amount:	$1.00
	PAR Number:	0X1107000322
	Send Date:	Friday, November 7, 20XX
	Repeat Code:	Wire 39
	Credit Account:	XXXXXXX1234 - SAMPLE CO 1234
	Details:	For further credit Sample Recipient XXXXXXX
	Initiated by:	User1 on Fri Nov 7 08:42:26 CST 20XX
	Approved by:	User2 on Fri Nov 7 08:44:26 CST 20XX
$2.00	Amount:	$2.00
	PAR Number:	0X1107000323
	Send Date:	Friday, November 7, 20XX
	Repeat Code:	Wire 40
	Credit Account:	XXXXXXX1234 - SAMPLE CO 1234
	Details:	For further credit Sample Recipient XXXXXXX
	Initiated by:	User1 on Fri Nov 7 08:42:26 CST 20XX
	Approved by:	User2 on Fri Nov 7 08:44:26 CST 20XX
$9.34	Amount:	$9.34
	PAR Number:	0X1107000324
	Send Date:	Friday, November 7, 20XX
	Repeat Code:	Wire 41
	Credit Account:	XXXXXXX1234 - SAMPLE CO 1234
	Details:	For further credit Sample Recipient XXXXXXX
	Initiated by:	User1 on Fri Nov 7 08:42:26 CST 20XX
	Approved by:	User2 on Fri Nov 7 08:44:26 CST 20XX
$22.00	Amount:	$22.00
	PAR Number:	0X1107000325
	Send Date:	Friday, November 7, 20XX
	Repeat Code:	Wire 42
	Credit Account:	XXXXXXX1234 - SAMPLE CO 1234
	Details:	For further credit Sample Recipient XXXXXXX
	Initiated by:	User1 on Fri Nov 7 08:42:26 CST 20XX
	Approved by:	User2 on Fri Nov 7 08:44:26 CST 20XX

$101.00	Amount:	$101.00
	PAR Number:	0X1107000326
	Send Date:	Friday, November 7, 20XX
	Repeat Code:	Wire 43
	Credit Account:	XXXXXXX1234 - SAMPLE CO 1234
	Details:	For further credit Sample Recipient XXXXXXX
	Initiated by:	User1 on Fri Nov 7 08:42:26 CST 20XX
	Approved by:	User2 on Fri Nov 7 08:44:26 CST 20XX

Subtotal: 6 Incoming Internal Wire Transfer(s)
$135.56

Customer Initiated Outgoing Fedwire

Dollar Amount	Transaction Details	
$60,000.00	Approved By:	SampleUser1 on Fri November 07 16:54:16 CST 20XX
	Beneficiary Bank:	1234567891 Main Bank
	Beneficiary Ref:	RFB FIELD*
	Credit Account:	XXXX00001234 FRB CITY
	Details:	For further credit Sample Recipient XXXXXXX
	Fed Ref:	000123
	Initiated By:	SampleUser2 on Fri November 07 16:54:16 CST 20XX
	OMAD:	34567
	Originator:	XXXX00001234 SAMPLE CO1234
	PAR Number:	0X1107000327
	Receiving Bank:	091000000 BANK STATE
	Repeat Code:	1234
	Send Date:	Friday, November 07, 20XX
	Source:	SPT Control Number: 123456
$40,000.00	Approved By:	SampleUser1 on Fri November 07 16:54:16 CST 20XX
	Beneficiary Bank:	1234567891 Main Bank
	Beneficiary Ref:	RFB FIELD*
	Credit Account:	XXXX00001234 FRB CITY
	Details:	For further credit Sample Recipient XXXXXXX
	Fed Ref:	001234
	Initiated By:	SampleUser2 on Fri November 07 16:54:16 CST 20XX
	OMAD:	34567
	Originator:	XXXX00001234 SAMPLE CO1234
	PAR Number:	0X1107000328
	Receiving Bank:	091000000 BANK STATE
	Repeat Code:	1234
	Send Date:	Friday, November 07, 20XX
	Source:	SPT Control Number: 123456

Subtotal: 2 Customer Initiated Outgoing Fed Wire(s)
$100,000.00

Outgoing USD International

Dollar Amount	Transaction Details	
$11.00	Approved By:	SampleUser1 on Fri November 07 16:54:16 CST 20XX
	Beneficiary Bank:	FOREIGNBANK1234
	Bank to Bank Info:	
	Beneficiary Ref:	
	Beneficiary:	XX-123456 MODIFY INTL USD TEMPLAT
	Details:	For further credit Sample Recipient XXXXXXX
	Initiated By:	SampleUser2 on Fri November 07 16:54:16 CST 20XX
	Intermediary Bank:	
	Originator:	XXXX00001234 SAMPLE CO1234
	PAR Number:	0X1107000329
	Receiving Bank:	091000000 MAIN BANK
	Send Date:	Friday, November 07, 20XX
	Source:	SPT Control Number: 123456
	Swift Ref:	IMT234567890
	Value Date:	Friday, November 07, 20XX

Subtotal: 1 Outgoing USD International
$11.00

Total Debits: 10
$158,146.56

GRAND TOTALS

Opening Ledger Balance	$7,551,044.80
Interim Ledger	$11,450,964.83
Opening Collected Balance	$1,237,959.88
Interim 1 Day Float	$2,316.89
Interim 2 Day Float	$0.00
Interim 3 + Day Float	$0.00
Collected Balance + 1 Day Float	$1,240,276.77
Number of Credits	15
Total Amount of Credits	$4,057,796.59
Number of Debits	10
Total Amount of Debits	$158,146.56

---End of Report---

Since this report includes items received but not yet posted, actual posting may differ due to corrections or additional activity.

Previous Day Summary and Detail
Sample Company A
SinglePoint
Reported Activity as of 11/06/20XX
Printed on 11/07/20XX at 12:27 PM CST

Bank Name	**USBMN - US BANK OF MINNESOTA**
Account Number	123456789012
Account Name	Sample Account A
Ledger Balance	$7,551,044.80
Collected + 1 Day	$1,237,959.88
Opening Collected	$1,769,895.39
One Day Float	$7,105,807.43
2 Day Float	$38,129.87
3 Day + Float	$0.00
Total Credits	$186,810,591.76
Number of Credits	32
Total Debits	$192,033,754.20
Total Amount of Debits	39
MTD Avg Collected	$271,840.55
MTD Avg Neg Collected	-$640,254.27

CREDITS
Customer Deposit(s)

Dollar Amount	**Transaction Details**
$7,131,515.19	IMMEDIATE FUNDS: 0.00/ 1 DAY FLOAT: 7,094,000.39/ 2 DAY FLOAT: 37,514.80/ 3 OR MORE DAY FLOAT: 0.00/ Bank Reference: XXXXXX3037
$12,188.38	IMMEDIATE FUNDS: 12,188.38/ 1 DAY FLOAT: 0.00/ 2 DAY FLOAT: 0.00/ 3 OR MORE DAY FLOAT: 0.00/ Bank Reference: XXXXXXX458
$6,028.88	IMMEDIATE FUNDS: 102.24/ 1 DAY FLOAT: 5,430.01/ 2 DAY FLOAT: 429.08/ 3 OR MORE DAY FLOAT: 67.55/ Bank Reference: XXXXXXX544
$2,505.34	IMMEDIATE FUNDS: 18.15/ 1 DAY FLOAT: 2,472.50/ 2 DAY FLOAT: 14.69/ 3 OR MORE DAY FLOAT: 0.00/ Bank Reference: XXXXXXX321
$1,991.52	IMMEDIATE FUNDS: 74.97/ 1 DAY FLOAT: 1,818.12/ 2 DAY FLOAT: 98.43/ 3 OR MORE DAY FLOAT: 0.00/ Bank Reference: XXXXXXX026
$1,628.38	IMMEDIATE FUNDS: 69.11/ 1 DAY FLOAT: 1,486.40/ 2 DAY FLOAT: 72.87/ 3 OR MORE DAY FLOAT: 0.00/ Bank Reference: XXXXXXX812
$600.01	IMMEDIATE FUNDS: 0.00/ 1 DAY FLOAT: 600.01/ 2 DAY FLOAT: 0.00/ 3 OR MORE DAY FLOAT: 0.00/ Bank Reference: XXXXXXX418

Subtotal: 7 Customer Deposit(s)

$7,156,457.70

ACH Settlement Credit(s)

Dollar Amount	Transaction Details
$86,149.91	PAYROLL SETTLEMENT ABC COMPANY Bank Reference: XXXXXXX888

Subtotal: 1 ACH Settlement Credit(s)

$86,149.91

ACH Credit Detail(s)+A120

Dollar Amount	Transaction Details
$1,282,770.71	BANKCARD XXXXXXX043 XXX241 DEPOSIT/SETTLE Bank Reference: XXXXXXX970 Transaction Reference: XXXXXXX001
$986,660.00	BANKCARD XXXXXXX043 XXX241 DEPOSIT/SETTLE Bank Reference: XXXXXXX920 Transaction Reference: XXXXXXX011
$800,502.00	BANKCARD XXXXXXX043 XXX241 DEPOSIT/SETTLE Bank Reference: XXXXXXX708 Transaction Reference: XXXXXXX021
$200,300.00	BANKCARD XXXXXXX043 XXX241 DEPOSIT/SETTLE Bank Reference: XXXXXXX270 Transaction Reference: XXXXXXX051
$150,000.00	BANKCARD XXXXXXX043 XXX241 DEPOSIT/SETTLE Bank Reference: XXXXXXX271 Transaction Reference: XXXXXXX061
$98,000.00	BANKCARD XXXXXXX043 XXX241 DEPOSIT/SETTLE Bank Reference: XXXXXXX500 Transaction Reference: XXXXXXX004
$35,896.99	SETTLEMENTXXXXXXX270 XXXXXXXXXXXX001 DISCOVER NETWORK Bank Reference: XXXXXXX903 Transaction Reference: XXXXXXX000
$20,000.00	SETTLEMENTXXXXXXX270 XXXXXXXXXXXX001 DISCOVER NETWORK Bank Reference: XXXXXXX893 Transaction Reference: XXXXXXX020
$1,750.00	SETTLEMENTXXXXXXX270 XXXXXXXXXXXX001 DISCOVER NETWORK Bank Reference: XXXXXXX788 Transaction Reference: XXXXXXX221

Subtotal: 9 ACH Credit Detail(s)

$3,575,879.70

Incoming Wire Transfers

Dollar Amount	Transaction Details
$161,501,073.77	PAR Number: 0X1107002029 Fed Ref: 000275 Date/Time Received: November 7,20XX 07:44:00 CDT Originator: 1234567890123456 SAMPLE COMPANY BCDEF CITY STATE Originator Bank: BBREXPLPWMUL BRE BANK S.A. (FORMERLY BANK ROZWOJ U EKSPORTU S.A.) LODZ POLAND* Sending Bank: 0210000XX BANK ABCD Receiving Bank: 091000022US BANK MINNESOTA Beneficiary Ref: SWF OF 05/08/01 Originator to Beneficiary Info: ITEM 7531216038 HP 54720A GENNEX79***** IMAD: 20XX1107B1QGC08C000275

$8,002,880.00	PAR Number: 0X1107000165 Date/Time Received: November 7,20XX 08:03:08 CDT Originator: 000123456789012 SAMPLE COMPANY ABC CITY STATE Originator to Beneficiary Info: ITEM 7531216038 HP 54720A GENNEX79*
$6,200,504.00	PAR Number: 0X1107000166 Date/Time Received: November 7,20XX 08:03:08 CDT Originator: 000123456789012 SAMPLE COMPANY ABC CITY STATE Originator to Beneficiary Info: ITEM 7531216038 HP 54720A GENNEX79*
$6,786.00	PAR Number: 0X1107000176 Date/Time Received: November 7,20XX 08:03:08 CDT Originator: 000123456789012 SAMPLE COMPANY ABC CITY STATE Originator to Beneficiary Info: ITEM 7531216038 HP 54720A GENNEX79*
$3,000.00	PAR Number: 0X1107000109 Date/Time Received: November 7,20XX 08:03:08 CDT Originator: 000123456789012 SAMPLE COMPANY ABC CITY STATE Originator to Beneficiary Info: ITEM 7531216038 HP 54720A GENNEX79*

Subtotal: 4 Incoming Wire Transfers

$175,714,243.77

Sweep Interest Income

Dollar Amount	Transaction Details
$28.55	COMMERCIAL PAPER SWEEP INTEREST IMMEDIATE FUNDS: 28.55/ 1 DAY FLOAT: 0.00/ 2 DAY FLOAT: 0.00/ 3 OR MORE DAY FLOAT: 0.00/ Bank Reference:
$23.13	COMMERCIAL PAPER SWEEP INTEREST IMMEDIATE FUNDS: 23.13/ 1 DAY FLOAT: 0.00/ 2 DAY FLOAT: 0.00/ 3 OR MORE DAY FLOAT: 0.00/ Bank Reference:

Subtotal: 2 Sweep Interest Income

$51.68

Sweep Principal Credit

Dollar Amount	Transaction Details
$277,798.91	COMMERCIAL PAPER SWEEP PRINCIPAL IMMEDIATE FUNDS: 277,798.91/ 1 DAY FLOAT: 0.00/ 2 DAY FLOAT: 0.00/ 3 OR MORE DAY FLOAT: 0.00/ Bank Reference:

Subtotal: 1 Sweep Principal Credit

$277,798.91

Miscellaneous Credit(s)

Dollar Amount	Transaction Details
$4.14	MISCELLANEOUS CREDIT IMMEDIATE FUNDS: 4.14/ 1 DAY FLOAT: 0.00/ 2 DAY FLOAT: 0.00/ 3 OR MORE DAY FLOAT: 0.00/ Bank Reference: XXXXXXX825 Transaction Reference: XXXXXXX065
$2.14	MISCELLANEOUS CREDIT IMMEDIATE FUNDS: 2.14/ 1 DAY FLOAT: 0.00/ 2 DAY FLOAT: 0.00/ 3 OR MORE DAY FLOAT: 0.00/ Bank Reference: XXXXXXX825 Transaction Reference: XXXXXXX065
$2.01	MISCELLANEOUS CREDIT IMMEDIATE FUNDS: 2.01/ 1 DAY FLOAT: 0.00/ 2 DAY FLOAT: 0.00/ 3 OR MORE DAY FLOAT: 0.00/ Bank Reference: XXXXXXX825 Transaction Reference: XXXXXXX065
$1.56	MISCELLANEOUS CREDIT IMMEDIATE FUNDS: 1.56/ 1 DAY FLOAT: 0.00/ 2 DAY FLOAT: 0.00/ 3 OR MORE DAY FLOAT: 0.00/ Bank Reference: XXXXXXX825 Transaction Reference: XXXXXXX065
$0.11	MISCELLANEOUS CREDIT IMMEDIATE FUNDS: 0.11/ 1 DAY FLOAT: 0.00/ 2 DAY FLOAT: 0.00/ 3 OR MORE DAY FLOAT: 0.00/ Bank Reference: XXXXXXX542 Transaction Reference: XXXXXXX070
$0.09	MISCELLANEOUS CREDIT IMMEDIATE FUNDS: 0.09/ 1 DAY FLOAT: 0.00/ 2 DAY FLOAT: 0.00/ 3 OR MORE DAY FLOAT: 0.00/ Bank Reference: XXXXXXX616 Transaction Reference: XXXXXXX005
$0.04	MISCELLANEOUS CREDIT IMMEDIATE FUNDS: 0.04/ 1 DAY FLOAT: 0.00/ 2 DAY FLOAT: 0.00/ 3 OR MORE DAY FLOAT: 0.00/ Bank Reference: XXXXXXX540 Transaction Reference: XXXXXXX070

Subtotal: 7 Miscellaneous Credit(s)

$10.09

TOTAL CREDITS

$1,730,025.19

DEBITS

ACH Debit(s)

Dollar Amount	Transaction Details
$47,855.52	021406-HAVRE XXXXXXX554 AC#XXXXXXXX6283 Bank Reference:
$728.31	SETTLEMENTXXXXXXX270 XXXXXXXXXXXX001 DISCOVER NETWORK Bank Reference: XXXXXXX144 Transaction Reference: XXXXXXX001

Subtotal: 2 ACH Debit(s)

$48,583.83

Check(s) Paid

Dollar Amount	Transaction Details
$913,184.04	Bank Reference: 7716982 3456789012 Transaction Reference: 0000000012
$900,061.00	Bank Reference: 7717164 2345678901 Transaction Reference: 0000000013
$121,600.00	Bank Reference: 7717164 2345678901 Transaction Reference: 0000000018
$55,121.00	Bank Reference: 7717164 2345678901 Transaction Reference: 0000000001
$48,400.00	Bank Reference: 7717164 2345678901 Transaction Reference: 0000000044
$20,371.00	Bank Reference: 7717164 2345678901 Transaction Reference: 0000000014
$10,146.76	Bank Reference: 7717164 2345678901 Transaction Reference: 0000000022
$4,233.00	Bank Reference: 7717164 2345678901 Transaction Reference: 0000000089
$910.96	Bank Reference: 7717164 2345678901 Transaction Reference: 0000000068
$158.85	Bank Reference: XXXXXXX643 Transaction Reference: XXXXXXX059
$4.35	Bank Reference: 7717228 1234567890 Transaction Reference: 0000000042

Subtotal: 11 Check(s) Paid

$2,074,190.96

Target Balance Debit(s)

Dollar Amount	Transaction Details
$49,429,333.32	FUNDS TRANSFER TO DDA ACT XXX302016305 Bank Reference: XXXX000693
$5,379,013.60	FUNDS TRANSFER TO DDA ACT XXX300504104 Bank Reference: XXXX000625
$1,526,409.62	FUNDS TRANSFER TO DDA ACT XXX302016628 Bank Reference: XXXX000695

Subtotal: 3 Target Balance Debit(s)

$56,334,756.54

Outgoing Wire Transfers

Dollar Amount	Transaction Details
$106,012,003.00	PAR Number: 0X1107501171 Fed Ref: 000006 Date/Time Completed: November 7,20XX 08:03:08 CDT Repeat Code: 12345 Receiving Bank: ABCDEF Bank. Beneficiary Bank: E CREDIT UNION BANK LTD Beneficiary: 0123456799012345 SAMPLE CO GHIJ Beneficiary Ref: ITEM 12345

Originator to Beneficiary Info: FOR FURTHER CREDIT SAMPLE RECIPIENT XXXXXX ACCT NO 123456
Originator: 000123456789012 SAMPLE COMPANY ABC CITY ROAD 18 NORTH MINNEAPOLIS MN 55428
IMAD: 21156465654
Source: SPT Control Number: 12002
Initiated By: User1 on Wed Nov 11 14:00:46 CDT 20XX
Approved By: User2 on Wed Nov 11 14:01:04 CDT 20XX

$13,424,624.16 PAR Number: 0X1107501181
Fed Ref: 000006
Date/Time Completed: November 7,20XX 08:03:08 CDT
Repeat Code: 12345
Receiving Bank: ABCDEF Bank.
Beneficiary Bank: E CREDIT UNION BANK LTD
Beneficiary: 0123456799012345 SAMPLE CO GHIJ
Beneficiary Ref: ITEM 12345
Originator to Beneficiary Info: FOR FURTHER CREDIT SAMPLE RECIPIENT XXXXXX ACCT NO 123456
Originator: 000123456789012 SAMPLE COMPANY ABC CITY ROAD 18 NORTH MINNEAPOLIS MN 55428
IMAD: 21156465654
Source: SPT Control Number: 12002
Initiated By: User1 on Wed Nov 11 14:00:46 CDT 20XX
Approved By: User2 on Wed Nov 11 14:01:04 CDT 20XX

$5,822,052.00 PAR Number: 0X1107501181
Fed Ref: 000006
Date/Time Completed: November 7,20XX 08:03:08 CDT
Repeat Code: 12345
Receiving Bank: ABCDEF Bank.
Beneficiary Bank: E CREDIT UNION BANK LTD
Beneficiary: 0123456799012345 SAMPLE CO GHIJ
Beneficiary Ref: ITEM 12345
Originator to Beneficiary Info: FOR FURTHER CREDIT SAMPLE RECIPIENT XXXXXX ACCT NO 123456
Originator: 000123456789012 SAMPLE COMPANY ABC CITY ROAD 18 NORTH MINNEAPOLIS MN 55428
IMAD: 21156465654
Source: SPT Control Number: 12002
Initiated By: User1 on Wed Nov 11 14:00:46 CDT 20XX
Approved By: User2 on Wed Nov 11 14:01:04 CDT 20XX

$4,821,000.00 PAR Number: 0X1107501181
Fed Ref: 000006
Date/Time Completed: November 7,20XX 08:03:08 CDT
Repeat Code: 12345
Receiving Bank: ABCDEF Bank.
Beneficiary Bank: E CREDIT UNION BANK LTD
Beneficiary: 0123456799012345 SAMPLE CO GHIJ
Beneficiary Ref: ITEM 12345
Originator to Beneficiary Info: FOR FURTHER CREDIT SAMPLE RECIPIENT XXXXXX ACCT NO 123456
Originator: 000123456789012 SAMPLE COMPANY ABC CITY ROAD 18 NORTH MINNEAPOLIS MN 55428
IMAD: 21156465654
Source: SPT Control Number: 12002
Initiated By: User1 on Wed Nov 11 14:00:46 CDT 20XX
Approved By: User2 on Wed Nov 11 14:01:04 CDT 20XX

$2,848,500.00 PAR Number: 0X1107501181
Fed Ref: 000006
Date/Time Completed: November 7,20XX 08:03:08 CDT
Repeat Code: 12345
Receiving Bank: ABCDEF Bank.
Beneficiary Bank: E CREDIT UNION BANK LTD
Beneficiary: 0123456799012345 SAMPLE CO GHIJ
Beneficiary Ref: ITEM 12345
Originator to Beneficiary Info: FOR FURTHER CREDIT SAMPLE RECIPIENT XXXXXX ACCT NO 123456
Originator: 000123456789012 SAMPLE COMPANY ABC CITY ROAD 18 NORTH MINNEAPOLIS MN 55428
IMAD: 21156465654
Source: SPT Control Number: 12002
Initiated By: User1 on Wed Nov 11 14:00:46 CDT 20XX

Approved By: User2 on Wed Nov 11 14:01:04 CDT 20XX

$109,000.00	PAR Number: 0X1107501181 Fed Ref: 000006 Date/Time Completed: November 7,20XX 08:03:08 CDT Repeat Code: 12345 Receiving Bank: ABCDEF Bank. Beneficiary Bank: E CREDIT UNION BANK LTD Beneficiary: 0123456799012345 SAMPLE CO GHIJ Beneficiary Ref: ITEM 12345 Originator to Beneficiary Info: FOR FURTHER CREDIT SAMPLE RECIPIENT XXXXXX ACCT NO 123456 Originator: 000123456789012 SAMPLE COMPANY ABC CITY ROAD 18 NORTH MINNEAPOLIS MN 55428 IMAD: 21156465654 Source: SPT Control Number: 12002 Initiated By: User1 on Wed Nov 11 14:00:46 CDT 20XX Approved By: User2 on Wed Nov 11 14:01:04 CDT 20XX

Subtotal: 5 Outgoing Wire Transfers

$133,037,179.16

Securities Purchased

Dollar Amount	Transaction Details
$530,774.66	SWEEP TO COMMERCIAL PAPER INVESTMENT Bank Reference: XXXXXXX107

Subtotal: 1 Securities Purchased

$530,774.66

Currency and Coin Shipped

Dollar Amount	Transaction Details
$2,525.00	COIN/CURRENCY PURCHASED Bank Reference: XXXXXXX641 Transaction Reference: XXXXXXX062
$2,300.00	COIN/CURRENCY PURCHASED Bank Reference: XXXXXXX214 Transaction Reference: XXXXXXX020
$600.00	COIN/CURRENCY PURCHASED Bank Reference: XXXXXXX261 Transaction Reference: XXXXXXX005

Subtotal: 3 Currency and Coin Shipped

$5,425.00

Miscellaneous Fee(s)

Dollar Amount	Transaction Details
$63.64	Bank Reference: XXXXXXX020
$42.52	Bank Reference: XXXXXXX020
$34.90	Bank Reference: XXXXXXX038
$31.00	Bank Reference: XXXXXXX042
$21.00	Bank Reference: XXXXXXX072
$20.00	Bank Reference: XXXXXXX073
$18.00	Bank Reference: XXXXXXX083
$15.61	Bank Reference: XXXXXXX013
$11.01	Bank Reference: XXXXXXX093
$10.12	Bank Reference: XXXXXXX088

Subtotal: 10 Miscellaneous Fee(s)

$267.80

Miscellaneous Debit(s)

Dollar Amount	Transaction Details

$2,575.00	CIB BOOK TRANSFER INTO DDA XXXXXXX068 Bank Reference:
$0.71	Bank Reference: XXXXXXX683 Transaction Reference: XXXXXXX070
$0.45	Bank Reference: XXXXXXX567 Transaction Reference: XXXXXXX044
$0.09	Bank Reference: XXXXXXX035 Transaction Reference: XXXXXXX008

Subtotal: 4 Miscellaneous Debit(s)

$2,576.25

TOTAL DEBITS

$588,786.39

GRAND TOTAL

Ledger Balance	$7,551,044.80
Collected + 1 Day	$1,237,959.88
Opening Collected	$1,769,895.39
One Day Float	$7,105,807.43
2 Day Float	$38,129.87
3 Day + Float	$0.00
MTD Avg Collected	$271,840.55
MTD Avg Neg Collected	-$640,254.27
Total Amount of Credits	$186,810,591.76
Number of Credits	32
Total Amount of Debits	$192,033,754.20
Number of Debits	39

---End of Report---

Your transition to eBill Service

Meet customer demands and stay a step ahead in the bill payment space

The State of Nebraska and U.S. Bank

Transition Outline

- Commitment to The State of Nebraska
- Introduction to eBill Service
- Integration, transition and resources
- Next steps

Commitment to The State of Nebraska

As your E-Payment service provider we understand the importance of payment acceptance tools in your business and are committed to providing innovative solutions to help you stay a step ahead.

With the bill payment landscape quickly evolving and consumer demands changing, we're excited to deliver a best-in-class electronic bill presentment and payment solution focused on the biller and consumer – eBill Service.

eBill Service provides you with a bill payment solution to help streamline operations, reduce costs and meet consumer demands by providing a secure, simple and fast way to make payments.

Introduction to eBill Service

Get more for you and your customers with eBill

The power behind eBill – U.S. Bank and Alacriti

Alacriti was chosen as our fintech partner based on a successful track record in delivery and market leading capabilities for clients and their consumers.

- Delivery
  - Implementation and onboarding tools are clean and intuitive
- Innovative capabilities
  - Cutting edge technology such as chatbots (Facebook Messenger, Alexa)
  - Insightful reporting and forward thinking dashboard
- Strategic partnership
  - Exclusivity on development and roadmap
  - Opportunities beyond bill pay
  - Improved client onboarding

Consumer insights into the bill pay marketplace

14.7 billion
bills paid per year[1]

68%
one-time payments[1]

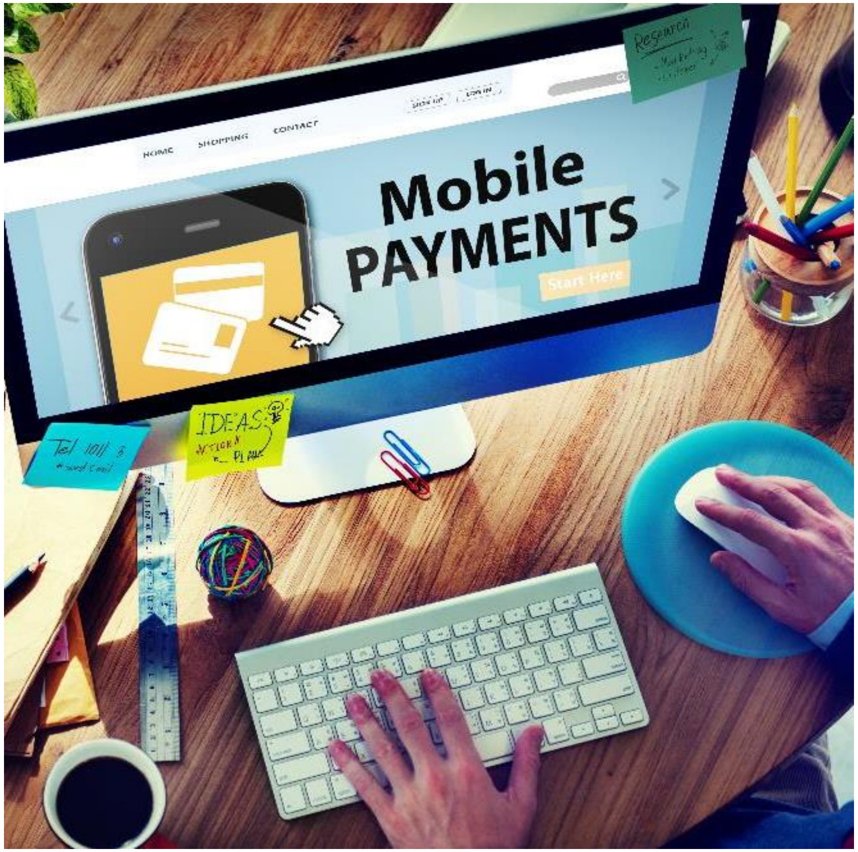
32%
recurring payments[1]

59%
bills paid online or through mobile channel[2]

1. Source: Aite 2017 "How Americans pay their bills"
2. Source: Fiserv consumer payments study, 2017
See end disclosures.

eBill Service allows consumers to self-service

A mobile-optimized website allows consumers to:



- Enroll in timely text and email payment alerts
- Enroll in paperless billing (electronic bill)
- Enrollment in recurring and autopay
- View current and historical bills
- View payment history
- Engage with an online artificial intelligence chatbot 24/7 to answer questions

eBill Service delivers more features

Features	eBill Standard	eBill Enhanced	eBill Premium	E-Pay Services
Customer & Admin Website	✓	✓	✓	✓
Artificial Intelligence <NEW> (e.g. Facebook Messenger, Amazon Alexa, Google Assistant)	N/A	✓	✓	N/A
Pay-by-Text <NEW>	N/A	✓	✓	N/A
IVR	N/A	✓	✓	✓
ACH, Credit/Debit Card	✓	✓	✓	✓
One-Time & Recurring	✓	✓	✓	✓
AutoPay, Payment Plan, Balance Reload <NEW>	N/A	✓	✓	N/A
Email Alerts	✓	✓	✓	✓
Text Alerts <NEW>	N/A	✓	✓	N/A
Electronic Bill Presentment <NEW>	N/A	✓	✓	N/A
URL Redirect	✓	✓	✓	✓
Simple Single Sign On	N/A	✓	✓	N/A
Full API, Full Single Sign On, or Hosted Payment Form (Checkout)	N/A	N/A	✓	N/A*
Multi-entity Hierarchy**	N/A	✓	✓	✓

***Full API only** ****Enhanced – Maximum of 7 entities (1 client, 6 divisions); Premium – unlimited entities**

Integration, transition and resources

Department of Revenue E-Pay - volumes & payment types

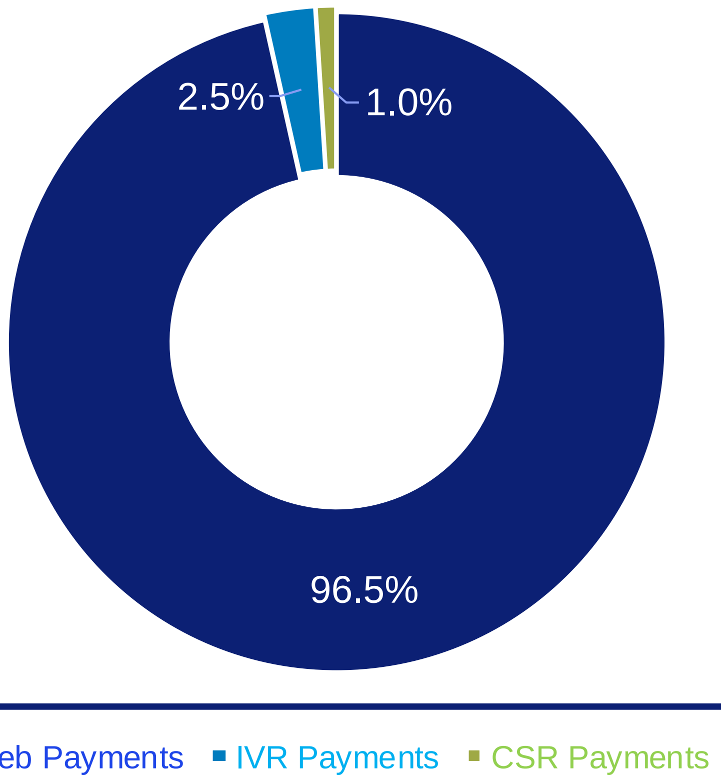
NB1 Biller Group: 2019 - 190,452 pymts;1st 2 Qtrs 2020 – 92,725 pymts

- Less than 1% CSR payments
- 2.5% IVR payments
- 96.5% Web payments

Payment Types

100% ACH

NB1-DOR: Nebraska Revenue
NB1-GAM: Gaming
NB1-IEP: Indiv Estimated Income Tax
NB1-IFP: Indv Income Tax
NB1-SKI: Gaming



Child Support E-Pay - volumes & payment types

NCS Biller Group: 2019 – 50,732 pymts; 1st 2 Qtrs 2020 – 26,726 pymts

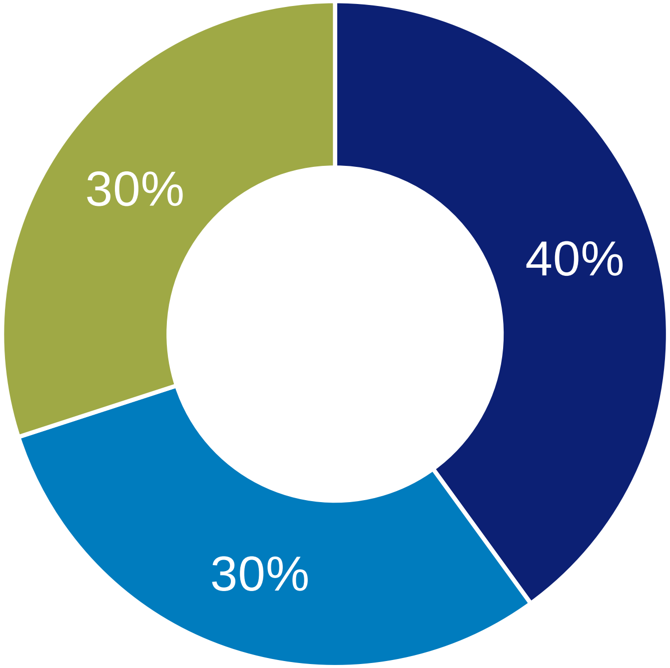
- 30% IVR payments
- 30% Kiosk payments (Migrating to other provider)
- 40% Web payments

  6% were recurring payments

Payment Types

6% ACH; 23% ATM

23% Cash; 48% Credit Card



NCS-IVR:	Child & Family Support Payment
NCS-KSK:	Child & Family Support Payment
NCS-PC0:	Child & Family Support Payment

Supreme Court E-Pay - volumes & payment types

ATT Biller Group: 2019 - 19,567 pymts; 1st 2 Qtrs 2020 – 8,093 pymts

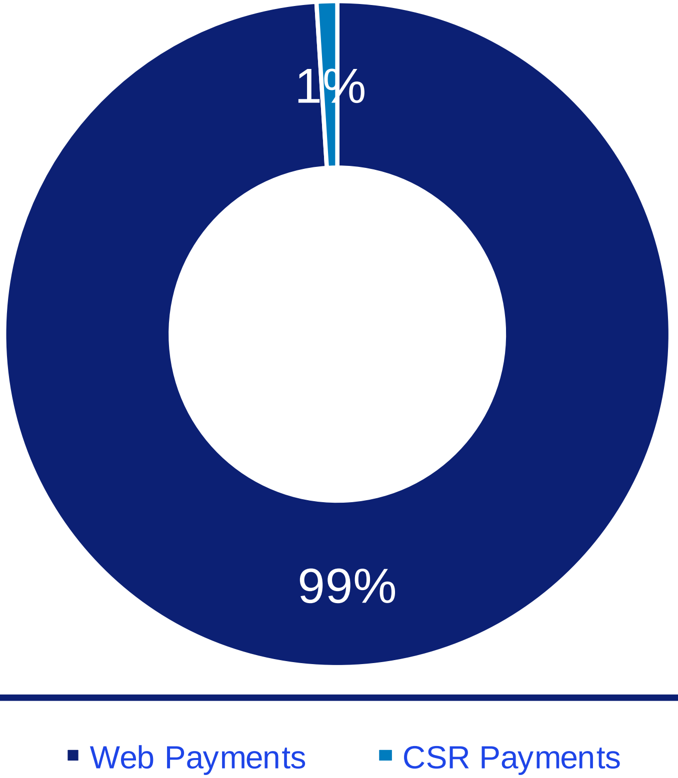
- 99% Web Payments
- less than 1% CSR Payments

Payment Types

6% ACH

94% Credit Card

ATT-ADM: Attorneys Admissions Payment
ATT-PMT: NSCPC Collections ePayments
ATT-SER: Attorney Services Payment



Your current E-Pay setup

- 3 Biller Groups and 11 Biller IDs:
  - Department of Revenue - NB1: DOR; GAM; IEP; IFP; SKI
  - Child Support - NCS: IVR; KSK; PC0
  - Supreme Court - ATT: ADM; PMT; SER
- Payments accepted via:
  - Web
  - Customer service representative (CSR)
  - IVR
  - Kiosk (Migrating to other provider)

NB1-DOR:	Nebraska Revenue
NB1-GAM:	Gaming
NB1-IEP:	Indiv Estimate Income Tax
NB1-IFP:	Indv Income Tax
NB1-SKI:	Gaming

NCS-IVR:	Child & Family Support Payment
NCS-KSK:	Child & Family Support Payment
NCS-PC0:	Child & Family Support Payment

ATT-ADM:	Attorneys Admissions Payment
ATT-PMT:	NSCPC Collections ePayments
ATT-SER:	Attorney Services Payment

Considering your setup for eBill Service

Biller Group ID: Department of Revenue - NB1

Details	Biller ID: NB1:DOR	Biller ID: NB1:GAM	Biller ID: NB1-:EP	Biller ID: NB1:IFP	Biller ID: NB1:SKI	Notes
Daily Payment Cutoff	X		X	X		5pm CST
Daily Payment Cutoff		X			X	8pm CST
ACH	X	X	X	X	X	
WEB/CSR Payments	X	X	X	X	X	
IVR Payments	X					
Settlement	X		X	X		Same Day
Settlement		X			X	Next Day
Pre-Registration File Transmission	X					
Pre-Registration Response File Transmission	X					
Remittance File Transmission	X (2)		X (2)	X (2)		

Considering your setup for eBill Service

Biller Group ID: Child Support - NCS

Details	Biller ID: NCS-:IVR	Biller ID: NCS:KSK	Biller ID: NCS:PC0	Notes
Daily Payment Cutoff	X	X	X	ACH & Credit Card: 8pm CST
ACH	X	X		
Credit Card	X	X	X	ATM, M/C, Visa, Discover
Cash		X		
WEB / CSR Payments			X	
IVR Payments	X			
KIOSK Payments		X		
Settlement	X	X	X	Next Day
Remittance File Transmission	X	X	X	

Considering your setup for eBill Service

Biller Group ID: Supreme Court - ATT

Details	Biller ID: ATT:ADM	Biller ID: ATT:PMT	Biller ID: ATT:SER	Notes
Daily Payment Cutoff	X		X	ACH: 8pm CST; Credit Card: 1:30am CST
Daily Payment Cutoff		X		ACH & Credit Card: 8pm CST
ACH	X	X	X	
WEB/CSR Payments	X	X	X	
Credit Card	X		X	M/C, Visa, Discover, AMEX
Credit Card		X		M/C, Visa, Discover
Settlement	X	X	X	Next Day
Remittance File Transmission		X		

Customer Service Rep (CSR) setup specifics Summary for all Biller ID’s.

Details	Notes
Admin Website	Admin Website for customer service rep (CSR)
# Admin CSR Users	ATT: 2; NB1: 98; NCS: 20
Volume of Transactions	1691 in 2019
Types of Functions used	Make, refund and cancel payments, research and run reports

Integration options

- Web Service API interface exchange messages via a Web Service (SOAP or REST) processing interface
- Single Sign-On
- Hosted Payment Form – one time payments

Ready to support your service transition

E-Pay-to-eBill Service transition strategy

- Recent implementation of clients across various verticals
- Communications, training and migration documents
- Dedicated transition team with clearly identified roles and responsibilities, including:
  - Transition Manager (TM) – primary project contact and liaison with client
  - Technical Project Manager (TPM) – SME to assist with client set ups

Dedicated support for your transition to eBill

You will be assigned a U.S. Bank Transition Manager responsible for:

- Scheduling initial and weekly meetings during the transition process
- Discussing and reviewing your requirements
- Managing the build of your new eBill Service setup
- Coordinating training for your staff

High-level migration milestone outline

Milestones	Description	Validations Needed	Timeline	Resources
Requirements	Capture details of required setup and issuance of additional documents based on requirements.	• Finalize the optimal go-forward configuration • Review recommended enhancements and changes to existing setup	**1-2 weeks**	IT Resources Project Manager
Build	Build out your requested setup in test. Development of any files or real-time connectivity, and initial testing.	• Confirm custom file mapping and layout review	**4-6 weeks**	IT Resources Project Manager Third-Party IT Vendor Consultants
Documentation	Completion of any required documentation for ACH and Card payment processing, transmission set up or IVR set up.	• Merchant processing documents, • Supplemental questionnaires • Terms and conditions • IVR recording	**1-2 weeks**	IT Resources Project Manager Third-Party IT Vendor Consultants
Testing	Integration and User Acceptance sandbox testing. Capture any final edits to customer websites and emails. Build final setup in production.	• Full end to end testing • Test file transmissions • ACH Pep+ setup • Look and feel testing and training	**2-4 weeks**	IT Resources Project Manager Third-Party IT Vendor Consultants
Go Live	Operational live proving of the build, and then you are pushed into production.	• Production support information handoff		

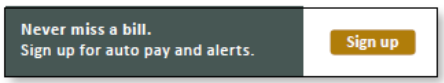
Estimated timing: 8-14 weeks to production

Next steps in your preparation

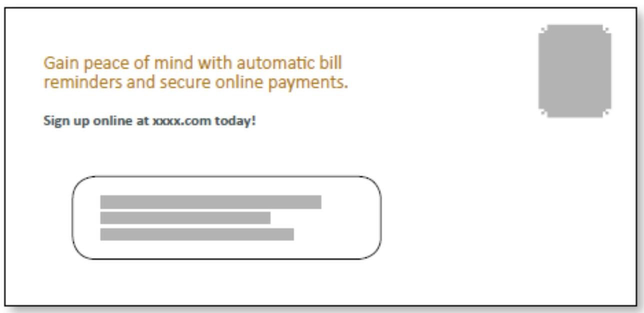
- Review Developer toolkit and begin development work
- Identify, secure, and set expectations for the resources that will support the transition
- Identify internal and consumer-facing assets that will require updating such as:
  - Bill referencing URL for payments
  - email
  - Internal policies and procedures
- Discuss a project start date

Available tools for eBill Service

- User guides, quick guides and tutorial videos
- Downloadable marketing toolkit to drive consumer adoption

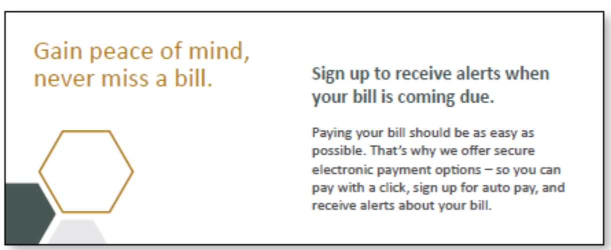

Never miss a bill.
Sign up for auto pay and alerts.
Sign up

Web banner


Gain peace of mind with automatic bill reminders and secure online payments.

Sign up online at xxxx.com today!

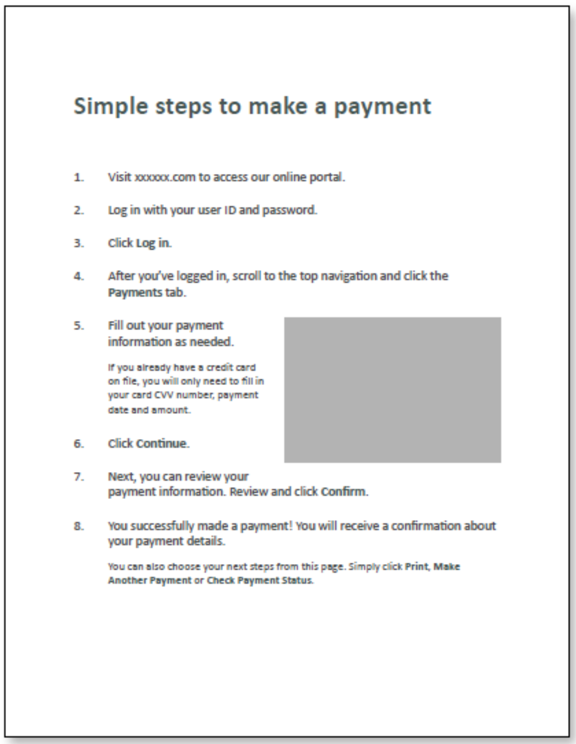
Envelope statement


Gain peace of mind, never miss a bill.

Sign up to receive alerts when your bill is coming due.

Paying your bill should be as easy as possible. That's why we offer secure electronic payment options – so you can pay with a click, sign up for auto pay, and receive alerts about your bill.

Bill insert

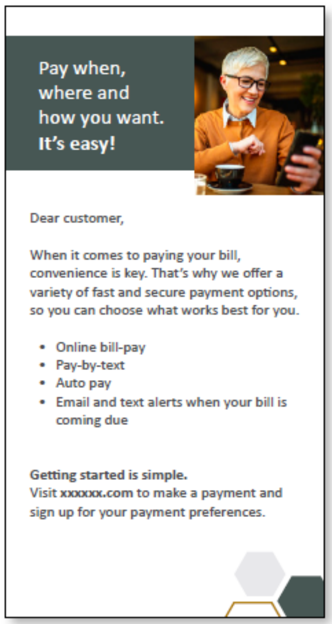

Simple steps to make a payment

1. Visit xxxxxx.com to access our online portal.
2. Log in with your user ID and password.
3. Click Log in.
4. After you've logged in, scroll to the top navigation and click the Payments tab.
5. Fill out your payment information as needed.

   If you already have a credit card on file, you will only need to fill in your card CVV number, payment date and amount.
6. Click Continue.
7. Next, you can review your payment information. Review and click Confirm.
8. You successfully made a payment! You will receive a confirmation about your payment details.

   You can also choose your next steps from this page. Simply click **Print, Make Another Payment** or **Check Payment Status.**

How-to guide


Pay when, where and how you want. It's easy!

Dear customer,

When it comes to paying your bill, convenience is key. That's why we offer a variety of fast and secure payment options, so you can choose what works best for you.

- Online bill-pay
- Pay-by-text
- Auto pay
- Email and text alerts when your bill is coming due

Getting started is simple.
Visit **xxxxxx.com** to make a payment and sign up for your payment preferences.

Email template

Questions and confirm next steps

We look forward to supporting your implementation and thank you for your partnership.

eBill resources and appendix

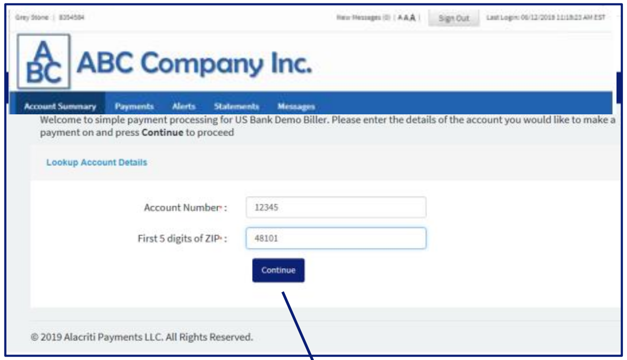
Web Service API

- Web Service API interface exchange messages via a Web Service (SOAP or REST) processing interface.
- This integration option requires the biller to access the eBill Service Web Service as defined in the WSDL (web service definition language) and allows the biller to embed payment related functions into their own systems
- The ‘Enhanced Gateway API’ supports a Web Service API interface. This is accessed using the https protocol so that private information is transferred securely. This requires the biller to use an SSL (?) implementation. All real time communications make use of SSL, HTTPS and TLS 1.2
- Interfacing to the Enhanced Gateway API using SSL does not require the biller to have a certificate. The Gateway uses a non-authenticated SSL session, meaning the biller is not authenticated using a digital certificate as a component of the SSL negotiation
- The Gateway uses source IP authentication to authenticate the request generation and validates message integrity using a message signature

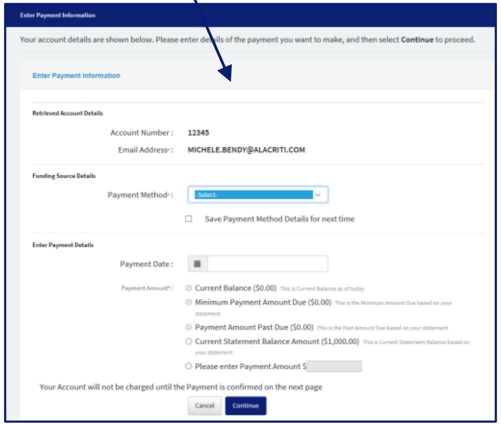
Full API (Web Service and REST)

- The Full API can be used to create customer records in real time so data can be used for authentication as part of Direct Access
- Biller can embed Funding Source & Payment Functions into their website and is responsible for PCI unless using the Hosted Payment Form (slide 16)
- Each set of calls (Customer/Account, Funding Source & Payment) allows the biller to Create New Records, Lookup & Retrieve Records, and Update Records (Edit, Delete, etc.)
- Some billers use limited calls, to address specific needs:
  - For example, ‘Create Customer’ can be triggered when a customer is created in the billers system so immediate payments can be made in eBill Service

Biller Website

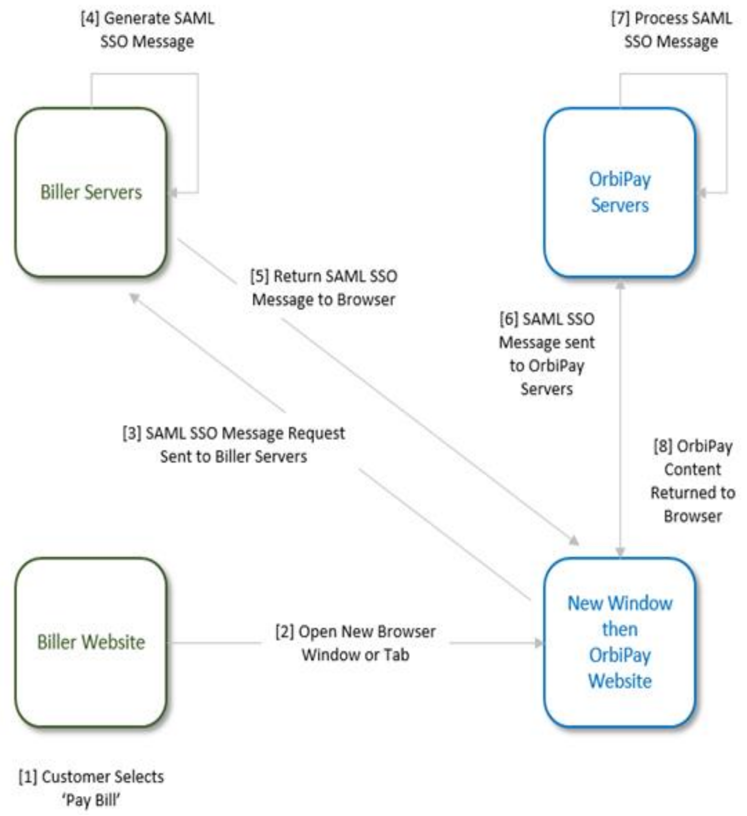


Biller Website



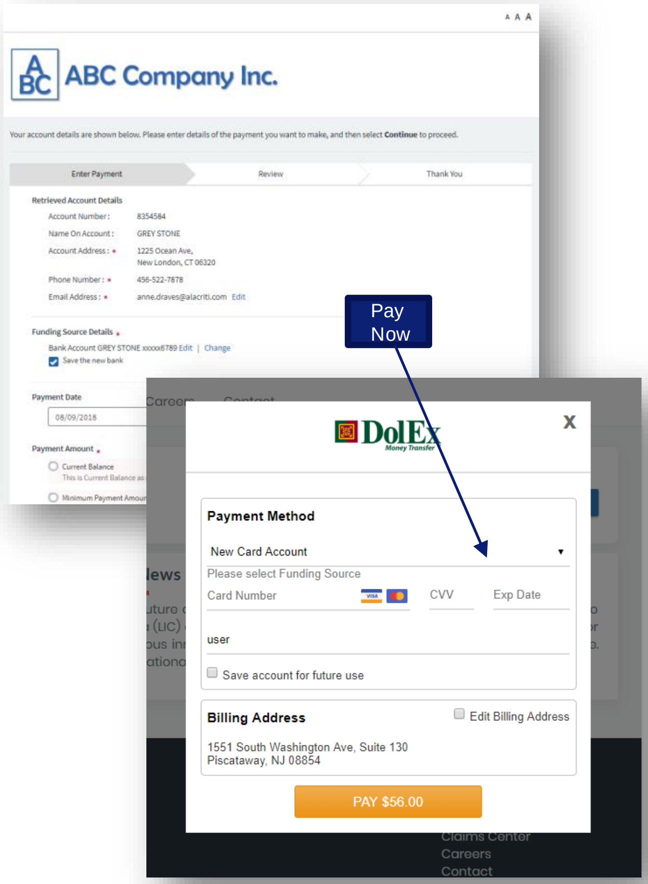
Single Sign-On (SSO)

- SSO allows the biller systems to seamlessly provide bill payment and related services offered by the eBill Service platform to their customers.
  - Customers access bill payment functionality from biller's website without the need to re-authenticate
- Customers accessing functionality in the biller's website are authenticated by the biller's system and SAML 2.0 provides a secure way to transmit information by leveraging XML digital signatures via HTTP POST
- Biller is responsible for:
  - Authenticating customers on their respective website
  - Constructing a valid SAML request, and
  - Re-directing customers to the eBill Service platform



Hosted payment form

- Allows billers to seamlessly embed one time payments into their website with no PCI obligations:
  - Website integration is via a few lines of Javascript
  - Biller must also code to REST API on the backend
- Customer's payment information is securely collected without posting it to biller's server by tokenizing it in eBill Service
- Hosted forms for capturing is loaded securely over HTTPS, from eBill/Alacriti servers and rendered on biller's payment page
- The payment form loads in billers payment pages as an 'overlay form' (right). Biller's website is actually suspended in the background and Alacriti takes control the of browser window

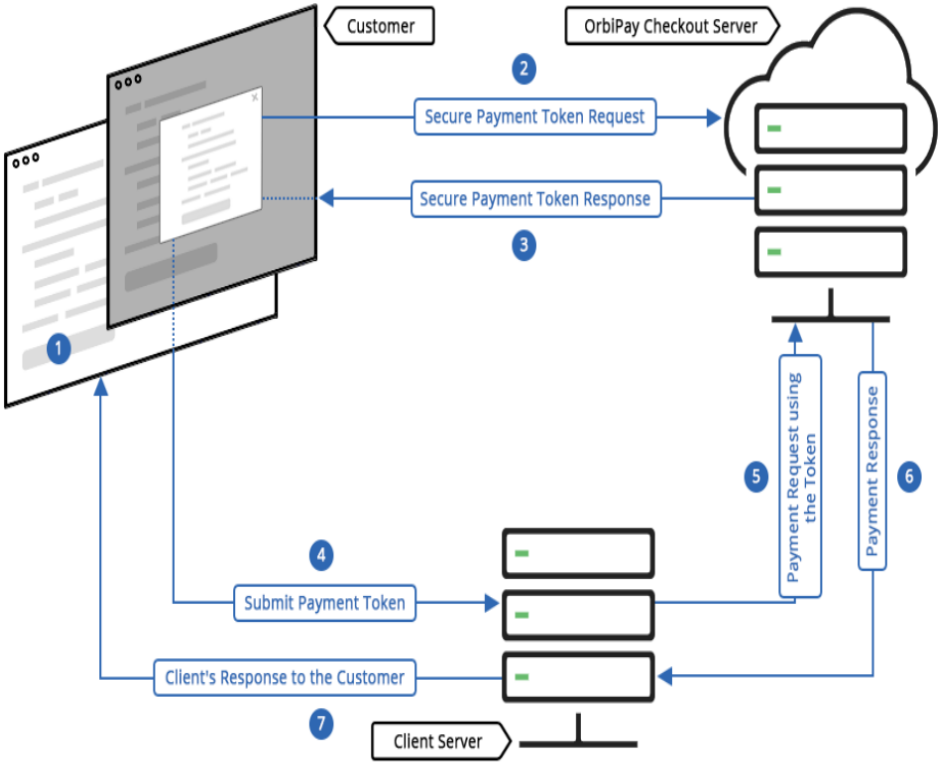


*An **IFrame** (Inline Frame) is an HTML document embedded inside another HTML document on a website.
The **IFrame** HTML element is often used to insert content from another source, such as an advertisement, into a Web page.

Hosted payment form explained

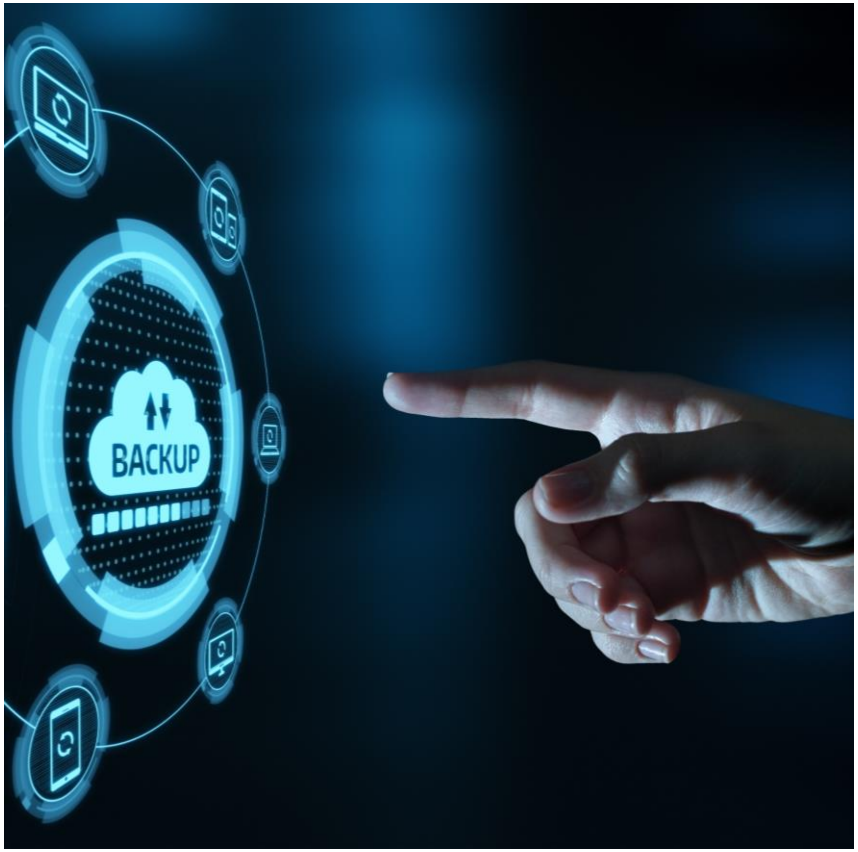
Customer logs into biller's website to make payment and the following events occur:

1. **Load Payment Form:** The payment form is served when the customer clicks on the "Pay" button on the biller's payment page
2. **Secure Payment Token Request: C**ustomer fills in the required data on the payment form and clicks "Pay" which *initiates a request to create a secure payment token*
3. **Secure Payment Token Response:** Alacriti *responds with a secure payment token to the payment form*
4. **Submit Payment Token: S**ecure payment token is submitted to biller's server
5. **Payment Request using the Token: B**iller's server initiates a request to eBill/Alacriti to create a payment using the token after validating the token with the help of the Hosted Forms SDK (software development kit in various languages (Java, Python, C#, Node.js, PHP)
6. **Payment Response:** Alacriti processes the payment request and responds with the appropriate response
7. **Biller's Response to the Customer:** Biller responds to the customer based on the payment response received from Alacriti



Business continuity and disaster recovery

Enterprise Resiliency Program



- Protects customers, assets and employees by design
- Evaluates the risks of significant adverse events
- Plans and validates response strategies
- Actively monitors reporting on the threat landscape and effectiveness of the control environment
- Leads emergency response teams

Since it is impossible to anticipate every type of potential disaster, there can be no assurance that there will be no interruption of our business functions in all circumstances. The mission of our Enterprise Resiliency program is to minimize the impact of any disruption. This overview is subject to modification by U.S. Bancorp at any time.

Recovery strategies for mission critical functions

- Transfer work
- Relocate people within business to another site
- Relocate to recovery center
- Work from home via a bank-owned device

Since it is impossible to anticipate every type of potential disaster, there can be no assurance that there will be no interruption of our business functions in all circumstances. The mission of our Enterprise Resiliency program is to minimize the impact of any disruption. This overview is subject to modification by U.S. Bancorp at any time.

Disclosures

Deposit products offered by U.S. Bank National Association. Products and services may be subject to credit approval. Eligibility requirements, restrictions and fees may apply. You will need Internet access on your mobile device and may be charged access fees by your carrier, dependent upon your mobile plan. Check with your carrier for details on specific fees and charges. Member FDIC.

CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY) 08/13/2020

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Holder Identifier :

PRODUCER
Aon Risk Insurance Services West, Inc.
Denver CO Office
1900 16th Street, Suite 1000
Denver CO 80202 USA

CONTACT NAME:
PHONE (A/C. No. Ext): (866) 283-7122
FAX (A/C. No.): (800) 363-0105
E-MAIL ADDRESS:

INSURER(S) AFFORDING COVERAGE		NAIC #
INSURER A:	ACE American Insurance Company	22667
INSURER B:		
INSURER C:		
INSURER D:		
INSURER E:		
INSURER F:		

INSURED
U.S. Bancorp
EP-MN-L201
200 S. 6th Street
Minneapolis MN 55402 USA

COVERAGES CERTIFICATE NUMBER: 570083530126 REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

Limits shown are as requested

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	COMMERCIAL GENERAL LIABILITY CLAIMS-MADE / OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY / PRO-JECT / LOC OTHER:						EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	
	AUTOMOBILE LIABILITY ANY AUTO OWNED AUTOS ONLY / SCHEDULED AUTOS HIRED AUTOS ONLY / NON-OWNED AUTOS ONLY						COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	
	UMBRELLA LIAB / OCCUR EXCESS LIAB / CLAIMS-MADE DED / RETENTION						EACH OCCURRENCE AGGREGATE	
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N / A					PER STATUTE / OTH- E.L. EACH ACCIDENT E.L. DISEASE-EA EMPLOYEE E.L. DISEASE-POLICY LIMIT	
A	Cyber Liability			G25602894004 SIR applies per policy terms & conditions	11/15/2019	11/15/2020	Aggr Limit	$10,000,000

Certificate No : 570083530126

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

RE: RFP.

CERTIFICATE HOLDER

State of Nebraska
1526 K Street, Suite 130
Lincoln NE 68508 USA

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Aon Risk Insurance Services West, Inc.

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 08/13/2020

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Marsh USA Inc.
333 South 7th Street, Suite 1400
Minneapolis, MN 55402-2400
Attn: Minneapolis.CertRequest@marsh.com Fax 212-948-0114

CONTACT NAME:
PHONE (A/C, No, Ext): **FAX (A/C, No):**
E-MAIL ADDRESS:

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Indian Harbor Insurance Company	36940
INSURER B :	
INSURER C :	
INSURER D :	
INSURER E :	
INSURER F :	

INSURED
U.S. BANCORP AND ITS SUBSIDIARIES
200 S. 6th STREET
EP-MN-L20I
MINNEAPOLIS, MN 55402

COVERAGES **CERTIFICATE NUMBER:** CHI-009550843-01 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	COMMERCIAL GENERAL LIABILITY; CLAIMS-MADE; OCCUR; GEN'L AGGREGATE LIMIT APPLIES PER: POLICY; PRO-JECT; LOC; OTHER:						EACH OCCURRENCE	$
							DAMAGE TO RENTED PREMISES (Ea occurrence)	$
							MED EXP (Any one person)	$
							PERSONAL & ADV INJURY	$
							GENERAL AGGREGATE	$
							PRODUCTS - COMP/OP AGG	$
								$
	AUTOMOBILE LIABILITY; ANY AUTO; OWNED AUTOS ONLY; SCHEDULED AUTOS; HIRED AUTOS ONLY; NON-OWNED AUTOS ONLY						COMBINED SINGLE LIMIT (Ea accident)	$
							BODILY INJURY (Per person)	$
							BODILY INJURY (Per accident)	$
							PROPERTY DAMAGE (Per accident)	$
								$
	UMBRELLA LIAB; OCCUR; EXCESS LIAB; CLAIMS-MADE; DED; RETENTION $						EACH OCCURRENCE	$
							AGGREGATE	$
								$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N; ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) N; If yes, describe under DESCRIPTION OF OPERATIONS below	N / A					PER STATUTE / OTH-ER	
							E.L. EACH ACCIDENT	$
							E.L. DISEASE - EA EMPLOYEE	$
							E.L. DISEASE - POLICY LIMIT	$
A	ERRORS & OMISSIONS			ELU164832-19F	11/15/2019	11/15/2020	Aggregate Limit:	10,000,000
A	FI BOND (CRIME)			ELU164832-19G	11/15/2019	11/15/2020	Aggregate Limit:	10,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

State of Nebraska
1526 K Street, Suite 130
Lincoln, NE 68508

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE of Marsh USA Inc.
Manashi Mukherjee
Manashi Mukherjee

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 07/09/2020

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER 1-612-333-3323 Hays Companies 80 South 8th Street Suite 700 Minneapolis, MN 55402	CONTACT NAME: Dawn Heinemann and Melody Kronbach PHONE (A/C, No, Ext): 612-333-3323 FAX (A/C, No): 612-373-7270 E-MAIL ADDRESS: dheinemann@hayscompanies.com
INSURED U.S. Bancorp and its Subsidiaries 200 South 6th Street EP-MN-L20I Minneapolis, MN 55402	

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : OLD REPUBLIC INS CO	24147
INSURER B : NATIONAL UNION FIRE INS CO OF PITTS	19445
INSURER C :	
INSURER D :	
INSURER E :	
INSURER F :	

COVERAGES CERTIFICATE NUMBER: 59770219 REVISION NUMBER: 1

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY PRO-JECT LOC OTHER:	X		MWZY31397920	08/01/20	08/01/21	EACH OCCURRENCE	$ 5,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 1,000,000
							MED EXP (Any one person)	$ EXCLUDED
							PERSONAL & ADV INJURY	$ 5,000,000
							GENERAL AGGREGATE	$ 6,000,000
							PRODUCTS - COMP/OP AGG	$ 6,000,000
								$
A	AUTOMOBILE LIABILITY X ANY AUTO OWNED AUTOS ONLY / SCHEDULED AUTOS HIRED AUTOS ONLY / NON-OWNED AUTOS ONLY			MWTB31397720	08/01/20	08/01/21	COMBINED SINGLE LIMIT (Ea accident)	$ 250,000
							BODILY INJURY (Per person)	$
							BODILY INJURY (Per accident)	$
							PROPERTY DAMAGE (Per accident)	$
								$
B	X UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DED RETENTION $			BE18198076	08/01/20	08/01/21	EACH OCCURRENCE	$ 10,000,000
							AGGREGATE	$ 10,000,000
								$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBEREXCLUDED? N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N / A	X	MWC31397620	08/01/20	08/01/21	X PER STATUTE OTH-ER	
							E.L. EACH ACCIDENT	$ 2,000,000
							E.L. DISEASE - EA EMPLOYEE	$ 2,000,000
							E.L. DISEASE - POLICY LIMIT	$ 2,000,000
A	Excess Automobile Liab.			MWZX31398120	08/01/20	08/01/21	LIMIT	4,750,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Medical Expense - $5,000 has been endorsed on the general liability policy per form GL 416 010 0811.
The State and others required by the contract documents are additional insured on a primary and non-contributory basis as respects general liability policy. Waiver of subrogation applies in favor of the additional insureds as respects workers' compensation as required by written contract.
RE: 5791 Z1 ? Purchasing Card, Preferred Vendor Card and Group Travel Card Services

CERTIFICATE HOLDER	CANCELLATION
CON State of Nebraska, Dept. of Administrative Services State Purchasing Bureau 1526 K Street, Suite 130 Lincoln, NE 68508 USA	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE

ddebuhr
59770219

System and Organization Controls (SOC) 3

Report on U.S. Bancorp System Relevant to Security, Availability and Confidentiality

For the period from October 1, 2018 to September 30, 2019

Management's Report of Its Assertions on the Effectiveness of Its Controls over the Payment Services, Corporate & Commercial Banking, Wealth Management & Investment Services, and Consumer and Business Banking Services System Based on the Trust Services Criteria for Security, Availability and Confidentiality

December 12, 2019

We, as management of, U.S. Bancorp are responsible for:

- Identifying the Payment Services, Corporate & Commercial Banking, Wealth Management & Investment Services, and Consumer and Business Banking Services System (System) and describing the boundaries of the System, which are presented in Attachment A
- Identifying our principal service commitments and system requirements
- Identifying the risks that would threaten the achievement of its principal service commitments and service requirements that are the objectives of our system, which are presented in Attachment B
- Identifying, designing, implementing, operating and monitoring effective controls over the Payment Services, Corporate & Commercial Banking, Wealth Management & Investment Services, and Consumer and Business Banking Services System (System) to mitigate risks that threaten the achievement of the principal service commitments and system requirement
- Selecting the trust services categories that are the basis of our assertion

We assert that the controls over the system were effective throughout the period October 1, 2018 to September 30, 2019 to provide reasonable assurance that the principal service commitments and system requirements were achieved based on the criteria relevant to security, availability, confidentiality set forth in the AICPA's TSP section 100, *2017 Trust Services Criteria for Security, Availability, Processing Integrity, Confidentiality, and Privacy* and if user entities applied the complementary user entity controls and the subservice organizations applied the controls assumed in the design of the Company's controls through the period.

Very truly yours,

U.S. Bancorp
Janet Lerch
Chief Operational Risk Officer
12/12/2019

Ernst & Young LLP
Suite 1400
220 South Sixth Street
Minneapolis, MN 55402-4509

Tel: +1 612 343 1000
ey.com

Building a better working world

Report of Independent Accountants

The Board of Directors and Management
U.S. Bancorp

Scope
We have examined management's assertion, contained within the accompanying "Assertion of U.S. Bancorp" (Assertion), that U.S. Bancorp's controls over the Payment Services, Corporate & Commercial Banking, Wealth Management & Investment Services, and Consumer and Business Banking Services (System) were effective throughout the period October 1, 2018 to September 30, 2019, to provide reasonable assurance that its principal service commitments and system requirements were achieved based on the criteria relevant to security, availability, and confidentiality (applicable trust services criteria) set forth in the AICPA's TSP section 100, *2017 Trust Services Criteria for Security, Availability, Processing Integrity, Confidentiality, and Privacy*.

Management's Responsibilities
U.S. Bancorp's management is responsible for its Assertion, selecting the trust services categories and associated criteria on which its Assertion is based, and having a reasonable basis for its Assertion. It is also responsible for:

- Identifying the Payment Services, Corporate & Commercial Banking, Wealth Management & Investment Services, and Consumer and Business Banking Services (System) and describing the boundaries of the System
- Identifying its principal service commitments and system requirements and the risks that would threaten the achievement of its principal service commitments and service requirements that are the objectives of the System
- Identifying, designing, implementing, operating and monitoring effective controls over the System to mitigate risks that threaten the achievement of the principal service commitments and system requirements

Our Responsibilities
Our responsibility is to express an opinion on the Assertion, based on our examination. Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. Those standards require that we plan and perform our examination to obtain reasonable assurance about whether management's Assertion is fairly stated, in all material respects. An examination involves performing procedures to obtain evidence about management's assertion, which includes (1) obtaining an understanding of U.S. Bancorp's relevant security, availability and confidentiality policies, processes and controls, (2) testing and evaluating the operating effectiveness of the controls and (3) performing such other procedures as we considered necessary in the circumstances. The nature, timing and extent of the procedures selected depend on our judgment, including an assessment of the risk of material misstatement, whether due to fraud or error. We believe that the evidence obtained during our examination is sufficient to provide a reasonable basis for our opinion.

Building a better working world

Our examination was not conducted for the purpose of evaluating U.S. Bancorp's cybersecurity risk management program. Accordingly, we do not express an opinion or any other form of assurance on its cybersecurity risk management program.

Inherent limitations:
Because of their nature and inherent limitations, controls may not prevent, or detect and correct, all misstatements that may be considered relevant. Furthermore, the projection of any evaluations of effectiveness to future periods, or conclusions about the suitability of the design of the controls to achieve U.S. Bancorp's principal service commitments and system requirements, is subject to the risk that controls may become inadequate because of changes in conditions, that the degree of compliance with such controls may deteriorate, or that changes made to the system or controls, or the failure to make needed changes to the system or controls, may alter the validity of such evaluations. Examples of inherent limitations of internal controls related to security include (a) vulnerabilities in information technology components as a result of design by their manufacturer or developer; (b) breakdown of internal control at a vendor or business partner; and (c) persistent attackers with the resources to use advanced technical means and sophisticated social engineering techniques specifically targeting the entity.

Opinion:
In our opinion, U.S. Bancorp's management assertion referred to above is fairly stated, in all material respects, based on the applicable trust services criteria and if the subservice organizations applied the controls assumed in the design of U.S. Bancorp's controls throughout the period October 1, 2018 to September 30, 2019.

Restricted use
This report is intended solely for the information and use of U.S. Bancorp, user entities of U.S. Bancorp's Payment Services, Corporate & Commercial Banking, Wealth Management & Investment Services, and Consumer & Business Banking Services system during some or all of the period October 1, 2018 to September 30, 2019, and prospective user entities, independent auditors, and practitioners providing services to such user entities and regulators who have sufficient knowledge and understanding of the following:

- The nature of the service provided by the service organization
- The applicable trust services criteria
- The risks that may threaten the achievement of the applicable trust services criteria, and how controls address those risks

Ernst & Young LLP

December 12, 2019
Minneapolis, MN

Description of the U.S. Bancorp Payment Services, Corporate & Commercial Banking, Wealth Management & Investment Services, and Consumer & Business Banking Services System

U.S. Bancorp Overview

U.S. Bancorp, with 74,000 employees and $459 billion in assets as of December 31, 2018, is the parent company of U.S. Bank, the fifth-largest commercial bank in the United States. The Minneapolis-based bank blends its branch and ATM network with mobile and online tools that allow customers to bank how, when and where they prefer. U.S. Bank is committed to serving millions of retail, business, wealth management, payment, commercial and corporate, and investment services customers across the country and around the world as a trusted financial partner.

Customer Support Functions

In addition to having the four client-serving lines of business described above, U.S. Bancorp has multiple corporate support functions, including Finance, Human Resources, Law Division, Risk Management and Compliance, Strategy and Corporate Affairs, and Technology and Operations Services (TOS).

- **Finance:** incorporates business line financial reporting and planning, as well as the controller's division, corporate development, corporate treasury, and corporate real estate.
- **Human Resources:** provides services to the whole enterprise related to pay, benefits, inclusion and learning.
- **Law Division:** supports all business lines by providing advice in specific focus areas such as Depositions, IRS Summons and Regulatory Change Management.
- **Risk Management and Compliance:** incorporates Corporate Compliance, Credit Risk Management, Anti-Money Laundering (AML) Risk Management and Operational Risk Management; the Enterprise Privacy Office is a part of the Operational Risk Management department.
- **Strategy and Corporate Affairs:** oversees U.S. Bancorp's reputation strategies with internal and external stakeholders, including brand strategy, corporate communications, and enterprise research and analytics.
- **TOS:** provides shared services technology and operations services and is described below in "Overview of Technology Environment."

To protect against credit, financial, strategic, operational, reputational and compliance risk, U.S. Bancorp enlists three lines of defense. The first line of defense is the relevant business line. The second line of defense is a corporate support function related to risk management and compliance. The third line of defense is Corporate Audit Services (CAS), an independent third party that provides objective risk-centric assurance services to the U.S. Bancorp Audit Committee.

Overview of Technology Environment

U.S. Bancorp has 13 distinct Information Technology (IT) support functions that provide the technology infrastructure, information security and information technology controls in support of U.S. Bancorp's primary lines of business described above. Technology and Operating Services (TOS) is the largest IT support function and provides shared information technology and security support services for the back-end banking operations as well as other operations services across U.S. Bancorp business lines. TOS is made up of the following departments: Infrastructure Services, Information Security Services (ISS), and Application Development.

In addition to TOS services, the scope of this report also includes the following IT support functions and technology services within certain business line functions:

- ***Trust Technology and Support Services (TT&SS):*** Provides transaction processing, securities movement and safekeeping, trust accounting and application management for Wealth Management & Investment Services (WM&IS).

- ***U.S. Bancorp Home Mortgage (USBHM) Technology Group:*** Responsible for certain Information Technology general controls (ITGCs) at the application level over Mortgage Servicing package (MSP) relating to user administration, change management authorization, testing and approval, and incident management.

- ***Fund Services Technology Development & Management Group (TDM):*** Responsible for certain ITGCs at the application level over Eagle–Star/Pace/Portal, TA2000 related to user administration, change management authorization, testing and approval, job processing and incident management.

- ***Fund Services Technology and Systems Support (TSS):*** Responsible for certain ITGCs at the application level over TA2000, Automated Workflow Distributor (AWD), and Direct Access to Secure Hub (DASH) related to user administration, change management authorization, testing and approval, and incident management.

- ***Fund Services Centralized Operations and Technology Support (COTS):*** Responsible for certain ITGCs at the application level over Advent Geneva, and AIP Workstation related to user administration, change management authorization, testing and approval, and incident management.

- ***Corporate Payments System (CPS) Global Technology Group:*** Responsible for certain ITGCs at the application level over TS1 related to user administration, and over Corporate Payments Management Information System (CPMIS) related to user administration, change management authorization, testing, approval and deployment.

- ***FSV Technology Group:*** Responsible for certain ITGCs at the application level over FSV Prepaid Legacy Web and FSV Prepaid Portal related to user administration, password security, change management authorization, testing, approval, and IT operations monitoring.

- ***Credit Risk Infrastructure and Reporting:*** Responsible for certain ITGCs at the application level over Credit Risk Management Business Line operations, related to user access reviews, change management authorization, testing, approval, and IT operations monitoring.

- ***Dealer Services Finance & Strategic Management (F&SM): Responsible*** for certain ITGCs at the application level over Consumer Banking Sales & Support Business Line operations, related to user access reviews, change management authorization, testing, approval and incident management.

- ***Treasury Systems Group (subset of TOS):*** Responsible for the entirety of the ITGCs at the application level over Treasury Business Line related to change management, logical access, IT operations except for backup and recovery, managed by TOS.

- ***Community Development Center Technology:*** Responsible for certain ITGCs at the application level over CDC Gateway related to change management and scheduled batch job management.

- ***Risk Management and Compliance Technology Support (Solution Owners):*** Responsible for certain ITGCs at the application level over Archer eGRC and STORM portals related to user administration, change management authorization, testing, approval and scheduled batch job monitoring.

- ***Retail Payment Solutions (RPS) Finance Group:*** Responsible for certain ITGCs at the application level over RPS Business Line operations, related to change management authorization, testing, approval and IT operations monitoring.

Scope of Services Covered in Report

The Company's major lines of business are Payment Services, Corporate & Commercial Banking, Wealth Management & Investment Services, and Consumer and Business Banking, these operating segments are components of the Company about which financial information is prepared and evaluated regularly by management in deciding how to allocate resources and assess performance.

- Payment Services includes consumer and business credit cards, stored-value cards, debit cards, corporate, government and purchasing card services, consumer lines of credit and merchant processing.

- Corporate and Commercial Banking offers lending, equipment finance and ticket leasing, depository services, treasury management, capital markets services, international trade services and other financial services to middle market, large corporate, commercial real estate, financial institution, nonprofit and public sector clients.

- Wealth Management and Investment Services provides private banking, advisory services, investment management, retail brokerage services, insurance, trust, custody and fund servicing through five businesses: Wealth Management, Corporate Trust Services, U.S. Bancorp Asset Management, Institutional Trust & Custody and Fund Services.

- Consumer and Business Banking delivers products and services through banking offices, telephone servicing and sales, on-line services, direct mail, ATM processing and mobile devices. It encompasses community banking, metropolitan banking and indirect lending, as well as mortgage banking.

- Global Fund Services administers a wide range of funds, including, but not limited to, convertible arbitrage, multi-strategy, credit arbitrage, distressed securities, global macro, long/short equity, market neutral, commodities, private equity, special situations and managed futures. Similarly, a comprehensive range of fund structures, currency classes and performance fee mechanisms are serviced. Clients are based in various jurisdictions, including, but not limited to, the United Kingdom, the United States, Switzerland, Malta, Portugal, Denmark and Spain. Current funds serviced are domiciled in the Cayman Islands, Ireland, the Jersey Islands, the British Virgin Islands, Delaware, Guernsey and Malta. The largest proportion of the clients' investor base consists of institutional and high-net-worth individuals based in Europe and the United States.

Payment Services

Corporate Payment Systems (CPS)

CPS provides payment solutions that enable the exchange of value between buyers and sellers. CPS programs help improve expense management and streamline steps in the procurement process as a service organization for record-keeping and reporting. The scope of CPS services covered by the present report includes the Commercial Card program. Commercial Card program enables user entities to track transactions to support their financial statements (e.g., overall spend, spend by category, account code management, payment and billing detail, delinquency management and supplier management).

FSV Payment Systems (FSV)

FSV is a full-service provider of stored-value processing products and services. The FSV suite of stored-value electronic payment products and programs offered includes payroll, general-purpose reloadable, gift, promotional, rebate and incentive, and health care payment cards. FSV has strategic relationships with Visa®, MasterCard®, American Express®, Diners Club® and Discover®, as well as automated teller machine (ATM) networks. The scope of FSV services and products covered by the present report is limited to Stored Value Processing Services System.

Retail Payment Solutions (RPS) and Elan

RPS provides relationship-based retail payment solutions for clients, while Elan is a separate business unit within RPS and is designed to provide agent credit card services executed under a credit card Joint Marketing Agreement with its clients, who are generally other financial institutions. Elan provides full life cycle servicing of accounts, from account initiation through collection, charge-off and recovery. Services include client setup, underwriting, transaction management, remittance processing, settlement, customer service, collections and reward administration. The scope of the RPS and Elan services and products covered by the present report is limited to Elan Agent Program Transaction Processing System.

Corporate and Commercial Banking

Wholesale ACH/Wires

The Wholesale Banking line of business provides ACH and wire transfer account administration functions to its own Consumer and Business customers. In addition, the line of business provides services such as initiation of automated clearing house (ACH) and wire services online and initiation of ACH transactions via interactive voice response (IVR). The scope of Wholesale ACH/Wires services and products covered by the present report is limited to ACH and Wire Services Transaction Processing System.

Elan ATM/Financial Services

Elan Financial Services provides processing services to user entities across the United States, including an array of Electronic Funds Transfer (EFT) processing solutions such as ATM processing, bank and debit card point-of-sale (POS) processing, ATM network membership, ATM and POS gateway services, and turnkey ATM-managed services. Elan Financial Services also owns and operates the Fastbank® ATM and MoneyPass® ATM and personal identification number (PIN) POS surcharge-free networks.

In addition to providing core processing capabilities, Elan Financial Services provides support and program management, including ATM and debit card issuance and management, network communications monitoring, a comprehensive set of fraud-monitoring tools, web-based program administration, and a full range of client support services, including cash operations. The scope of Elan ATM/Financial Services covered by the present report is limited to ATM and Debit Card Transaction and Cash Operations Processing System.

Wealth Management, Fund Services and Investment Services

Institutional Trust & Custody (IT&C)

IT&C provides trust, custody, and investment management services to corporations, employee benefit plans, foundations and endowments, public and governmental entities, insurance companies, financial institutions, registered investment advisors (RIAs) and broker/dealers, unions, and some foreign clients. Primary roles within the markets include Relationship Management (primary client contact), Account Management (daily administration), and Sales Management (new business development). IT&C client portfolios and support groups include various institutional relationships. Support groups include Sales Support, Product Management, Risk Management, Payment Services, and the Asset Management Group for those accounts where U.S. Bancorp has investment discretion. The scope of Institutional Trust & Custody services and products covered by the present report is limited to Trust & Custody Account Transaction Processing System.

Global Corporate Trust Services (GCTS)

GCT provides trustee, custodial and agency services to a client base that includes corporate, municipal and special-purpose entities that issue a broad spectrum of traditional debt and structured finance transactions. The structured finance transactions include asset-backed securities, mortgage-backed securities, commercial mortgage-backed securities and collateralized debt obligations. The scope of GCTS services and products covered by the present report is limited to Trust & Custody Account Transaction Processing System.

Municipal Bond Trustee Services

Municipal Bond transaction processing is performed by the following Global Corporate Trust (GCT) support units: Product Operations and Support and Operations Services. Product Operations is responsible for monitoring and processing incoming wires from the bond issuers. Support and Operations Services includes Money Market Instruments (MMIs) for municipal clients that are issued through the DTCC Issuing and Paying Agent system. U.S. Bank's security master file for MMIs is the Securities Processing Automated Note System. On the scheduled interest payment, redemption or maturity dates, DTCC debits U.S. Bank for the payment amounts in order to credit the beneficial holders.

Wealth Management

Through the Private Client Reserve, Asset Management Group, Ascent Private Capital Management and Trust Advisory Centers, Wealth Management delivers sophisticated and customized financial solutions targeted at clients in the affluent, high-net-worth, and ultra-high-net-worth segments, including individuals and families, corporate executives, legal and health care professionals, business owners and charitable organizations. Wealth Management provides financial planning, private banking, personal trust, investment management, investment advisory services and retail brokerage services.

The Private Client Group in Community Banking

This group provides personalized wealth management services to affluent and high-net-worth clients, including individuals, business owners, and charitable organizations in more than 60 Community Banking locations across the U.S. Bancorp footprint through dedicated relationship managers specializing in personal trust administration, private banking, and financial planning services. Relationship managers provide a significant level of service to clients through regular and systematic communication, and they enhance and expand relationships by creating and implementing customized financial solutions for clients.

U.S. Bancorp Asset Management, Inc. (USBAM)

USBAM is a registered investment advisor with the Securities and Exchange Commission (SEC). The primary function of the business unit is to manage registered and unregistered funds and liquidity management investment strategies for its clients. USBAM serves as the registered investment advisor for the First American Funds family, which includes six registered funds. In addition to advising the First American Funds, USBAM also provides separately managed accounts for institutional investors (which include corporations, public entities, for-profit/nonprofit health care entities, and foundations and endowments). Through that custom cash business, USBAM invests cash in individual short-term portfolios as dictated by those institutional investors.

USBAM also administers U.S. Bancorp's securities lending program and manages that program's collateral. Securities lending is an investment strategy that attempts to maximize returns on securities in client portfolios by lending the securities to approved borrowers. Clients in the securities lending program can elect to have their cash collateral invested in a registered fund, unregistered fund, or a separate mandate account.

U.S. Bancorp Fund Services, LLC (Fund Services)

Fund Services supports investment strategies and products, including mutual funds, alternative investments and exchange-traded funds ranging from startup to $100 billion. Fund Services serves the unique needs of registered and unregistered products and provides transfer agent, fund administration, fund accounting, compliance and risk management, distribution and marketing, fund custody and alternative investment services. The scope of Fund Services and products covered by the present report is limited to Mutual Fund Recordkeeping and Reporting System, Mutual Fund Transfer Agent Transaction Processing System and Alternative Investment Solutions Fund Administration System.

Consumer & Business Banking

Home Mortgage Investor Servicing

USBHM is part of the Consumer and Business Banking Division and is designed to provide information for use by institutional user entities and their independent auditors who audit the financial statements of an entity that uses USBHM as a mortgage loan servicer. The scope of USBHM services and products covered by the present report is limited to investor servicing and cash administration activities, including investor setup, loan sales, borrower payment processing, loan clearing, account reconciliations, wire disbursements, investor remittance and investor reporting services related to the residential mortgage loans serviced by USBHM.

People

U.S. Bancorp's organizational structure provides a framework for planning, executing and controlling business operations. Organizational structures are available to employees on the Company's intranet. Senior management officials within the Managing Committee are responsible for setting the Company's tone and core values through oversight of business activities, developing strategies for managing and monitoring risk and compliance matters, overseeing financial controls and performance, and developing policy. U.S. Bancorp understands that the primary factors in setting the appropriate "tone at the top" of an organization include:

- Independence of the Board of Directors
- Integrity and ethical values of senior management overtly displayed through communicated policies and procedures and implicitly through their actions and expectations
- Stature and experience of board members, the extent of their involvement and scrutiny of activities, and the appropriateness of their actions

Data

Information stored, used or transmitted between and among the Company's information systems is considered a corporate asset and is safeguarded. It is the Company's policy to prohibit unauthorized access, disclosure, duplication, modification, diversion, destruction, loss, misuse or theft of this information. In addition, it is the Company's policy to protect information entrusted to it by third parties in the same manner as the Company's information is protected, as well as in accordance with applicable contracts. Software installed on the Company's multi-user systems is regulated by approved access control mechanisms.

U.S. Bancorp employees and contingent workers (consultants, temporary hires and other independent contractors) are required to take security awareness education courses to provide personnel with the required qualifications and knowledge to protect their network, systems, and data.

Cybersecurity

U.S. Bancorp's products and services are highly data-driven and have a continuous focus on cybersecurity. The Company participates in multiple industry working groups focused on sharing cybersecurity information and leads the Financial Services Information Sharing and Analysis Center (FS-ISAC), a financial services sector classified information-sharing working group. TS provides critical cyber protection services to the enterprise. Specifically, TS has programs and management practices in place to evaluate and manage cyber risks, including the following:

- ***Security Governance Program:*** ISS, which is part of TS, develops, implements, and maintains enterprise-wide information security policies, standard operating procedures and programs in support of the Chief Information Security Officer. U.S. Bancorp has put in place risk-driven, multi-tier cybersecurity defense approach to protect from cyber risks and threats.

- ***Executive Strategy and Communication:*** U.S. Bancorp establishes an Enterprise Information Security Strategy that sets priorities and goals for cyber security development for a long term period. CISO provides executive communication reporting to senior leadership.

- ***Risk Assessment Program:*** The Governance, Risk, and Compliance (GRC) group within ISS performs risk assessments for major security incidents with vulnerabilities that cannot be remediated and new or substantially changed information systems prior to implementation.

- ***Security Architecture Management:*** Organization wide Information Security Architecture processes are put in place to properly address information security requirements through the information assets lifecycle.

- ***Role-Based Access Management Program:*** U.S. Bancorp implements a role-based access management approach to address principle of least access privilege. A centralized access management tool is implemented to manage user and privileged access across all business lines and multiple applications. Authorization and review controls by assigned owners for access roles and models are put in place.

- ***Security Monitoring Activities/Incident Management Program:*** U.S. Bancorp utilizes a Security Incident and Event Management (SIEM) tool to monitor the information technology environment for cybersecurity incidents, even triaging, timely responding and reporting.

- ***Security Awareness and Training Program:*** The Security Management Delivery and Awareness team manages the security awareness training program called Security Awareness for Everyone (SAFE). All U.S. Bancorp employees are required to complete the training annually.

- ***Threat and Vulnerability Management Program:*** U.S. Bancorp deploys multiple threat and vulnerability detection tools to scan its IT environment. The tools include McAfee products and a proprietary script run hourly. Periodic penetration testing of information assets is performed to identify and mitigate security gaps.

- ***Patch Management Program:*** U.S. Bancorp’s Vulnerability Management group manages and deploys patches to all workstations and servers on a regular basis to protect against vulnerabilities.

- ***Vendor Risk Management Program:*** U.S. Bancorp has an established corporate Third-Party Risk Management (TPRM) function that oversees all third-party management activities and establishes the enterprise-wide TPRM policy. In addition, each business line has a TPRM function that monitors and enforces compliance with corporate TPRM requirements.

- ***Data Classification Program:*** The GRC group promulgates information classification guidance which applies to all business lines and all data within the enterprise.

- ***Data Loss Prevention (DLP) Program:*** U.S. Bancorp deploys DLP tool to prevent and detect confidential information leakage through various communication channels.

- ***Security Baseline Compliance Program:*** U.S. Bancorp develops security baseline standards for various platforms and network infrastructure devices and ensure compliance with internal policies and procedures, along with regulatory requirements

- ***Endpoint Protection and Malicious Activity Management:*** U.S. Bancorp puts in place software tools and procedures to protect user desktops, servers and applicable network equipment from malicious software and activity, as well as timely identify and react to security incidents.

- ***Network Security Management:*** U.S. Bancorp implements policies, procedures and tools addressing encryption and certificates management, secure firewall rules management, network boundary protection, and compliance monitoring to identify and remediate deviations.

Security

The system is protected against unauthorized access, use, or modification to meet the entity's commitments and system requirements
The system is protected, both logically and physically, against unauthorized access.
U.S. Bancorp has a complex technology environment composed of a combination of distributed, midrange, and mainframe applications. The applications consist of those that are in-house-developed, purchased-not-modified and purchased-modified, as well as applications hosted by third-party vendors. The primary platforms that support the applications are Mainframe, Distributed, iSeries and HP Non-Stop (formerly known as Tandem).

Data Centers
U.S. Bancorp maintains consistent policies and standards across all data centers for physical and environmental security to help protect production and corporate servers, network devices, and network connections within the data centers. Both primary (production) and secondary (back-up, disaster recovery) operations are housed in several data centers around the United States and Europe. Network Equipment Rooms (NER), Server rooms and network closets are outside the scope of the report.

Authentication and access
Strong authentication and access controls are implemented to restrict administrative access to system components (for example, infrastructure, software, architecture and data), internal support tools and customer data to meet the entity's commitments and system requirements.

Change Management
U.S. Bancorp has robust system change management processes that require changes to be authorized and properly tested and controlled. Changes to applications and supporting infrastructure are requested within ServiceNow. Application changes follow an established system development life cycle outlined by the Integrated Delivery Methodology (IDM), including development, quality assurance, user acceptance testing, production implementation and validation.

Availability

The system is available for operation and use as committed or agreed to.
U.S. Bancorp establishes requirements to protect the confidentiality, integrity, and availability of information. The Enterprise Readiness Services Group (ERSG) establishes the requirements for preparedness, including planning, implementation, assessment, and maintenance of the program for prevention, mitigation, response, continuity and recovery through a significant event, impact or declared business disruption.

Business and Service Continuity Plans are maintained and tested in accordance with FFIEC Guidelines as stated in the Enterprise Business Continuity Policy and Guidance.

To support continued availability in the event of destruction of data within systems, automated processes for the completion of backups for data and systems are in place, and files are recoverable. Financially significant data and systems are backed up automatically through the use of backup tools on a defined schedule. In-scope systems are tested for recoverability according to the Business Continuity Program Guidance and as part of the disaster recovery exercises.

Confidentiality

Information that is designated "confidential" is protected as committed or agreed.
U.S. Bancorp practices, processes and systems must protect internal, confidential and personal information through the stages of the information life cycle: creation, processing, storage, transmission and disposal. U.S. Bancorp is committed to protecting the security and confidentiality of its customers' content defined as Consumer Privacy Pledge at https://www.usbank.com/privacy/.

Internally, confidentiality requirements are communicated to employees through training and policies. Employees and contingent workers are required to attend security awareness education training courses to provide personnel with the required qualifications and knowledge to protect their network, systems and data. Training materials outline the expectation of the users to protect customer information, and completing the required training provides assurance that resources understand the expectations when accessing customer information and systems. In addition, U.S. Bancorp maintains a third party risk management (TPRM) program to onboard and monitor vendors periodically based on the information security risk tier assigned. The program evaluates performance against contractual obligations, including confidentiality commitments.

Principal service commitments and system requirements

The Company designs its processes and procedures related to Payment Services, Corporate & Commercial Banking, Wealth Management & Investment Services, and Customer and Business Banking Services System to meet its objectives for the provided services. Those objectives are based on service commitments that the Company makes to user entities and partners, the laws and regulations that govern the provision of the services, and the financial, operational and compliance requirements that the Company has established for the services.

Principal service commitments relevant to security, confidentiality and availability criteria of data are documented and communicated in the enterprise-wide Information Protection Posture, Enterprise Information Technology Service Management Policy, Enterprise Preparedness Guidance and other standard operating procedures. Service commitments are documented and communicated through contract provisions for use with financial and nonfinancial institutions. Clients receive communication via the U.S. Bank as a Service Provider (USBASP) program and Business Line relationships.

The Company is committed to protecting the confidentiality, integrity, availability and privacy of customer data. The Company maintains the following principles and system requirements across every appropriate business environment:

- **Information and Information Systems are Assets:** The Company's information assets are protected from disclosure, modification, deletion or loss in accordance with the sensitivity of the information and the risks associated with its disclosure to unauthorized individual.
- **Information Security Risk Management:** The Company establishes standards to manage well-known and well-understood risks. The Company maintains processes to assess and manage risks to the security of the Company's information as new threats emerge and as technology and business practices change. The Company identifies, quantifies (where possible), prioritizes and mitigates risks to acceptable levels with the objective of maintaining the security management of enterprise information assets and intellectual property.
- **Information security policies and procedures:** Information security policies are established and maintained to ensure compliance with legal, regulatory and contractual obligations. These policies are designed to protect confidential business and personal information. These policies are implemented through effective communication, training and enforcement. The Information security policies define an organization-wide approach to how systems and data are protected. These include policies around how the service is designed and developed, how the system is operated, how the internal business systems and networks are managed and how employees are hired and trained. Standard operating procedures are documented on how to carry out specific manual and automated processes required in the operation and development of the Company.
- **Restricted access to the enterprise network:** Employee access to internal resources within the network is enabled by secure methods to access the Company's applications via the Internet, internal network access and administrative access to resources within the network. Access to information assets is controlled based on the level of trust of the individual seeking access and the security of the access path.

- **Layered security (defense in depth):** The Company designed and implemented technical components at all levels of the infrastructure to significantly reduce the likelihood a weakness in one area does not lead to a compromise. Procedural controls are put in place wherever responsibility for security activities are assigned. Managerial controls ensure responsibilities are carried out and technical and procedural controls are functioning as designed.
- **Data encryption:** The Company's encryption standards support the interoperability of diverse communication systems that handle the storage and transmission of information assets across the distributed environment. Standards apply acceptable protocols to meet compliance objectives for PCI standards and Information Security policies.
- **Isolation of critical and sensitive resources within the enterprise network**: Assets are classified according to their business criticality and sensitivity, and security resources are allocated to provide the greatest protection for the most critical and most sensitive assets. Network design and access controls support this protection priority.
- **Business control of business information resources:** Technology and Operations Services maintains custody of information assets. Business line management controls the security of information assets they own. The Company establishes and maintains processes for information ownership and access authorization to ensure adequate segregation of function through business line control for information assets.
- **Least privilege and access based on business need**: To ensure information confidentiality, availability and integrity, access to information resources is provided on a need-to-know and need-to-use basis, according to job roles and functions defined by the information owner. Where privileged access is required for those in custodial roles or business line IT staff responsible for the processing, storage, transmission, backup and secure handling of information, such access is limited, to the extent possible, to the level needed, within the specific role of each employee. Such individuals are educated on the risks and responsibilities related to having this access and agree to comply with restrictions on their use of privileged authority.
- **Secure application design and development:** The Company establishes the application development life cycle (design, development, deployment, maintenance and retirement) requirements to ensure the protection of information assets accessible through business applications thorough all phases of the application life cycle.
- **Protection of information assets in the custody of third parties:** When the Company's information assets are placed in the custody of third parties, the Company retains responsibility for its protection to meet business, legal, regulatory and contractual requirements. The Company vests that responsibility with third-party relationship owners, who ensure contractual agreements provide for the protection of such assets (consistent with enterprise security policy) and guarantees the Company the right to verify the protection of its assets through its own audit processes or receipt of reliable third-party assessments. Non-disclosure agreements are executed by the Company any time the Company is engaged in dialogue or the exchange of information deemed sensitive or confidential to the Company. The NDA or Confidentiality Agreement ensures sensitive or confidential information remains protected, and the Company has legal recourse in the event there is disclosure. NDAs are part of the checklist of artifacts considered during engagements with contractors, third party/hosted data center providers and others.

- **Information security incidents management:** Reporting procedures are identified to ensure information security events and weaknesses associated with information systems are communicated allowing timely corrective action to be taken. Responsibilities and procedures are in place to handle information security events and weaknesses effectively once they have been reported. A process of continual improvement is applied to the response activities and overall management of information security incidents. As necessary, evidence is collected for root cause analysis and extent of damage, to provide a determination of culpability or to comply with regulatory requirements. Throughout this process the integrity of the evidence is maintained to meet forensic requirements. The Company periodically exercises its Computer Security Incident Response Plan in accordance with regulatory requirements and to ensure procedures are adequate to manage the Company's response to a security incident.
- **IT service management:** The Company established service requirements for IT services including change management, incident management, problem management, configuration management, access management, and service level management to provide value to the customer in the form of IT services. The Company's defines the SLAs for applications managed and hosted by the Company for access provisions and enterprise roles management.
- **Compliance:** The Company's Information Protection Program supports compliance with applicable laws, regulations and contractual requirements. The Company has mapped its information security policies to applicable legal, regulatory and contractual requirements including Gramm-Leach-Bliley Act (GLBA), Payment Card Industry (PCI), Health Insurance Portability and Accountability Act (HIPAA), Sarbanes-Oxley Act SOX) and the National Institute of Standards and Technology (NIST) Cybersecurity Framework. U.S. Bancorp Information Protection Program is aligned with published NIST guidelines and other industry-accepted security standards. Employees and contractors apply these principles when protecting information, where applicable. The Company supports compliance with relevant European Union General Data Protection Regulation standards.
- **Business continuity:** The mission of the Company's business continuity program is to establish and support an ongoing business continuity and contingency planning program to evaluate the impact of significant events that may adversely affect customers, assets, or employees and maintain availability of services.
- **Physical security:** The Company established policies with requirements for prevention of unauthorized physical access, damage, and/or interference to enterprise premises and information, including those related to the areas where critical or sensitive information is processed and handled.
- **Protection of personally identifiable information:** for non-financial and financial Institutions the Company has established the following principal service commitments and system requirements:
    - Design physical, electronic and procedural safeguards to maintain the security and confidentiality of personal data.
    - Protect personal data against anticipated threats or hazards to the security or integrity of personal data.
    - Prevent unauthorized access to or use of such personal data that could result in substantial harm or inconvenience to the applicable customer.

- o Notice to client in the event that service provider becomes aware that personal data of client's current or former customers has been compromised as a result of a breach of security at service provider, its affiliates or its agents. Such notice will include service provider's reasonable estimate of the number of customer records affected and the nature of the information exposed, together with the steps to be taken by service provider to limit such exposure and avoid a recurrence thereof.

The Company established internal control environment and operational requirements that support the achievement of principal service commitments, relevant laws and regulations, and other system requirements. Such requirements are communicated in Company's system policies and procedures, system design documentation and contracts with customers.

A-LIGN

CERTIFICATE OF REGISTRATION

Business Continuity Management System

ISO 22301: 2012

This is to certify that the Business Continuity Management System of:

U.S. Bank National Association
One Meridian Crossing
Richfield, Minnesota 55423

Conforms with the requirements of ISO 22301: 2012 for the scope listed below:

Administration and operation of the U.S. Bancorp Enterprise Preparedness Program, which provides direction and oversight to all U.S. Bancorp business lines, units and subsidiary companies, to ensure alignment and compliance of business resumption programs with defined policies and procedures and governing requirements.

Certificate Number: BCMS02

Expiry Date: 06/06/2022

Issue Date: 06/06/2019

Issued by:

Gene Geiger

President, A-LIGN

ISO 22301 CERTIFIED
A-LIGN

ANAB
ACCREDITED
ISO/IEC 17021
MANAGEMENT SYSTEMS
CERTIFICATION BODY

This certificate was issued electronically and is bound by the terms and conditions set forth in the agreement. Further clarification regarding the scope of this certificate and applicability to the ISO 22301: 2012 standard may be obtained at www.a-lign.com.

A-LIGN Headquarters: 400 N. Ashley Dr. Suite 1325 Tampa, Florida 33602 Tel: 888-702-5446

U.S. Bancorp Enterprise Resiliency Program Overview

The Enterprise Resiliency Program ("Program") establishes and supports U.S. Bancorp's ("Company") Business Continuity and Contingency Planning and Response Program. The Program is designed to protect customers, assets, and employees by: evaluating the risks of significant adverse events, planning and validating response strategies, actively monitoring of and reporting on the threat landscape and effectiveness of the control environment, and leading emergency response teams.

The Program ensures Company and its affiliates meet the fiduciary responsibility to stakeholders and comply with regulatory requirements of the Federal Financial Institutions Examination Council (FFIEC), the Securities and Exchange Commission (SEC), the Office of the Comptroller of the Currency (OCC), the Financial Industry Regulatory Authority (FINRA), the Office of the Superintendent of Financial Institutions (OSFI) and the European Banking Authority (EBA). Additionally, Company has met all recovery criteria as prescribed by the Interagency White Paper on Sound Practices to Strengthen the Resilience of the U.S. Financial System.

The U.S. Bancorp Board of Directors annually approves the U.S. Bancorp Enterprise Resiliency Policy. Program status and any significant issues are reported to the U.S. Bancorp Board of Directors, the Management Committee and Senior Executives on a quarterly basis.

Foundation of Risk Management

The Enterprise Resiliency Program is supported by the Enterprise Resiliency Group (EPG), a department of the Company's Risk Management and Compliance division. The group consists of over 40 risk management and business continuity professionals.

Risk Assessments

Risk assessments are foundational to the enterprise resiliency program. The results of risk assessments drive the planning, exercising and emergency response components of the program. The following risk assessments are performed:

- Application Criticality Assessment ("ACA") are used to assess application risk and determine appropriate recovery time objectives and recovery point objectives;
- Business Impact Analysis ("BIA") measures the effects of resource loss and escalating losses over time to provide the basis for risk mitigation and business continuity planning;
- Third Party Resiliency Assessment ("TPA") evaluates the risks associated with processes performed by and/or technology provided by mission critical third parties to drive appropriate third-party outage mitigation and recovery planning; and
- Threat Vulnerability Assessment ("TVA") assesses the risk of major natural hazard events along with the impacts of those events on Company corporate locations and the mission critical processes/technologies executed at those locations.

Results of these risk analysis activities drive strategic recovery planning for continuity of operations for these processes. TPA occurs annually on the anniversary of the previous assessment or upon a significant change in the relationship. ACA, BIA and TVA assessments are refreshed bi-annually or upon significant change.

Risk Mitigation Planning

The Enterprise Resiliency Group has established and maintains guidelines which incorporate industry best practices for the operational resiliency of critical business processes and technology. To achieve operational resiliency, business process and technology owners in partnership with and under the guidance of the Enterprise Resiliency Group build and maintain response plans to address threats and risks identified by the assessment activities described above. The response plans are integrated into the overall Company Risk Management framework.

Business Continuity Response Plans

Company's Business Continuity Plans are developed and maintained to address operational resiliency and recovery strategies for such events as pandemic/high employee absenteeism, natural and man-made hazard impacts, technology outages and other business disruptions.

In the event a business office or operational facility becomes, or is likely to become, non-operational an appropriate business continuity plan will be activated. The response strategy will vary based upon the nature of the disruption and work impacted. Response strategies include:

- Transfer Work-Work is transferred to another location out of the impacted area that does the same business function or has been cross trained.
- Relocate People within Business-Team members from the impacted location are relocated to another site.
- Relocate to Regional Recovery Center- A location, other than the normal facility, will be used to process data and/or conduct critical or necessary business functions.
- Work from Home-Team members will work from home on a bank-owned device.

Disaster Recovery Response Plans

Company's technology infrastructure is designed and implemented to ensure high-availability and high-recoverability. Industry leading best practices and best-in-class technology components are utilized to operate a highly-redundant, geographically-disperse network of data centers. Critical data is securely mirrored and replicated between two data centers.

Company's Disaster Recovery Plans are developed and maintained to address technology, infrastructure, application and data recovery and validation strategies in response unplanned technology interruptions up to and including the loss of a data center.

Third Party Provider Outage Response Plans

Company's Vendor Service Plans are developed and maintained to address the risks from the loss of service from a critical provider. Vendor Service Plans include pre-planned response activities including but not limited to communication strategies, alternative work plans, and service resumption validation processes.

High Absenteeism/Pandemic Response Plans

The U.S. Bancorp Pandemic Preparation and Response Plan is developed and maintained in partnership with senior leaders and other critical support departments to prepare for the possibility of pandemic flu in the same way that we prepare for other events that could affect our employees, customers and our communities. The plan was prepared in communication with public officials, pandemic planning experts, various state and local organizations, and other financial institutions and businesses. The plan augments procedures already in place as part of existing Company's Enterprise Resiliency Program and outlines strategies to mitigate the impact of a pandemic upon the company, its employees, and customers.

Plan Validation

In alignment with regulatory requirements, bank policy and industry best practices, resiliency plans are regularly exercised to demonstrate plan effectives and process/technology recoverability. Exercise scenarios include business continuity plan activation or activation simulation; local, regional, national and international crisis management and response team simulations; U.S. Bancorp and third-party joint exercises; and key/critical infrastructure/application disaster recovery.

Enterprise Resiliency Policy requires business continuity and vendor service plans to be exercised on an annual basis. Disaster recovery plans for mission critical and key applications are exercised on a quarterly basis. Results from each exercise are documented and reviewed by the Enterprise Resiliency Group. Any encountered issues or plan discrepancies are documented along with remediation plans.

Crisis Management and Adverse Event Response

The Enterprise Resiliency Group's Crisis Management team manages and coordinates the enterprise response to adverse events that threaten to harm the organization, its stakeholders, employees, assets or reputation. The enterprise response focuses on the safety of all employees, customers and assets of the Company, minimizing disruption of service and/or inconvenience to customers, returning to a business as usual state as quickly as possible, and limiting any potential liability of the organization.

Employee Training and Awareness

Employee Training and Awareness is a critical component of the success of Company's Enterprise Resiliency Program. The training and awareness program consist of both formal and informal activities, including but not limited to, required biennial training courses, planning-community user groups, participation in functional exercises of recovery plans, and localized evacuation procedure drills.

Audits / Exams / ISO Certification

Annual internal audits and periodic OCC/Federal Reserve exams are conducted on the Company's Enterprise Resiliency Program. Company maintains an ISO 22301-Business Continuity Management certification.

Notifications

In the event of a major disaster at Company that impacts customer product or service, a member of the Product/Service Customer Support Team will communicate with the customer. Since it is impossible to anticipate every type of potential disaster, there can be no assurance that there will be no interruption of the Company's business functions in all circumstances. The mission of the Company's Enterprise Resiliency Program is to minimize the impact of any disruption.

Disclaimer

This document is subject to modification by U.S. Bancorp at any time.

State of Nebraska (State Purchasing Bureau)
REQUEST FOR PROPOSAL FOR CONTRACTUAL SERVICES

SOLICITATION NUMBER	RELEASE DATE
RFP 6304 Z1	June 12, 2020
OPENING DATE AND TIME	**PROCUREMENT CONTACT**
August 18, 2020 2:00 p.m. Central Time	Julie Schiltz / Annette Walton

PLEASE READ CAREFULLY!

SCOPE OF SERVICE

The State of Nebraska (State), Department of Administrative Services (DAS), Materiel Division, State Purchasing Bureau (SPB), is issuing this Request for Proposal (RFP) Number 6304 Z1 for the purpose of selecting a qualified Bidder to provide Automated Clearing House (ACH) Origination Services. A more detailed description can be found in Section V. The resulting contract may not be an exclusive contract as the State reserves the right to contract for the same or similar services from other sources now or in the future.

The term of the contract will be five (5) years commencing upon notice to proceed. The Contract includes the option to renew for two (2) additional one (1) year periods upon mutual agreement of the Parties. The State reserves the right to extend the period of this contract beyond the termination date when mutually agreeable to the Parties.

ALL INFORMATION PERTINENT TO THIS REQUEST FOR PROPOSAL CAN BE FOUND ON THE INTERNET AT: **http://das.nebraska.gov/materiel/purchasing.html**.

IMPORTANT NOTICE: Pursuant to Neb. Rev. Stat. § 84-602.04, State contracts in effect as of January 1, 2014, and contracts entered into thereafter, must be posted to a public website. The resulting contract, the solicitation, and the successful bidder's proposal or response will be posted to a public website managed by DAS, which can be found at http://statecontracts.nebraska.gov.

In addition and in furtherance of the State's public records Statute (Neb. Rev. Stat. § 84-712 et seq.), all proposals or responses received regarding this solicitation will be posted to the State Purchasing Bureau public website.

These postings will include the entire proposal or response. Bidder must request that proprietary information be excluded from the posting. The bidder must identify the proprietary information, mark the proprietary information according to state law, and submit the proprietary information in a separate container or envelope marked conspicuously using an indelible method with the words "PROPRIETARY INFORMATION", or if submitting the proposal or response electronically, as a separate electronic file that is named "PROPRIETARY INFORMATION". The contractor must submit a detailed written document showing that the release of the proprietary information would give a business advantage to named business competitor(s) and explain how the named business competitor(s) will gain an actual business advantage by disclosure of information. The mere assertion that information is proprietary or that a speculative business advantage might be gained is not sufficient. (See Attorney General Opinion No. 92068, April 27, 1992) THE BIDDER MAY NOT ASSERT THAT THE ENTIRE PROPOSAL IS PROPRIETARY. COST PROPOSALS WILL NOT BE CONSIDERED PROPRIETARY AND ARE A PUBLIC RECORD IN THE STATE OF NEBRASKA. The State will determine, in its sole discretion, if the disclosure of the information designated by the Bidder as proprietary would 1) give advantage to business competitors and 2) serve no public purpose. The Bidder will be notified of the State's decision. Absent a determination by the State that the information may be withheld pursuant to Neb. Rev. Stat. § 84-712.05, the State will consider all information a public record subject to disclosure.

If the agency determines it is required to release proprietary information, the bidder will be informed. It will be the bidder's responsibility to defend the bidder's asserted interest in non-disclosure.

To facilitate such public postings, with the exception of proprietary information, the State of Nebraska reserves a royalty-free, nonexclusive, and irrevocable right to copy, reproduce, publish, post to a website, or otherwise use any contract, proposal, or response to this solicitation for any purpose, and to authorize others to use the documents. Any individual or entity awarded a contract, or who submits a proposal or response to this solicitation, specifically waives any copyright or other protection the contract, proposal, or response to the solicitation may have; and, acknowledges that they have the ability and authority to enter into such waiver. This reservation and waiver is a prerequisite for submitting a proposal or response to this solicitation, and award of a contract. Failure to agree to the reservation and waiver will result in the proposal or response to the solicitation being found non-responsive and rejected.

Any entity awarded a contract or submitting a proposal or response to the solicitation agrees not to sue, file a claim, or make a demand of any kind, and will indemnify and hold harmless the State and its employees, volunteers, agents, and its elected and appointed officials from and against any and all claims, liens, demands, damages, liability, actions, causes of action, losses, judgments, costs, and expenses of every nature, including investigation costs and expenses, settlement costs, and attorney

fees and expenses, sustained or asserted against the State, arising out of, resulting from, or attributable to the posting of the contract or the proposals and responses to the solicitation, awards, and other documents.

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GLOSSARY OF TERMS

Acceptance Test Procedure: Benchmarks and other performance criteria, developed by the State of Nebraska or other sources of testing standards, for measuring the effectiveness of products or services and the means used for testing such performance.

Account Analysis Statement: A paper or electronic report that a bank provides to commercial customers specifying services provided, balances maintained, volumes processed, and charges assessed. It is essentially an invoice for services provided, along with detailed information on balances and credit earned for those balances.

Acquirer (Financial Institution): A financial institution that enters into agreements with merchants to accept branded cards as payment for goods and services. They are also called acquirers or acquiring banks or merchant banks.

Addenda Record: An ACH record that carries the supplemental data needed to completely identify an account holder(s) or provide information concerning a payment to the RDFI and the Receiver.

Addendum: Something to be added or deleted to an existing document; a supplement.

After Receipt of Order (ARO): After Receipt of Order

Agency: Any state agency, board, or commission other than the University of Nebraska, the Nebraska State colleges, the courts, the Legislature, or any other office or agency established by the Constitution of Nebraska.

Agency Related Person (ARP): Any individual whose information is stored in CHARTS and is assigned a 13-digit alpha/numeric identifier.

Agent/Representative: A person authorized to act on behalf of another.

Amend: To alter or change by adding, subtracting, or substituting.

Amendment: A written correction or alteration to a document.

Appropriation: Legislative authorization to expend public funds for a specific purpose. Money set apart for a specific use.

Automated Clearing House: (ACH) Electronic network for financial transactions in the United States

Automated Clearing House (ACH) Operator: The central clearing facility operated by a private organization or the Federal Reserve Bank that acts on behalf of the depository financial institutions to transmit or receive the ACH entries. The ACH Operator calculates settlement totals owed to and by the participating depository financial institutions based on the effective entry date contained within the batches of transactions.

Automated Clearing House (ACH) Return: Any ACH entry that has been returned to the ODFI by the RDFI or by the ACH Operator because it cannot be processed. The reason for each return is included with the return in the form of a “return reason code.”

Automated Notification of Change or Refused Automated Notification of Change (COR): The entry is to identify an automated notification of change or a refused automated notification of change. A COR entry must be accompanied by an Addenda Record to specify changed information.

Award: All purchases, leases, or contracts which are based on competitive proposals will be awarded according to the provisions in the solicitation.

Bank: Any state-chartered or federally-chartered bank which has a main chartered office in this state, any branch thereof in this state, or any branch in this state of a state-chartered or federally charted bank which maintained a main chartered office in this state prior to becoming a branch of such state-chartered or federally chartered bank.

Banking Day: Any day on which a participating depository bank is open to the public during any part of the day for carrying on substantially all its banking functions.

Batch: A group of records or documents considered as a single unit for the purpose of data processing.

Best and Final Offer (BAFO): In a competitive proposal, the final offer submitted which contains the bidder’s most favorable terms for price.

Bid/Proposal: The offer submitted by a bidder in response to a written solicitation.

Bid Bond: An insurance agreement, accompanied by a monetary commitment, by which a third party (the surety) accepts liability and guarantees that the bidder will not withdraw the solicitation.

Bidder: A bidder who submits a proposal in response to a written solicitation.

Breach: Violation of a contractual obligation by failing to perform or repudiation of one's own promise.

Business: Any corporation, partnership, individual, sole proprietorship, joint-stock company, joint venture, or any other private legal entity.

Business Day: Any weekday, except State-recognized holidays.

Calendar Day: Every day shown on the calendar including Saturdays, Sundays, and State/Federal holidays.

Cancellation: To call off or revoke a purchase order without expectation of conducting or performing it at a later time.

Cash Concentration or Disbursement (CCD): An electronic payment format used for concentration and disbursement of funds within or between companies. A single 94-character record contains the standard entry class indicating the type of transaction, transit routing numbers for the originating and receiving banks, and the originator and receiver account numbers.

Cash Concentration or Disbursement plus Addendum (CCD+): One of the formats used for the U.S. Treasury Vendor Express program and for B2B payments. It is useful when only a limited amount of information must be transmitted. This format is identical to CCD but with an addenda record. The addenda record is 94 characters long and includes a free-form space for up to 80 characters of descriptive data.

Central Processing Unit (CPU): Any computer or computer system that is used by the State to store, process, or retrieve data or perform other functions using Operating Systems and applications software.

Change Order: Document that provides addendum/amendments to an executed purchase order or contract.

CHARTS (Children Have A Right To Support): The Nebraska Child Support Enforcement computer system.

Collateral: The assets being used as security for State funds on deposit or a letter of credit. Collateral must meet State statutory requirements.

Collusion: An agreement or cooperation between two or more persons or entities to accomplish a fraudulent, deceitful, or unlawful purpose.

Comma Separated Values (CSV): A simple text value representation for a spreadsheet, with columns delimited using commas and rows delimited using new lines.

Commodities: Any equipment, material, supply or goods; anything movable or tangible that is provided or sold.

Commodities Description: Detailed descriptions of the items to be purchased; may include information necessary to obtain the desired quality, type, color, size, shape, or special characteristics necessary to perform the work intended to produce the desired results.

Compensating Balances: Balances that are maintained in the company's deposit accounts at the bank and generally do not earn interest, but are used to offset depository service charges.

Competition: The effort or action of two or more commercial interests to obtain the same business from third parties.

Confidential Information: Unless otherwise defined below, "Confidential Information" shall also mean proprietary trade secrets, academic and scientific research work which is in progress and unpublished, and other information which if released would give advantage to business competitors and serve no public purpose (see Neb. Rev. Stat. §84-712.05(3)). In accordance with Nebraska Attorney General Opinions 92068 and 97033, proof that information is proprietary requires identification of specific, named competitor(s) who would be advantaged by release of the information and the specific advantage the competitor(s) would receive.

Contract: An agreement between two or more parties creating obligations that are enforceable or otherwise recognizable at law; the writing that sets forth such an agreement.

Contract Administration: The administration of the contract which includes and is not limited to; contract signing, contract amendments and any necessary legal actions.

Contract Award: Occurs upon execution of the State document titled "Service Contract Award" by the proper authority.

Contract Management: The management of day to day activities at the agency which includes and is not limited to ensuring deliverables are received, specifications are met, handling meetings and making payments to the Contractor.

Contract Period: The duration of the contract.

Contractor: An individual or entity lawfully conducting business in the State, or licensed to do so, who seeks to provide goods or services under the terms of a written solicitation.

Conversion Plan: A work plan provided by the Contractor that includes a detailed description of planned activities and deliverables to ensure a successful conversion from the current system to a system under a new contract.

Cooperative Purchasing: The combining of requirements of two or more political entities to obtain advantages of volume purchases, reduction in administrative expenses or other public benefits.

Copyright: A property right in an original work of authorship fixed in any tangible medium of expression, giving the holder the exclusive right to reproduce, adapt and distribute the work.

Corporate Trade Exchange (CTX): A format designed for B2B trade payments. It consists of a standard ACH payment transaction and a variable-length message addendum designed to convey remittance information in the Accredited Standards Committee (ASC) X12 data standard. The addenda can accommodate 9,999 records of 80 characters each.

Critical Program Error: Any Program Error, whether or not known to the State, which prohibits or significantly impairs use of the Licensed Software as set forth in the documentation and intended in the contract.

Custodial Parent (CP): The parent who has primary care, custody, or control of the child.

Customer Service: The process of ensuring customer satisfaction by providing assistance and advice on those products or services provided by the Contractor.

Data Transmission: The electronic exchange of information between two data processing points.

Default: The omission or failure to perform a contractual duty.

Demand Deposit Accounts (DDA): Commonly referred to as a checking account, a DDA is a method by which an account holder uses a commercial bank to transfer funds to and receive deposits from a third party.

Deviation: Any proposed change(s) or alteration(s) to either the terms and conditions or deliverables within the scope of the written solicitation or contract.

Direct Deposit: An ACH service that provides for the electronic transfer of funds directly into the account of the payee. Typical examples of direct deposit processed by the State include direct deposit of payroll, employee expense reimbursements, State vendor payments, IRS tax payments, and government benefits payments (child support and other NE Health and Human Services aid to individuals or families).

Earnings Credit: The total dollar value of credit that can be used to offset the service charges incurred during an analysis period.

Earnings Credit Rate: The rate used by a bank to determine the total dollar value of credit to offset a customer's service charge.

Effective Entry Date: The date the originating company expects payment to take place. The ACH Operator reads the Effective Entry Date to determine the Settlement Date.

Encoding Errors: A check encoded for an amount that does not match the written amount of the check. Either too little or too much money is credited to the bank account when an encoding error is made. In addition, either too little or too much can be credited to the Non-Custodial Parent and recovery may be required or additional monies may need to be disbursed.

Encryption: A computer generated algorithm that allows secure communication between parties. The process of encoding electronic transaction information to allow secure transmission of data over the Internet.

Entry: An electronic item representing the transfer of funds in the ACH network.

Evaluation: The process of examining an offer after opening to determine the bidder's responsibility, responsiveness to requirements, and to ascertain other characteristics of the offer that relate to determination of the successful award.

Evaluation Committee: Individuals appointed by the requesting agency that advises and assists the procuring office in the evaluation of proposals (offers made in response to written solicitations).

Extension: Continuance of a contract for a specified duration upon the agreement of the parties beyond the original Contract Period. Not to be confused with "Renewal Period".

Field: One or more consecutive character positions within an ACH entry mapped to contain specific information.

File: A group of ACH batches initiated into the ACH network or sorted for delivery to ACH receiving point(s). A file must be transmitted electronically via data transmission between the sending point and the receiving point. A file may be delivered to an end-point via direct transmission. A file may contain one or more batches of entries.

File Transfer Protocol (FTP): A standard network protocol used to transfer files from one host to another host over a TCP-based network, such as the Internet.

Fiscal Year: A State of Nebraska fiscal year runs from July 1 of one calendar year to June 30 of the next calendar year.

Foreign Corporation: A foreign corporation that was organized and chartered under the laws of another state, government, or country.

Funds Availability: The time at which the funds resulting from an electronic funds transfer are made available to the customer.

Implementation Plan: A comprehensive plan describing the timeline and steps necessary to implement and rollout the project for participating agencies.
Installation Date: The date when the procedures described in "Installation by Contractor", and "Installation by State", as found in the solicitation, or contract, are completed.

Interactive Voice Response Unit (IVR): Allows customers to interact with a company's host system via a telephone keypad or by speech recognition.

Interested Party: A person, acting in their personal capacity, or an entity entering into a contract or other agreement creating a legal interest therein.

International ACH Transaction (IAT): An entry that is part of a payment transaction involving a bank's office that is not located in the territorial jurisdiction of the United States.

Internet Initiated Entry (Web): One of the ACH entry formats, the Web format is used for payments that can be one-time or recurring debit entries initiated by an Originator pursuant to an authorization obtained from the Receiver via a secure Internet session.

Invalid Proposal: A proposal that does not meet the requirements of the solicitation or cannot be evaluated against the other proposals.

Issuer: A bank or other authorized entity that issues branded cards to cardholders, and with which each cardholder has an agreement to pay transactions initiated through the use of the card.

Julian Date: A numeric day of the year. For example, January 12 has a Julian date of 012.

Key-entered transaction: A transaction that is manually keyed into a point-of-sale device.

Late Proposal: An offer received after the Opening Date and Time.

Ledger Balances: Bank balances that reflect all entries to a bank account, regardless of whether the deposited items have been collected and are available for withdrawal.

Licensed Software Documentation: The user manuals and any other materials in any form or medium customarily provided by the Contractor to the users of the Licensed Software which will provide the State with sufficient information to operate, diagnose, and maintain the Licensed Software properly, safely, and efficiently.

Licensee: An individual, business or organization who is authorized by the Nebraska Department of Revenue to conduct business and to collect taxes for Charitable Gaming programs.

Liquidated Damages: Damages for the injured party to collect as compensation upon a specific breach or failure to perform certain requirements as stated in the contract.

Location Code: A three-digit code assigned by the State that is used on deposit slips to identify the State agency making a deposit at the bank. The location code must be on the online/internet reporting application and in the CSV exports required by selected Contractor.

Mandatory/Must: Required, compulsory, or obligatory.

May: Discretionary, permitted; used to express possibility.

Misapplied Payments: When an incoming payment is identified as coming from an incorrect Non-Custodial Parent or the credit is recorded incorrectly and the disbursement is sent out to the incorrect Custodial Parent. Upon being identified, the proper credit is given to the correct Non-Custodial Parent. This creates a new correct payment to the correct Custodial Parent. Collection is required on the incorrect payment that and this is referred to as a "misapplied payment."

Module (see System): A collection of routines and data structures that perform a specific function of software.

Must: See Mandatory/Must and Shall/Will/Must.

National Automated Clearing House Association (NACHA): The national trade association for electronic payments, which establishes rules, industry standards, and procedures governing the exchange of commercial ACH payments by depository banks.

NACHA Formats: The ACH record format specifications described in the NACHA Operating Rules and Guidelines, which are the accepted and warranted payment format standards for payments delivered through the ACH Network.

National Institute for Governmental Purchasing (NIGP): National Institute of Governmental Purchasing – Source used for assignment of universal commodity codes to goods and services.

Nebraska Child Support Payment Center (NCSPC): Also referred to as the State Disbursement Unit (SDU); single entity in each state where support payments are received, receipted, distributed, and disbursed. The SDU may be an agency of State government or a vendor under contract with the Nebraska Department of Health and Human Services

Nebraska.gov: Serves as the State of Nebraska's official Web portal and network. Oversight for operations of the portal is statutorily assigned to the Nebraska State Records Board (NSRB). The NSRB contracts with Nebraska.gov for the management of the portal.

Nebraska State Records Board (NSRB): A 12-member board consisting of Constitutional Officers, the Director of Administrative Services and six members of the public.

Non-Custodial Parent (NCP): The parent who does not have primary care, custody, or control of the child.

Notification of Change (NOC): Information sent by an RDFI to notify the ODFI that previously valid information for a receiver has become outdated or that information contained in a pre-notification is erroneous. The standard entry class code is COR. A Notification of Change is a non-dollar entry sent to the ODFI by the RDFI that contains information for the correction of erroneous information contained within an ACH entry.

Office of Foreign Assets Control (OFAC): The agency of the United States Government concerned with monitoring and controlling the assets and financial transactions of entities deemed to be, or acting on behalf of, enemies of the United States. Certain OFAC regulations affect both ACH and wire transfer transactions.

On-Us Entry: Entry within an ACH file destined for an account held at the ODFI.

Open Market Purchase: Authorization may be given to an agency to purchase items above direct purchase authority due to the unique nature, price, quantity, location of the using agency, or time limitations by the AS Materiel Division, State Purchasing Bureau.

Opening Date and Time: Specified date and time for the public opening of received, labeled, formal proposals.

Operating System: The control program in a computer that provides the interface to the computer hardware and peripheral devices, and the usage and allocation of memory resources, processor resources, input/output resources, and security resources.

Originating Depository Financial Institution (ODFI): A participating financial institution that initiates ACH entries at the request of and by agreement with its customers (Originators). ODFIs must abide by the provisions of the NACHA Operating Rules and Guidelines.

Originator: Any individual, corporation, or other entity that initiates entries into the ACH network.

Outsourcing: The contracting out of a business process which an organization may have previously performed internally or has a new need for, to an independent organization from which the process is purchased back.

Payee: A person to whom money is paid or will be paid.
Payor: Any party making a payment to the State either by check, money order, cashier's check, online bill pay, ACH credit, or PPD debit.

Payroll & Financial Center (PFC): Electronic procurement system of record.

Per Item Charge: Fees paid to the processor on a per transaction basis.

Performance Bond: An insurance agreement, accompanied by a monetary commitment, by which a third party (the surety) accepts liability and guarantees that the Contractor fulfills any and all obligations under the contract.

Platform: A specific hardware and Operating System combination that is different from other hardware and Operating System combinations to the extent that a different version of the Licensed Software product is required to execute properly in the environment established by such hardware and Operating System combination.

Point of Contact (POC): The person designated to receive communications and to communicate.

Point of Purchase: A term that refers to the location where payments for goods or services takes place where the purchaser and seller are both present.

Point of Sale (POS): The physical or Web location where a sales transaction occurs and payment is authorized**.**

Posting: The process of recording debits and credits to individual account balances.

Prearranged Payment or Deposit (PPD): One of the ACH entry formats, the PPD format is the payment application by which consumers authorize a company or financial institution to credit or debit an account for normally recurring payments in fixed amounts.

Prearranged Payment or Deposit Plus (PPD+): One of the ACH entry formats, the PPD format is the payment application by which consumers authorize a company or financial institution to credit or debit an account for normally recurring payments in fixed amounts. This format is identical to PPD but with one addenda record.

Pre-notification (Prenote): A non-dollar test entry that may be sent through the ACH Network by an Originator to alert an RDFI that a live-dollar transaction will be forthcoming and that verification of the Receiver's account number is required.

Product: Something that is distributed commercially for use or consumption and that is usually (1) tangible personal property, (2) the result of fabrication or processing, and (3) an item that has passed through a chain of commercial distribution before ultimate use or consumption.

Program Error: Code in Licensed Software which produces unintended results or actions, or which produces results or actions other than those described in the specifications. A program error includes, without limitation, any Critical Program Error.

Program Set: The group of programs and products, including the Licensed Software specified in the solicitation, plus any additional programs and products licensed by the State under the contract for use by the State.

Project: The total scheme, program, or method worked out for the accomplishment of an objective, including all documentation, commodities, and services to be provided under the contract.

Proposal: An offer, bid, or quote submitted by a contractor/vendor in a response to a written solicitation

Proprietary Information: Proprietary information is defined as trade secrets, academic and scientific research work which is in progress and unpublished, and other information which if released would give advantage to business competitors and serves no public purpose (see Neb. Rev. Stat. § 84-712.05(3)). In accordance with Attorney General Opinions 92068 and 97033, proof that information is proprietary requires identification of specific named competitor(s) advantaged by release of the information and the demonstrated advantage the named competitor(s) would gain by the release of information.

Protest/Grievance: A complaint about a governmental action or decision related to a solicitation or resultant contract, brought by a bidder who has submitted a proposal response in connection with the award in question, to AS Materiel Division or another designated agency with the intention of achieving a remedial result.

Public Proposal Opening: The process of opening correctly submitted offers at the time and place specified in the written solicitation and in the presence of anyone who wished to attend.

Re-presented Check Entries (RCK): The standard entry class code used for the recreation of represented check entries. A Single entry debit initiated for the purpose of collecting a paper check after it has been returned for insufficient or uncollected funds on a consumer account.

Receiver: An individual, corporation, or other entity that has authorized an Originator to initiate a credit or debit entry to an account held at an RDFI.

Receiving Depository Financial Institution (RDFI): Any financial institution qualified to receive ACH entries that agrees to abide by the NACHA Operating Rules and Guidelines; the financial institution where the receiver of an ACH transaction holds a deposit account.

Recommended Hardware Configuration: The data processing hardware (including all terminals, auxiliary storage, communication, and other peripheral devices) to the extent utilized by the State as recommended by the Contractor.

Release Date: The date of public release of the written solicitation to seek offers.

Renewal Period: Optional contract periods subsequent to the original Contract Period for a specified duration with previously agreed to terms and conditions. Not to be confused with Extension.

Responsible Contractor: A contractor who has the capability in all respects to perform fully and lawfully all requirements with integrity and reliability to assure good faith performance.

Responsive Contractor: A contractor who has submitted a proposal which conforms to all requirements of the solicitation document.

Return Items: Any ACH transaction that cannot be processed and is being returned to the Originator by the RDFI to the ODFI for correction or reinitiating.

Reversal: Any ACH entries or files sent within required deadlines to “correct” or reverse previously originated erroneous entries or files.

Routing Number: A nine-digit number (eight digits plus check digit) that identifies a specific financial institution. Also referred to as the ABA number.

Secure Sockets Layer (SSL): Are cryptographic protocols which are designed to provide communication security over the internet.

Settlement: A transfer of funds between two parties in cash, or on the books of a mutual depository institution, to complete one or more prior transactions, made subject to final accounting.

Settlement Date: The date on which an exchange of funds with respect to an entry is reflected on the books of the Federal Reserve Bank.

Shall/Will/Must: An order/command; mandatory.

Should: Expected; suggested, but not necessarily mandatory.

Software License: Legal instrument with or without printed material that governs the use or redistribution of licensed software.

Specifications: The detailed statement, especially of the measurements, quality, materials, and functional characteristics, or other items to be provided under a contract.

Split tender: The use of two forms of payment, or legal tender, for a single purchase**.**

Standard Entry Class Code (SEC): Three-character code within an ACH Company/Batch Header record that identifies payment types within an ACH batch.

Statutory: These clauses are controlled by state law and are not subject to negotiation.

Subcontractor: Individual or entity with whom the contractor enters a contract to perform a portion of the work awarded to the contractor.

System (see Module): Any collection or aggregation of two (2) or more Modules that is designed to function, or is represented by the Contractor as functioning or being capable of functioning, as an entity.

Taxpayer: A person or company which pays taxes to any division of the Nebraska Department of Revenue.

Taxpayer ID Number: Individual social security number, corporate, Federal, or State tax ID number.

Terminal: The POS equipment used to capture, transmit, and store payment card transactions.

Termination: Occurs when either Party, pursuant to a power created by agreement or law, puts an end to the contract prior to the stated expiration date. All obligations which are still executory on both sides are discharged but any right based on prior breach or performance survives.

Third Party: Any person or entity, including but not limited to fiduciaries, shareholders, owners, officers, managers, employees, legally disinterested persons, and sub-contractors or agents, and their employees. It shall not include any entity or person who is an interested Party to the contract or agreement.

Trade Secret: Information, including, but not limited to, a drawing, formula, pattern, compilation, program, device, method, technique, code, or process that (a) derives independent economic value, actual or potential, from not being known to, and not being ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use; and (b) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy (see Neb. Rev. Stat. §87-502(4)).

Trademark: A word, phrase, logo, or other graphic symbol used by a manufacturer or contractor to distinguish its product from those of others, registered with the U.S. Patent and Trademark Office.

Trap file: Provided by the ODFI to the State agencies using this service daily as a standard NACHA formatted ACH file. These files contain all of the ACH credit transactions for all of the bank accounts designated for the Nebraska Department of Revenue.

Universal Payment Identification Code (UPIC): A permanent and secure bank account identifier issued by financial institutions to allow organizations to receive electronic payments without divulging sensitive bank information. UPICs mask the confidential bank routing number and account information, reducing the risk of fraud while facilitating secure electronic payments. UPICs are restricted to credit payments, preventing unauthorized debits, checks or demand drafts, and wires. The Electronic Payment Network (EPN) developed the UPIC.

Upgrade: Any change that improves or alters the basic function of a product or service.

User: A person who uses a computer, software, or network service.

Vendor Performance Report: A report completed by the using agency and submitted to State Purchasing Bureau documenting products or services delivered or performed which exceed or fail to meet the terms of the purchase order, contract, and/or solicitation specifications.

Vendor: Inclusive term for any Bidder or Contractor

Warrant: A legal instrument by which State government satisfies its financial obligations. Unlike a check, the warrant is a claim against the State Treasury and is subject to payment at the Treasurer's discretion.

Will: See Mandatory/Shall/Will/Must.

Work Day: See Business Day.

Zero Balance Accounts (ZBAs): A collection account on which the balance is maintained at zero or a small balance. A transfer of funds is made to a master account each banking day netting out the credits and debits at the close of business.

ACRONYM LIST

ARO – After Receipt of Order

ACH – Automated Clearing House

ARP – Agency Related Person

BAFO – Best and Final Offer

CCD - Cash Concentration or Disbursement

CCD+ - Cash Concentration or Disbursement plus Addendum

CHARTS – Children Have A Right To Support

COI – Certificate of Insurance

COR – Automated Notification of Change or Refused Automated Notification of Change

CPU – Central Processing Unit

CSV – Comma Separated Values

CTX – Corporate Trade Exchange

DAS – Department of Administrative Services

DDA – Demand Deposit Accounts

FTP – File Transfer Protocol

IAT – International ACH Transaction

IVR – Interactive Voice Response Unit

NACHA – National Automated Clearing House Association

NCP – Non-Custodial Parent

NCSPC - Nebraska Child Support Payment Center

NOC – Notice of Change

ODFI – Originating Depository Financial Institution

OFAC – Office of Foreign Assets Control

PFC – Payroll & Financial Center

PPD – Prearranged Payment or Deposit

PPD+ - Prearranged Payment or Deposit with Addenda

POC – Point of Contact

POS – Point of Sale

RCK – Re-present Check Entries

RDFI – Receiving Depository Financial Institution

SEC – Standard Entry Class Code

SPB – State Purchasing Bureau

UPIC – Universal Payment Identification Code

WEB – Internet Initiated Entry

ZBA – Zero Balance Account

I. PROCUREMENT PROCEDURE

A. GENERAL INFORMATION

The solicitation is designed to solicit proposals from qualified Bidder who will be responsible for providing Automated Clearing House (ACH) Origination Services at a competitive and reasonable cost. Terms and Conditions, Project Description and Scope of Work, Proposal instructions may be found in Sections II through VI.

Proposals shall conform to all instructions, conditions, and requirements included in the solicitation. Bidders are to carefully examine all documents, schedules, and requirements in this solicitation, and respond to each requirement in the format prescribed. Proposals may be found non-responsive if they do not conform to the solicitation.

B. PROCURING OFFICE AND COMMUNICATION WITH STATE STAFF AND EVALUATORS

Procurement responsibilities related to this solicitation reside with State Purchasing Bureau. The point of contact (POC) for the procurement is as follows:

Name:	Julie Schiltz/ Annette Walton
	RFP # 6304 Z1
Agency:	State Purchasing Bureau
Address:	1526 K Street, Suite 130
	Lincoln, NE 68508
Telephone:	402-471-6500
E-Mail:	as.materielpurchasing@nebraska.gov

From the date the solicitation is issued until the Intent to Award is issued, communication from the Bidder is limited to the POC listed above. After the Intent to Award is issued, the Bidder may communicate with individuals the State has designated as responsible for negotiating the contract on behalf of the State. No member of the State Government, employee of the State, or member of the Evaluation Committee is empowered to make binding statements regarding this solicitation. The POC will issue any answers, clarifications or amendments regarding this solicitation in writing. Only the SPB or awarding agency can award a contract. Bidders shall not have any communication with, or attempt to communicate or influence any evaluator involved in this solicitation.

The following exceptions to these restrictions are permitted:

1. Contact made pursuant to pre-existing contracts or obligations;
2. Contact required by the schedule of events or an event scheduled later by the solicitation POC; and
3. Contact required for negotiation and execution of the final contract.

The State reserves the right to reject a bidder's proposal, withdraw an Intent to Award, or terminate a contract if the State determines there has been a violation of these procurement procedures.

C. **SCHEDULE OF EVENTS**

The State expects to adhere to the procurement schedule shown below, but all dates are approximate and subject to change.

ACTIVITY		DATE/TIME
1.	Release Solicitation	June 12, 2020
2.	Last day to submit 1st set of written questions First set of questions must be submitted via ShareFile https://nebraska.sharefile.com/r-r1691783efd44d598	June 26, 2020
3.	State responds to 1st set of written questions through Solicitation "Addendum" and/or "Amendment" to be posted to the Internet at: http://das.nebraska.gov/materiel/purchasing.html	July 10, 2020
4.	Last day to submit 2nd set of written questions Second set of questions must be submitted via ShareFile https://nebraska.sharefile.com/r-rfee03e3ac6841c69	July 22, 2020
5.	State responds to 2nd set of written questions	July 31, 2020
6.	Last day to submit "Notification of Intent To Submit a Proposal" Submit intent via ShareFile https://nebraska.sharefile.com/r-rfd01d36fdf545779	August 5, 2020
7.	Proposal Opening Location for mailed/hand delivered submissions: State Purchasing Bureau 1526 K Street, Suite 130 Lincoln, NE 68508 Electronic submissions via ShareFile: https://nebraska.sharefile.com/r-r32ad872991e4b77b	August 18, 2020 2:00 PM Central Time
8.	Review for conformance to solicitation requirements	August 18, 2020
9.	Evaluation period	August 19, 2020 through September 16, 2020
10.	"Oral Interviews/Presentations and/or Demonstrations" (if required)	TBD
11.	Post "Notification of Intent to Award" to Internet at: http://das.nebraska.gov/materiel/purchasing.html	September 23, 2020
12.	Contract finalization period	September 23, 2020 through January 31, 2021
13.	Contract award	February 01, 2021
14.	Contractor start date	September 01, 2021

D. **WRITTEN QUESTIONS AND ANSWERS**

Questions regarding the meaning or interpretation of any solicitation provision must be submitted in writing to State Purchasing Bureau and clearly marked "RFP Number 6304 Z1; Automated Clearing House (ACH) Origination Services Questions". The POC is not obligated to respond to questions that are received late per the Schedule of Events.

Bidders should present, as questions, any assumptions upon which the Bidder's proposal is or might be developed. Proposals will be evaluated without consideration of any known or unknown assumptions of a bidder. The contract will not incorporate any known or unknown assumptions of a bidder.

It is preferred that questions be uploaded via ShareFile. First set of questions must be submitted using the following link via ShareFile https://nebraska.sharefile.com/r-r1691783efd44d598. Second set of questions must be submitted using the following link via ShareFile https://nebraska.sharefile.com/r-rfee03e3ac6841c69. It is recommended that Bidders submit questions using the following format.

Solicitation Section Reference	Solicitation Page Number	Question

Written answers will be posted at http://das.nebraska.gov/materiel/purchasing.html per the Schedule of Events.

E. **NOTIFICATION OF INTENT TO SUBMIT A PROPOSAL**

Bidders who intend to submit a proposal should complete a "Notification of Intent to Submit a Proposal Form" (see Form B) and submit to via ShareFile https://nebraska.sharefile.com/r-rfd01d36fdf545779 per the Schedule of Events. A list of bidders who submitted a Notification of Intent to Submit a Proposal will be posted on the Internet at http://das.nebraska.gov/materiel/purchasing.html.

F. **COST CLARIFICATION**

The State reserves the right to review all aspects of cost for reasonableness and to request clarification of any proposal where the cost component shows significant and unsupported deviation from industry standards or in areas where detailed pricing is required.

G. **SECRETARY OF STATE/TAX COMMISSIONER REGISTRATION REQUIREMENTS (Statutory)**

All contractors must be authorized to transact business in the State of Nebraska and comply with all Nebraska Secretary of State Registration requirements. The contractor who is the recipient of an Intent to Award will be required to certify that it has complied and produce a true and exact copy of its current (within ninety (90) calendar days of the intent to award) Certificate or Letter of Good Standing, or in the case of a sole proprietorship, provide written documentation of sole proprietorship and complete the United States Citizenship Attestation Form, available on the Department of Administrative Services website at http://das.nebraska.gov/materiel/purchasing.html. This must be accomplished prior to execution of the contract.

Commented [MMD1]:

Commented [GLM2R1]: As a national banking association, U.S. Bank is exempt from any requirement to have a state registration or local business license. 12 CFR 7.4007(b) states that "[a] national bank may exercise its deposit-taking powers without regard to state law limitations concerning: . . . (6) State licensing or registration requirements (except for purposes of service of process)[.]"

If receive Intent to Award, we can provide our Certificate of Corporate Existence and Certification of Fiduciary Powers since USBNA is not registered with the Nebraska Secretary of State.

H. **ETHICS IN PUBLIC CONTRACTING**

The State reserves the right to reject proposals, withdraw an intent to award or award, or terminate a contract if a contractor commits or has committed ethical violations, which include, but are not limited to:

1. Offering or giving, directly or indirectly, a bribe, fee, commission, compensation, gift, gratuity, or anything of value to any person or entity in an attempt to influence the bidding process;
2. Utilize the services of lobbyists, attorneys, political activists, or consultants to influence or subvert the bidding process;
3. Being considered for, presently being, or becoming debarred, suspended, ineligible, or excluded from contracting with any state or federal entity:
4. Submitting a proposal on behalf of another Party or entity; and
5. Collude with any person or entity to influence the bidding process, submit sham proposals, preclude bidding, fix pricing or costs, create an unfair advantage, subvert the proposal, or prejudice the State.

The Contractor shall include this clause in any subcontract entered into for the exclusive purpose of performing this contract.

Contractor shall have an affirmative duty to report any violations of this clause by the Contractor throughout the bidding process, and throughout the term of this contract for the successful Contractor and their subcontractors.

I. **DEVIATIONS FROM THE REQUEST FOR PROPOSAL**

The requirements contained in the solicitation (Sections II thru VI) become a part of the terms and conditions of the contract resulting from this solicitation. Any deviations from the solicitation in Sections II through VI must be clearly defined by the bidder in its proposal and, if accepted by the State, will become part of the contract. Any specifically defined deviations must not be in conflict with the basic nature of the solicitation, requirements, or applicable state or federal laws or statutes. "Deviation", for the purposes of this solicitation, means any proposed changes or alterations to either the contractual language or deliverables within the scope of this solicitation. The State discourages deviations and reserves the right to reject proposed deviations.

J. **SUBMISSION OF PROPOSALS**

The State is accepting either electronically submitted responses or paper responses for this RFP.

To submit electronic responses:

1. For bidders submitting electronic responses:
   a. Bidders submitting electronically can upload the response via ShareFile https://nebraska.sharefile.com/r-r32ad872991e4b77b

b. Note to bidders: Not all browsers are compatible with ShareFile. Chrome, Internet Explorer and Firefox all work. Microsoft Edge does not.

c. In order for the bidder to receive confirmation from ShareFile that all files submitted have been received, bidder must enter contact information after clicking on the link provided.

2. The Technical, Cost Proposals, Financial Statement and Proprietary information should be uploaded as multiple separate and distinct files. If multiple proposals are submitted, the State will retain only the most recently submitted response. It is the bidder's responsibility to submit the proposal by the date and time indicated in the Schedule of Events. Electronic proposals must be received by SPB by the date and time of the proposal opening per the Schedule of Events. No late proposals will be accepted.

3. ELECTRONIC PROPOSAL FILE NAMES
The bidder should clearly identify the uploaded RFP proposal files. Once uploaded, files are only available for 30 days after submitted. Please do not submit more than 30 days prior to bid opening. To assist in identification please use the following naming convention:
   a. RFP 6304 Z1 ABC Company, Description of service
   b. If multiple files are submitted for one RFP proposal, add number of files to file names: RFP 6304 Z1 ABC Company, Description of service File 1 of 2.

To submit paper responses:

1. Paper responses must be mailed to:
   State Purchasing Bureau
   1526 K Street. Suite 130
   Lincoln, NE 68508

2. The Technical, Cost Proposals, Financial Statements and Proprietary Information should be packaged separately (loose-leaf binders are preferred) on standard 8 ½" by 11" paper, except that charts, diagrams and the like may be on fold-outs which, when folded, fit into the 8 ½" by 11" format. The State will not furnish packaging and sealing materials.

Pages may be consecutively numbered for the entire proposal, or may be numbered consecutively within sections. Figures and tables should be numbered and referenced in the text by that number. They should be placed as close as possible to the referencing text. The Technical Proposal should not contain any reference to dollar amounts. However, information such as data concerning labor hours and categories, materials, subcontracts and so forth, shall be considered in the Technical Proposal so that the bidder's understanding of the scope of work may be evaluated. The Technical Proposal shall disclose the bidder's technical approach in as much detail as possible, including, but not limited to, the information required by the Technical Proposal instructions.

It is the bidder's responsibility to ensure the solicitation is received either electronically or in a sealed envelope or container and submitted by the date and time indicated in the Schedule of Events. Sealed proposals must be received in the State Purchasing Bureau by the date and time of the proposal opening per the Schedule of Events. No late proposals will be accepted.

The Request for Proposal form must be manually signed in an indelible manner or by DocuSign and returned by the proposal opening date and time along with the bidder's Request for Proposal along with any other requirements as stated in the Request for Proposal document in order for the bidder's Request for Proposal response to be evaluated.

It is the responsibility of the bidder to check the website for all information relevant to this Request for Proposal to include addenda and/or amendments issued prior to the opening date. Website address is as follows: http://das.nebraska.gov/materiel/purchasing.html.

Emphasis should be concentrated on conformance to the solicitation instructions, responsiveness to requirements, completeness, and clarity of content. If the bidder's proposal is presented in such a fashion that makes evaluation difficult or overly time consuming the State reserves the right to reject the proposal as non-conforming.

By signing the "Request for Proposal for Contractual Services" form, the bidder guarantees compliance with the provisions stated in this solicitation.

K. **PROPOSAL PREPARATION COSTS**
The State shall not incur any liability for any costs incurred by Bidders in replying to this solicitation, including any activity related to bidding on this solicitation.

L. **FAILURE TO COMPLY WITH REQUEST FOR PROPOSAL**

Violation of the terms and conditions contained in this solicitation or any resultant contract, at any time before or after the award, shall be grounds for action by the State which may include, but is not limited to, the following:

1. Rejection of a bidder's proposal;
2. Withdrawal of the Intent to Award;
3. Withdrawal of the Award;
4. Negative Vendor Performance Report(s)
5. Termination of the resulting contract;
6. Legal action; and
7. Suspension of the bidder from further bidding with the State for the period of time relative to the seriousness of the violation, such period to be within the sole discretion of the State.

M. **PROPOSAL CORRECTIONS**

A bidder may correct a mistake in a proposal prior to the time of opening by uploading a revised and completed RFP proposal if the original proposal was electronically submitted

1. If a corrected RFP proposal is submitted, the file name(s) date/time stamped with latest date/time stamp will be accepted as final proposal. The corrected RFP file name(s) should be identified as Corrected 6304 Z1 ABC Company Proposal #1, Corrected 6304 Z1 ABC Company Proposal #2, etc.

Changing a proposal after opening may be permitted if the change is made to correct a minor error that does not affect price, quantity, quality, delivery, or contractual conditions. In case of a mathematical error in extension of price, unit price shall govern.

N. **LATE PROPOSALS**

Proposals received after the time and date of the proposal opening will be considered late proposals. Late proposals will be returned unopened, if requested by the bidder and at bidder's expense. The State is not responsible for proposals that are late or lost regardless of cause or fault.

O. **PROPOSAL OPENING**

The opening of proposals will be public and the bidders will be announced. Proposals **WILL NOT** be available for viewing by those present at the proposal opening. Proposals will be posted to the State Purchasing Bureau website once an Intent to Award has been posted to the website. Information identified as proprietary by the submitting bidder, in accordance with the solicitation and state statute, will not be posted. If the state determines submitted information should not be withheld, in accordance with the Public Records Act, or if ordered to release any withheld information, said information may then be released. The submitting bidder will be notified of the release and it shall be the obligation of the submitting bidder to take further action, if it believes the information should not be released. (See RFP signature page for further details) Bidders may contact the State to schedule an appointment for viewing proposals after the Intent to Award has been posted to the website. Once proposals are opened, they become the property of the State of Nebraska and will not be returned.

P. **REQUEST FOR PROPOSAL/PROPOSAL REQUIREMENTS**

The proposals will first be examined to determine if all requirements listed below have been addressed and whether further evaluation is warranted. Proposals not meeting the requirements may be rejected as non-responsive. The requirements are:

1. Original Request for Proposal for Contractual Services form signed using an indelible method;
2. Clarity and responsiveness of the proposal;
3. Completed Corporate Overview;
4. Completed Financial Statement;
5. Completed Sections II through VI;
6. Completed Technical Approach;
7. Completed Attachment A; and
8. Completed State Cost Proposal Template

Q. **EVALUATION COMMITTEE**

Proposals are evaluated by members of an Evaluation Committee(s). The Evaluation Committee(s) will consist of individuals selected at the discretion of the State. Names of the members of the Evaluation Committee(s) will not be published prior to the intent to award.

Any contact, attempted contact, or attempt to influence an evaluator that is involved with this solicitation may result in the rejection of this proposal and further administrative actions.

R. **EVALUATION OF PROPOSALS**

All proposals that are responsive to the solicitation will be evaluated. Each evaluation category will have a maximum point potential. The State will conduct a fair, impartial, and comprehensive evaluation of all proposals in accordance with the criteria set forth below. Areas that will be addressed and scored during the evaluation include:

1. Collateral Requirements (Attachment A);
    c. Meet State statute collateral requirements for State deposits;
    d. Provide a monthly statement of collateral;
    e. State designated representative signature before collateral is released.
2. Contractor must be a bank (Attachment A);
    a. Contractor must be a bank as defined in Neb. Rev. Stat. §77-2387(2) having a qualifying office in the State of Nebraska,
    b. Contractor agrees to cash Nebraska State Treasury and warrants issued by the Nebraska Child Support Payment Center free of charge and without requiring a fingerprint as required in Neb. Rev. Stat. §77-2301(2)(a).
    c. Contractor must continue the use of the State of Nebraska's UPIC numbers.
3. Financial Stability;
    a. Contractor has financial stability to do business with the State of Nebraska.
4. Corporate Overview should include but is not limited to:
    a. the ability, capacity, and skill of the contractor to deliver and implement the system or project that meets the requirements of the solicitation;
    b. the character, integrity, reputation, judgment, experience, and efficiency of the contractor;
    c. whether the contractor can perform the contract within the specified time frame;
    d. the quality of vendor performance on prior contracts;
    e. such other information that may be secured and that has a bearing on the decision to award the contract;
5. Technical Approach;
6. Attachment A; and,
7. Cost Proposal.

Neb. Rev. Stat. §81-161 allows the quality of performance of previous contracts to be considered when evaluating responses to competitively bid solicitations in determining the lowest responsible bidder. Information obtained from any Vendor Performance Report (See Terms & Conditions, Section H) may be used in evaluating responses to solicitations for goods and services to determine the best value for the State.

Neb. Rev. Stat. §73-107 allows for a preference for a resident disabled veteran or business located in a designated enterprise zone. When a state contract is to be awarded to the lowest responsible contractor, a resident disabled veteran or a business located in a designated enterprise zone under the Enterprise Zone Act shall be allowed a preference over any other resident or nonresident contractor, if all other factors are equal.

Resident disabled veterans means any person (a) who resides in the State of Nebraska, who served in the United States Armed Forces, including any reserve component or the National Guard, who was discharged or otherwise separated with a characterization of honorable or general (under honorable conditions), and who possesses a disability rating letter issued by the United States Department of Veterans Affairs establishing a service-connected disability or a disability determination from the United States Department of Defense and (b)(i) who owns and controls a business or, in the case of a publicly owned business, more than fifty percent of the stock is owned by one or more persons described in subdivision (a) of this subsection and (ii) the management and daily business operations of the business are controlled by one or more persons described in subdivision(a) of this subsection. Any contract entered into without compliance with this section shall be null and void.

Therefore, if a resident disabled veteran or business located in a designated enterprise zone submits a proposal in accordance with Neb. Rev. Stat. §73-107 and has so indicated on the solicitation cover page under "Contractor must complete the following" requesting priority/preference to be considered in the award of this contract, the following will need to be submitted by the contractor within ten (10) business days of request:

1. Documentation from the United States Armed Forces confirming service;
2. Documentation of discharge or otherwise separated characterization of honorable or general (under honorable conditions);
3. Disability rating letter issued by the United States Department of Veterans Affairs establishing a service-connected disability or a disability determination from the United States Department of Defense; and
4. Documentation which shows ownership and control of a business or, in the case of a publicly owned business, more than fifty percent of the stock is owned by one or more persons described in subdivision (a)

of this subsection; and the management and daily business operations of the business are controlled by one or more persons described in subdivision (a) of this subsection.

Failure to submit the requested documentation within ten (10) business days of notice will disqualify the contractor from consideration of the preference.

Evaluation criteria will be released with the solicitation.

S. **ORAL INTERVIEWS/PRESENTATIONS AND/OR DEMONSTRATIONS**

The State may determine after the completion of the Technical and Cost Proposal evaluation that oral interviews/presentations and/or demonstrations are required. Every bidder may not be given an opportunity to interview/present and/or give demonstrations; the State reserves the right, in its discretion, to select only the top scoring bidders to present/give oral interviews. The scores from the oral interviews/presentations and/or demonstrations will be added to the scores from the Technical and Cost Proposals. The presentation process will allow the bidders to demonstrate their proposal offering, explaining and/or clarifying any unusual or significant elements related to their proposals. Bidders' key personnel, identified in their proposal, may be requested to participate in a structured interview to determine their understanding of the requirements of this proposal, their authority and reporting relationships within their firm, and their management style and philosophy. Only representatives of the State and the presenting bidder will be permitted to attend the oral interviews/presentations and/or demonstrations. A written copy or summary of the presentation, and demonstrative information (such as briefing charts, et cetera) may be offered by the bidder, but the State reserves the right to refuse or not consider the offered materials. Bidders shall not be allowed to alter or amend their proposals.

Once the oral interviews/presentations and/or demonstrations have been completed, the State reserves the right to make an award without any further discussion with the bidders regarding the proposals received.

Any cost incidental to the oral interviews/presentations and/or demonstrations shall be borne entirely by the bidder and will not be compensated by the State.

T. **BEST AND FINAL OFFER**

If best and final offers (BAFO) are requested by the State and submitted by the bidder, they will be evaluated (using the stated BAFO criteria), scored, and ranked by the Evaluation Committee. The State reserves the right to conduct more than one Best and Final Offer. The award will then be granted to the highest scoring bidder. However, a bidder should provide its best offer in its original proposal. Bidders should not expect that the State will request a best and final offer.

U. **REFERENCE AND CREDIT CHECKS**

Commented [MMD3]: Due Diligence at a corporate level. We cannot agree at an individual level.

The State reserves the right to conduct and consider reference and credit checks. The State reserves the right to use third parties to conduct reference and credit checks. By submitting a proposal in response to this solicitation, the bidder grants to the State the right to contact or arrange a visit in person with any or all of the bidder's clients. Reference and credit checks may be grounds to reject a proposal, withdraw an intent to award, or rescind the award of a contract.

V. **AWARD**

The State reserves the right to evaluate proposals and award contracts in a manner utilizing criteria selected at the State's discretion and in the State's best interest. After evaluation of the proposals, or at any point in the solicitation process, the State of Nebraska may take one or more of the following actions:

1. Amend the solicitation;
2. Extend the time of or establish a new proposal opening time;
3. Waive deviations or errors in the State's solicitation process and in bidder proposals that are not material, do not compromise the solicitation process or a bidder's proposal, and do not improve a bidder's competitive position;
4. Accept or reject a portion of or all of a proposal;
5. Accept or reject all proposals;
6. Withdraw the solicitation;
7. Elect to rebid the solicitation;
8. Award single lines or multiple lines to one or more bidders; or,
9. Award one or more all-inclusive contracts.

The solicitation does not commit the State to award a contract. Once intent to award decision has been determined, it will be posted to the Internet at:
http://das.nebraska.gov/materiel/purchasing.html

Any protests must be filed by a bidder within ten (10) business days after the intent to award decision is posted to the Internet. Grievance and protest procedure is available on the Internet at:
http://das.nebraska.gov/materiel/purchasing.html

W. **ALTERNATE/EQUIVALENT PROPOSALS**

Bidder may offer proposals which are at variance from the express specifications of the solicitation. The State reserves the right to consider and accept such proposals if, in the judgment of the Materiel Administrator, the proposal will result in goods and/or services equivalent to or better than those which would be supplied in the original proposal specifications. Bidder must indicate on the solicitation the manufacturer's name, number and shall submit with their proposal, sketches, descriptive literature and/or complete specifications. Reference to literature submitted with a previous proposal will not satisfy this provision. Proposals which do not comply with these requirements are subject to rejection. In the absence of any stated deviation or exception, the proposal will be accepted as in strict compliance with all terms, conditions and specification, and the Bidder shall be held liable therefore.

X. **REJECTION OF PROPOSALS**

The State reserves the right to reject any or all proposals, wholly or in part, in the best interest of the State.

II. TERMS AND CONDITIONS

Bidders should complete Sections II through VI as part of proposal. Bidder is expected to read the Terms and Conditions and should initial either accept, reject, or reject and provide alternative language for each clause. The bidder should also provide an explanation of why the bidder rejected the clause or rejected the clause and provided alternate language. By signing the solicitation, bidder is agreeing to be legally bound by all the accepted terms and conditions, and any proposed alternative terms and conditions submitted with the proposal. The State reserves the right to negotiate rejected or proposed alternative language. If the State and bidder fail to agree on the final Terms and Conditions, the State reserves the right to reject the proposal. The State of Nebraska is soliciting proposals in response to this solicitation. The State of Nebraska reserves the right to reject proposals that attempt to substitute the bidder's commercial contracts and/or documents for this solicitation.

The bidders should submit with their proposal any license, user agreement, service level agreement, or similar documents that the bidder wants incorporated in the Contract. The State will not consider incorporation of any document not submitted with the bidder's proposal as the document will not have been included in the evaluation process. These documents shall be subject to negotiation and will be incorporated as addendums if agreed to by the Parties.

If a conflict or ambiguity arises after the Addendum to Contract Award have been negotiated and agreed to, the Addendum to Contract Award shall be interpreted as follows:

1. If only one Party has a particular clause then that clause shall control;
2. If both Parties have a similar clause, but the clauses do not conflict, the clauses shall be read together;
3. If both Parties have a similar clause, but the clauses conflict, the State's clause shall control.

A. GENERAL

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
		GA	Please see redlines below.

The contract resulting from this solicitation shall incorporate the following documents:

1. Request for Proposal and Addenda;
2. Amendments to the solicitation;
3. Questions and Answers;
4. Bidder's proposal (Solicitation and properly submitted documents, including Bidder's Master Services Agreement, Services Terms and Conditions, Your Deposit Account Agreement, and any documents referenced or incorporated therein);
5. Addendum One to Contract, if applicable; and,
6. Amendments/Addendums to the Contract.

These documents constitute the entirety of the contract.

Unless otherwise specifically stated in a future contract amendment, in case of any conflict between the incorporated documents, the documents shall govern in the following order of preference with number one (1) receiving preference over all other documents and with each lower numbered document having preference over any higher numbered document: 1) Amendments and Addendums to the executed Contract with the most recent dated amendment or addendum having the highest priority, 2) Addendum One to Contract 3) Amendments to solicitation and any Questions and Answers, 4) the original solicitation document and any Addenda, and 5) the Bidder's submitted Proposal.

Any ambiguity or conflict in the contract discovered after its execution, not otherwise addressed herein, shall be resolved in accordance with the rules of contract interpretation as established in the State of Nebraska.

B. **NOTIFICATION**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
		GA	Please see redlines in section D below.

Bidder and State shall identify the contract manager who shall serve as the point of contact for the executed contract.

Communications regarding the executed contract shall be in writing and shall be deemed to have been given if delivered personally or mailed, by U.S. Mail, postage prepaid, return receipt requested, to the parties at their respective addresses set forth below, or at such other addresses as may be specified in writing by either of the parties. All notices, requests, or communications shall be deemed effective upon personal delivery or five (5) calendar days following deposit in the mail.

Either party may change its address for notification purposes by giving notice of the change, and setting forth the new address and an effective date.

C. **NOTICE (Buyer Representative)**
The State reserves the right to appoint a Buyer's Representative to manage [or assist the Buyer in managing] the contract on behalf of the State. The Buyer's Representative will be appointed in writing, and the appointment document will specify the extent of the Buyer's Representative authority and responsibilities. If a Buyer's Representative is appointed, the Contractor will be provided a copy of the appointment document, and is expected to cooperate accordingly with the Buyer's Representative. The Buyer's Representative has no authority to bind the State to a contract, amendment, addendum, or other change or addition to the contract.

D. **GOVERNING LAW (Statutory)**
Notwithstanding any other provision of this contract, or any amendment or addendum(s) entered into contemporaneously or at a later time, the parties understand and agree that, (1) the State of Nebraska is a sovereign state and its authority to contract is therefore subject to limitation by the State's Constitution, statutes, common law, and regulation; (2) this contract will be interpreted and enforced under the laws of the State of Nebraska; (3) any action to enforce the provisions of this agreement must be brought in the State of Nebraska per state law; (4) the person signing this contract on behalf of the State of Nebraska does not have the authority to waive the State's sovereign immunity, statutes, common law, or regulations; (5) the indemnity, limitation of liability, remedy, and other similar provisions of the final contract, if any, are entered into subject to the State's Constitution, statutes, common law, regulations, and sovereign immunity; and, (6) all terms and conditions of the final contract, including but not limited to the clauses concerning third party use, licenses, warranties, limitations of liability, governing law and venue, usage verification, indemnity, liability, remedy or other similar provisions of the final contract are entered into specifically subject to the State's Constitution, statutes, common law, regulations, and sovereign immunity.

~~The Parties~~Each party must comply with all ~~applicable~~ local, state and federal laws, ordinances, rules, orders, and regulations that are applicable to that party.

E. **BEGINNING OF WORK**
The bidder shall not commence any billable work until a valid contract has been fully executed by the State and the awarded bidder. The Bidder will be notified in writing when work may begin.

F. **AMENDMENT**
This Contract may be amended in writing, within scope, upon the agreement of both parties.

G. **CHANGE ORDERS OR SUBSTITUTIONS**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
GA			

The State and the Contractor, upon the written agreement, may make changes to the contract within the general scope of the solicitation. Changes may involve specifications, the quantity of work, or such other items as the State may find necessary or desirable. Corrections of any deliverable, service, or work required pursuant to the contract shall not be deemed a change. The Contractor may not claim forfeiture of the contract by reasons of such changes.

The Contractor shall prepare a written description of the work required due to the change and an itemized cost sheet for the change. Changes in work and the amount of compensation to be paid to the Contractor shall be determined in accordance with applicable unit prices if any, a pro-rated value, or through negotiations. The State shall not incur a price increase for changes that should have been included in the Contractor's proposal, were foreseeable, or result from difficulties with or failure of the Contractor's proposal or performance.

No change shall be implemented by the Contractor until approved by the State, and the Contract is amended to reflect the change and associated costs, if any. If there is a dispute regarding the cost, but both parties agree that immediate implementation is necessary, the change may be implemented, and cost negotiations may continue with both Parties retaining all remedies under the contract and law.

In the event any product is discontinued or replaced upon mutual consent during the contract period or prior to delivery, the State reserves the right to amend the contract or purchase order to include the alternate product at the same price.

*****Contractor will not substitute any item that has been awarded without prior written approval of SPB*****

H. VENDOR PERFORMANCE REPORT(S)

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
GA			

The State may document any instance(s) of products or services delivered or performed which exceed or fail to meet the terms of the purchase order, contract, and/or solicitation specifications. The State Purchasing Bureau may contact the Vendor regarding any such report. Vendor performance report(s) will become a part of the permanent record of the Vendor.

I. NOTICE OF POTENTIAL CONTRACTOR BREACH

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
GA			

If Contractor breaches the contract or anticipates breaching the contract, the Contractor shall immediately give written notice to the State. The notice shall explain the breach or potential breach, a proposed cure, and may include a request for a waiver of the breach if so desired. The State may, in its discretion, temporarily or permanently waive the breach. By granting a waiver, the State does not forfeit any rights or remedies to which the State is entitled by law or equity, or pursuant to the provisions of the contract. Failure to give immediate notice, however, may be grounds for denial of any request for a waiver of a breach.

J. BREACH

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
GA			

Either Party may terminate the contract, in whole or in part, if the other Party breaches its duty to perform its obligations under the contract in a timely and proper manner. Termination requires written notice of default and a thirty (30) calendar day (or longer at the non-breaching Party's discretion considering the gravity and nature of the default) cure period. Said notice shall be delivered by Certified Mail, Return Receipt Requested, or in person with proof of delivery. Allowing time to cure a failure or breach of contract does not waive the right to immediately terminate the contract for the same or different contract breach which may occur at a different time. In case of default of the Contractor, the State may contract the service from other sources and hold the Contractor responsible for any excess cost occasioned thereby.

The State's failure to make payment shall not be a breach, and the Contractor shall retain all available statutory remedies and protections.

K. **NON-WAIVER OF BREACH**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
GA			

The acceptance of late performance with or without objection or reservation by a Party shall not waive any rights of the Party nor constitute a waiver of the requirement of timely performance of any obligations remaining to be performed.

L. **SEVERABILITY**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
GA			

If any term or condition of the contract is declared by a court of competent jurisdiction to be illegal or in conflict with any law, the validity of the remaining terms and conditions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the contract did not contain the provision held to be invalid or illegal.

M. **INDEMNIFICATION**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
		GA	Please see redlines below.

1. **GENERAL**
The Contractor agrees to defend, indemnify, and hold harmless the State and its employees, volunteers, agents, and its elected and appointed officials ("the indemnified parties") from and against any and all third party claims, liens, demands, damages, liability, actions, causes of action, losses, judgments, costs, and expenses of every nature, including investigation costs and expenses, settlement costs, and attorney fees and expenses ("the claims"), sustained or asserted against the State for personal injury, death, or property loss or damage, to the exent arising out of, resulting from, or attributable to the willful misconduct, negligence, error, or omission of the Contractor, its employees, Subcontractors, consultants, representatives, and agents, resulting from this contract, except to the extent such Contractor liability is attenuated by any action of the State which directly and proximately contributed to the claims.

2. **INTELLECTUAL PROPERTY (Optional)**
The Contractor agrees it will, at its sole cost and expense, defend, indemnify, and hold harmless the indemnified parties from and against any and all claims, to the extent such claims arise out of, result from, or are attributable to, the actual or alleged infringement or misappropriation of any patent, copyright, trade secret, trademark, or confidential information of any third party by the Contractor or its employees, Subcontractors, consultants, representatives, and agents; provided, however, the State gives the Contractor prompt notice in writing of the claim. The Contractor may not settle any infringement claim that will affect the State's use of the Licensed Software without the State's prior written consent, which consent may be withheld for any reason.

If a judgment or settlement is obtained or reasonably anticipated against the State's use of any intellectual property for which the Contractor has indemnified the State, the Contractor shall, at the Contractor's sole cost and expense, promptly modify the item or items which were determined to be infringing, acquire a license or licenses on the State's behalf to provide the necessary rights to the State to eliminate the infringement, or provide the State with a non-infringing substitute that provides the State the same functionality. At the State's election, the actual or anticipated judgment may be treated as a breach of warranty by the Contractor, and the State may receive the remedies provided under this solicitation.

3. **PERSONNEL**
The Contractor shall, at its expense, indemnify and hold harmless the indemnified parties from and against any claim with respect to withholding taxes, worker's compensation, employee benefits, or any other claim, demand, liability, damage, or loss of any nature relating to any of the personnel, including subcontractor's and their employees, provided by the Contractor.

4. **SELF-INSURANCE**
The State of Nebraska is self-insured for any loss and purchases excess insurance coverage pursuant to Neb. Rev. Stat. § 81-8,239.01 (Reissue 2008). If there is a presumed loss under the provisions of this agreement, Contractor may file a claim with the Office of Risk Management pursuant to Neb. Rev. Stat. §§ 81-8,829 – 81-8,306 for review by the State Claims Board. The State retains all rights and immunities under the State Miscellaneous (Section 81-8,294), Tort (Section 81-8,209), and Contract Claim Acts (Section 81-8,302), as outlined in Neb. Rev. Stat. § 81-8,209 et seq. and under any other provisions of law and accepts liability under this agreement to the extent provided by law.

5. The Parties acknowledge that Attorney General for the State of Nebraska is required by statute to represent the legal interests of the State, and that any provision of this indemnity clause is subject to the statutory authority of the Attorney General.

N. **ATTORNEY'S FEES**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
GA			

In the event of any litigation, appeal, or other legal action to enforce any provision of the contract, the Parties agree to pay all expenses of such action, as permitted by law and if ordered by the court, including attorney's fees and costs, if the other Party prevails.

O. PERFORMANCE BOND

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
GA			

The Contractor will be required to supply a bond executed by a corporation authorized to contract surety in the State of Nebraska, payable to the State of Nebraska, which shall be valid for the life of the contract to include any renewal and/or extension periods. The amount of the bond must be $500,000The bond will guarantee that the Contractor will faithfully perform all requirements, terms and conditions of the contract. Failure to comply shall be grounds for forfeiture of the bond as liquidated damages. Amount of forfeiture will be determined by the agency based on loss to the State. The bond will be returned when the contract has been satisfactorily completed as solely determined by the State, after termination or expiration of the contract.

P. LIQUIDATED DAMAGES

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
		GA	Please see redlines below.

The State and the contractor agree that actual damages from a failure to perform certain requirements as set forth below and requirements as may be agreed to in any contract(s) executed pursuant to this RFP are difficult to accurately estimate, that there has been a reasonable effort by parties to fix the amount of compensation that is due under the contracts, and that it is possible to identify an amount of liquidated damages for the failure to perform those requirements that is proportionate to the actual damages that the State would anticipate as a result of the failure.

In lieu of actual damages, the State and the contractor(s) shall agree to a schedule of damages for failure to perform certain requirements as set forth below and other requirements that are agreed to by contractor and the State in any contract(s) executed pursuant to this RFP.

The following is the required schedule of liquidated damages for failure to perform certain requirements set forth below and any other requirements the contractor and the State may agree to.

The damages are categorized as follows:

Standard	$ ~~3,000~~500.00 per 24 hours
High	$ ~~7,500~~1,000.00 per 24 hours
Critical	$~~15,000~~1,500.00 per 24 hours

Liquidated damages may be charged by the State for each day the Contractor fail to perform or comply with certain requirements as set forth below or requirements agreed to by the State and the contractor in the contract(s), other than failures directly caused by the State or circumstances beyond the control of the contractor or their agents (natural disasters, etc.). Such liquidated damages shall be prorated on an hourly basis. Within sixty (60) calendar days after each instance that causes liquidated damages to be due, the State will send a notice to the Contractor that liquidated damages are due. The Contractor shall pay the State any damages due within ten (10) business days of receiving such notice.

All notices as set forth in Section II.P. shall be delivered to the contractor by email(s) designated by the contractor, unless otherwise agreed to by the State and contractor. Notices shall be deemed received by the contractor when they are sent by the State.

1. **ACCEPTANCE OF ACH FILES**
Within three (3) hours of contractor being notified by State that contractor was not available to accept ACH Credit/Debit Origination files (by any method used by State agencies to transmit files not limited to: direct transmission, PC encryption transmission, Internet upload), contractor will either resolve the situation within three (3) hours of receiving such notice so the ACH Credit/Debit Origination files can be received from the State or pay liquidated damages until such situation is resolved to the satisfaction of the State.
Category: Critical

2. **ABILITY TO ACCESS DAILY BANK REPORTING INFORMATION**
Upon being notified by the State that daily bank information reports prior day balance reports, current day balance reports, ACH return and Notice of Change reports, ACH current day and prior day addenda reports, or CSV exports are unavailable, contractor will either resolve the situation within four (4) hours of receiving such notice and make all required reports available to State staff or pay liquidated damages until such situation is resolved to the satisfaction of the State.
Category: Critical

3. **TRAP FILES AVAILABILITY**
Upon being notified by the State that daily trap files for the Nebraska Department of Revenue are not available to State staff for download, contractor will either resolve the situation within four (4) hours of receiving such notice by having the trap files available for download by State staff or pay liquidated damages until such situation is resolved to the satisfaction of the State.
Category: Critical

4. **SENDING/RECEIVING OF WIRES**
Upon being notified by the State that contractor is unable to send or receive wires, contractor will either resolve the situation within four (4) hours of receiving such notice or pay liquidated damages until such situation is resolved to the satisfaction of the State.
Category: Critical

5. **RAW DATA RETURN AND NOTICE OF CHANGE FILE/TRANSMISSION AVAILABILITY**
Upon being notified by the State that daily raw data return and notice of change file/transmission is unavailable, contractor will either resolve the situation within eight (8) hours of receiving such notice by making the file/transmission available to State staff or pay liquidated damages until such situation is resolved to the satisfaction of the State.
Category: Standard

6. **ACH RETURNS, ACH REVERSALS, AND ACH DELETES PROCESSING**
The contractor will be responsible to process batch, file, and individual item ACH Returns, Reversals, and Deletes the same day the State has notified the bank. Failure to handle ACH returns, Reversals and Deletes according to NACHA Operating Rules will require a payment of liquidated damages to the State for each instance not handled in accordance with the NACHA Operating Rules.
Category: Standard

7. **ACH CREDIT/DEBIT ON-US TRANSACTION POSTING**
Contractor will post ACH transactions accurately within the NACHA Operating Rules. Contractor will correct each error made to customers account/State clients due to posting error(s) within eight (8) hours after State notifies contractor of error or pay liquidated damages for each uncorrected error until the situation is resolved to the satisfaction of the State.
Category: High

8. **CUSTOMER SERVICE**
Contractor will provide adequate customer service support, as determined by the State, to the State and State clients/vendors. When contacted by State staff or State vendors/clients for information, customer service will provide a response back to each inquiry within four (4) hours of receiving such inquiry.

Specific service levels requested:
Request for trace number/or additional information of ACH transaction with an effective date within the last sixty (60) days. Expected response time frame: Contractor will provide within twenty-four (24) hours.
Category: Standard

State Vendor/Receiving Bank request for addenda information on an ACH transaction with an effective date within the last sixty (60) days. Expected response time frame: Contractor will provide within eight (8) hours of contact from State Vendor or Receiving Bank.
Category: Standard

Request for trace number/or additional information of ACH transaction with an effective date within the more than sixty (60) days old. Expected response time frame: Contractor will provide within forty-eight (48) hours.
Category: Standard

9. **RFP REQUIRED REPORTING**
Within three (3) business days of contractor being notified by the State, reports not provided by contractor will be made available to the State or contractor will pay liquidated damages until the situation is resolved to the satisfaction of the State.
Category: Standard

Q. ASSIGNMENT, SALE, OR MERGER

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
GA			

Either Party may assign the contract upon mutual written agreement of the other Party. Such agreement shall not be unreasonably withheld.

The Contractor retains the right to enter into a sale, merger, acquisition, internal reorganization, or similar transaction involving Contractor's business. Contractor agrees to cooperate with the State in executing amendments to the contract to allow for the transaction. If a third party or entity is involved in the transaction, the Contractor will remain responsible for performance of the contract until such time as the person or entity involved in the transaction agrees in writing to be contractually bound by this contract and perform all obligations of the contract.

R. CONTRACTING WITH OTHER NEBRASKA POLITICAL SUB-DIVISIONS OF THE STATE OR ANOTHER STATE

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
GA			

The Contractor may, but shall not be required to, allow agencies, as defined in Neb. Rev. Stat. §81-145, to use this contract. The terms and conditions, including price, of the contract may not be amended. The State shall not be contractually obligated or liable for any contract entered into pursuant to this clause. A listing of Nebraska political subdivisions may be found at the website of the Nebraska Auditor of Public Accounts.

The Contractor may, but shall not be required to, allow other states, agencies or divisions of other states, or political subdivisions of other states to use this contract. The terms and conditions, including price, of this contract shall apply to any such contract, but may be amended upon mutual consent of the Parties. The State of Nebraska shall not be contractually or otherwise obligated or liable under any contract entered into pursuant to this clause. The State shall be notified if a contract is executed based upon this contract.

Currently, Nebraska Public Power District and Lancaster County are using this contract. It will be the responsibility of the selected contractor to contact the cities, counties, and other governmental subdivisions regarding the potential to participate under the contract. Each municipality, county, or other governmental subdivision will establish a relationship with the selected contractor and negotiate business and technical requirements according to the specific needs of each within the constraints of the contract.

S. **FORCE MAJEURE**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
GA			

Neither Party shall be liable for any costs or damages, or for default resulting from its inability to perform any of its obligations under the contract due to a natural or manmade event outside the control and not the fault of the affected Party ("Force Majeure Event"). The Party so affected shall immediately make a written request for relief to the other Party, and shall have the burden of proof to justify the request. The other Party may grant the relief requested; relief may not be unreasonably withheld. Labor disputes with the impacted Party's own employees will not be considered a Force Majeure Event.

T. **CONFIDENTIALITY**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
GA			

All materials and information provided by the Parties or acquired by a Party on behalf of the other Party shall be regarded as confidential information. All materials and information provided or acquired shall be handled in accordance with federal and state law, and ethical standards. Should said confidentiality be breached by a Party, the Party shall notify the other Party immediately of said breach and take immediate corrective action.

It is incumbent upon the Parties to inform their officers and employees of the penalties for improper disclosure imposed by the Privacy Act of 1974, 5 U.S.C. 552a. Specifically, 5 U.S.C. 552a (i)(1), which is made applicable by 5 U.S.C. 552a (m)(1), provides that any officer or employee, who by virtue of his/her employment or official position has possession of or access to agency records which contain individually identifiable information, the disclosure of which is prohibited by the Privacy Act or regulations established thereunder, and who knowing that disclosure of the specific material is prohibited, willfully discloses the material in any manner to any person or agency not entitled to receive it, shall be guilty of a misdemeanor and fined not more than $5,000.

U. **EARLY TERMINATION**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
GA			

The contract may be terminated as follows:

1. The State and the Contractor, by mutual written agreement, may terminate the contract at any time.

2. The State, in its sole discretion, may terminate the contract for any reason upon thirty (30) calendar day's written notice to the Contractor. Such termination shall not relieve the Contractor of warranty or other service obligations incurred under the terms of the contract. In the event of termination the Contractor shall be entitled to payment, determined on a pro rata basis, for products or services satisfactorily performed or provided.

3. The State may terminate the contract immediately for the following reasons:

a. if directed to do so by statute;
b. Contractor has made an assignment for the benefit of creditors, has admitted in writing its inability to pay debts as they mature, or has ceased operating in the normal course of business;
c. a trustee or receiver of the Contractor or of any substantial part of the Contractor's assets has been appointed by a court;
d. fraud, misappropriation, embezzlement, malfeasance, misfeasance, or illegal conduct pertaining to performance under the contract by its Contractor, its employees, officers, directors, or shareholders;
e. an involuntary proceeding has been commenced by any Party against the Contractor under any one of the chapters of Title 11 of the United States Code and (i) the proceeding has been pending for at least sixty (60) calendar days; or (ii) the Contractor has consented, either expressly or by operation of law, to the entry of an order for relief; or (iii) the Contractor has been decreed or adjudged a debtor;
f. a voluntary petition has been filed by the Contractor under any of the chapters of Title 11 of the United States Code;
g. Contractor intentionally discloses confidential information;
h. Contractor has or announces it will discontinue support of the deliverable; and,
i. In the event funding is no longer available.

V. CONTRACT CLOSEOUT

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
		GA	Please see redlines below.

Upon contract closeout for any reason the Contractor shall within 30 days, unless stated otherwise herein:

1. Transfer all completed or partially completed deliverables to the State;
2. Transfer ownership and title to all completed or partially completed deliverables to the State;
3. Return to the State all information and data, unless the Contractor is permitted to keep the information or data by contract or rule of law. Contractor may retain one copy of any information or data as required to comply with applicable work product documentation standards, its records retention policy, or as are automatically retained in the course of Contractor's routine back up procedures;
4. Cooperate with any successor Contactor, person or entity in the assumption of any or all of the obligations of this contract;
5. Cooperate with any successor Contactor, person or entity with the transfer of information or data related to this contract;
6. Return or vacate any state owned real or personal property; and,
7. Return all data in a mutually acceptable format and manner.

Nothing in this Section should be construed to require the Contractor to surrender intellectual property, real or personal property, or information or data owned by the Contractor for which the State has no legal claim.

III. CONTRACTOR DUTIES

A. INDEPENDENT CONTRACTOR / OBLIGATIONS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
		GA	Please see redlines below.

It is agreed that the Contractor is an independent contractor and that nothing contained herein is intended or should be construed as creating or establishing a relationship of employment, agency, or a partnership.

The Contractor is solely responsible for fulfilling the contract. The Contractor or the Contractor's representative shall be the sole point of contact regarding all contractual matters.

The Contractor shall secure, at its own expense, all personnel required to perform the services under the contract. The personnel the Contractor uses to fulfill the contract shall have no contractual or other legal relationship with the State; they shall not be considered employees of the State and shall not be entitled to any compensation, rights or benefits from the State, including but not limited to, tenure rights, medical and hospital care, sick and vacation leave, severance pay, or retirement benefits.

~~By-name personnel commitments made in the Contractor's proposal shall not be changed without the prior written approval of the State. Replacement of these personnel, if approved by the State, shall be with personnel of equal or greater ability and qualifications.~~

All personnel assigned by the Contractor to the contract shall be employees of the Contractor or a subcontractor, and shall be fully qualified to perform the work required herein. Personnel employed by the Contractor or a subcontractor to fulfill the terms of the contract shall remain under the sole direction and control of the Contractor or the subcontractor respectively.

With respect to its employees, the Contractor agrees to be solely responsible for the following:

1. Any and all pay, benefits, and employment taxes and/or other payroll withholding;
2. Any and all vehicles used by the Contractor's employees, including all insurance required by state law;
3. Damages incurred by Contractor's employees within the scope of their duties under the contract;
4. Maintaining Workers' Compensation and health insurance that complies with state and federal law and submitting any reports on such insurance to the extent required by governing law;
5. Determining the hours to be worked and the duties to be performed by the Contractor's employees; and,
6. All claims on behalf of any person arising out of employment or alleged employment (including without limit claims of discrimination alleged against the Contractor, its officers, agents, or subcontractors or subcontractor's employees)

If the Contractor intends to utilize any subcontractor, the subcontractor's level of effort, tasks, and time allocation should be clearly defined in the contractor's proposal. The Contractor shall agree that it will not utilize any subcontractors not specifically included in its proposal in the performance of the contract without the prior written authorization of the State. The term "subcontractor" does not include a third party who, in the ordinary course of business, provides products or services to the Contractor and not directly to the State.

The State reserves the right to require the Contractor to reassign or remove from the project any Contractor or subcontractor employee.

Contractor shall insure that the terms and conditions contained in any contract with a subcontractor does not conflict with the terms and conditions of this contract.

The Contractor shall include a similar provision, for the protection of the State, in the contract with any Subcontractor engaged to perform work on this contract.

B. **EMPLOYEE WORK ELIGIBILITY STATUS**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
		GA	Please see redlines in section C below.

The Contractor is required and hereby agrees to use a federal immigration verification system to determine the work eligibility status of employees physically performing services within the State of Nebraska. A federal immigration verification system means the electronic verification of the work authorization program authorized by the Illegal Immigration Reform and Immigrant Responsibility Act of 1996, 8 U.S.C. 1324a, known as the E-Verify Program, or an equivalent federal program designated by the United States Department of Homeland Security or other federal agency authorized to verify the work eligibility status of an employee.

If the Contractor is an individual or sole proprietorship, the following applies:

1. The Contractor must complete the United States Citizenship Attestation Form, available on the Department of Administrative Services website at http://das.nebraska.gov/materiel/purchasing.html

2. The completed United States Attestation Form should be submitted with the solicitation response.

3. If the Contractor indicates on such attestation form that he or she is a qualified alien, the Contractor agrees to provide the US Citizenship and Immigration Services documentation required to verify the Contractor's lawful presence in the United States using the Systematic Alien Verification for Entitlements (SAVE) Program.

4. The Contractor understands and agrees that lawful presence in the United States is required and the Contractor may be disqualified or the contract terminated if such lawful presence cannot be verified as required by Neb. Rev. Stat. §4-108.

C. **COMPLIANCE WITH CIVIL RIGHTS LAWS AND EQUAL OPPORTUNITY EMPLOYMENT / NONDISCRIMINATION (Statutory)**

The Contractor shall comply with all applicable local, state, and federal statutes and regulations regarding civil rights laws and equal opportunity employment. The Nebraska Fair Employment Practice Act prohibits Contractors of the State of Nebraska, and their Subcontractors, from discriminating against any employee or applicant for employment, with respect to hire, tenure, terms, conditions, compensation, or privileges of employment because of race, color, religion, sex, disability, marital status, or national origin (Neb. Rev. Stat. §48-1101 to 48-1125). The Contractor guarantees compliance with the Nebraska Fair Employment Practice Act, and breach of this provision shall be regarded as a material breach of contract. ~~The Contractor shall insert a similar provision in all Subcontracts for goods and services to be covered by any contract resulting from this solicitation.~~

D. **COOPERATION WITH OTHER CONTRACTORS**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
GA			

Contractor may be required to work with or in close proximity to other contractors or individuals that may be working on same or different projects. The Contractor shall agree to cooperate with such other contractors or individuals, and shall not commit or permit any act which may interfere with the performance of work by any other contractor or individual. Contractor is not required to compromise Contractor's intellectual property or proprietary information unless expressly required to do so by this contract.

E. DISCOUNTS

Prices quoted shall be inclusive of ALL trade discounts. Cash discount terms of less than thirty (30) days will not be considered as part of the proposal. Cash discount periods will be computed from the date of receipt of a properly executed claim voucher or the date of completion of delivery of all items in a satisfactory condition, whichever is later.

F. PRICES

Prices quoted shall be net, including transportation and delivery charges fully prepaid by the contractor, F.O.B. destination named in the solicitation. No additional charges will be allowed for packing, packages, or partial delivery costs. When an arithmetic error has been made in the extended total, the unit price will govern.

All prices, costs, and terms and conditions submitted in the proposal shall remain fixed and valid commencing on the opening date of the proposal until the contract terminates or expires.

The State reserves the right to deny any requested price increase. No price increases are to be billed to any State Agencies prior to written amendment of the contract by the parties.

The State will be given full proportionate benefit of any decreases for the term of the contract.

G. PERMITS, REGULATIONS, LAWS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
GA			

The contract price shall include the cost of all royalties, licenses, permits, and approvals, whether arising from patents, trademarks, copyrights or otherwise, that are in any way involved in the contract. The Contractor shall obtain and pay for all royalties, licenses, and permits, and approvals necessary for the execution of the contract. The Contractor must guarantee that it has the full legal right to the materials, supplies, equipment, software, and other items used to execute this contract.

H. OWNERSHIP OF INFORMATION AND DATA / DELIVERABLES

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
GA			

The State shall have the unlimited right to publish, duplicate, use, and disclose all information and data developed or obtained by the Contractor on behalf of the State pursuant to this contract.

The State shall own and hold exclusive title to any deliverable developed as a result of this contract. Contractor shall have no ownership interest or title, and shall not patent, license, or copyright, duplicate, transfer, sell, or exchange, the design, specifications, concept, or deliverable.

I. INSURANCE REQUIREMENTS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
		GA	Please see redlines below.

The Contractor shall throughout the term of the contract maintain insurance as specified herein and provide the State a current Certificate of Insurance/Acord Form (COI) verifying the coverage. The Contractor shall not commence work on the contract until the insurance is in place. If Contractor subcontracts any portion of the Contract the Contractor must, throughout the term of the contract, require the subcontractor maintain insurance appropriate for the services being subcontracted. ~~either:~~

~~Provide equivalent insurance for each subcontractor and provide a COI verifying the coverage for the subcontractor;~~
~~Require each subcontractor to have equivalent insurance and provide written notice to the State that the Contractor has verified that each subcontractor has the required coverage; or,~~
~~Provide the State with copies of each subcontractor's Certificate of Insurance evidencing the required coverage.~~

~~The Contractor shall not allow any Subcontractor to commence work until the Subcontractor has equivalent insurance.~~
The failure of the State to require a COI, or the failure of the Contractor to provide a COI or require subcontractor insurance shall not limit, relieve, or decrease the liability of the Contractor hereunder.

In the event that any policy written on a claims-made basis terminates or is canceled during the term of the contract or within ninety (90) days of termination or expiration of the contract, the contractor shall obtain an extended discovery or reporting period, or a new insurance policy, providing coverage required by this contract for the term of the contract and ninety (90) days following termination or expiration of the contract.

If by the terms of any insurance a mandatory deductible is required, or if the Contractor elects to increase the mandatory deductible amount, the Contractor shall be responsible for payment of the amount of the deductible in the event of a paid claim.

Notwithstanding any other clause in this Contract,
the following insurance policies are required herein.
~~the State may recover up to the liability limits of the insurance policies required herein.~~

1. **WORKERS' COMPENSATION INSURANCE**
The Contractor maintain during the life of this contract the statutory Workers' Compensation and Employer's Liability Insurance for all of the contactors' employees to be engaged in work on the project under this contract and, in case any such work is sublet, the Contractor shall require the Subcontractor similarly to maintain ~~shall take out and maintain during the life of this contract the statutory Workers' Compensation and Employer's Liability Insurance for all of the contactors' employees to be engaged in work on the project under this contract and, in case any such work is sublet, the Contractor shall require the Subcontractor similarly to provide~~ Worker's Compensation and Employer's Liability Insurance for all of the Subcontractor's employees to be engaged in such work. This policy shall be written to meet the statutory requirements for the state in which the work is to be performed, including Occupational Disease. **The policy shall include a waiver of subrogation in favor of the State. The COI shall contain the mandatory COI subrogation waiver language found hereinafter**. The amounts of such insurance shall not be less than the limits stated hereinafter. For employees working in the State of Nebraska, the policy must be written by an entity authorized by the State of Nebraska Department of Insurance to write Workers' Compensation and Employer's Liability Insurance for Nebraska employees.

2. **COMMERCIAL GENERAL LIABILITY INSURANCE AND COMMERCIAL AUTOMOBILE LIABILITY INSURANCE**
The Contractor shall ~~take out and~~ maintain during the life of this contract such Commercial General Liability Insurance and Commercial Automobile Liability Insurance as shall protect Contractor ~~and any Subcontractor~~ performing work covered by this contract from claims for damages for bodily injury, including death, as well as from claims for property damage, which may arise from operations under this contract, whether such operation be by the Contractor ~~or by any Subcontractor or~~ by anyone ~~directly or indirectly employed by either of them~~ for which the Contractor is responsible., and the amounts of such insurance shall not be less than limits stated hereinafter.

The Commercial General Liability Insurance shall be written on an **occurrence basis**, and provide Premises/Operations, Products/Completed Operations, Independent Contractors, Personal Injury, and Contractual Liability coverage. **The policy shall include the State, and others as required by the contract documents, as Additional Insured(s). This policy shall be primary, and any insurance or self-insurance carried by the State shall be considered secondary and non-contributory**. **The COI shall contain the mandatory COI liability waiver language found hereinafter.** The Commercial Automobile Liability Insurance shall be written to cover all Owned, Non-owned, and Hired vehicles.

Commented [SMW4]: Insurance is maintained at a corporate level to provide coverage for the operations of U.S. Bancorp and its subsidiaries. Insurance is not procured on a per-relationship basis. While some of these policies may respond to liability owed to the State, only the general and automobile liability policies where the State is included as additional insured could respond to the State directly. The other policies would reimburse the Bank after liability and loss have been determined and paid or incurred.

Commented [SMW5]: Subcontractors are required to maintain their own insurance coverage.

REQUIRED INSURANCE COVERAGE	
COMMERCIAL GENERAL LIABILITY	
General Aggregate	$2,000,000
Products/Completed Operations Aggregate	$2,000,000
Personal/Advertising Injury	$1,000,000 per occurrence
Bodily Injury/Property Damage	$1,000,000 per occurrence
Damage to Rented Premises (Fire)	$300,000 each occurrence
Contractual	Included
~~XCU Liability (Explosion, Collapse, and Underground Damage)~~	~~Included~~
Independent Contractors	Included
If higher limits are required, the Umbrella/Excess Liability limits are allowed to satisfy the higher limit.	
WORKER'S COMPENSATION	
Employers Liability Limits	$500K/$500K/$500K
Statutory Limits- All States	Statutory - State of Nebraska
Voluntary Compensation	Statutory
COMMERCIAL AUTOMOBILE LIABILITY	
Bodily Injury/Property Damage	$1,000,000 combined single limit
Include All Owned, Hired & Non-Owned Automobile liability	Included
UMBRELLA/EXCESS LIABILITY	
Over Primary Insurance	$5,000,000 per occurrence / Aggregate~~$5,000,000 per occurrence~~
PROFESSIONAL LIABILITY	
All Other Professional Liability (Errors & Omissions)	$1,000,000 Per Claim / Aggregate
COMMERCIAL CRIME	
Crime/Employee Dishonesty Including 3rd Party Fidelity	$1,000,000 Aggregate
CYBER LIABILITY	
Breach of Privacy, Security Breach, Denial of Service, Remediation, Fines and Penalties	$10,000,000 Aggregate
MANDATORY COI SUBROGATION WAIVER LANGUAGE	
"Workers' Compensation policy shall include a waiver of subrogation in favor of the State of Nebraska."	
MANDATORY COI LIABILITY WAIVER LANGUAGE	
"Commercial General Liability & Commercial Automobile Liability policies shall name the State of Nebraska as an Additional Insured and the policies shall be primary and any insurance or self-insurance carried by the State shall be considered secondary and non-contributory as additionally insured."	

3. **EVIDENCE OF COVERAGE**

The Contractor shall furnish the Contract Manager, with a certificate of insurance coverage complying with the above requirements prior to beginning work at:

State Purchasing Bureau
1526 K Street Ste. 130
Lincoln, NE 68508

These certificates or the cover sheet shall reference the RFP number, and the certificates shall include the name of the company, policy numbers, effective dates, dates of expiration, and amounts and types of coverage afforded. ~~If the State is damaged by the failure of the Contractor to maintain such insurance, then the Contractor shall be responsible for all reasonable costs properly attributable thereto.~~

Reasonable notice of cancellation of any required insurance policy must be submitted to the contract manager as listed above when ~~issued and~~ replacement coverage is unable to be procured. A new certificate of insurance must be provided as evidence there was ~~a new coverage binder shall be submitted immediately to~~ ensure no break in coverage.

Commented [SMW7]: Umbrella liability policies have aggregate limits.

Commented [SMW8]: This type of insurance has an aggregate limit.

Commented [SMW9]: This type of insurance has an aggregate limit.

Commented [SMW10]: Failure to comply with the insurance terms should be treated in the same way as a failure to comply with any other contractual term of this agreement.

~~4. DEVIATIONS~~

~~The insurance requirements are subject to limited negotiation. Negotiation typically includes, but is not necessarily limited to, the correct type of coverage, necessity for Workers' Compensation, and the type of automobile coverage carried by the Contractor.~~

J. NOTICE OF POTENTIAL CONTRACTOR BREACH

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
GA			

If Contractor breaches the contract or anticipates breaching the contract the Contractor shall immediately give written notice to the State. The notice shall explain the breach or potential breach, and may include a request for a waiver of the breach if so desired. The State may, at its discretion, temporarily or permanently waive the breach. By granting a temporary waiver, the State does not forfeit any rights or remedies to which the State is entitled by law or equity, or pursuant to the provisions of the contract. Failure to give immediate notice, however, may be grounds for denial of any request for a waiver of a breach.

K. ANTITRUST

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
GA			

The Contractor hereby assigns to the State any and all claims for overcharges as to goods and/or services provided in connection with this contract resulting from antitrust violations which arise under antitrust laws of the United States and the antitrust laws of the State.

L. CONFLICT OF INTEREST

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
GA			

By submitting a proposal, bidder certifies that no relationship exists between the bidder and any person or entity which either is, or gives the appearance of, a conflict of interest related to this Request for Proposal or project.

Bidder further certifies that bidder will not employ any individual known by bidder to have a conflict of interest nor shall bidder take any action or acquire any interest, either directly or indirectly, which will conflict in any manner or degree with the performance of its contractual obligations hereunder or which creates an actual or appearance of conflict of interest.

If there is an actual or perceived conflict of interest, bidder shall provide with its proposal a full disclosure of the facts describing such actual or perceived conflict of interest and a proposed mitigation plan for consideration. The State will then consider such disclosure and proposed mitigation plan and either approve or reject as part of the overall bid evaluation.

M. ADVERTISING

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
		GA	Please see redlines in section N below.

The Contractor agrees not to refer to the contract award in advertising in such a manner as to state or imply that the company or its goods or services are endorsed or preferred by the State. Any publicity releases pertaining to the project shall not be issued without prior written approval from the State.

N. NEBRASKA TECHNOLOGY ACCESS STANDARDS (Statutory)

~~Contractor shall review the Nebraska Technology Access Standards, found at http://nitc.nebraska.gov/standards/2-201.html and ensure that products and/or services provided under the contract are in compliance or will comply with the applicable standards to the greatest degree possible. In the event such standards change during the Contractor's performance, the State may create an amendment to the contract to request the contract comply with the changed standard at a cost mutually acceptable to the parties.~~

Commented [MMD11]: *We cannot provide a point in time confirmation of the State of Nebraska's Technology Standards and be held liable to policies that may change over time, potentially without notice to U.S. Bancorp. U.S. Bancorp's Information Security Program supports compliance with applicable laws and regulations.*

The U.S. Bancorp SOC3 provides additional information.

O. DISASTER RECOVERY/BACK UP PLAN

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
		GA	Please see redlines below.

The Contractor shall have a disaster recovery and back-up plan, ~~of which a copy should be provided upon request to the State~~, which includes to the extent applicable, but is not limited to equipment, personnel, facilities, and transportation, in order to continue delivery of goods and services as specified under the specifications in the contract in the event of a disaster.

Commented [MMD12]: BC/DR Plans are confidential and proprietary and are not shared externally.

The U.S. Bancorp Resiliency Program Overview and the ISO 22301 provides additional information pertaining to our BC/DR program.

P. DRUG POLICY

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
GA			

Contractor certifies it maintains a drug free work place environment to ensure worker safety and workplace integrity. Contractor agrees to provide a copy of its drug free workplace policy at any time upon request by the State.

Q. WARRANTY

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
GA			

Despite any clause to the contrary, the Contractor represents and warrants that its services hereunder shall be performed by competent personnel and shall be of professional quality consistent with generally accepted industry standards for the performance of such services and shall comply in all respects with the requirements of this Agreement. For any breach of this warranty, the Contractor shall, for a period of ninety (90) days from performance of the service, perform the services again, at no cost to Customer, or if Contractor is unable to perform the services as warranted, Contractor shall reimburse Customer the fees paid to Contractor for the unsatisfactory services. The rights and remedies of the parties under this warranty are in addition to any other rights and remedies of the parties provided by law or equity, including, without limitation actual damages, and, as applicable and awarded under the law, to a prevailing party, reasonable attorneys' fees and costs.

IV. PAYMENT

A. PROHIBITION AGAINST ADVANCE PAYMENT (Statutory)

Neb. Rev. Stat. §§81-2403 states, "[n]o goods or services shall be deemed to be received by an agency until all such goods or services are completely delivered and finally accepted by the agency."

B. TAXES (Statutory)

The State is not required to pay taxes and assumes no such liability as a result of this solicitation. The Contractor may request a copy of the Nebraska Department of Revenue, Nebraska Resale or Exempt Sale Certificate for Sales Tax Exemption, Form 13 for their records. Any property tax payable on the Contractor's equipment which may be installed in a state-owned facility is the responsibility of the Contractor

C. INVOICES

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
GA			

Fees charged by the contractor will be submitted to the State through an analysis statement, allowing the State to determine how fees should be split by agencies. The State will pay the contractor by the end of the following month by an ACH transaction. The terms and conditions included in the Contractor's invoice shall be deemed to be solely for the convenience of the parties. No terms or conditions of any such invoice shall be binding upon the State, and no action by the State, including without limitation the payment of any such invoice in whole or in part, shall be construed as binding or estopping the State with respect to any such term or condition, unless the invoice term or condition has been previously agreed to by the State as an amendment to the contract.

D. PAYMENT (Statutory)

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within Solicitation Response (Initial)	NOTES/COMMENTS:
		GA	Please see redlines in section G below.

Payment will be made by the responsible agency in compliance with the State of Nebraska Prompt Payment Act (See Neb. Rev. Stat. §81-2403). The State may require the Contractor to accept payment by electronic means such as ACH deposit. In no event shall the State be responsible or liable to pay for any goods and services provided by the Contractor prior to the Effective Date of the contract, and the Contractor hereby waives any claim or cause of action for any such services.

E. LATE PAYMENT (Statutory)

The Contractor may charge the responsible agency interest for late payment in compliance with the State of Nebraska Prompt Payment Act (See Neb. Rev. Stat. §81-2401 through 81-2408).

F. SUBJECT TO FUNDING / FUNDING OUT CLAUSE FOR LOSS OF APPROPRIATIONS (Statutory)

The State's obligation to pay amounts due on the Contract for a fiscal years following the current fiscal year is contingent upon legislative appropriation of funds. Should said funds not be appropriated, the State may terminate the contract with respect to those payments for the fiscal year(s) for which such funds are not appropriated. The State will give the Contractor written notice thirty (30) calendar days prior to the effective date of termination. All obligations of the State to make payments after the termination date will cease. The Contractor shall be entitled to receive just and equitable compensation for any authorized work which has been satisfactorily completed as of the termination date. In no event shall the Contractor be paid for a loss of anticipated profit.

G. RIGHT TO AUDIT (Statutory)

No more than once per calendar year, the State shall have the right to assess the policies, standards, and practices of Contractor with respect to the Services provided under this Agreement, to the extent reasonably necessary to verify

Contractor's compliance with the terms of this Agreement. The State acknowledges that information which Contractor deems confidential or proprietary may not be considered reasonably necessary to verify Contractor's compliance.~~The State shall have the right to audit the Contractor's performance of this contract upon a thirty (30) days' written notice. Contractor shall utilize generally accepted accounting principles, and shall maintain the accounting records, and other records and information relevant to the contract (Information) to enable the State to audit the contract. (Neb. Rev. Stat. §84-304 et seq.) The State may audit and the Contractor shall maintain, the Information during the term of the contract and for a period of five (5) years after the completion of this contract or until all issues or litigation are resolved, whichever is later. The Contractor shall make the Information available to the State at Contractor's place of business or a location acceptable to both Parties during normal business hours. If this is not practical or the Contractor so elects, the Contractor may provide electronic or paper copies of the Information. The State reserves the right to examine, make copies of, and take notes on any Information relevant to this contract, regardless of the form or the Information, how it is stored, or who possesses the Information. Under no circumstance will the Contractor be required to create or maintain documents not kept in the ordinary course of contractor's business operations, nor will contractor be required to disclose any information, including but not limited to product cost data, which is confidential or proprietary to contractor.~~

V. PROJECT DESCRIPTION AND SCOPE OF WORK

The contractor should provide the following information in response to this solicitation.

A. PROJECT OVERVIEW

Automated Clearing House (ACH) is an electronic network for financial transactions. ACH processes large volumes of credit and debit transactions in batches. ACH credit transfers include direct deposit payroll and vendor payments. ACH direct debit transfers include consumer payments on insurance premiums, revenue tax obligations, child support payment, and other kinds of payments. Rules and regulations that govern the ACH network are established by National Automated Clearing House Association (NACHA) and the Federal Reserve.

The State Treasurer's Office will be the point of contact for all daily banking functions and implementation of the banking services on behalf of State agencies. The State will continue to expand the use of electronic payments for State vendors, payroll, and government benefits payments to consumers and vendors. The State is seeking a state or national bank contractor that will work with State agencies to develop additional electronic solutions to receive payments via ACH, thus enabling the State to continue reducing check processing charges and to allow all agencies to continue to exercise the specific requirements of each agency's process of ACH credits and debits. All payments to vendors in excess of $25,000 or vendors receiving multiple payments per year are required to be sent electronically. The State will continue to reduce the number of warrants written by encouraging the use of Direct Deposit of government benefit payments (Department of Health and Human Services (DHHS) child care and child support payments have been mandated by the Nebraska State Legislature, Neb. Rev. Stat. §43-3342) and vendor payments. The State allows employees to receive payments by warrant, Direct Deposit to a savings/checking account, or loaded to a stored-value Visa branded debit card. The increased use of ACH payments across State programs will also decrease fees by the banks for clearing and processing State warrants, forgery, and expired warrant claims. The State will continue to work on expanding programs that will increase the dollar amount of receipts being paid and originated electronically by both ACH credit and ACH debit programs.

A historical count of ACH transactions, ACH returns, and return checks processed by the State and governmental entities under the State's current contract. These figures are not a guarantee of future transaction counts. Figures are provided for the benefit of bidders in the development of proposals.

Following is the number of Credit and Debit ACH transactions originated by all State agencies (except the Nebraska Child Support Payment Center (NCSPC) which is listed in Exhibit 2) for Fiscal Year 2018-19 and the first half of Fiscal Year 2019-2020 by month.

Fiscal Year	ACH Transactions	Dollar Amount
2018-2019	2,619,552	$12,110,525,243

Month	ACH Transactions	Dollar Amount
July 2019	180,095	$ 948,851,615
August 2019	191,728	$1,042,998,632
September 2019	168,105	$1,070,286,612
October 2019	180,794	$1,059,908,177
November 2019	177,009	$1,049,525,332
December 2019	202,155	$1,009,979,357
January 2020	178,182	$1,201,315,739
February 2020	417,329	$1,254,599,273
March 2020	329,433	$1,314,178,645

B. PROJECT ENVIROMENT

While multiple State agencies will use the services, the Nebraska State Treasurer's Office will be the point of contact for all daily banking functions and implementation of the banking services.

ACH ORIGINATION SERVICES

Outlined below is a current list of entities authorized to send or transmit files on the State's behalf. Multiple agencies are also receiving NACHA-formatted files from the State's current ACH processor. Administrative Services processes all ACH vendor and payroll payments on behalf of State agencies excluding those listed below. The Nebraska Department of Revenue's (DOR) accounts will be set up as a subsidiary zero balance account (ZBA) with funds being moved to a main account.

1. SENDING AND RECEIVING ACH FILES

State Accounting (credit files only)…………………….....Direct Transmission Administrative
State Accounting *IRS payments ……….......................................Website Transmission
Nebraska Lottery – (credit and debit files)………..………………..….Website Transmission
State Treasurer's Office – (credit and debit files)……….…………...Website Transmission
State Treasurer's Office – NCSPC – (credit and debit files)…….. Website Transmission
Department of Labor – (credit and debit files) …..……………………...Direct Transmission
Department of Revenue – (credit and debit files) ……………………...Direct Transmission
University of Nebraska – (credit and debit files) ……………………......Direct Transmission

2. RECEIVING ACH TRAP FILES

Department of Revenue – (credit and reversal transactions)………..Direct Transmission

3. PROVIDE BANK ACCOUNT

A bank account will be established with the contractor where ACH files will be credited and debited. ACH debit files will be funded on settlement date, which could mean that the account will be in a daylight overdraft every morning. Treasury Management will wire money into the account daily so that an approximate balance of $4 million could be maintained. However, debits and credits flowing in and out of this account in one day could be as high as $425 million. A secure online solution is required so wires can be received and initiated by Treasury Management staff.

The Nebraska Department of Revenue (DOR) requires accounts set up as subsidiary zero balance accounts (ZBA) with funds being moved to the State's bank account every business day.

The following information provides a description of the project and additional State agency-specific requirements. The figures listed represent recent transaction counts and are not a guarantee of future volumes. The below narratives were based on the use of current services and are being provided to assist bidders in preparing a quality response.

4. **NEBRASKA LOTTERY (LOTTERY)**

a. ACH ORIGINATION

<u>Current Process:</u>
Lottery originates CCD+ credit and debit transactions to lottery retailers. This is a mandatory Electronic Funds Transfer (EFT) program. The file is sent to the bank on Monday for settlement on Wednesday.

Lottery receives the EFT batch file from their vendor, International Game Technology PLC (IGT). The file, which contains both debit and credit transactions, is uploaded using a Web-based application on the bank website by logging in using a unique ID and password. The staff fills out the batch data fields, which identify the file as being from Lottery, and uploads the file. After the file is uploaded, staff checks the directory listing within the Web application to make sure the file was processed correctly and there were no format errors.

Within 5-10 minutes, State staff calls a designated line at the bank and enters a four-digit PIN. The total number and dollar amount of credits and debits are entered for the bank to verify the file was correct. When finished, the bank then sends an email to designated staff when the batch file is processed correctly. See chart in Exhibit 2 for historical volumes.

b. CHARITABLE GAMING

See chart in Exhibit 2 for historical volumes.

Charitable Gaming is a division of the Nebraska Department of Revenue; it administers and collects taxes for the bingo, keno, lottery/raffle and pickle card games. The licensees (taxpayers) can file and pay taxes and fees through an EFT process.

Current Process:
After the licensee files the return information and indicates they want to pay the tax due electronically, an invoice of how much tax is due is created by SaleForce Inc. A licensee will log into the Nebraska Department of Revenue/Gaming Website (NEGAM), where a payment gateway is connected,

process the charitable gaming tax return, and request to make an electronic payment for the charitable gaming tax. The application uses the URL to redirect to the banking site.

An invoice is generated by Salesforce and the invoice page sends HTML form data to the current Contractor. This including the total amount due, since the bank does not accept partial/overpayments nor allow payments of less than all invoices simultaneously. In addition, the session transfer message can accommodate data for up to five (5) invoices. If there are less than five (5) invoices on a record, some of these additional fields will be blank.

The bank processes payment and provides an itemized payment receipt to licensee.

5. NEBRASKA DEPARTMENT OF REVENUE (DOR)
See chart in Exhibit 2 for historical volumes.

a. ACH DEBIT ORIGINATION SERVICES

Current Process:
DOR receives ACH transactions for a variety of tax programs. ACH files are provided to the bank for debit origination. DOR originates its own ACH debit transactions through its Payment Plan and Electronic Funds Withdrawal (EFW) programs. Transactions are also generated by DOR vendors. All ACH files provided will be balanced files containing an offset credit for each debit.

The State Treasurer's Office has set aside bank accounts for DOR use to segregate funds for accounting purposes. DOR requires the bidder to provide this same level of service. Currently, DOR uses nine (9) bank accounts and reserves the right to add, eliminate, or combine accounts as needed. These accounts are for Individual Estimated Tax, Sales and Use Tax, Sales Tax, Business Consumer Use Tax, Withholding Tax, Individual Income Tax, Corporate Tax, Motor Fuels Tax, and E Payment.

b. ACH CREDIT PROCESSING SERVICES

Current Process:
The DOR supports receipt of credits to designated State-owned demand deposit accounts for tax payments. DOR uses Universal Payment Identification Codes (UPIC) for these designated State-owned demand deposit accounts. The DOR provides taxpayers with file format requirements and the appropriate UPIC for the type of tax being paid. The contractor must provide DOR with a daily file containing the offset credits from these ACH Credit files.

c. PAYMENT SCHEDULING SYSTEM.

Current Process:
DOR currently uses an Internet and IVR based application to initiate ACH debit entries in various tax filing and tax payment applications.

DOR utilizes a payment scheduling system to allow taxpayers to schedule ACH payments via the Web, an IVR interface, and operator-assisted entry. The Web and IVR interface allows the taxpayer to enter basic payment related information such as Nebraska taxpayer ID, type of tax being paid, tax period end date, amount, and RDFI information needed to complete the ACH transaction. The operator-assisted service allows the ACH payment scheduling system vendor to enter this same required information reported by the taxpayer by a toll-free telephone call.

This ACH payment scheduling system allows the taxpayer to log in via a secure application to initiate payments for all types of EFT tax payments supported by DOR. The IVR component of this service must provide toll-free access using a state specified telephone number. The application accepts Nebraska taxpayer ID number or social security number (SSN), and accommodate single entry and recurring payments. The application provides reports online, allow the taxpayer to easily review payment history and pending payments, and allows the taxpayer to set up bank account information for multiple bank accounts.

Requirements:
The ACH payment scheduling system must provide a public facing Web-based system, IVR system, and operator-assisted service used to collect payment data from taxpayers. If the payment system allows for mobile functionality, describe the interface. Functionality to include;

Schedule a tax payment – taxpayer should be able to enter:

a. Payment amount in dollars and cents.

1) Scheduled Payment Date. This can be a future date. The system must allow payments to be warehoused for a period of up to one (1) year beyond the current date.
2) Tax Period End Date (MMDDYYYY). This can be for past dates, but should not be for future dates or before 01011968 (January 1, 1968).
3) Nebraska ID Number. The system must verify that the entered Nebraska ID Number is a valid licensed DOR taxpayer – be present on the DOR business master file.
4) Tax Type. The system must allow the taxpayer to select a tax type from a list of tax types that taxpayer is licensed to pay.

Upon completion of scheduling a payment, the ACH payment scheduling system must issue a confirmation number to the taxpayer. The taxpayer must be given the opportunity to review and confirm the details of the payment and have the opportunity to cancel the transaction. A confirmation number must be issued each time a transaction is completed. This is a unique number assigned to a one-time payment when it is initiated, edited, or cancelled.

The system should provide taxpayer inquiry and payment history. The ACH payment scheduling system should

1) Allow the taxpayer to view pending payments and edit or delete, if necessary
2) Allow the taxpayer to view payment history

d. Register taxpayer banking information in the system. The ACH payment scheduling system should allow registrations to be made in real-time. Both registered and unregistered taxpayers should be able to originate payments. Payments originated by unregistered taxpayers should require fewer pages to navigate. Registered taxpayer should be allowed to create a profile that can be accessed through the application and have access to additional features, including the ability to store bank accounts for future use. Stored banking information would include

1) Bank routing number – system checks to ensure this is a valid entry
2) Bank account number
3) Re-enter bank account number for verification
4) Bank Account Type – checking or savings
5) Business Account – yes or no
6) Option to save account for future use by giving it a name.

e. Validate registration or payment information entered by the taxpayer.

1) Show payment detail
2) Show bank account detail
3) Allow taxpayer to enter email address and phone number for payment confirmation
4) Terms and conditions -- Taxpayer must read and accept the terms of the authorization and the confirmation number to complete the transaction
5) Payment confirmation with confirmation number assigned and detailed information on transaction

f. Manage taxpayer bank account information

1) Allows the taxpayer to add, edit or delete banking information saved in the system.
2) Multiple bank accounts may be listed for a single Nebraska taxpayer ID number or SSN.

g. Provide taxpayer authentication. Authentication functionality should include at a minimum the same functionality supported in the current ACH payment scheduling system.

1) Currently a taxpayer is authenticated using their Nebraska taxpayer ID number or SSN and system-specific password.
    a. First time taxpayers use their Nebraska taxpayer ID numbers as their password and are required to change their passwords the first time into the system.
    b. Nebraska taxpayer ID numbers and associated tax program data are provided to the contractor via a computer file as agreed upon by DOR and the selected bidder. Updates to this file are provided daily by DOR.
    c. For taxpayers making individual income tax payments, DOR does not provide preregistration data to the contractor; instead taxpayers must self-register by entering their SSNs through the ACH Payment Scheduling system.
    d. Bidders must provide descriptions of their solutions for taxpayer authentication.
        1. Provide the taxpayer with the ability to change his or her password.

h. The ACH payment scheduling system must provide an internal Web-based administrative site for DOR taxpayers. This system will be used by DOR to perform a variety of functions:

1) Schedule payments at taxpayer request
2) Cancel payments at taxpayer request
3) Update payments at taxpayer request
4) Inquire on pending and past payments
5) Reset passwords at taxpayer request

i. The ACH payment scheduling system must be able to support all tax categories allowing EFT supported by DOR and allow for the addition of new tax programs at the request of the DOR throughout the life of this contract.

j. The ACH payment scheduling system must have the ability for taxpayers to schedule estimated payments for both individual and business taxes. These recurring payments must be able to be scheduled for dates as specified by the DOR. The current due dates for individual income estimated tax payments are April 15, June 15, September 15, and January 15. For corporation income tax, the current due dates are April 15, June 15, September 15, and December 15.

k. DOR receives and transmits files with the ACH payment scheduling system vendor via secure FTP. Exhibit 3 provides specifications for each file. These files include but not limited to:

l. Daily Remittance report containing payment information about debit transactions originated by the ACH payment scheduling system.

m. Pre-Registration Response File. This file serves as an acknowledgment from the ACH payment scheduling system that the DOR Pre-registration file has been received.

n. Revenue Pre-registration File. This is a copy of the DOR Business Master File used by the ACH payment scheduling system to authenticate taxpayers. Once this file is initially provided, only daily adds, changes, and deletes are sent.

6. **UNIVERSITY OF NEBRASKA**

a. ACH ORIGINATION SERVICES

Current Process:
SAP is a business software vendor used for the UN business enterprise solution. The UN and NSCS use SAP Payroll for processing monthly and biweekly net pay results. Employees may deposit into more than one bank account the transaction count reflects each deposit. Each pay cycle the University makes ACH deposits to vendors (such as retirement plan contributions or health insurance premiums) for the payroll deductions taken from the employees' pay. The vendor payments are included in the same file as net pay, as a separate batch. Once a month, the University processes a debit file to collect health insurance premiums from retirees that are participating in the University's group health insurance plan. The retiree health premium requires mandatory EFT participation. The University sends payroll files two days in advance. Retiree debit files are transmitted to the bank approximately 10 days in advance. A University staff member calls in file totals via an IVR. See chart in Exhibit 2 for historical volumes.

The University will use some or all of the requirements. There are no agency-specific requirements that need a response.

7. **NEBRASKA CHILD SUPPORT PAYMENT CENTER**

a. ACH ORIGINATION SERVICES

Current Process:
NCSPC transmits one file a day with multiple batches via a website. NCSPC makes payments to the Custodial Parent by an ACH transaction to a checking or savings account or to a VISA branded stored value card. The NCSPC also debits Non-Custodial parents checking and savings accounts via an ACH transaction for child support payments. The State Treasurer's Office will maintain a separate demand deposit account for NCSPC. All NCSPC analysis activity must be billed monthly to NSCPC. See chart in Exhibit 2 for historical volumes.

The bank account ledger balance must be collateralized at the level required by State statute individually of other State bank accounts. Currently $10 million is pledged.

NCSPC staff will need access to NCSPC bank account via an Internet-based information reporting application.

NCSPC will use some or all of the requirements listed. There are no agency-specific requirements that need a response.

8. **NEBRASKA DEPARTMENT OF LABOR - UNEMPLOYMENT INSURANCE**

a. ACH ORIGINATION SERVICES

Current Process:
The Department of Labor has three (3) daily files, which are both debit and credit files. The batch information is verified by a secure email, it includes the number of transactions and the file amounts, and whether they are debits or credits. After information is received and verified a confirmation is made electronically. Tax payments are accepted via UIConnect, their online data and payment system, which can push or pull payment from employer accounts. Batches of unemployment benefit payments are produced by GeoSolutions. See chart in Exhibit 2 for historical volumes.

9. **TREASURY MANAGEMENT**

a. ACH ORIGINATION SERVICES

Current Process:
The Treasury Management Division of the State Treasurer's Office (TM) submits ACH files for daily processing. Files often contain multiple batches and are transmitted via a secure website with dual authentication credentials. Criteria for selecting an originating bank will include the ability to provide a secure online solution with at least the minimum industry authentication standards. ACH files are initiated from both TM, as well as Administrative Services' Accounting Division. The State Treasurer's Office works with many State agencies to offer debit programs, this option continues to grow. See chart in Exhibit 2 for historical volumes.

Treasury Management handles the ACH returns for State Agencies other than NCSPC and the Department of Labor. Daily Return Settlement report is printed and staff identifies which agency the money should be returned to. An entry for the return is made in the accounting system and a copy of the entry is sent to the proper agency. Returns should be listed on the previous and current day reports separately and not netted from receipts.

Treasury Management requires the contractor to provide an online application to initiate a re-presented check entry (RCK) through the ACH network in attempt to collect the debt on insufficient fund checks. This is a service that TM provides to any agencies that want to use it.

10. **STATE ACCOUNTING**

a. ACH ORIGINATION

Current Process:
State Accounting coordinates all payments flowing out of the State's accounting system to the bank except those listed individually. Two NACHA ACH formatted files with multiple batches per file are created daily and sent to the bank via direct transmission. Most of the batches in the files are sent with an effective date two or more days in advance, but there is generally at least one batch of limited transactions in the file which is for one-day settlement. Employees may direct their payroll deposits into more than one bank account, so transaction count includes multiples. The contractor will be required to provide a PC or Internet-based batch database solution for use by State Accounting to transmit IRS tax payments and occasional payroll PPD credits. See chart in Exhibit 2 for historical volumes.

State Accounting will use some or all of the requirements. There are no agency-specific requirements that need a response.

11. **Universal Payment Identification Code (UPIC)**

The State requires the contractor to use UPIC account numbers. The State has been using UPICs with different ACH credit payments being paid to the State electronically monthly. The State will continue to expand the use of the UPICs when the opportunity. The State will use the existing UPIC numbers that are in place and expand the use in the right situation. UPIC offers the State fraud protection, the ability to block incoming wires, and ACH debits. It also reduces State expenses by allowing the portability of the UPIC to future selected vendors under the State origination agreement without having to do mass postal mailings to thousands of entities/consumers paying the State by ACH credit.

In the calendar year 2018, UPIC numbers were used 948,104 times with a dollar volume of $4,686,459,281. UPIC numbers were used 1,406,765 times with a dollar volume of $5,130,838,567 in the calendar year 2019.

These figures represent a historical count of prior activity by the State and are not a guarantee of future transaction accounts.

The State is not willing to change the account numbers that are already in place using UPIC.

12. **Daily Export**
The State requires the contractor to provide a daily Comma Separated Value (CSV) export of designated bank accounts' prior day activity by 10 a.m. CT. Four format options are available. This file will be imported into the State ERP system as a part of an automated daily reconciliation process unique to the State. The State requires this information to be exported from a Web-based information reporting application. See Exhibit 1 for descriptions of the formats available.

C. BUSINESS REQUIREMENTS

1. The Contractor is responsible to research Nebraska Revised Statutes for legal responsibilities when doing business with the State. State statutes and the Nebraska Constitution include but are not limited to:
Neb. Rev. Stat. § 48-1122—Prohibition of Discrimination
~~Neb. Rev. Stat § 73-205(3)—Technology Access Standards~~
Neb. Rev. Stat § 73-506(1)—The State cannot pay for deliverables not received
Neb. Rev. Stat § 73-506(2)—Service contracts with unspecified or unlimited duration
Neb. Rev. Stat § 77-2301—The bank must be a state or national bank licensed to do business in the State and will cash State warrants free of charge
Neb. Rev. Stat § 77-2387 to 77-2398—Collateral Requirements
Neb. Rev. Stat § 81-2401 to 81-2408—Prompt Payment Act
Neb. Rev. Stat § 81-118.01-Electronic Payment; acceptance; conditions
Nebraska State Constitution, Article XIII, § 3—Prohibits indemnification and limitations of liability

Commented [GLM13]: NRS 73-205(3) – Technology Access Standards: N/A since RFP is for Automated Clearing House (ACH) Origination Services and not the purchase of information technology.

2. **COLLATERAL REQUIREMENTS**
The contractor shall be responsible to meet State statute requirements for collateralization of State deposits. References to collateralization requirements are found in Neb. Rev. Stat. Section §77-2395, §77-2389, §77-2398, and §77-2387. Collateral requirements are applicable to all State agency accounts serviced under this contract and the contractor is required to pledge 102 percent of the bank account ledger balance. The State requires a statement of collateral be provided on a calendar month basis by the bank and the holding company emailed to NST.TMStaff@nebraska.gov. The agreement for collateral arrangements must require the signature of a State designated representative before collateral for the State is released. The contractor must provide statutorily required collateral, currently estimated to be up to $50 million, without exceptions or be excluded from further award consideration.

Collateral requirement are required for the maximum daily ledger balance, below is the monthly average from July 2019 to December 2019:

January 2019	$4,404,271
February 2019	$3,725,272
March 2019	$3,938,049
April 2019	$4,117,922
May 2019	$3,405,645
June 2019	$3,184,488
July 2019	$3,409,620
August 2019	$2,466,095
September 2019	$2,588,483
October 2019	$2,979,269
November 2019	$3,143,192
December 2019	$3,577,684

3. ACH ORIGINATION BUSINESS REQUIREMENTS
The contractor must comply with the following items:
   a. The contractor must allow all State bank accounts except Nebraska Unemployment and NCSPC be grouped for the purposes of compensating balance. All charges for services must be charged on a calendar month account analysis. The account analysis must be made available online or mailed to the State entity no later than the 15th of each month.

   b. Per Neb. Rev. Stat. 77-2301, the contractor will be required to cash State Treasury warrants and warrants issued by the NCSPC free of charge and without requiring a fingerprint at any branch of the contractor.

Cleared State Warrants

January 2019	21,773	$33,072,059
February 2019	30,873	$30,963,022
March 2019	43,882	$32,390,474
April 2019	56,428	$36,366,996
May 2019	39,073	$36,338,948
June 2019	28,125	$26,136,292
July 2019	24,827	$27,725,441
August 2019	21,608	$26,931,084
September 2019	22,462	$30,898,863
October 2019	23,087	$30,049,204
November 2019	20,403	$27,508,178
December 2019	19,707	$34,351,366

Cleared NCSPC Warrants

January 2019	1961	$423,061.30
February 2019	1889	$362,595.44
March 2019	2738	$674,004.14
April 2019	2825	$695,547.85
May 2019	2433	$515,931.39
June 2019	1839	$365,405.52
July 2019	2131	$396,399
August 2019	1878	$345,155
September 2019	1845	$385,074
October 2019	1981	$393,227
November 2019	1939	$411,445
December 2019	1906	$413,202

c. The contractor must follow all applicable Nebraska DHHS rules and regulations, and may view them at: www.sos.ne.gov/rules-and-regs/regsearch/index.html. NCSPC staff will work with the contractor to resolve questions or issues regarding compliance of these rules and regulations.

d. The contractor will be required to provide an annual report for the period July 1 to June 30 to the State Treasurer's Office for all transaction counts processed. The report will be due August 1 of each year. The report would give transaction counts by Standard Entry Class code and dollars processed per entity using the contract.

e. The contractor must keep the State educated on all changes to the rules and regulations by providing training or materials.

f. The contractor will detail the process the State will use to export using a CSV format the daily bank activity from an online/internet based information reporting application, and in which format the contractor will allow the State to use. (Examples are listed in Exhibit 1 and the contractor must use one of the four formats

g. The contractor must provide credit limit for the day on State accounts of $400 million to allow a wire to be posted to cover the debits for the day.

h. The contractor must provide debit limit for the day on State accounts of $400 million. Largest to date was $373,933,963 for one (1) day.

i. Provide the State Treasurer's Office, through a mutually agreed electronic transmission method, the amount of receipted funds credited to those accounts designated by the State by open of business Central Time on the effective settlement date. The money must be available for withdrawal by 8:30 AM CT.

j. Retain existing UPIC numbers with the option to add or delete numbers.

VI. PROPOSAL INSTRUCTIONS

This section documents the requirements that should be met by bidders in preparing the Technical and Cost Proposal. Bidders should identify the subdivisions of "Project Description and Scope of Work" clearly in the proposals; failure to do so may result in disqualification. Failure to respond to a specific requirement may be the basis for elimination from consideration during the State's comparative evaluation.

Proposals are due by the date and time shown in the Schedule of Events. Content requirements for the Technical and Cost Proposal are presented separately in the following subdivisions; format and order:

A. PROPOSAL SUBMISSION

1. **CORPORATE OVERVIEW**
The Corporate Overview section of the Technical Proposal should consist of the following subdivisions:

a. **BIDDER IDENTIFICATION AND INFORMATION**
The bidder should provide the full company or corporate name, address of the company's headquarters, entity organization (corporation, partnership, proprietorship), state in which the bidder is incorporated or otherwise organized to do business, year in which the bidder first organized to do business and whether the name and form of organization has changed since first organized.

b. **FINANCIAL STATEMENTS**
The bidder must provide financial statements applicable to the firm. Bidder should provide financial statements in a separate file. If publicly held, the bidder must provide a copy of the corporation's most recent audited financial reports and statements, and the name, address, and telephone number of the fiscally responsible representative of the bidder's financial or banking organization.

If the bidder is not a publicly held corporation, either the reports and statements required of a publicly held corporation, or a description of the organization, including size, longevity, client base, areas of specialization and expertise, and any other pertinent information, should be submitted in such a manner that proposal evaluators may reasonably formulate a determination about the stability and financial strength of the organization. Additionally, a non-publicly held firm should provide a banking reference.

The bidder must disclose any and all judgments~~, pending or expected litigation,~~ or other real or potential financial reversals, which might materially affect the viability or stability of the organization, or state that no such condition is known to exist.

Commented [RZC14]: As the nation's fifth largest commercial bank, we are not immune from claims or legal actions initiated from time to time by various parties. While at any given time, including the present, U.S. Bank is involved in disputes and litigation which normally occur in banking operations, these pending cases are generally not considered unusual in number or amount, and, based on past experiences in similar litigation, should not have a material adverse effect on the financial position of U.S. Bank, nor impact the delivery of banking services to State.

The State may elect to use a third party to conduct credit checks as part of the corporate overview evaluation.

c. **CHANGE OF OWNERSHIP**
If any change in ownership or control of the company is anticipated during the twelve (12) months following the proposal due date, the bidder should describe the circumstances of such change and indicate when the change will likely occur. Any change of ownership to an awarded bidder(s) will require notification to the State.

d. **OFFICE LOCATION**
The bidder's office location responsible for performance pursuant to an award of a contract with the State of Nebraska should be identified.

e. **RELATIONSHIPS WITH THE STATE**
The bidder should describe any dealings with the State over the previous five (5) years. If the organization, its predecessor, or any Party named in the bidder's proposal response has contracted with the State, the bidder should identify the contract number(s) and/or any other information available to identify such contract(s). If no such contracts exist, so declare.

f. **BIDDER'S EMPLOYEE RELATIONS TO STATE**
If any Party named in the bidder's proposal response is or was an employee of the State within the past twelve(12) months, identify the individual(s) by name, State agency with whom employed, job title or position held with the State, and separation date. If no such relationship exists or has existed, so declare.

Commented [MMD15]:

Commented [GLM16R15]: No such relationships to disclose per due diligence.

If any employee of any agency of the State of Nebraska is employed by the bidder or is a Subcontractor to the bidder, as of the due date for proposal submission, identify all such persons by name, position held with the bidder, and position held with the State (including job title and agency). Describe the responsibilities of such persons within the proposing organization. If, after review of this information by the State, it is determined that a conflict of interest exists or may exist, the bidder may be disqualified from further consideration in this proposal. If no such relationship exists, so declare.

g. **CONTRACT PERFORMANCE**

If the bidder or any proposed Subcontractor has had a contract terminated for default during the past five (5) years, all such instances must be described as required below. Termination for default is defined as a notice to stop performance delivery due to the bidder's non-performance or poor performance, and the issue was either not litigated due to inaction on the part of the bidder or litigated and such litigation determined the bidder to be in default.

It is mandatory that the bidder submit full details of all termination for default experienced during the past five (5) years, including the other Party's name, address, and telephone number. The response to this section must present the bidder's position on the matter. The State will evaluate the facts and will score the bidder's proposal accordingly. If no such termination for default has been experienced by the bidder in the past five (5) years, so declare.

If at any time during the past five (5) years, the bidder has had a contract terminated for convenience, non-performance, non-allocation of funds, or any other reason, describe fully all circumstances surrounding such termination, including the name and address of the other contracting Party.

h. **SUMMARY OF BIDDER'S CORPORATE EXPERIENCE**

The bidder should provide a summary matrix listing the bidder's previous projects similar to this solicitation in size, scope, and complexity. The State will use no more than three (3) narrative project descriptions submitted by the bidder during its evaluation of the proposal.

The bidder should address the following:

1) Provide narrative descriptions to highlight the similarities between the bidder's experience and this solicitation. These descriptions should include:

   a) The time period of the project;
   b) The scheduled and actual completion dates;
   c) The bidder's responsibilities;
   d) For reference purposes, a customer name (including the name of a contact person, a current telephone number, a facsimile number, and e-mail address); and
   e) Each project description should identify whether the work was performed as the prime bidder or as a Subcontractor. If a bidder performed as the prime bidder, the description should provide the originally scheduled completion date and budget, as well as the actual (or currently planned) completion date and actual (or currently planned) budget.

2) Bidder and Subcontractor(s) experience should be listed separately. Narrative descriptions submitted for Subcontractors should be specifically identified as Subcontractor projects.

3) If the work was performed as a Subcontractor, the narrative description should identify the same information as requested for the bidders above. In addition, Subcontractors should identify what share of contract costs, project responsibilities, and time period were performed as a Subcontractor.

4. SUMMARY OF BIDDER'S PROPOSED PERSONNEL/MANAGEMENT **EXPERIENCE**

The bidder should present a detailed description of its proposed approach to the management of the project.

The bidder should identify the specific professionals who will work on the State's project if their company is awarded the contract resulting from this solicitation. The names and titles of the team proposed for assignment to the State project should be identified in full, with a description of the team leadership, interface and support functions, and reporting relationships. The primary work assigned to each person should also be identified.

The bidder should provide resumes for all personnel proposed by the bidder to work on the project. The State will consider the resumes as a key indicator of the bidder's understanding of the skill mixes required to carry out the requirements of the solicitation in addition to assessing the experience of specific individuals.

Resumes should not be longer than three (3) pages. Resumes should include, at a minimum, academic background and degrees, professional certifications, understanding of the process, and at least three (3) references (name, address, and telephone number) who can attest to the competence and skill level of the individual. Any changes in proposed personnel shall only be implemented after written approval from the State.

a. **SUBCONTRACTORS**

If the bidder intends to Subcontract any part of its performance hereunder, the bidder should provide:

1) name, address, and telephone number of the Subcontractor(s)
2) specific tasks for each Subcontractor(s)
3) percentage of performance hours intended for each Subcontract
4) total percentage of Subcontractor(s) performance hours

5. TECHNICAL APPROACH

The technical approach section of the Technical Proposal should consist of the following subsections:

a. Understanding of the project requirements;
b. Proposed development approach;
c. Technical considerations;
d. Detailed project work plan; and
e. Deliverables and due dates.

Form A
Bidder Proposal Point of Contact
Request for Proposal Number 6304 Z1

Form A should be completed and submitted with each response to this solicitation. This is intended to provide the State with information on the bidder's name and address, and the specific person(s) who are responsible for preparation of the bidder's response.

Preparation of Response Contact Information	
Bidder Name:	
Bidder Address:	
Contact Person & Title:	
E-mail Address:	
Telephone Number (Office):	
Telephone Number (Cellular):	
Fax Number:	

Each bidder should also designate a specific contact person who will be responsible for responding to the State if any clarifications of the bidder's response should become necessary. This will also be the person who the State contacts to set up a presentation/demonstration, if required.

Communication with the State Contact Information	
Bidder Name:	
Bidder Address:	
Contact Person & Title:	
E-mail Address:	
Telephone Number (Office):	
Telephone Number (Cellular):	
Fax Number:	

Form B
Notification of Intent to Submit Proposal
Request for Proposal Number 6304 Z1

Bidder Name:	
Bidder Address:	
Contact Person:	
E-mail Address:	
Telephone Number:	
Fax Number:	

The “Notification of Intent to Submit Proposal” form should be submitted to the State Purchasing Bureau via ShareFile https://nebraska.sharefile.com/r-rfd01d36fdf545779 by the date shown in the Schedule of Events.

REQUEST FOR PROPOSAL FOR CONTRACTUAL SERVICES FORM

BIDDER MUST COMPLETE THE FOLLOWING

By signing this Request for Proposal for Contractual Services form, the Bidder guarantees compliance with the procedures stated in this Solicitation, and agrees to the terms and conditions unless otherwise indicated in writing and certifies that bidder maintains a drug free work place.

Per Nebraska's Transparency in Government Procurement Act, Neb. Rev Stat § 73-603 DAS is required to collect statistical information regarding the number of contracts awarded to Nebraska Contractors. This information is for statistical purposes only and will not be considered for contract award purposes.

_____ NEBRASKA CONTRACTOR AFFIDAVIT: Bidder hereby attests that bidder is a Nebraska Contractor. "Nebraska Contractor" shall mean any bidder who has maintained a bona fide place of business and at least one employee within this state for at least the six (6) months immediately preceding the posting date of this Solicitation.

_____ I hereby certify that I am a Resident disabled veteran or business located in a designated enterprise zone in accordance with Neb. Rev. Stat. § 73-107 and wish to have preference, if applicable, considered in the award of this contract.

_____ I hereby certify that I am a blind person licensed by the Commission for the Blind & Visually Impaired in accordance with Neb. Rev. Stat. §71-8611 and wish to have preference considered in the award of this contract.

FORM MUST BE SIGNED USING AN INDELIBLE METHOD (NOT ELECTRONICALLY)

FIRM:	
COMPLETE ADDRESS:	
TELEPHONE NUMBER:	
FAX NUMBER:	
DATE:	
SIGNATURE:	
TYPED NAME & TITLE OF SIGNER:	

Master Services Agreement
(Governmental Entities)

Customer Tax Identification Number: ______________________

I, ______________________, HEREBY CERTIFY that I am ______________________________
of ______________________________ ("Customer"). I further certify that I have full power and lawful authority to execute this Master Services Agreement ("MSA") on behalf of Customer. I further certify that Customer has taken all action required by its resolutions and other organizational documents, records or agreements to authorize the individuals listed below to act on behalf of Customer in all transactions contemplated under this MSA. Customer shall not be bound by the terms and conditions for those specific services described, to the extent Customer elects not to use such service(s). Customer hereby agrees as follows:

DEPOSIT ACCOUNTS:

1. U.S. Bank National Association ("Bank") is hereby designated as Customer's banking depository. Customer has received a copy of the deposit account terms and conditions and agrees that such terms shall govern the deposit account services provided by Bank. All transactions between Customer and Bank involving any of Customer's accounts at Bank will be governed by the deposit account terms and conditions, this MSA and other disclosures provided to Customer. Customer agrees to provide Bank with a copy of documents requested by Bank.

2. Any one (1) of the persons whose names and signatures appear in Appendix A (individually, an "Account Signer") are hereby authorized to open, add, modify, or close accounts in the name of Customer or its subsidiaries or affiliates, or if applicable, as an agent for another entity, and to sign, on behalf of Customer, its subsidiaries or affiliates or as an agent for another entity, checks, drafts or other orders for the payment, transfer or withdrawal of any of the funds or other property of Customer, whether signed, manually or by use of a facsimile or mechanical signature or otherwise authorized, including those payable to the individual order of the person or persons signing or otherwise authorizing the same and including also those payable to the Bank or to any other person for application, or which are actually applied to the payment of any indebtedness owing to the Bank from the person or persons who signed such checks, drafts or other withdrawal orders or otherwise authorized such withdrawals; and are also authorized to endorse for deposit, payment or collection any check, bill, draft or other instrument made, drawn or endorsed to the accounts governed by this MSA for deposit into these accounts. The authorization contained in the preceding sentence includes transfers of funds or other property of Customer to accounts outside of those accounts Customer maintains at Bank. Any one of the Contract Signers (as defined below) is also authorized to execute any documentation that Bank may require to add or delete Account Signers.

3. Unless Customer otherwise advises Bank in writing and Bank has a reasonable opportunity to act on such writing, the Account Signers listed in Appendix A will be Account Signers on any future deposit accounts that Customer maintains with Bank.

4. Customer acknowledges and agrees that Bank is not required to obtain the consent of or otherwise contact an Account Signer for transactions other than those listed in paragraph 2 above, including, but not limited to, transfers between accounts Customer maintains at Bank, advances on loans Customer has with Bank and transfers to pay down loans Customer has with Bank.

TREASURY MANAGEMENT SERVICES:

5. Bank's treasury management services ("Treasury Management Service(s)") are described in the U.S. Bank Services Terms and Conditions, any supplements thereto, any implementation documents, user manuals, operating guides and other related documentation and disclosures provided by Bank, and any addendum to any of the foregoing (collectively the "Services Agreement"). Customer has received and reviewed the Services Agreement and desires to use one or more of the Treasury Management Services.

6. Any one (1) of the persons whose names and signatures appear in Appendix B (individually, a "Treasury Management Signer") are empowered in the name of and on behalf of the Customer to enter into all transactions contemplated in the Services Agreement including, but not limited to, selecting Treasury Management Services, appointing agents to act on behalf of Customer in the delivery of Treasury Management Services, signing additional documentation necessary to implement the Treasury Management Services and giving Bank instructions with regard to any Treasury Management Service, including without limitation, wire transfers, ACH transfers, and any other electronic or paper transfers from or to any account Customer may maintain with Bank. Bank may, at its discretion, require Customer to execute additional documentation to implement or amend certain Treasury Management Services. In such cases, documentation necessary to implement or amend such Services shall be signed by a Treasury Management Signer. Customer further acknowledges and agrees that Bank may implement or amend Services based on the verbal, written, facsimile, voice mail, email or other electronically communicated instructions that it believes in good faith to have been received from a Treasury Management Signer. Any one of the Contract Signers (as defined below) is also authorized to execute any documentation that Bank may require to add or delete Treasury Management Signers.

MONEY CENTER AND SAFEKEEPING SERVICES:

7. Any one (1) of the persons referenced in Appendix M (individually, a "Money Center Signer") are each authorized and empowered in the name of and on behalf of the Customer to transact any and all depository and investment business through the Bank's Money Center division (the "Money Center") and any securities custodial business through the Bank's Safekeeping Department (the "Safekeeping Department), which such person may at any time deem to be advisable, including, without limiting the generality of the foregoing, selecting any services that may from time to time be offered by the Money Center or the Safekeeping Department (collectively referred to herein as "Money Center Services" and "Safekeeping Services", respectively), appointing additional Money Center Signers or agents to act on behalf of Customer with respect to Money Center Services and Safekeeping Services, signing additional documentation necessary to implement the Money Center Services and Safekeeping Services and giving Bank instructions with regard to any Money Center Service and Safekeeping Service. Customer has received and reviewed the Services Agreement and may use one or more of the Money Center Services or Safekeeping Services from time to time. Bank may, at its discretion, require Customer to execute additional documentation to implement or amend certain Money Center Services or Safekeeping Services. In those cases, the required documentation shall be signed by a Money Center Signer. Customer further acknowledges and agrees that Bank may take any action with respect to any Money Center Services or Safekeeping Services requested by a Money Center Signer based on the verbal, written, facsimile, voice mail, email or other electronically communicated instructions that Bank believes in good faith to have been received from a Money Center Signer. Any one of the Money Center Signers is also authorized to execute any documentation that Bank may require to add or delete Money Center Signers.

FOREIGN EXCHANGE:

8. Bank is authorized by Customer to enter into foreign exchange transactions. Customer has received a copy of the Services Agreement and agrees that the terms contained in the Services Agreement, this MSA and other disclosures provided to Customer shall govern the foreign exchange services provided by Bank. Customer agrees to provide Bank with a copy of documents requested by Bank.

FOREIGN CURRENCY ACCOUNTS:

9. Bank is hereby designated as Customer's banking depository for one or more Foreign Currency Account(s) (the "Foreign Account(s)"). Any one (1) of the persons whose names and signatures appear in Appendix C (individually, a "Foreign Currency Account Signer") are hereby authorized to open, add, modify, or close any Foreign Account(s) in the name of Customer or its subsidiaries or affiliates and to make, on behalf of Customer, orders for payment or transfer of any of the funds or other property of Customer, whether signed, manually or by use of a facsimile or mechanical signature or otherwise authorized, including those payable to the individual order of the person or persons signing or otherwise authorizing the same. Customer hereby expressly authorizes and directs Bank to accept written and oral instructions any payment orders, by telephone or otherwise, consistent with the Services Agreement. Customer has received a copy of the Services Agreement and agrees that the terms contained in the Services Agreement, this MSA and other disclosures provided to Customer shall govern the Foreign Accounts. Any one of the Contract Signers (as defined below) is also authorized to execute any documentation that Bank may require to add or delete Foreign Currency Account Signers.

OTHER SERVICES:

10. A Contract Signer is authorized and empowered on behalf of Customer to transact any and all other depository and investment business with and through Bank, and, in reference to any such business, to make any and all agreements and to execute and deliver to Bank any and all contracts and other writings which such person may deem to be necessary or desirable.

GENERAL:

11. All Account Signers, Treasury Management Signers, Foreign Currency Account Signers and/or Money Center Signers (whether designated in this MSA or in a prior document [for example, a Certificate of Authority or a Treasury Management Services Agreement] executed by Customer) will remain in place until Bank receives written notice of any change and has a reasonable time to act upon Customer's written notice.

12. Any and all transactions by or in behalf of Customer with the Bank prior to the adoption of this MSA (whether involving deposits, withdrawals, Treasury Management Services, or otherwise) are in all respects ratified, approved and confirmed.

13. Customer agrees to furnish Bank with the names and signatures (either actual or any form or forms of facsimile or mechanical signatures adopted by the person authorized to sign) of the persons who presently are Account Signers, Treasury Management Signers, Foreign Currency Account Signers and/or Money Center Signers. Bank shall be indemnified and saved harmless by Customer from any claims, demands, expenses, loss or damage resulting from or growing out of honoring or relying on the signature or other authority (whether or not properly used and, in the case of any facsimile signature, regardless of when or by whom or by what means such signature may have been made or affixed) of any officer or person whose name and signature was so certified, or refusing to honor any signature or authority not so certified.

Each of the undersigned (individually and collectively, the "Contract Signers") certifies that, based on his or her review of Customer's books and records, Customer has, and at the time of adoption of this MSA had, full power and lawful authority to adopt the MSA and to confer the powers herein granted to the persons named, and that such persons have full power and authority to exercise the same.

Each of the Contract Signers further certifies that he or she has the full power and lawful authority to execute this MSA on behalf of Customer, its subsidiaries and affiliates, or if applicable, as an agent for another entity who has entered into an agreement with Customer authorizing Customer to act on such entity's behalf.

Each of the Contract Signers further certifies that the Account Signers, Treasury Management Signers, Foreign Currency Account Signers and/or Money Center Signers have been duly elected to and now hold the offices of Customer set opposite their respective names, and the signatures appearing opposite their names are the authentic, official signatures of the said signer.

The undersigned Contract Signers have executed this MSA as of the ________ day of ____________________,

20 ______.

Contract Signer Signature: ____________________________

Print Name: ____________________________

Print Title: ____________________________

Contract Signer Signature: ____________________________

Print Name: ____________________________

Print Title: ____________________________

Contract Signer Signature: ____________________________

Print Name: ____________________________

Print Title: ____________________________

Contract Signer Signature: ____________________________

Print Name: ____________________________

Print Title: ____________________________

Contract Signer Signature: ____________________________

Print Name: ____________________________

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Contract Signer Signature: ____________________________

Print Name: ____________________________

Print Title: ____________________________

Contract Signer Signature: ____________________________

Print Name: ____________________________

Print Title: ____________________________

Contract Signer Signature: ____________________________

Print Name: ____________________________

Print Title: ____________________________

For Internal Use Only:

Review_______________ Validation Method ______________ TL Review_______________ Imaged_______________

Appendix A

Account Signers

Customer Information

Customer Name: ______________________ Tax Identification Number: ______________

Account Information

Account Name	Account Number	Tax Identification Number

Authorized Account Signers

Name	Title	Specimen Signature

The Contract Signer listed below represents and warrants to the Bank that: (i) the signatures listed above are the true and authentic signatures of the Authorized Account Signer(s); (ii) that each Customer listed above has taken all action required by its respective organizational documents to appoint the Authorized Account Signer(s); and (iii) he/she is authorized to complete this Appendix A for each Customer listed above.

Contract Signer Signature: ______________________ Print Title: ______________________

Print Name: ______________________ Date: ______________________

For Internal Use Only:
Authorized Signers are related to the Master Services Agreement dated: ____________________

Review_______________ Validation Method ______________ TL Review_______________ Imaged_______________

Appendix B

Treasury Management Signers

Customer Information

Customer Name: ______________________ Tax Identification Number: ______________________

Authorized Treasury Management Signers

Name	Title	Specimen Signature

The Contract Signer listed below further represents and warrants to the Bank that the signatures listed above are the true and authentic signatures of the Authorized Treasury Management Signer(s) and that Customer has taken all action required by its organizational documents to appoint the Authorized Treasury Management Signer(s).

Contract Signer Signature: ______________________ Print Title: ______________________

Print Name: ______________________ Date: ______________________

For Internal Use Only:
Authorized Signers are related to the Master Services Agreement dated: ____________________

Review________________ Validation Method ______________ TL Review________________ Imaged________________

U.S. Bank Services

Terms and Conditions

Thank you for choosing U.S. Bank Services. This document provides product information, disclosures and descriptions of the Global Treasury Management, Foreign Exchange, Money Center and Safekeeping Services (“Services”) available at U.S. Bank. Other documents may become part of our Agreement depending on the Services selected. Please read all documents carefully; they will govern the Services provided to you, the Customer.

Customer shall not be bound by the terms and conditions for specific Services to the extent Customer is not using such Service(s).

U.S. Bank National Association

Member FDIC

TABLE OF CONTENTS

I. INTRODUCTION

1. Definitions.

a. "Agent" means any director, officer, employee, representative, affiliate, third-party vendor or any other person or automation acting on behalf of the Customer with the actual, implied or apparent authority of Customer. Bank may rely on any grant of authority until it receives written notice of its revocation and is given a reasonable amount of time to act upon such notice.

b. "Bank" means U.S. Bank National Association and each subsidiary or affiliate of U.S. Bank that provides Services to Customer.

c. "Business Day" means any day on which a majority of Bank's offices are open to the public for substantially all banking functions. Saturdays, Sundays, federal or state holidays or any day recognized by a Federal Reserve Bank as a holiday shall not be considered a Business Day, even if Bank's offices are open.

d. "Customer" means the business entity, and any parent company, subsidiary or affiliate, for whom Bank provides a Service.

e. "Service" or "Services" means one or more global treasury management, foreign exchange, or money center and safekeeping services offered by Bank.

2. Other Agreements, Laws and Regulations. These terms and conditions and the Master Services Agreement (or existing Treasury Management Service Agreement or equivalent document executed by Customer) are collectively referred to herein as the "Agreement". The Services are provided to Customer subject to the following other documents, laws and regulations, which are hereby incorporated into and made part of this Agreement:

a. the setup materials, user guides, and any supplement thereto required by Bank to implement a specific Service (referred to in the Agreement as the "Implementation Documents");

b. the most current fee and availability schedule and other fee disclosures provided to Customer, including account statements;

c. the provisions of the then-current deposit account agreement and accompanying disclosures, which govern deposit accounts and other depository services;

d. the Uniform Commercial Code, as enacted in the State of Minnesota;

e. any applicable automated clearinghouse operating rules, including, without limitation, the National Automated Clearing House Association Operating Rules and Guidelines (the "NACHA Rules"), the Real-Time Payments Operating Rules, and the rules promulgated by the Electronic Check Clearing House Organization (the "ECCHO Rules") and The Clearing House; and

f. federal, state and local laws and regulations applicable to Bank or Customer, including, without limitation, Regulation CC promulgated by the Board of Governors of the Federal Reserve System, 12 CFR Section 229.1, et seq. ("Regulation CC"), all Operating Circulars promulgated by the Board of Governors of the Federal Reserve System, and the regulations overseen by the Office of Foreign Assets Control ("OFAC").

3. Change of Terms. Bank may change the terms of this Agreement at any time upon reasonable written or electronic notice to Customer or by any other method permitted by law. Customer's continued use of the Services after the effective date of any change to the terms shall be deemed Customer's consent to the revised terms. Any other variations to this Agreement must be in writing and executed by Bank. In the event performance of the Services in accordance with the terms of this Agreement would result in violation of any present or future statute, regulation, government policy, or relevant clearing or central bank agreements or settlement systems to which Bank is subject, and which governs or affects the transactions contemplated by this Agreement, then this Agreement shall be deemed amended to the extent necessary to comply with such statute, regulation, policy, agreement or systems, and Bank shall incur no liability to Customer as a result of such violation or amendment. No course of dealing between Bank and Customer will constitute a modification of this Agreement or constitute an agreement between the Bank and Customer regardless of whatever practices and procedures Bank and Customer may use.

4. No Third-Party Beneficiaries/Third-Party Claims. Services provided by Bank are for the sole and exclusive benefit of Customer, and no other persons or organizations shall have any of the rights and remedies arising under this Agreement. Customer agrees to indemnify, defend and hold Bank harmless from and against any and all claims, demands, expenses, losses, liabilities and damages of third parties of any nature whatsoever, including, without limitation, reasonable attorney fees and court costs at trial or appeal arising directly or indirectly from any Service delivered to Customer pursuant to this Agreement.

5. Images. Bank may create a microfilm, optical disk, or other electronic image of the Agreement or Implementation Document. Bank may store the electronic image of such Agreement and/or Implementation Document in its electronic form and then destroy the paper original as part of Bank's normal business practices, with the electronic image deemed to be an original.

6. Foreign Account Tax Compliance Act. If a payment made by either party under this Agreement is or could become subject to the U.S. Federal withholding tax imposed by Sections 1471 through 1474 of the Internal Revenue Code of 1986, as amended ("FATCA"), then (i) each party shall provide to the other party such information, and shall disclose to the applicable governmental authorities such information, as may be required in order for such party to comply with all applicable requirements of FATCA and to determine that the other party has complied with FATCA, and (ii) a party that fails to comply with FATCA shall indemnify the other party for all costs, damages, and liabilities arising out of such party's failure to comply with FATCA. Customer is responsible for providing Bank with all necessary documentation to establish that payments to Customer are exempt from FATCA withholding.

7. Disclaimer of Warranties. BANK MAKES NO WARRANTIES, EXPRESS OR IMPLIED, IN LAW OR IN FACT, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND OF MERCHANTABILITY, EITHER TO CUSTOMER OR TO ANY OTHER PARTY, WITH RESPECT TO THE SERVICES PROVIDED BY BANK OR ITS AGENTS OR WITH RESPECT TO SOFTWARE PRODUCTS PROVIDED OR MADE AVAILABLE TO THE CUSTOMER FOR ITS USE BY BANK IN CONNECTION WITH THIS AGREEMENT AND ANY SERVICE.

II. TERMS APPLICABLE TO ALL GLOBAL TREASURY MANAGEMENT, FOREIGN EXCHANGE AND MONEY CENTER AND SAFEKEEPING SERVICES

1. Services. Bank may provide Services that are not specifically included in the Services section of this Agreement. By accepting and using any Service, Customer agrees that the Service will be governed by this Agreement and any other conditions communicated to Customer by Bank. Certain Services included in this Agreement may not be available or may not be provided in certain market areas.

2. Proprietary Information. Customer acknowledges that this Agreement, all related documentation and computer programs and systems used in providing Services, and all information related thereto constitute proprietary property of Bank that is of great commercial value. Customer agrees that it shall not acquire any proprietary interest or rights therein as a result of its use of the Services and shall keep all such proprietary information strictly confidential.

3. Representations and Warranties. Customer and Bank each represent and warrant to the other, as of the date this Agreement is entered into and at the time any Service is used or performed, that: (a) it is validly existing and in good standing under the laws of the jurisdiction of its organization; (b) it has all requisite power and authority to execute and deliver, and to perform its obligations under, this Agreement and each Service used or performed by it; (c) this Agreement has been duly authorized and executed by it and constitutes its legal, valid and binding obligation; (d) any consent or authorization of any governmental authority or third party required to be obtained by it in connection with this Agreement or any Service used or performed by it has been obtained; and (e) the Services received are for business use only and are not primarily for personal, family or household use. In addition, Customer represents and warrants to Bank that this Agreement will not violate: (i) any law, rule, regulation, order, writ, judgment, injunction, decree or award binding on Customer; or (ii) the provisions of any agreement to which Customer is a party or is subject, or by which it, or its assets, is bound, or conflict with or constitute a default thereunder.

4. Financial Review. Bank's willingness to provide Services to Customer is dependent on the Customer's financial condition. Customer's financial condition is subject to review by Bank from time to time, and such reviews must be satisfactory to Bank in its sole discretion and opinion. Customer shall, upon request, provide to Bank any such information as Bank may require to perform any such review. Customer's failure to meet such standards or provide such information or assistance when requested shall constitute a breach of this Agreement and shall permit Bank to cease providing Services upon written notice to Customer.

5. Fees. Unless otherwise agreed to by Bank in writing, Customer shall pay Bank the fees, charges and assessments set forth for the Services provided in the most current fee schedules and other fee disclosures provided to Customer (including account statements), plus additional fees and expenses for extraordinary Services. The price schedule for each Service shall be deemed accepted by Customer upon provision of the Service to Customer. In addition, Customer shall pay Bank the amount of any taxes levied or leased on fees charged pursuant to this Agreement, including, without limitation, federal, state, or local privilege excise or sales taxes based on gross revenue, any taxes or amount in lieu thereof paid or payable by Bank, excluding Bank's income taxes and any assessments charged to Bank directly as a result of providing the Services. Bank may change the amount or type of service charges from time to time. Fees for Services used by Customer may be charged in full to Customer's account(s) or may be offset through account analysis by applying earnings credit to Customer's service charges to determine a single monthly net service charge. The applicable earnings credit rate is established by the Bank and will change from time to time without advance notice to Customer. Customer's net service charge could be zero if such earnings credit exceeds total charges in a given month. If Customer's earnings credit is insufficient to offset the amount due hereunder, Customer agrees to pay such amount to Bank upon demand. Customer authorizes Bank to debit Customer's account(s) with Bank for any and all fees, expenses or other charges owed by Customer to Bank under this Agreement.

6. Deposit Accounts. Most Services require that Customer maintain one or more deposit accounts with Bank. All checks, wire transfers, ACH payments and other items deposited into such accounts are provisionally credited and taken subject to later verification by Bank and Bank's receipt of final settlement. Deposited items that are deposited and later returned unpaid will be charged against the account without prior notice. Customer agrees to pay Bank for any overdraft or overpayment in any of Customer's accounts. Customer authorizes Bank to charge any account Customer maintains with Bank for any amount remaining due under this Section.

7. Security Interest. Customer grants to Bank a consensual possessory security interest in Customer's deposit accounts maintained with Bank and the funds held therein to secure payment of all of Customer's obligations under this Agreement.

8. Accuracy and Timeliness of Information. Bank will use reasonable efforts to provide the information requested through the Services in a prompt fashion but shall not be liable for temporary failure to provide timely information. In such event, Customer shall be responsible for carrying out banking business through alternative delivery channels. Bank shall not be liable for any inaccurate or incomplete information with respect to transactions which have not been completely processed or posted to Bank's systems prior to being made available pursuant to the Services.

9. Authorized Signers and Users. Customer shall appoint certain Authorized Signer(s) in the Master Services Agreement or in such other format or document as may be agreed by Bank. Customer agrees that Authorized Signers shall be authorized to act on behalf of Customer in all actions taken under this Agreement and may enter into all transactions contemplated in this Agreement, including, without limitation, selecting Services for the benefit of Customer, appointing initial system administrator(s), and signing additional documentation that may be necessary to implement Services and giving instructions with regard to any Service, including, without limitation, wire transfers, ACH transfers and other electronic or paper transfers from or to any account Customer maintains with Bank. The Authorized Signer(s) or Customer's designated system administrator(s) shall appoint Agents to access or use the Services provided for the benefit of Customer ("Authorized Users"). Authorized Users may act on behalf of Customer for a particular Service in accordance with the relevant Implementation Documents or other document(s) establishing the Authorized Users' responsibilities or in accordance with the authority granted by Customer. Customer may revoke the authority of or change the Authorized Signers at any time upon prior written notice and execution of additional documentation required by Bank. Such change or revocation shall not be binding upon Bank until it has received the required written notice and has had a reasonable opportunity to act thereon. In any event, Bank may act on instructions that it believes in good faith were provided by an Authorized Signer or Authorized User, or anyone purporting to be an Authorized Signer or Authorized User.

10. Forms Approval and Service Implementation. Bank reserves the right to approve the form of Customer's checks, drafts, deposit slips and similar documentation. Prior to initiating a new account or Service, or at any other necessary time, Customer agrees to provide all information and conduct any test that Bank may reasonably request, including, without limitation, completing Implementation Documents and signature cards, providing corporate resolutions and other documents, and assessing test tapes and transmissions. Customer acknowledges that Services will not commence or continue until such time as an approved item or test is provided to Bank and determined by Bank to be satisfactory. Customer shall be responsible for initial product installation, whether or not Bank provides telephone or on-site installation support.

11. Security Procedures.

a. Introduction. Bank and Customer shall agree to one or more security procedures that must be used in connection with certain Service(s). Customer acknowledges and agrees that it has been informed of and understands Bank's security procedures, and that such security procedures are commercially reasonable. Customer agrees to be bound by any payment order, transaction or service change order that is acted upon by Bank in accordance with such security procedure. Customer understands that the security procedures are not intended for the purpose of detecting errors in the transmission or content of information controlled by Customer. If Customer selects certain security procedures to use in connection with a Service and those security procedures provide less protection against unauthorized transactions or activity than other security procedures offered by Bank in connection with such Service, the security procedures selected by Customer shall be deemed commercially reasonable to the same extent as the security procedures offered by Bank that provide greater protection. Bank reserves the right to issue new security procedures and/or to cancel or change any security procedures by giving verbal or written notice to Customer. Bank also reserves the right to periodically audit Customer's security procedures and information technology processes, and to mandate controls or suspend Services until Customer complies with such security procedures.

b. Access. Customer shall be solely responsible for designating authorized access to Services. Access to Services may be controlled through the use of user IDs, personal identification numbers, passwords, digital certificates/signatures, biometric authentication, private keys or other security devices ("Codes"). Customer is solely responsible for maintaining its own internal security and agrees to use the utmost care in selecting any company, individual or automation given access to one or more of the Services. Codes that are assigned to individual Authorized Users shall not be shared with any other person, including other Authorized Users and Customer shall not disclose any information regarding the Services that an unauthorized user would find helpful to obtain access to all or part of any Service. Customer assumes all risk of accidental disclosure or inadvertent use of any Codes, whether such disclosure or use arises out of Customer's negligent or deliberate acts or otherwise. If Customer or its Agents has reason to believe that any security procedures or Codes have or may become known by unauthorized persons (whether or not employed by Customer) or if Customer believes its network or computer systems have been compromised or its computers infected, Customer shall immediately notify Bank by telephone and confirm such verbal notification in writing to Bank within 24 hours. Bank will replace the security procedures and/or Codes in accordance with Bank's procedures. Customer shall be solely responsible for funds transfer instructions and other communications or transactions initiated before Bank received Customer's notice and had a reasonable time to act on such notice. Customer agrees to defend, indemnify and hold Bank harmless from and against any claims, losses, damages, costs, expenses, fines and other liabilities arising out of Customer's failure to maintain the security and confidentiality of the Codes or arising out of the unlawful use of any website or portal by Customer or any person who obtains access to a website or portal using the Codes.

c. Confidentiality. Customer and Bank represent, warrant and mutually agree that all confidential information concerning the other party or parties that comes into its possession in connection with any of the Services will be maintained in strictest confidence and shall not be used or divulged to any other party except as may be necessary or advisable for the due performance of any of the Services or as required by applicable law. Bank shall maintain physical, electronic, and procedural safeguards to keep Customer's confidential information secure. Customer's obligation to maintain the confidentiality of all security procedures shall survive the termination of any Service or this Agreement. Customer acknowledges that certain Services may involve the handling of confidential consumer information that may be subject to privacy laws and regulations, including unauthorized access or breach notification regulations. Customer agrees to notify Bank immediately if Customer sends or receives protected health information that requires the execution of a business associate agreement.

d. Verbal or Written Instructions. For some Services, Bank may choose to honor Customer's request to give Bank verbal or written instructions regarding the Services. Customer agrees that Bank may in good faith rely on such verbal or written instructions that purport to come from an authorized Agent of the Customer without independent verification by Bank.

e. Fraud prevention measures. Bank offers certain products, Services and security procedures, such as Positive Pay, account blocks or filters, and multi-factor authentication, that are designed to detect or deter fraud. Failure to use such products, Services or security procedures could substantially increase the likelihood of fraud. If Customer fails to implement any of these products, Services or security procedures, or if Customer fails to follow these or other precautions reasonable for its particular circumstances, Customer agrees that, except with respect to liability, loss or damage caused by Bank's own lack of good faith or failure to exercise ordinary care: (i) it will be precluded from asserting any claims against Bank for paying any unauthorized, altered, counterfeit or other fraudulent item that such product, Service, security procedure or precaution was designed to detect or deter; (ii) Bank will not be required to re-credit Customer's account or otherwise have any liability for paying such items; and (iii) Customer will pay all costs and expenses incurred by Bank for all efforts undertaken by Bank to recover any losses incurred by Customer.

12. Unsecured Electronic Transmissions and Instructions. Bank shall transmit to Customer information related to Services via secure electronic transmissions. If Customer elects to send or receive instructions or reports from Bank via unsecured electronic means, including, without limitation, facsimile transmission, voice mail, unsecured email, pager or other unsecured electronic or telephonic methods ("Electronic Transmission"), Customer acknowledges that such Electronic Transmissions are inherently insecure communication methods due to the possibility of error, delay and observation or receipt by unauthorized personnel. Bank may rely in good faith on Customer's instructions regarding how and to what number or email address Electronic Transmissions should be sent and may rely on any Electronic Transmission that it reasonably believes to have been initiated by the Customer. Should Customer elect to send or receive unsecured Electronic Transmissions to or from Bank, Customer assumes all risks, and Bank shall not be liable for any loss, that results from the nonreceipt, disclosure, alteration or unauthorized access of any such unsecured Electronic Transmission.

13. Account Blocks and Filters. ACH debit blocks and check blocks prevent ACH debits and checks from posting to Customer's account. ACH filters and check filters enable Customer to set various criteria to authorize certain transactions to post to Customer's account while excluding others. If an ACH debit or check filter is established by Customer, any ACH debit entry or check presented that does not specifically meet the criteria will be dishonored or sent back to the originator of the transaction. Customer acknowledges that the effectiveness of the filters is dependent on the accuracy and timeliness of the information provided by Customer. In addition, Customer acknowledges that payments to certain Bank-approved vendors cannot be blocked and that certain ACH transactions such as returns, settlements or adjustments cannot be blocked per NACHA Rules. If Customer desires to modify a block or filter setting, Customer shall notify Bank at least 72 hours in advance of the changes taking effect.

14. Computer Equipment and Software. Many Services require the use of computer hardware and software or other equipment. Customer is responsible for maintaining its computer and equipment (including those provided by or through Bank for use with Services) in good working order. Customer shall ensure that computers and other equipment have the necessary compatibility and format to interface with Bank's systems, including, without limitation, the ability to support the Bank's security procedures. Customer agrees to install upgrades and other system enhancements within a reasonable time after being requested to do so by Bank. License agreements for necessary software shall either be embedded in the software or separately documented. Customer agrees to comply with all applicable software license agreements, whether or not such agreements have been executed by Customer. Customer has no rights or ownership in any software provided by or through Bank and shall not transfer, copy, alter, modify, reverse engineer, reproduce, or convey in any manner, in whole or in part, any such software. Customer shall return all software and user manuals associated with any software upon request. Bank makes no representations or warranties with respect to any equipment or software provided by Bank.

15. Transactions on Non-Business Days/Cutoff Times. Transactions, deposits, payment orders, entries or other requests by Customer received by Bank on a non-Business Day, after established cutoff deadlines, or during a maintenance window may be treated by Bank as received on the next Business Day or may not be processed at all. Bank may change any cutoff time or other deadline at any time. Bank will make a reasonable effort to notify Customer of any changes in advance.

16. Customer-Initiated Transactions and Instructions. Bank will honor Customer's transactions and instructions (including adjustments, amendments and cancellations) only when Customer has complied with this Agreement and related policies and procedures. Bank will be under no obligation to honor, either in whole or in part, and may, in its sole discretion, delay, suspend or reject any transaction or instruction that:

a. exceeds Customer's collected or available funds on deposit with Bank;

b. Bank has reason to believe may not be authorized by Customer;

c. involves funds subject to a hold, dispute or legal process preventing their withdrawal;

d. violates any provision of any applicable regulation of the Federal Reserve Bank or any other federal, state or local regulatory authority; or

e. Bank has reasonable cause not to honor, for the protection of either Bank or Customer.

17. Inconsistent Name and Account Number. If Customer or third party acting on Customer's instruction initiates a fund transfer instruction or payment order ("Payment Order") to Bank that describes the person to receive the proceeds of such Payment Order (the "Beneficiary"), the Beneficiary's bank, or an intermediary bank by name and an account or other identifying number, Bank and subsequent parties to the Payment Order may rely on and act solely on the basis of such number, even though the name and number do not agree and even though Bank and subsequent parties know or have reason to know of the inconsistency. Customer's obligation to pay the amount of the Payment Order to Bank is not excused in such circumstances. With respect to incoming Payment Orders that do not include an account number recognizable to Bank, Bank may return the Payment Order to the sending financial institution without incurring any liability to Customer.

18. Intercompany Services/Authority to Transfer or Commingle Funds. In the event that Customer lists entities in an appendix to the Master Services Agreement or in any other document, or otherwise requests Bank to provide Services to a parent company, subsidiary, affiliate, or other commonly owned company, Customer agrees that it shall be jointly and severally liable for such company's obligations under this Agreement. Customer hereby represents and warrants to Bank that any and all transfers and commingling of funds required or permitted by any Service or requested by Customer, and all other aspects of the performance hereby by Bank and Customer, have been duly authorized by all necessary parties, including, without limitation, the account holder of each account, and that Customer has obtained and shall maintain in its regular business records and make available to Bank upon reasonable demand, for a period of seven (7) years after termination of the Service, adequate documentary evidence of such authorization from the account holder of each account, executed by the duly authorized officer(s) of each such account holder in accordance with that account holder's bylaws and/or board resolutions. Customer further represents and warrants that each transfer or commingling of funds authorized hereunder is not in violation of any agreement, bylaw or board resolution of Customer or any of its affiliates or subsidiaries, nor is it in violation of any applicable federal, state, local law, regulation, of any decree, judgment, order of any judicial or administrative authority. Each representation and warranty contained herein shall be continuing and shall be deemed to be repeated upon Bank's effecting each transfer and commingling of funds authorized hereunder.

19. Customer Records. This Agreement and the performance of Services by Bank shall not relieve Customer of any obligation imposed by law, clearinghouse rules (including the NACHA Rules and ECCHO Rules), or by contract regarding the maintenance of records, or from employing adequate audit, accounting and review practices as are customarily followed by similar businesses. In addition, Customer shall retain and provide to Bank, upon request, all information necessary to remake or reconstruct any deposit, transmission, file or entry for thirty (30) days following receipt by Bank of the deposit, file, entry, transmission or other order affecting an account.

20. Account Communications and Review Period. Customer agrees to regularly and promptly review and verify all statements, reports, check payment records, wire transfer instructions, confirmations, adjustments, charges, and other transactions ("Account Communications"). Customer may receive or access Account Communications electronically, including without limitation, delivery by posting to a password-protected website or database. Customer acknowledges that any Account Communication provided by Bank through electronic delivery is deemed to constitute good and effective delivery when posted by Bank, regardless of whether Customer actually or timely receives or accesses such Account Communication. Unless a different review period is specified elsewhere in this Agreement, Customer shall, within a reasonable time, which in no event shall be greater than thirty (30) calendar days following the day Bank first mails, electronically transmits or otherwise makes data available to Customer ("Review Period"), notify Bank of any error or discrepancy between Customer's records and any Bank notice or statement, or any transaction or transfer Customer believes was not authorized. If Customer fails to notify Bank of such unauthorized transaction within the Review Period, Customer agrees that the failure to report any such errors or unauthorized transactions shall relieve Bank of any liability for the unreported erroneous or unauthorized transaction. In accordance with NACHA Rules, Customer must report an unauthorized ACH debit entry to the Customer's account by the established deadline on the Business Day following the settlement date of the unauthorized entry. Otherwise, Customer's sole recourse is to the originator of the transaction.

21. Monitoring and Recording Communications. Customer acknowledges and agrees that Bank, or anyone acting on Bank's behalf, may monitor and/or record any communication between Customer, or its Agent, and Bank, or anyone acting on Bank's behalf, for quality control and other purposes. Customer also acknowledges and agrees that this monitoring or recording may be done without any further notice to Customer or its Agent. The communication that may be monitored or recorded includes telephone calls, cellular or mobile phone calls, electronic mail messages, text messages, instant or live chat, or any other communications in any form.

22. Limitation of Bank's Liability for Services. Customer acknowledges that Bank's fees for Services are very small in relation to the amounts of transfers initiated through these Services and consequently Bank's willingness to provide such Services is based on the liability limitations contained in this Agreement. In addition to greater limitations on Bank's liability that may be provided elsewhere in this Agreement, Bank's liability related to any Service shall be limited exclusively to actual proven damages arising directly from its own gross negligence or willful misconduct. BANK WILL NOT, UNDER ANY CIRCUMSTANCES, BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, CONSEQUENTIAL, PUNITIVE OR SIMILAR LOSSES OR DAMAGES, WHETHER OR NOT THE LIKELIHOOD OF SUCH LOSSES OR DAMAGES WAS KNOWN BY EITHER PARTY AT THE TIME CUSTOMER FIRST OBTAINS SERVICES FROM BANK OR AT THE TIME ANY INSTRUCTION OR ORDER IS GIVEN TO BANK PURSUANT TO ANY SERVICE, AND WHETHER SUCH LOSSES OR DAMAGES ARISE FROM TORT, CONTRACT, LOSS OF INVESTMENT OPPORTUNITY, LOST OR REDUCED PROFITS, OR OTHERWISE. Bank's maximum liability for any loss of interest shall be calculated using a rate equal to the average Federal Funds rate at the Federal Reserve Bank of New York for the period involved. Notwithstanding the foregoing, Bank shall not be liable for any losses or damages caused, in whole or in part, by the action or inaction of Customer, or any Agent or employee of Customer, whether or not such action or inaction constitutes negligence or a breach of this Agreement. Bank shall not be liable for any damage, cost, loss, liability or delay caused by a force majeure event, including but not limited to, accident, strike, labor dispute, fire, flood, war, riot, terrorist act, government restrictions, exchange or market rulings, market volatility, suspension of trading, equipment breakdown, electrical, telephone, Internet or mechanical failures, acts of nature, any cause which is attributable to a third party, or any other cause or event that was beyond Bank's reasonable control. Customer agrees that the fees charged for the performance of the Services shall be deemed to have been established in contemplation of these liability limitations.

23. Dispute Resolution.

a. Governing Law. Except as otherwise provided herein, this Agreement shall be governed by the laws of the State of Minnesota, without regard to conflicts of law principles.

b. Jury Trial Waiver. To the fullest extent permitted by law, Bank and Customer hereby agree to waive trial by jury in any judicial proceeding involving, directly or indirectly, any matter (whether in tort, contract or otherwise) in any way arising out of, related to or connected with these Services or this Agreement. Bank and Customer represent and warrant to each other that this jury trial waiver is knowingly, willingly and voluntarily given.

c. Jurisdiction and Venue. Customer consents to the jurisdiction of the courts of the State of Minnesota, waives any argument that such venue is inconvenient and agrees to bring litigation commenced in connection with this Agreement in either the District Court of Hennepin County or the United States District Court, District of Minnesota, Fourth Division.

d. Collection Costs. Should Bank have to undertake any action to recover any amount due under this Agreement for the Services, including, without limitation, fees, overdrafts or overpayment, Customer will be liable to Bank for the cost of such effort, plus reasonable attorney fees.

e. Adverse Claims. If Bank receives an adverse claim against any account, and Bank reasonably believes that it will not be protected if the claim is ignored, Customer agrees that Bank may place a hold on the affected account. Any such hold will remain in place only so long as reasonably necessary to resolve the claim or employ legal remedies to allow a court to decide such claim. Assuming compliance with this Section, Bank shall have no liability for dishonored transactions due to the hold, and Customer agrees to reimburse Bank all costs, including reasonable attorney fees, incurred due to such adverse claim.

24. Necessary Third-Party Service Providers.

a. Third-Party Networks. Some Services are provided by Bank through access to a third-party network. Such Services are dependent upon the availability of the third-party network on conditions acceptable to Bank. Bank reserves the right to discontinue the Service or provide the Service through an alternative third-party network and shall have no liability should such network become unavailable. Bank does not warrant and shall not be responsible for Services received by Customer from any third-party network.

b. Third-Party Vendors. Customer agrees that Bank may, at its sole discretion and at any time without notice to Customer, engage third-party vendors to provide a Service, or portions thereof, to Customer, or to support Bank in its provision of a Service to Customer. Customer acknowledges that Bank's third-party vendors may perform certain functions offshore. Some Services and/or computer equipment and software are provided to Customer by a third-party vendor selected by Customer who is unaffiliated with Bank. In those cases, the third-party vendor is acting as Customer's Agent rather than an agent of Bank, and Customer agrees to be bound by such third party's acts or omissions. Bank does not warrant and shall not be responsible for Services provided by unaffiliated third-party vendors. Customer authorizes Bank to disclose to any third-party vendor of Customer or Bank information concerning Customer to the extent required to deliver the requested Service.

25. Notices. All written notices to Bank shall be delivered or mailed to the address designated by Bank. Notices, including but not limited to, Account Communications sent to Customer shall be delivered or mailed to Customer's current lead account address or other known address if deemed more appropriate by Bank under the circumstances. Notices may be delivered to some Customers in electronic format, including posting to Bank's website, delivery via facsimile to a number on file, or delivery to an electronic mail address on file or used by an Authorized Signer or Authorized User.

26. Severability. To the extent possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision shall be held to be invalid, illegal or unenforceable, such provision shall be ineffective only to the extent of such invalidity, illegality or unenforceability, without rendering invalid, illegal or unenforceable the remainder of any such provision or the remaining provisions of this Agreement.

27. Waiver. A waiver by Bank or Customer of any term or provision shall not be construed as a waiver of such term or provision at any other time, or of any other term or provision. Bank's waiver of the enforcement of any of the terms of this Agreement with respect to any transaction or series of transactions will not affect Bank's right to enforce any of its rights with respect to other Customers or to enforce any of its rights with respect to later transactions with Customer.

28. Assignment. In addition to Section 24 above, Bank may at any time assign or delegate its rights and duties under this Agreement. Customer may not assign or transfer its rights or obligations hereunder to any other person or entity without Bank's written consent, which consent shall not be unreasonably withheld.

29. Termination. Any Services may be terminated by either party upon 30 days' prior written notice to the other. Bank may also terminate or suspend any Services immediately without notice to Customer if any of the following occurs: (a) Customer becomes insolvent or files, or has filed against it, any bankruptcy or other insolvency, reorganization, liquidation or dissolution proceeding of any kind; (b) a material adverse change occurs in Customer's business or financial condition; (c) Bank has reason to believe that Customer has engaged in fraudulent or illegal activity; (d) Customer fails to maintain balances in accounts sufficient to cover overdrafts; (e) Customer violates, or is in default under, the terms of this Agreement or any other agreement with Bank; (f) Customer fails to comply with security procedures or fails to provide information reasonably requested by Bank; (g) Bank determines it is impractical or illegal to provide any Services because of changes in laws, regulations or rules; (h) Bank, in good faith, is unable to satisfy itself that any Services have been properly authorized by Customer; or (i) Bank, in good faith, deems itself insecure. Notwithstanding any termination, the terms of this Agreement shall apply to all transactions which have been initiated prior to termination.

III. TERMS APPLICABLE TO ALL INTERNET-BASED SERVICES

1. Introduction. Bank offers a number of Services over the Internet. If requested by Customer and agreed to by Bank, Bank will grant Customer access to one or more of Bank's Internet Services in the manner established by Bank. Customer agrees that its use of Services from time to time offered by Bank via the Internet (collectively, the "Internet Services") shall be governed by:

(i) this Section and all other relevant sections of this Agreement, including, without limitation, sections governing the specific Services that are offered online;

(ii) the other agreements, laws and regulations described in Section I.2 of this Agreement; and

(iii) the applicable Terms of Use, as defined in Section III.2 below.

2. Terms of Use. Bank may post terms or rules of use ("Terms of Use") governing Customer's use of the Internet Services on Bank's website(s) for accessing such Services. Such Terms of Use shall supplement and amend the terms set forth in this Section. In the event of a conflict between the Terms of Use and the rules set forth in this Agreement, the Terms of Use shall govern. Customer's initial use of an Internet Service shall constitute an acceptance of the Terms of Use posted on the website. Bank may change the Terms of Use for any Internet Service at any time by posting notice of such change via an alert or message on a broadcast or message page of the website ("Broadcast Message"). All changes shall have an effective date. Customer's use of the Internet Service after the effective date of any such change shall constitute an acceptance of the revised Terms of Use by Customer. Customer is responsible for establishing an internal procedure for reviewing the Broadcast Message page on a regular basis to obtain timely notice of changes to the Terms of Use. In the event that a specific Internet Service does not have Broadcast Message capability, Customer will be notified of any changes in accordance with Section II.25 hereof. Neither Bank nor Customer will contest the validity, enforceability, or admissibility of hard copy printouts of the Terms of Use for any website or notices of changes to such Terms of Use provided in accordance with this Section. Copies of such Terms of Use or notices, if introduced as evidence in tangible form in any judicial or administrative proceeding, will be admissible to the same extent and under the same conditions as other business records originated and maintained in documentary form.

3. Security Procedures. Customer agrees to use the Internet Services in accordance with the security procedures established by Bank. Bank reserves the right to reject any transaction or Service request that is not made in accordance with such procedures. Customer shall at all times use a Web browser that supports the level of encryption used by Bank as part of its security procedures. Due to emerging technologies and ensuing changes in security practices, Bank reserves the right to supplement or change its security procedures from time to time upon reasonable notice to Customer. Customer acknowledges and agrees that, notwithstanding anything to the contrary set forth in the Agreement, in matters of security, reasonable notice may be less than a day's notice or even, in some cases, notice after the fact. Customer is solely responsible for maintaining a secure work environment to ensure against the use of Internet Services by unauthorized individuals or unauthorized automated access. Security procedures to be followed by Customer include, without limitation, informing Authorized Users that any passwords should not be shared, securing physical access to the terminals used for Internet Services when an Authorized User has logged in to an application or system and, if applicable, identifying secure methods for controlling authorized automated access to an application or system.

4. System Administrator. Customer shall designate one or more System Administrator(s). The System Administrator shall be responsible for setting up Internet Services and for establishing internal security procedures related to such Internet Services, which may be made available through applications or systems offered by Bank, including, without limitation, accepting delivery of software, system-wide configuration of Bank accounts, appointing Authorized Users, establishing authority levels, authorization requirements and payment limits, and distributing and resetting IDs, passwords and other internal security devices related to the Internet Services. Customer represents and warrants to Bank that any actions taken by the System Administrator in relation to the Internet Services including, without limitation, the appointment of Authorized Users and the access, automation and privileges granted to such Authorized Users, are duly authorized by Customer.

5. Other Customer Responsibilities.

a. Equipment and Software. Customer is responsible for obtaining (from Bank, in some instances), installing and maintaining the computer and communications equipment (including, without limitation, personal computers and modems), software, Web browsers, Internet access and communications services necessary to access and use the Internet Services in accordance with this Agreement.

b. Use of Internet Services. Customer shall use its access to Internet Services and websites operated by or on behalf of Bank only to conduct its business through or with Bank and agrees to limit access to those Agents who require access to Internet Services.

c. Antivirus Protection. Customer agrees to run antivirus software before transmitting data to or through any website. Customer may use any commercially available, industry recognized antivirus software of the type that detects and disinfects viruses automatically, without the need for the Customer to execute virus scanning for each file manually. Customer shall update its antivirus software on a regular basis and in no event less often than once every week.

d. Anti-malware Protection. Bank may offer complimentary anti-malware software for use with certain Services that is designed to detect, deter or destroy different types of malware. Failure to install anti-malware software offered by Bank could substantially increase the likelihood of fraud and other losses. If Customer fails to install software offered by Bank, Customer agrees that, except with respect to losses caused by Bank's own lack of good faith or failure to exercise ordinary care, it will be precluded from asserting claims against Bank for any losses caused by malware which such software would have detected, deterred or destroyed. Bank will not be required to re-credit Customer's account or otherwise have any liability for such losses.

e. Network Security. Customer agrees to install and utilize current industry-standard network security for its information technology systems that access Services via the Internet. Network security protection includes, but is not limited to, firewalls and intrusion detection systems. For certain Services, Bank may require Customer maintain specific network security protection in order to access the Services.

6. Disclaimer of Warranties. BANK PROVIDES ALL INTERNET SERVICES ON AN "AS IS," "AS AVAILABLE" BASIS AND MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND WITH RESPECT TO THE INTERNET SERVICES OR THE CONTENT OR SECURITY OF ANY WEBSITE. BANK DISCLAIMS ALL SUCH REPRESENTATIONS AND WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING, WITHOUT LIMITATION, ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. WITHOUT LIMITING THE FOREGOING, BANK DOES NOT WARRANT THAT THE OPERATION OF ANY WEBSITE WILL BE UNINTERRUPTED OR ERROR-FREE. CUSTOMER IS RESPONSIBLE FOR TAKING APPROPRIATE PRECAUTIONS AGAINST DAMAGE TO ITS OPERATIONS WHICH COULD BE CAUSED BY INTERRUPTIONS OR MALFUNCTIONS OF ANY WEBSITE AND ASSUMES THE RISK OF SUCH OCCURRENCES.

IV. TERMS APPLICABLE TO SPECIFIC GLOBAL TREASURY MANAGEMENT SERVICES

The following are additional terms and conditions applicable to specific Treasury Management Services offered by Bank. Bank may change the number or type of Services offered at any time. Customer shall not be bound by the terms and conditions for the specific Services described in Sections IV, V and VI of this Agreement to the extent Customer is not using such Service(s).

A. E-PAYMENT SERVICE

Customer may select the E-Payment Service that would allow its customers ("Payers") to make convenient payments to Customer through the Internet, an Integrated Voice Response (IVR) system or a 'live' call center. In addition, Customer may distribute electronic invoices, bills or statements to Payers who can pay such invoices, bills or statements via multiple payment channels accessible through the E-Payment Service. Customer agrees that this Service shall be governed by this Section and all other relevant sections of this Agreement.

1. Internet.

a. "Customer Payment Site" means the interactive Internet payment site hosted by Bank where Payers may make payments to Customer over the Internet. Bank will configure, implement, host and support the Customer Payment Site. If Customer provides the content for the Customer Payment Site, Customer agrees to indemnify and hold Bank harmless for any content that violates applicable law or payment network rules.

b. Customer License. Bank shall have the right and license to use or sublicense Customer's name, trademarks, service marks, copyrights and logos and other textual information in connection with the Customer Payment Site solely for the purposes contemplated herein.

c. "Administrative Website" means the interactive Internet site hosted by Bank where Customer may access reports, initiate payments on behalf of Payers, or initiate refunds. Bank will configure, implement, host and support the Administrative Website. Customer shall be solely responsible for setting up Authorized Users, access entitlements and internal controls within the Administrative Website.

d. Links. Customer shall provide and maintain a secure link on its website to the Customer Payment Site. Customer shall be responsible for ensuring that the link to the Customer Payment Site takes Payer to the appropriate area within the Customer Payment Site. Customer shall be responsible for providing the agreed-upon data concerning Payer in a manner that meets Bank's encryption or security methods during the exchange. Customer and Bank agree to use industry-standard security procedures and technology to ensure the security of the Customer's website and the Customer Payment Site and to prevent data theft or unauthorized access.

e. Payer Authentication. Depending on the applicable payment processing channel, Customer shall be responsible for verifying the identity of each Payer prior to the time Payer is linked to the Customer Payment Site. Customer agrees that Payers shall not be granted access to the Customer Payment Site link until Customer has verified the identity of each Payer using a commercially reasonable fraud detection system. For every Payer that accesses the Customer Payment System, Bank may rely on Customer to have completed such verification.

2. Compliance with laws and regulations. Customer agrees to comply with all applicable laws, rules and regulations, including without limitation, those issued by: (i) the National Automated Clearing House Association; (ii) any governmental entity, including (without limitation) the requirements contained in the Electronic Fund Transfer Act, Regulation E, and the Electronic Signatures in Global and National Commerce Act; (iii) the American with Disabilities Act; and (iv) any other entity or association that issues or sponsors a payment device, including (without limitation) the requirements of the Payment Card Industry (PCI) Data Security Standard and any credit card association, including Visa and MasterCard. Customer further agrees to comply with all payment network regulations for ATM debit networks.

3. Integrated Voice Response (IVR). To make an automated payment via a touch-tone phone, Payers may access the IVR system by calling a toll-free number provided by Bank or Customer. Customer shall have previously submitted Payer registration data ("registration data") to Bank. In order to make a payment via the IVR system, Payers are required to input information that matches their user information submitted in the registration data.

4. Call Center. If this option is selected by Customer, Payers may make a payment by phone by calling a 24-hour call center and speaking to 'live' Bank personnel. Bank shall authenticate a Payer's identity in the manner specified by Customer, and agreed to by Bank, in the Implementation Documents. Customer acknowledges and agrees that the authentication of the Payer's identity in such manner shall constitute a commercially reasonable fraud detection system and Bank shall have no liability for all payments so authenticated.

5. Payer Authorization. If payment is made via the Internet, Payer will be prompted to authorize the payment and print a confirmation once Payer has reviewed the payment data and input the information necessary to complete the payment. If payment is made via the IVR or call center, the confirmation number will be read to Payer. Bank is not responsible for the detection of errors made by Payer or Customer and may rely on the information submitted or communicated by Payer or Customer.

6. Payment Processing. Payments shall be processed in the manner mutually agreed to between Bank and Customer, which may include ACH debit entries, debit cards, credit cards or other payment processing methods. Customer shall at all times be considered the originator of Payer's payment. Depending on the applicable payment processing channel, payment processing may also be subject to the terms of any other agreement between Bank and Customer and between Customer and the payment transaction processor supported by Bank. Payments may be initiated through the Customer Payment Site, IVR system or Administrative Terminal. Bank will notify Customer of the payments that were initiated either through the Administrative Terminal or by delivering a file in the manner set forth in the Implementation Documents. Customer acknowledges that all payments are subject to adjustment, return, reversal and/or chargeback in accordance with the rules governing the applicable payment processing channel. Customer agrees to be liable to Bank for any such adjustment, return, reversal or chargeback.

7. Recurring Payments. The E-Payment Service provides Customer with the ability to offer Payers the option of making fixed or variable recurring payments. If permitted by applicable regulations, Payers have the ability to initiate a payment that recurs semi-weekly, weekly, semi-monthly, monthly or quarterly. Payers must be pre-registered in order to initiate variable recurring payments.

8. Fees. In addition to Bank's standard fees, Customer agrees to pay additional fees and expenses for implementation of the E-Payment Service or other additional Services, if any, as may from time to time be disclosed to Customer by Bank. Customer also agrees to pay the applicable fees and expenses charged by the payment transaction processor supported by Bank, as set forth in Customer's agreement with such processor.

9. Convenience Fee.

a. If permitted by applicable regulations, the E-Payment Service offers a flexible convenience fee option that allows Customer or Bank to define and collect a convenience fee to be charged to Payers in connection with the payment transaction. Payers are provided with the opportunity to stop the payment process if they do not wish to pay the convenience fee.

b. If Customer desires to collect the convenience fee, Customer shall be responsible for ensuring that convenience fee assessments comply with the relevant laws, rules and regulations.

c. If agreed to by Bank and Customer, Bank may collect and retain the convenience fee. Customer agrees that Bank may, in its sole discretion, set, adjust, manage and collect the convenience fee as a means to wholly or partially offset Bank fees that may otherwise have been incurred by Customer. Bank's willingness to collect the convenience fee shall be based on Customer's projected payment volume, average ticket, type of transactions, or other considerations such as changes to interchange fees and assessments. Bank may, in its sole discretion, establish or modify payment caps for sums paid by Payers. If the actual payment volume, average ticket or other considerations fail to meet Customer's stated projections or do not completely offset Bank fees, Customer agrees that Bank may, in its sole discretion, require Customer to wholly or partially reimburse Bank for any resulting shortfall in Bank fees.

10. Transaction Controls. Customer agrees to notify Bank of any material change or anticipated material change in daily dollar activity or type of transaction processing and obtain Bank's consent to such change. Bank may, in its sole discretion, immediately upon written notice to Customer, place a maximum dollar limit on the E-Payment transactions or require Customer to provide reasonable security for Bank's continued handling of such transactions.

11. Payer Communications. Customer agrees to obtain all consents necessary from Payers for Bank to process the Payers' data and communicate with Payers (e.g., confirmation Short Message Service ("SMS") or email) in the course of performing the E-Payment Service. It is Customer's responsibility to ensure that its use of the E-Payment Service complies with end-user communication laws such as the Telephone Consumer Protection Act ("TCPA") and Controlling the Assault of Non-Solicited Pornography And Marketing ("CAN-SPAM").

12. Bill Presentment Services. If selected by Customer and agreed to by Bank, Customer may distribute electronic invoices, bills or statements to Payers who can pay such invoices, bills or statements via multiple payment channels accessible through the E-Payment Service. Customer represents and warrants that it will not use or include any reference to untruncated credit card numbers, banking account numbers, social security numbers or Personal Health Information (as defined in the Health Insurance Portability and Accountability Act of 1996) in any electronic invoice, bill or statement distributed via Bank's Bill Presentment Service. Customer shall indemnify and hold Bank harmless from and against any and all claims, demands, damages, losses, liabilities, penalties and expenses (including, without limitation, reasonable attorney fees and court costs at trial or on appeal) arising directly or indirectly from Customer's breach of the representation or warranty contained in this paragraph. In addition, Bank makes no representation or warranty regarding, and assumes no responsibility with respect to, any services performed or promised by any third party (including, without limitation, any other bank or financial institution) in connection with Customer's use of the Bill Presentment Services.

B. INFORMATION REPORTING AND TRANSACTION SERVICES

Information reporting and transaction Services may be provided by Bank to Customer through SinglePoint®, Global Trade or other applications or systems as may be introduced by Bank ("System(s)"). The System may also be used by Customer to automate many of the Services offered by Bank and also may provide access to other Bank systems that initiate transactions. Customer agrees that such use of the System shall be governed by this Section and all other relevant sections of this Agreement.

1. Introduction. If requested by Customer and agreed to by Bank, Bank will grant access to Bank's System(s) in the manner agreed to by Bank. Customer agrees to be bound by any terms of use and license agreements associated with these Systems.

2. Information Reporting. Bank is authorized to store, process, transmit and make available through Bank's agencies and Systems and through third-party data processing providers ("Providers") information regarding accounts designated by Customer. Bank or Providers will transmit to Customer information regarding its account(s) and/or other financial data through the System on a periodic basis. Customer may elect to receive data through one or more delivery mechanisms, including, without limitation, the Internet, facsimile, CD-ROM or secure email or other data transmission options supported by Bank. Section II.12 shall apply in the event Customer elects to receive facsimile reports via an Electronic Transmission. Balance and related information for Customer's account(s) held at other financial institutions may be made available by these financial institutions or Providers that input information into Bank's System. Bank will use reasonable care in submitting data into the System but assumes no responsibility for the accuracy or timeliness of the account information and other financial data supplied by other financial institutions or Providers. Bank will make every reasonable effort to deliver information by the mutually agreed upon time but does not guarantee a specific delivery time. Accordingly, Bank's responsibility to Customer with respect to the delivery of information shall be to deliver such work as close to the agreed time as may be reasonably practicable.

3. Transaction Services. Customer may use SinglePoint®, Global Trade or other similar System to access treasury management or trade finance transaction Services offered by Bank for which Customer has enrolled. Depending on the type of Service or System feature offered by Bank and selected by Customer, access to the transaction Services may include, but are not limited to, ACH, cash vault, check payables, wire transfer payments, book transfers, positive pay services, investments, loan services, trust services, letter of credit services, adjustments, returns and exceptions management, receivables management, transaction research and annotation, and system administration. Customer agrees that use of the System for transaction Services shall be governed by this Section IV.B and all other sections of this Agreement that are applicable to the product or Service being accessed.

4. Security Procedures/System Administrator. Customer agrees to operate the System in accordance with Sections III.3 and III.4 of this Agreement.

5. Manuals. Bank will provide Customer with a manual in electronic format that will set forth the applicable System's policies and procedures with which Customer agrees to comply. Bank may, without prior notification, make amendments to any manual. Bank owns or has obtained all proprietary rights to the manuals and Customer agrees not to duplicate, distribute or otherwise copy Bank's manuals without Bank's prior written consent. Any manual will at all times remain the property of Bank and Bank reserves the right to request Customer to return all printed copies of such manual within thirty (30) days of termination of this Service.

6. Customer Responsibilities. Customer will purchase (from Bank, in some cases) and provide all equipment and software necessary to use the applicable System in accordance with this Agreement. Bank shall have no responsibility and makes no warranties for such equipment or software. Customer agrees to use the System solely to conduct its business with Bank and agrees to limit access to those Agents who require access to the System. Customer agrees that in addition to other limitations to Bank's liability elsewhere in this Agreement, Bank shall not be liable for any loss or damage arising directly or indirectly from the following:

a. any inaccuracy or incompleteness in the input of an order or instruction from the Customer;

b. any failure by Customer to obtain a confirmation of an order or instruction; or

c. any cancellation or attempted cancellation by Customer of an order or instruction.

7. International Information Reporting. If requested by Customer and agreed to by Bank, Bank may provide incoming international information reporting through Providers or via SWIFT, which shall be governed by the terms of this Section IV.B, other applicable sections of this Agreement, and other applicable agreements or law. Bank shall receive the international information reporting data through Providers or via SWIFT from Customer's account-servicing Bank ("Servicing Bank") and shall display such data to Customer using SinglePoint® or other similar System. If Customer makes a request to Bank for an off-schedule international information report from the Servicing Bank, Customer agrees that Bank shall have no liability if the Servicing Bank does not support the off-schedule request or does not respond to the request in a timely manner.

C. ELECTRONIC DEPOSIT SERVICES

Electronic Deposit Services provide Customer with the option of making electronic deposits using one or more products offered by Bank. Customer agrees that the Electronic Deposit Services shall be governed by this Section and other relevant sections of this Agreement.

1. Processing Options. Customer shall at all times maintain an account with Bank. Customer captures checks or check information received from its Payor Customers into Check Images and transmits the same to Bank for processing and collection. Bank will seek to collect such Check Images through the check collection system by presenting or exchanging Check Images, or using Check Images to create a Substitute Check, or a Photo-In-Lieu ("PIL") for collection. If ACH processing is selected by Customer, checks that are eligible to be used as source documents to originate ARC entries, POP entries, or BOC entries are converted to ACH Entries and processed through the ACH system. Checks ineligible for ACH conversion are sent through check collection in the manner previously described.

2. Definitions.

a. "ACH Entry" means an ARC, POP or BOC debit entry originated to debit funds from a Payor Customer's account at a financial institution in accordance with the NACHA Rules.

b. "Check Image" means an electronic image of the front and back of an original paper check (including a paper Demand Draft), or an electronic image of a Substitute Check that is created by Customer, Bank or another bank or depository institution in the check collection system.

c. "Check Image Metadata" means information about the Check Image, as well as pointers to the actual image data (also known as image tags).

d. "Customer System" means the computer hardware and/or software and/or Web-based applications located at Customer's site that is used by Customer to prepare Electronic Deposits and to access the Electronic Deposit Services.

e. "Demand Draft" or "Remotely Created Check" means a paper item, other than a Substitute Check or PIL, which (i) is drawn on a Payor Customer account, (ii) does not bear the signature of the Payor Customer, and (iii) is authorized by the Payor Customer to be issued in the amount for which the item is drawn.

f. "Electronic Deposit" means electronic information (including Check Images, Check Image Metadata, MICR Data, dollar amount or ACH Entry information), obtained from capturing information from an original paper check and remittance documentation that is transmitted to Bank for deposit, processing and collection.

g. "Electronic Deposit Services" means an array of products and services that allow organizations that receive check payments and/or remittance payments to deposit all payments electronically at Bank, as further described in the applicable User Manual.

h. "Electronic Deposit System" means Bank's computer systems or databases that Customer may access in order to obtain Electronic Deposit Services.

i. "MICR Data" means information from the Magnetic Ink Character Recognition stylized printing on the bottom of checks comprising of routing, transit, account and check serial numbers.

j. "Payor Customers" means clients and/or customers of Customer that submit original paper checks or check information to Customer for payment obligations owed to Customer.

k. "Photo-In-Lieu" or "PIL" means a photocopy of the front of an original paper check created from a Check Image.

l. "Substitute Check" means a paper check document that meets the definition of a "substitute check" in the Check Collection for the 21st Century Act as implemented by Regulation CC of the Federal Reserve Board.

3. Customer Authorizations and Notifications. Customer shall adhere to any and all applicable laws, regulations and clearinghouse rules, including but not limited to, obtaining all necessary consents and authorizations from, and/or providing all necessary disclosures to its Payor Customers concerning the creation of Demand Drafts or the conversion of Payor Customers' checks to ACH Entries. Customer is solely responsible for ascertaining the content, method, and frequency of any required authorizations and notifications.

4. Determination of Items Eligible for Electronic Deposit.

a. Only original paper checks that qualify as a source document may be converted to an ACH Entry under NACHA Rules. Bank will apply certain automated internal edits and screens to the Electronic Deposit submitted by Customer to determine whether the original paper check is a source document that qualifies for conversion to an ACH Entry. Customer acknowledges and agrees that Customer is the Originator of such ACH Entries under NACHA Rules regardless of whether Customer or Bank initiates the ACH Entry into the payment system.

b. Only a paper item, payable on demand, and drawn on or payable through or at an office of a bank, is eligible for deposit as a Check Image. Unless permitted by applicable law, Customer represents and warrants to Bank that Customer shall not use the Electronic Deposit Services to transmit Electronically Created Items (as defined in Federal Reserve's Regulation CC). Without limiting the generality of the preceding sentence, the following items are not eligible for deposit as Check Images or an Electronic Deposit under the Electronic Deposit Services, and Customer must deposit these original paper items with Bank: (i) checks, including travelers checks, that are drawn on banks located outside of the United States; (ii) checks payable in a medium other than U.S. dollars; (iii) non-cash items (as defined under Section 229.2(u) of Federal Reserve's Regulation CC); (iv) promissory notes and similar obligations, such as savings bonds (unless explicitly permitted as an Electronic Deposit in the applicable User Manual); (v) checks issued by and drawn on Customer or an affiliate of Customer; and (vi) any other class of checks or drafts as identified by Bank to Customer from time to time in the User Manual.

5. Capture of Checks and Check Information.

a. For certain Electronic Deposit Services, Customer shall use scanning hardware and/or software that meets Bank's specifications. Depending on the type of Electronic Deposit Service or processing option(s) selected by Customer, in the event the condition of a paper check precludes a complete automated read, Customer shall be responsible for visually inspecting the Check Image. Customer shall be responsible for the repair of any MICR Data (if applicable) and for ensuring that any and all information on the front and back of a paper check is accurately captured and legible in the resulting Check Image, that the resulting Check Image contains an accurate record of all MICR Data required for a substitute check, and that the Check Image otherwise complies with any Check Image or MICR Data quality standards and guidelines that may be established by the American National Standards Institute (ANSI), ECCHO Rules, the Federal Reserve, other applicable regulatory agency or clearinghouse, or which Bank may provide to Customer from time to time. Customer acknowledges that current image technology may not capture all security features (e.g., watermarks) contained in the original paper checks and agrees to assume any and all losses resulting from claims based on security features that do not survive the image process.

b. Customer further acknowledges that Bank does not verify the accuracy, legibility or quality of the Check Image prior to processing an Electronic Deposit. Bank may, in its sole discretion, reject, repair, alter, amend, re-format or convert the Check Image Metadata or MICR Data submitted in an Electronic Deposit in accordance with general check collection practices and industry presentment standards, but Bank shall have no obligation to reject, repair, alter, amend, re-format or convert the Check Image Metadata or MICR Data. If Bank requires that Customer comply with certain formatting standards or other guidelines outlined in the applicable User Manual when submitting Electronic Deposits (for example, requiring use of the external processing code for identifying Remotely Created Checks) and Customer declines to implement, or comply with, such standards or guidelines, Customer acknowledges that Bank shall not be liable for any error or loss that results from Bank processing such Electronic Deposit or from Bank's re-formatting or conversion of the Electronic Deposit prior to processing.

c. Bank shall not be liable to Customer for failure to process an Electronic Deposit, or any error that results in processing or collecting an Electronic Deposit: (i) for which Customer has not provided Bank an accurate, complete and legible image of, or information from, the original paper check; (ii) for which Customer has failed to comply with formatting standards or other guidelines required by Bank; or (iii) which would violate this Agreement, the User Manual or any other agreement between Customer and Bank.

d. If Customer desires to make an Electronic Deposit outside of the contiguous United States, Customer shall seek Bank's prior approval. Bank may reject a deposit transaction or terminate the Electronic Deposit Services immediately if Customer fails to obtain Bank's prior approval. If Customer chooses to access Electronic Deposit Services from locations outside the contiguous United States, Customer is responsible for compliance with local laws. Customer agrees not to use the Electronic Deposit Services in any country that is subject to geographically-based restrictions imposed by OFAC.

6. Upload of Electronic Deposit to Bank.

a. Customer shall upload the Electronic Deposit transmission (containing one or more Electronic Deposits) to Bank prior to the daily cut-off time established by Bank from time to time for the receipt of Electronic Deposits. Any Electronic Deposit transmission received by Bank after its daily cut-off time shall be deemed to have been received by Bank at the opening of its next Business Day. Performance of the Electronic Deposit Services may be affected by external factors such as communication network latency. Customer is responsible for the transmission of the Electronic Deposit until the Electronic Deposit System reports a successful acknowledgement of receipt of the transmission.

b. An Electronic Deposit is received when the entire Electronic Deposit transmission in which that Electronic Deposit is contained is received by Bank in accordance with section 6.a above. If only a portion of that Electronic Deposit transmission is received by Bank for any reason, including without limitation, a failure during the transmission to Bank, the Electronic Deposit transmission is deemed to have been not received by Bank with respect to any Electronic Deposit contained in that Electronic Deposit transmission (including any Check Image contained in the portion of that Electronic Deposit transmission that was received).

c. Bank will process Electronic Deposit transmission received from Customer either via ACH Processing, Check Image or Substitute Check collection in accordance with the processing options selected by Customer. For each Check Image sent to Bank in an Electronic Deposit transmission, Customer agrees not to deposit or cash the original paper check nor re-deposit the Check Image at Bank or any other financial institution or other business.

d. A per item limit, dollar limit, or deposit limit may be established by Bank in its sole discretion and communicated to Customer. If any such limit is established, Bank shall have no obligation to process items or files in excess of the limit.

7. Funds Availability. Customer agrees that the transmission of Check Images using Electronic Deposit Services is not subject to the funds availability requirements of Regulation CC. Bank may, at any time, and in its sole discretion, provide a one-time notification to Customer if Bank intends to delay funds availability beyond ordinary Regulation CC funds availability time frames for items submitted by Customer using Electronic Deposit Services. In such instance, funds deposited will be available for withdrawal 3 business days after electronic transmission to Bank, subject to any holds placed on the account as permitted under this Agreement. Bank may, but is not required to, make such funds available sooner.

8. Collection of Check Images. Notwithstanding anything to the contrary in this Agreement, Bank may in its sole discretion determine the manner in which Bank will seek to collect a Check Image deposited by Customer for check collection. Without limiting the generality of the preceding sentence, Bank may, at its option: (i) present or transfer the Check Image to the paying bank, a Federal Reserve Bank, check clearinghouse, image share/exchange network, or other bank; (ii) create a Substitute Check or a PIL from the Check Image and collect such item, or (iii) request that Customer provide to Bank the original paper check from which the Check Image was created and then collect the original paper check. Depending on the collection method, the Check Image or physical item is subject to the rules of that clearinghouse, Federal Reserve Bank, or image share/exchange network or financial institution agreement.

9. Representment of Returns. If Customer identifies to Bank a returned ACH Entry as being returned because the original paper check was ineligible as a source document for the ACH Entry, Bank shall use reasonable efforts to collect the check related to the ACH Entry by creating, in Bank's sole discretion, a Substitute Check, or a PIL from the image of the original paper check.

10. Storage of Check Images. Bank shall store Check Images and other check information on the Electronic Deposit System in accordance with Bank's record retention schedule and shall make such information available to Customer according to the applicable User Manuals and fee schedule. If the Electronic Deposit Services are terminated, Customer may obtain Check Images or check information at the price outlined in the fee schedule.

11. Franking, Endorsement, Retention and Destruction of Original Paper Checks. Depending on the requirements outlined in the applicable User Manual, Bank may require, or strongly recommend, that Customer frank or mark the face of each original check after successfully capturing each Check Image to help ensure that an item is not deposited more than once either as a Check Image or physical check. Bank may require Customer to restrictively endorse each check prior to capturing each Check Image. Customer shall destroy the original paper check based on guidelines identified in the applicable User Manual and shall employ commercially reasonable methods to securely store the original paper check until destruction. At Bank's request, Customer shall provide the original paper check to Bank if the original paper check has not been destroyed by Customer and Bank needs the original paper check to process a payment or resolve a dispute arising from an Electronic Deposit.

12. Representations and Warranties. With respect to each Check Image or Electronic Deposit that Customer transmits to Bank, Customer is deemed to make any representation or warranty that would have applied had Customer deposited the original paper check, including without limitation, that no party will receive a presentment or otherwise be charged for a paper check, whether presented in paper or electronic form, which Customer has converted to a Check Image such that such party is asked to make payment of a check which has already been paid. In addition Customer is deemed to make to Bank any representation, warranty or indemnification that Bank makes, under applicable law, clearinghouse rule, Federal Reserve Operating Circular, Federal Reserve Regulation (including without limitation Regulation CC), bi-lateral agreement or otherwise, to any person (including without limitation a collecting bank, a Federal Reserve Bank, a Receiving Depository Financial Institution, a paying bank, a returning bank, a depository bank in possession of the original paper check, the drawee, the drawer, any endorser, or any other transferee) when Bank transfers, presents or originates a Check Image, Substitute Check, PIL or ACH Entry created from the Electronic Deposit.

13. Customer Responsibility. With respect to each Check Image, Electronic Deposit or other image that Customer transmits to Bank, Customer agrees to defend, indemnify and hold Bank harmless from and against any and all claims, demands, damages, losses, liabilities, penalties and expenses (including, without limitation, reasonable attorney fees and court costs at trial or on appeal) arising directly or indirectly: (a) from Customer's breach of a representation or warranty as set forth in section 12 above; (b) as a result of any act or omission of Customer in the capturing, creation or transmission of the Check Image or Electronic Deposit, including without limitation, the encoding of the MICR Data from the original paper check; (c) from any duplicate, fraudulent or unauthorized check, Check Image, Substitute Check, PIL or ACH Entry; (d) for any loss caused by Bank's acceptance of a Check Image, or creation of a Substitute Check PIL or ACH Entry instead of presentment of the original paper check; (e) out of Customer's deposit of an Electronically Created Item; or (f) from any other act or omission arising out of Bank's action or inaction taken pursuant to any request by Customer or pursuant to this Agreement. This Section 12 shall survive termination of the Agreement.

14. User Manual. Bank will provide Customer with one or more user guides ("User Manual") in paper or electronic format that will set forth the policies and procedures for the relevant Electronic Deposit Services product with which Customer agrees to comply. Bank may, without prior notification, make amendments to any User Manual. Bank may require that certain employees of Customer attend periodic training as a condition to using the Electronic Deposit Services.

15. Security Procedures and Right to Audit. Customer shall comply with all security procedures for the Electronic Deposit Services that are established by Bank or set forth in the applicable User Manual. Customer is solely responsible for (i) maintaining its own internal security procedures; (ii) safeguarding the security and confidentiality of any information that is obtained from Payor Customers' checks, Check Images and other information that is either printed from, stored on, or downloaded to, the Customer System, Electronic Deposit System, or Customer's other computer/data systems or portable media; and (iii) preventing errors or unauthorized access to the Customer System or the Electronic Deposit System. Bank reserves the right to periodically audit Customer's security procedures and information technology processes and to mandate controls.

16. Mobile Remote Deposit Services ("Mobile Services"). Depending on the type of Electronic Deposit Service selected by Customer, Mobile Services is an optional add-on service that will allow Customer to make remote check deposits and obtain check deposit history made through the Mobile Services using a supported mobile device. If Customer selects Mobile Services, Customer will need to download and install a Mobile Service application on compatible and supported mobile phones, tablets or other devices (collectively, "Devices").

a. Description of Mobile Services. Mobile Services allow Customer to use a Device to take photographs of the front and back of the check and to transmit the Check Image to Bank in a secure data encrypted format using Customer's mobile service provider's cellular network or the Internet (collectively, "Network"). Certain Mobile Services may allow Customer to use a Device to enter remittance data and to take photographs of the front and back of remittance and general documents associated with the Check Image for reporting and research purposes.

b. Use of Mobile Services. Customer agrees to use Mobile Services in accordance with this Agreement, other user requirements provided in the User Manual and the downloaded mobile application. Bank reserves the right to modify the scope of Mobile Services at any time or change or upgrade Mobile Services from time to time, including the right to cease offering the Service on a previously supported Device. Bank also reserves the right to refuse any Electronic Deposit requested through the Service because a Check Image fails image quality standards, is detected as a duplicate item, or for any other reason in Bank's sole discretion. Customer understands and agrees that Mobile Services may not be accessible at all times due to Network connectivity or may have limited utility over some Networks, such as while roaming. Customer acknowledges and agrees that Bank may use geolocation technology to track that Mobile Services activity occurs within the contiguous United States.

c. Software. Customer agrees not to use Mobile Services or the content or information delivered through Mobile Services in any way that would infringe upon any third-party copyright, patent, trademark, trade secret, or other proprietary rights or rights of publicity or privacy, including any rights in the Mobile Services software. In the event Mobile Services is terminated or Customer's software license is revoked for any reason, Customer agrees to promptly delete the Mobile Services application from its Devices.

d. Service Limitations.

- **i.** Neither Bank nor Customer's mobile service providers can always foresee or anticipate technical or other difficulties related to Mobile Services, which may result in loss of data, personalization settings or other interruptions. Bank assumes no responsibility for the timeliness of any Mobile Services transmissions or communications, or the loss or failure to store any user data, communications or personalization settings in connection with a Device and Customer's use of Mobile Services.
- **ii.** Bank shall not be responsible for the operation, security, functionality or availability of any Device or Network that Customer utilizes to access Mobile Services. Transmission of a Check Image shall not be deemed received unless the Device reports a successful acknowledgement of receipt of the transmission. Customer agrees to exercise caution when utilizing Mobile Services on Devices and to train its Authorized Users to exercise good judgment and discretion when accessing or transmitting information.
- **iii.** Information about activity is synchronized between the Mobile Services software and Bank's Electronic Deposit System, however, deposit information available via the Mobile Services application may differ from the information that is available directly through the Electronic Deposit System. Information and features available

directly through the Electronic Deposit System may not be available via the Mobile Services application and may be described using different terminology. The method of entering information via the Mobile Services application may also differ from the method of entering instructions through the Electronic Deposit System. Customer agrees that Bank shall not be liable for any errors or delays in the content as a result of Customer's use of the Mobile Services software.

iv. Customer acknowledges that its mobile service carrier or provider may provide for fees, limitations and restrictions such as data usage charges or data throttling which may have an impact on Customer's use of or interaction with Mobile Services. Customer agrees to be solely responsible for all such fees, limitations and restrictions.

e. Security.

i. If Customer permits its employees or agents to use their own personal mobile devices to access Mobile Services, Customer assumes any and all risks associated with the use of personal mobile devices, including but not limited to, any risk that compromises the integrity of Customer's corporate network or sensitive business data. Customer is solely responsible for implementing policies that will help mitigate the risk of allowing employees to use personally-owned mobile devices, which may include but are not limited to, requiring that Devices are configured and managed with information assurance controls commensurate with the sensitivity of the underlying data and employing Mobile Device Management (MDM) software or other software that secures, monitors, manages and supports mobile devices deployed across operators, service providers and enterprises.

ii. Customer shall ensure that its employees or agents exercise appropriate precautions surrounding the use and safeguarding of the Devices at all times. Customer agrees not to leave Devices unattended when logged into Mobile Services and to log off immediately at the completion of each access. Customer agrees that either a username and password or biometric verification are the agreed-upon security procedures and that such security procedures are commercially reasonable. If these security procedures are used to access Mobile Services, Customer agrees that any transactions using Mobile Services are hereby authorized. If Customer permits other persons to use a Device, login information or any other means to access Mobile Services, Customer will be responsible for the resulting transactions, and Bank shall have no liability for any damages Customer may incur.

iii. Devices with internet capabilities are susceptible to viruses. Customer is responsible for ensuring that each Device is protected from and free form viruses, malicious software ("malware") and other harmful components which could result in damage to programs, files, or the Device, or could result in information being intercepted by a third party. Bank shall have no liability for any damages which may result from such viruses, malware or other harmful components.

D. ACH SERVICES

1. Introduction. If requested by Customer and agreed to by Bank, Customer or its Agent may initiate credit or debit Automated Clearing House ("ACH") transactions ("Entries") for payments ("Credit Entries") and/or collections ("Debit Entries") on Business Days to its accounts or the accounts of others ("Receivers") in accordance with Bank's security procedures and this Agreement. Bank will act as an Originating Depository Financial Institution ("ODFI") with respect to such Entries. Bank may process Entries directly, through one or more clearinghouses, or through the mechanism selected by Bank. Customer's rights and obligations with respect to such Entries are governed by applicable law and the NACHA Rules, as amended from time to time. Customer acknowledges that it shall be bound by the then-current version of the NACHA Rules and agrees not to initiate any Entry in violation of the NACHA Rules or applicable federal, state or international law, regulation or clearinghouse rules, including, without limitation, Regulation E of the Board of Governors of the Federal Reserve System, regulations promulgated by the Office of Foreign Assets Control, FinCEN, rules governing the Canadian, Mexican and European payments systems and Operating Circular 4 of the Federal Reserve Bank (collectively referred to herein as the "Rules"). Customer acknowledges and agrees that Bank shall have the right to examine Customer's books, records and systems to ensure Customer's compliance with the Rules and this Section IV.D and that Bank shall further have the right to suspend Services if Bank determines, in its sole and absolute discretion, that Customer is not complying with the Rules and/or this Section IV.D. Customer acknowledges that a copy of the NACHA Rules is available through NACHA at current NACHA prices. Bank shall have the right, in its sole discretion, to terminate or suspend ACH Services immediately if Bank is legally or contractually required to place a hold on funds or a portion of the funds in Customer's account(s). Bank may also, in its sole discretion, delay, suspend or reject an ACH file or Entry if the Bank has a reasonable basis to suspect the ACH file or Entry may be unauthorized or fraudulent. Capitalized terms not otherwise defined in this Agreement shall have the meanings ascribed to them in the NACHA Rules.

2. Entry Origination/Processing Dates/Deadlines. Customer may initiate Entries in the manner and format agreed to by Bank. ACH files transmitted to Bank shall be in an unbalanced file format. Bank has the right to restrict the standard entry class ("SEC") codes utilized by Customer. If notified by Bank of such restriction, Customer must cease use of the SEC code and the underlying transaction type. Customer agrees that all Entries (regardless of SEC Code) that involve the storage, exchange or transmission of banking information via unsecured electronic networks shall be encrypted or transmitted via a secure session, using a commercially reasonable security technology that complies with regulatory guidelines. Bank will establish a deadline for the receipt of Entries from Customer ("Deadline"). Bank may establish different Deadlines for Entries depending on the method of delivery employed by Customer and all such Deadlines are subject to change. Bank must receive Customer's Entries at or prior to the Deadline for the Entries to be processed on the Business Day of receipt. Entries received after the Deadline, Entries that contain an Effective Entry Date that is invalid or stale, or Entries that are ineligible for Same Day ACH, will be processed on the next Deadline, which may be the next Business Day. Entries with settlement dates of more than thirty (30) calendar days from receipt will not be processed unless prior arrangements have been made. If Customer has opted-in for Same Day ACH, Customer acknowledges that any Entry using the current day's date as the Effective Entry Date that is submitted to the ACH Operator prior to the Deadline shall carry the Same Day ACH fee. If Customer has not opted-in for Same Day ACH and submits an Entry prior to the Deadline using the current day's date as the Effective Entry Date, Customer acknowledges that such Entry shall be processed on the next Business Day.

3. Content and Secondary Authorization. In submitting any Entry, Customer shall be responsible for providing all information required by Bank. Customer bears sole and exclusive responsibility to verify that the information set forth in Entries submitted to Bank is authentic, accurate and conforms to the Rules. The Services hereunder are only designed to respond to information provided by Customer. Accordingly, any inaccuracy in any information provided by Customer may result in unintended processing by Bank. Bank bears no responsibility for detecting or reporting any error in data supplied by Customer and shall not be liable to Customer for any information provided by Customer with respect to an

Entry which is inaccurate, incomplete or otherwise incorrect. Bank strongly recommends that Customer utilize a second individual to review and approve ACH files prior to submission to Bank. Customer acknowledges and agrees that such a security procedure is commercially reasonable and that Customer's failure to use this procedure substantially increases Customer's risk of an unauthorized ACH file.

4. Entry Limits and Payment. Customer agrees to comply with any applicable per transaction or aggregate Entry limits established by the Rules. Customer shall at all times maintain a settlement account with Bank for the purpose of funding Customer's Entries ("Account"). The total dollar amount of Entries initiated by Customer through Bank under all ACH Services and pending on a given day shall not exceed the lesser of collected or available balances in the Account or an exposure limit should one be established by Bank ("Exposure Limit"). Establishment of an Exposure Limit should not be interpreted or construed by Customer as a commitment or agreement to provide any credit or loans to a Customer and is subject to modification or termination at any time by Bank. Customer shall pay Bank for all Entries and authorizes Bank to charge its Account or any other account with Bank in the amount of such Entries. Bank shall have the right in its sole discretion to reject any or all Entries initiated by Customer without notice if Bank has reason to believe that there will be insufficient available funds on the relevant settlement date, even if Bank may have previously accepted Entries for processing with insufficient available funds in the Account. Customer will receive funds for any Debit Entry on the ACH settlement date. Bank shall credit the Account in any amount payable to the Customer, subject to Bank's right to make adjustments in accordance with this Agreement. Bank may establish, monitor and periodically review Customer's Exposure Limit and Customer's compliance thereof, and may, in Bank's sole discretion, cease processing Entries based on such review.

5. Prenotification. To the extent permitted by the Rules, Customer may elect to send a prenotification that it intends to initiate an Entry to a particular account in accordance with the procedures set forth in the Rules or by Bank. The prenotification can be returned or result in a Notification of Change ("NOC"). If the prenotification is returned, Customer shall research the problem and make any necessary corrections before transmitting another Entry. If the prenotification results in a NOC, Customer shall make the required change prior to initiating another Entry or issue a Refused NOC. Bank offers an optional Service that allows Bank to track Customer's NOC on Customer's behalf. If Customer selects this option, Bank shall only manage the changes to the routing numbers, account numbers and transaction codes.

6. Notification of Change ("NOC"). A NOC is created by the Receiving Depository Financial Institution ("RDFI") to notify Customer (via Bank) that previously valid information contained in a posted Entry is outdated, or information contained in a prenotification or live transaction is erroneous or improperly formatted and should be corrected. Bank offers NOC Manager, which is a Service that allows Bank to track Customer's NOC on Customer's behalf. NOC Manager only manages the changes to routing numbers, account numbers and transaction codes. Bank, in its sole discretion, may require that Customer enroll in NOC Manager as part of ACH Services provided to Customer.

7. Data Breach Notification. Customer may have gathered personal or financial information of its customers for the purpose of initiating ACH transactions. Such information may include, without limitation, the customer's bank account number together with the bank routing number, or the customer's name together with the customer's social security number or tax identification number. Customer agrees to immediately report to Bank any loss, theft or unauthorized access of such information ("data breach") by or from Customer, its Agent, or third-party service provider, if circumstances indicate that the misuse of such information has occurred or is reasonably possible. Customer acknowledges that Bank may have an obligation to report any data breaches to NACHA and other affected parties, and agrees to establish appropriate procedures to prevent, detect, investigate and report data breaches. If applicable to Customer, Customer agrees to render electronically stored account numbers used in the initiation of Entries unreadable in accordance with the requirements and effective dates specified by NACHA.

8. ACH Secured Funds Entries. Bank may, at any time, and in its sole discretion, require Customer to prefund some or all Credit Entries that Customer desires to initiate. Customer acknowledges and agrees that such funds are held solely for the benefit of Bank and that Customer will not be entitled to earn any interest thereon. Upon initiation of such Credit Entries, Bank is authorized to immediately charge the Account (in the total amount of such Entries). If ACH Secured Funds is used to initiate Debit Entries, funds will be credited to the Account on the settlement date of the transaction. However, such funds shall not be available for withdrawal from the Account for two Business Days, or such other period as determined by Bank, after the settlement date.

9. File Confirmation System. Customer shall at all times comply with applicable file confirmation procedures and any security procedures established by Bank. Such procedures are solely for the purpose of verifying the origination of Entries by Customer or Bank's receipt of the ACH file and/or batch (but not for errors in transmission or content).

a. Control Totals. If Customer elects to provide Bank with the total dollar value of Entries and any other necessary information ("Control Totals"), Customer must telephone Bank's Interactive Voice Response system or input Control Totals through SinglePoint each time it originates Entries. After Bank receives Customer's ACH file, Bank will compare the information in the ACH file to the Control Totals. If the information matches the Control Totals, Bank will process the ACH file. Bank will notify Customer if the Control Totals do not match the information in the ACH file, or if Bank receives an ACH file without receiving Control Totals or vice versa. Bank will not process an ACH file unless it receives conforming Control Totals before established Deadlines.

b. Confirmation of Receipt. If Customer elects not to provide Bank with Control Totals but elects to receive a confirmation report or file, Bank shall provide Customer with a confirmation that Bank received Customer's ACH file and/or batch. After Customer receives the confirmation report or file, Customer will compare the confirmation information to Customer's ACH transmission information. If the information does not match, Customer shall notify Bank before Bank's established deadline, failing which, Bank shall process Customer's ACH file and/or batch. Customer acknowledges that the confirmation report or file is for the sole purpose of verifying Bank's receipt of the file and does not signify any validation of data. Customer bears sole responsibility for any inaccurate or incomplete information provided to Bank if Customer fails to notify Bank prior to Bank's processing of Customer's file.

10. Rejected and Returned Entries, Unauthorized Entries. Bank may reject any Entry that is not initiated in accordance with this Agreement. In the event that an Entry is rejected, or returned by an ACH processor, for any reason whatsoever, it shall be Customer's responsibility to reinitiate the Entry. Bank will give Customer or its designated Agent notice of any rejected or returned Entry in the manner agreed to by the parties. Bank is authorized to debit/credit the Account for Entries that are returned to Bank. Unless the return is caused by Bank's failure to properly execute an Entry, Bank has no obligation to pay Customer interest on the amount of any returned Entry debited from the Account. A Receiver may, in some cases, have the right to have an unauthorized or erroneous Debit Entry credited to its account. Customer agrees that Bank may deduct the amount owing to the Receiver from Customer's Account upon Bank's receipt of proper notice from the Receiver's bank. Bank may charge back against Customer any Debit Entry that is returned or reversed by the RDFI.

11. ACH Redeposit Service. If requested by Customer and agreed to by Bank, Bank will reinitiate (maximum of two times) each Debit Entry returned for insufficient or uncollected funds.

12. Amendment of Entries. Customer does not have the right to delete, reverse or amend any Entry (each, an "Adjustment Request") after it has been received by Bank. If Customer sends Bank an Adjustment Request via internet, secure email, or fax in accordance with the terms of this Agreement, Bank will make reasonable efforts to act on the Adjustment Request. All Adjustment Requests must be received by Bank prior to the established deadlines, and even if the Adjustment Request is made in a timely manner, Customer acknowledges that an Adjustment Request may prove unsuccessful (for example, if it is returned by the RDFI for non-sufficient funds). Customer agrees to indemnify Bank in connection with any Adjustment Request in accordance with applicable law.

a. Internet Option. If Customer has selected the Internet Option, Customer may use SinglePoint® to transmit information to Bank for the purpose of amending ACH files. Customer agrees to comply with any applicable software agreement, user guide and any established security procedures.

b. Secure Email Option. If Customer has selected the Secure Email Option, Customer may send an Adjustment Request to a designated shared mailbox at Bank.

c. Fax Option. If Customer has selected the Fax Option, Customer may transmit an Adjustment Request to Bank via facsimile to a designated facsimile number. Customer acknowledges that the Internet and Secure Email Options are substantially more secure than the Fax Option. Customer agrees to be bound by any instructions submitted via the Fax Option, whether or not authorized, issued in its name and accepted by Bank in accordance with the agreed procedures.

13. Customer Representations/Indemnity. Customer represents and warrants to Bank that each Entry: (i) complies with the terms of this Agreement and the Rules; (ii) does not breach any warranty of Customer or Bank contained in this Agreement and the Rules; (iii) complies with applicable state, federal and international laws and rules, including, without limitation, the Electronic Funds Transfer Act, Regulation E and regulations overseen by the Office of Foreign Assets Control; (iv) is accurate, timely, and authorized; and (v) that any Debit Entry is for a sum that on its settlement date is due and owing from the Receiver to Customer or is a correction of a previously transmitted erroneous Credit Entry. With respect to each ACH Entry (regardless of SEC Code), Customer is deemed to make to Bank any representation or warranty that Bank makes, under applicable law and the Rules to any person, RDFI, or any other transferee. Receiver authorizations shall expressly authorize Bank to transmit corrective entries to Receiver's accounts to correct a prior Entry and shall authorize Customer to release to Bank all information concerning its Receivers that is required by Bank to recover such Entries. Customer shall immediately cease initiating Entries upon receiving actual or constructive notice of the termination or revocation of the Receiver's authorization. Customer will retain each authorization received by Customer for such period of time as may be required by the Rules or applicable law and shall provide Bank with copies of such authorizations upon request. Customer will indemnify, defend and hold Bank harmless from and against any and all claims, demands, expenses, losses, liabilities, and damages, including without limitation, NACHA fines, reasonable attorney fees and court costs at trial or on appeal that arise directly or indirectly out of any Entry initiated by Customer in violation of this Agreement and the Rules.

14. Re-presented Check Entries. NACHA Rules allow Customer to initiate an Entry to collect certain checks that have been returned unpaid for insufficient or uncollected funds ("RCK Entry"). In the event that Customer initiates an RCK Entry to Bank for check collection purposes, Customer agrees that such RCK Entry will comply with all provisions of this Agreement and applicable Rules and makes the following additional representations and warranties regardless of which entity initiates the RCK Entry on its behalf:

a. Each check is eligible under NACHA Rules to be collected via an RCK Entry.

b. Customer has no knowledge of any insolvency and it has good legal title to the returned item.

c. All signatures on the returned item are authentic and authorized, and the returned item is without alteration, not subject to claims or defenses, and will not be presented to the paying bank.

d. The RCK Entry accurately reflects the item and any information encoded after issue in magnetic ink is correct. (RCK Entries cannot be used for collection fees.)

e. Any restrictive endorsement placed on the item is void or ineffective.

f. Customer has provided clear and conspicuous notice of its electronic check representment policy in advance of receiving the item to which the RCK Entry relates.

g. The Customer will provide to Bank immediately upon request a copy of the front and back of the returned item, provided that the request is made within seven (7) years of the settlement date of the RCK Entry.

15. Internet-Initiated Entries. NACHA Rules allow Customer to initiate a Debit Entry to a consumer Receiver's account pursuant to an authorization obtained from the Receiver via the Internet ("WEB Entry"). In the event that Customer initiates a WEB Entry to Bank, Customer agrees that such WEB Entry will comply with all provisions of this Agreement and applicable Rules and makes the following additional representations and warranties regardless of which entity initiates the WEB Entry on its behalf:

a. Customer has employed a commercially reasonable fraudulent transaction detection system to screen each WEB Entry. As of the effective date specified by NACHA, a commercially reasonable fraudulent transaction detection system must include, at a minimum, validation of the account number to be debited for each Web Debit Entry. This validation must be completed for the first use of such account number as well as each time there is a change in such account number.

b. Customer has employed commercially reasonable methods of authentication to verify the identity of the Receiver.

c. Customer has taken commercially reasonable steps to verify that routing numbers are valid.

d. Customer has established a commercially reasonable secure Internet session prior to the key entry by the Receiver of any banking information and through the transmission of the data to Customer. If regulatory requirements or technological advancements drive the commercially reasonable standard to change, Customer agrees to comply with the new standard.

e. Customer has and will conduct an annual audit to ensure that the financial information that Customer obtains from Receivers is protected by security practices that include adequate levels of: (1) physical security to protect against theft, tampering, or damage, (2) personnel and access controls to protect against unauthorized access and use, and (3) network security to ensure secure capture, storage and distribution of financial information. Customer will provide proof of Customer's security audits to Bank upon request. Any such information provided to Bank shall be kept confidential except as required to be disclosed by applicable law, rule or regulation. Bank may cease processing Entries for Customer if Bank in its sole discretion determines that Customer's security procedures are inadequate.

16. Telephone-Initiated Entries. NACHA Rules allow Customer to initiate a Debit Entry to a consumer Receiver's account pursuant to the Receiver's oral authorization and banking information obtained via the telephone ("TEL Entry"). In the event that Customer initiates a TEL Entry to Bank, Customer agrees that such TEL Entry will comply with all provisions of this Agreement and applicable Rules and makes the following additional representations and warranties regardless of which entity initiates the TEL Entry on its behalf:

a. Receiver Authorization. Customer shall obtain the Receiver's explicit authorization prior to initiating a Debit Entry to the Receiver's account. In the event that Customer obtains the Receiver's authorization verbally, Customer will either tape record the Receiver's oral authorization or provide, in advance of the settlement date of the Entry, written notice to the Receiver that confirms the oral authorization. Customer agrees that, at a minimum, the following specific information is disclosed to, and acknowledged by, the Receiver during the telephone call:

- **(i)** the date on or after which the Receiver's account will be debited;
- **(ii)** the amount of the Debit Entry to the Receiver's account;
- **(iii)** the Receiver's name;
- **(iv)** the account to be debited;
- **(v)** a telephone number that is available to the Receiver and answered during normal business hours for customer inquiries;
- **(vi)** the date of the Receiver's oral authorization;
- **(vii)** a statement that the authorization obtained from the Receiver will be used to originate an ACH debit to the Receiver's account;
- **(viii)** for recurring TEL entries, the amount of recurring transactions; and
- **(ix)** for recurring TEL entries, the timing (including the start date), number, and/or frequency of the electronic fund transfers.

Customer shall retain either the original or a duplicate tape recording of the Receiver's oral authorization or a copy of the written notice confirming the Receiver's oral authorization for two years from the date of the authorization and shall immediately provide same to Bank upon request.

If Customer chooses to provide the Receiver with written notice confirming the Receiver's oral authorization, Customer will disclose to the Receiver during the telephone call the method by which such notice will be provided.

b. Security Procedures. In addition to all other representations and warranties contained in this Agreement and the Rules, Customer also represents and warrants the following each time it delivers a TEL Entry to the Bank that it has (a) utilized a commercially reasonable security procedure to verify the identity of the Receiver, including name, address and telephone number; and (b) further that Customer has established commercially reasonable procedures to verify the accuracy of the RDFI's ABA routing and transit number.

17. Accounts Receivable and Back Office Conversion Entries. NACHA Rules allow Customer to utilize ACH to collect consumer check payments received via U.S. mail or at a dropbox location ("ARC Entry"). NACHA Rules also enable Customer to convert during back office processing checks presented either at the point of purchase or a manned bill payment location ("BOC Entry"). In the event that Customer initiates an ARC or BOC Entry to Bank, Customer agrees that such ARC or BOC Entry will comply with all provisions of this Agreement and applicable Rules and makes the following additional representations and warranties regardless of which entity initiates the ARC or BOC Entry on its behalf:

a. Prior to the receipt of each check, Customer has provided clear and conspicuous notice to the Receiver: (i) that receipt of the check is authorization for a payment as a check transaction or for a one-time ACH debit to the Receiver's account; and (ii) of Customer's phone number for inquiries regarding BOC Entries.

b. Customer shall provide a copy of the notice to the Receiver at the time of the transaction if Receiver presents the check in-person.

c. Each check is eligible as a source document under NACHA Rules to be collected via an ARC or BOC Entry.

d. Customer shall use a reading device to capture the Receiver's routing number, account number, and check serial number from the source document (unless Bank has agreed to do so on Customer's behalf for retail lockbox services).

e. The amount of the entry, the routing number, the account number, and the check serial number are in accordance with the source document.

f. The source document to which the ARC or BOC Entry relates will not be presented for payment.

g. Customer has established policies and procedures to destroy the source document as soon as is reasonable and shall use commercially reasonable methods to securely store the source document until such destruction.

h. Customer shall use commercially reasonable methods to securely store all banking information relating to the ARC or BOC Entry.

i. Customer shall retain a reproducible and legible image, microfilm or copy of the front of the Receiver's source document for two years from the settlement date of each ARC or BOC Entry, and shall immediately provide same to Bank upon request.

j. For BOC Entries, Customer has employed commercially reasonable procedures to verify the identity of each Receiver of BOC Entries.

k. For BOC Entries, Customer maintains a working telephone number that is answered during Customer's normal business hours for Receiver inquiries regarding BOC transactions.

18. Point of Purchase (POP) Entries. NACHA Rules allow Customer to initiate a Debit Entry to a Receiver's account for in-person purchases made by check at the point-of-purchase ("POP Entry"). In the event that Customer initiates a POP Entry to Bank, Customer agrees that such POP Entry will comply with all provisions of this Agreement and applicable Rules and makes the following additional representations and warranties regardless of which entity initiates the POP Entry on its behalf:

a. Customer has posted a notice in a prominent and conspicuous location at the point-of-purchase and provided Receiver with a written notice of same: (i) that when a check is provided as payment, it is authorization for payment as a check transaction or for a one-time ACH debit to the Receiver's account; and (ii) that funds may be withdrawn from the Receiver's account the same day payment is made.

b. Each check is eligible under NACHA Rules to be collected via a POP Entry and the Receiver has not opted out of check conversion.

c. Customer has used a reading device to capture the Receiver's routing number, account number, and check serial number from the source document.

d. Customer has provided a receipt to Receiver containing the Originator name, telephone number, date of transaction, transaction amount, check serial number of the source document, merchant number, terminal city and state; and Customer has not included the Receiver's complete account number or complete identification number on such receipt.

e. Customer has returned the voided source document to the Receiver after capturing the necessary check information and the source document was not previously negotiated, voided, or provided by the Receiver for use in any prior POP Entry.

f. Customer has obtained the Receiver's authorization and provided a copy of same to Receiver, which: (i) is in writing and signed or similarly authenticated by the Receiver; (ii) is readily identifiable as an ACH debit authorization; (iii) clearly and conspicuously states its terms; and (iv) states that the check will not be processed.

19. International ACH Transactions (IAT) Entries. NACHA Rules allow Customer to initiate or receive international payment transactions transmitted via the ACH network.

a. In the event any part of an Entry originates from, or is transmitted to, a financial agency office located outside the territorial jurisdiction of the United States that handles the payment transaction ("IAT Entry"), Customer agrees that such IAT Entry will comply with all provisions of this Agreement and applicable Rules. Customer acknowledges that an IAT Entry is ineligible for Same Day ACH. Customer also makes the following additional representations and warranties regardless of which entity initiates the IAT Entry on its behalf:

- **(i)** Customer is in compliance with U.S. law, including, but not limited to, Customer's obligations under programs administered by OFAC and FinCEN.
- **(ii)** The origination of an outbound IAT Entry is in compliance with the laws and payment system rules of the receiving country.
- **(iii)** In the case of an IAT Entry to a non-consumer account, Customer has an agreement with the Receiver whereby the Receiver has agreed to be bound by the Rules.

IAT Entries may be processed by Bank through a correspondent bank. Bank assumes no liability for delays, non-delivery, late returns or other events resulting from processing delays by the correspondent bank or for other causes beyond Bank's control. Cancellation or amendment of an IAT Entry involving non-U.S. dollar currency is subject to any rate exchange loss as determined by Bank. Customer agrees to sell any canceled or amended Entry to Bank at the then current applicable foreign currency buy rate.

b. Remittance Transfer Provider. If Customer is at any time classified as a Remittance Transfer Provider under Regulation E, Customer represents, warrants and agrees that:

- **(i)** Customer shall be responsible for performing and complying with the requirements of 12 CFR Part 1005, including, but not limited to, providing disclosures to the consumer (sender), the error resolution procedures, the provision of any remedies to the consumer, and the cancellation and refund of remittance transfers;
- **(ii)** Bank is acting as an agent and not as a Remittance Transfer Provider when performing activities on behalf of Customer; and
- **(iii)** Even if Bank is deemed a Remittance Transfer Provider under applicable law, Customer shall take all actions necessary to comply with the obligations of a Remittance Transfer Provider.

Customer agrees to indemnify and hold Bank harmless from and against any and all loss, liability, damage, costs and expenses (including attorneys' fees) that Bank may sustain in reliance on Customer's representations and warranties set forth in this Agreement or the Rules.

20. Third-Party Vendors. If Customer initiates Entries through a third-party vendor or processor ("Vendor"), Vendor is the agent of Customer and not of Bank. If Customer uses a Vendor, Customer shall be deemed to have authorized Bank to follow the instructions of such Vendor to the same extent and under the same conditions as would apply if the instructions came direct from Customer and Customer shall be responsible for insuring that such Vendor fully complies with the Rules and this Agreement. Bank is not responsible for the acts or omissions of Vendor and Customer agrees to be liable for and hold Bank harmless from, any losses caused by the acts or omissions of Customer's Vendor.

21. Third-Party Sender. If Customer is transmitting Entries as a third-party vendor or processor on behalf of originators ("Third-Party Sender"), Customer agrees to be bound by the applicable terms provided in this Agreement and the Rules. Customer warrants to Bank that the originator has agreed to assume the responsibilities of an Originator under NACHA Rules and that ACH Entries shall not be initiated in violation of laws of the United States. Customer represents that it has executed an ACH agreement with each Originator and that the agreement binds the Originator to the NACHA Rules. Customer shall provide Bank with the list of Originators, copies of the agreements, and other information deemed reasonably necessary to identify the Originators within two (2) Business Days of Bank's request. Bank reserves the right to review the list of Originators for which Customer is transmitting the Entries and to reject any in Bank's sole discretion. As Third-Party Sender, Customer agrees to indemnify, defend and hold Bank harmless from and against any and all claims, demands, expenses, losses, liabilities, and damages, including reasonable attorney fees and court costs at trial or on appeal that arise directly or indirectly from the failure of the Originator to perform its obligations as an Originator under NACHA Rules. Customer further agrees to assume all applicable responsibilities, warranties and liabilities of the ODFI, as specified in the NACHA Rules. Customer shall cooperate fully and respond within two (2) Business Days to any inquiry from Bank relating to potential NACHA Rule inquiries or violations.

22. Cash Concentration/Deposit Reporting Services. Customer may request Bank to provide deposit reporting Services based on information provided by the Customer or its designated Agent. Information will be delivered to Bank at the time and location established by Bank. Bank has no responsibility for the accuracy of any information provided by Customer. Customer may authorize Bank to initiate Credit or Debit Entries to accounts designated by Customer at other financial institutions. Bank will initiate such Entries in accordance with agreed procedures. Customer agrees to authorize RDFIs to honor such transactions.

23. ACH Positive Pay Service. ACH Positive Pay Service assists Customer in detecting fraud by electronically matching incoming ACH transactions to authorizations that Customer can create and manage online. If ACH Positive Pay Service is selected by Customer, Customer shall designate the account(s) maintained at Bank that are to be used with the ACH Positive Pay Service ("ACH Positive Pay Account"). Customer shall create authorizations for incoming ACH Credit and/or Debit Entries that it desires to post to the ACH Positive Pay Account. Customer shall be responsible for the accuracy and completeness of all information provided to Bank. Bank will allow incoming Entries that match Customer's authorizations to post to Customer's ACH Positive Pay Account. Incoming ACH transactions that do not match Customer's authorizations will be treated as exception items, and Customer agrees to monitor, review and make payment decisions on the exception items prior to Bank's established deadline. Bank is authorized to return all exception items unless Customer instructs bank to pay one or more exception items prior to the established deadline. Bank shall have no responsibility for any liability, loss or damage resulting from the return of any exception item to the Originator in accordance with this Section or Customer's failure to meet Bank's established deadlines, except with respect to losses caused by Bank's own lack of good faith or failure to exercise ordinary care. Bank's failure to report a discrepancy will not discharge Customer's obligation with regard to any item and shall not obligate Bank to return any item if it is otherwise authorized.

E. WIRE TRANSFER SERVICES

1. Introduction.

a. Governing Law. Bank sends outgoing and receives incoming wire transfers through Fedwire (the funds transfer system owned and operated by the Federal Reserve Banks or other provider in accordance with section II.24.A). All funds transfers are governed by this Agreement, Subpart B of Regulation J of the Federal Reserve Board, OFAC regulations, and all other applicable international, federal, state and local laws and regulations. Customer agrees not to initiate or receive a wire transfer payment order in violation of applicable federal, state or local law.

b. Authorized Users. Customer will designate to Bank in the form required by Bank those individuals authorized to instruct Bank regarding wire transfer Services including without limitation, individuals authorized to initiate payment orders and select advice methods, confirmation methods, and any or all authorizations and instructions that may be requested by Bank. Bank may rely on any such authorization until it has been revoked in writing by Customer. Bank shall have a reasonable time to process any revocation received pursuant to this Section.

2. Routing/Time Deadlines. Bank may use any means of transmission, funds transfer system, intermediary bank, clearinghouse or route that Bank reasonably believes is suitable for each outgoing wire transfer. Bank will establish from time to time one or more deadlines after which Bank will not accept an incoming payment order to be processed on the day of receipt. Payment orders received after Bank's established deadline, during a maintenance window, or on any non-Business Day, including any Saturday, Sunday, holiday or any day that Bank's wire department is not open will be rejected. Payment orders received during a maintenance window, including the end-of-day maintenance window, will not receive a notice of rejection.

3. Payment Orders.

a. Communication. Customer may communicate a payment order to Bank by the means and manner agreed to between the parties.

b. Content of Payment Orders. Customer will supply to Bank any information Bank may reasonably request regarding any payment order initiated by Customer, including, without limitation, money amounts, affected accounts, dates of transfer, the beneficiary's name and account number, the name and routing number or bank identifier code of the beneficiary's financial institution, such additional information as Bank may reasonably request and, if necessary, further evidence of any Agent's authority to transfer funds or to do any other act contemplated by this Service.

c. Execution of Payment Orders. Customer authorizes Bank to execute and charge Customer's account(s) with Bank for payment orders delivered to Bank in accordance with this Agreement. Bank has no obligation to execute a payment order if Customer's account to be charged has insufficient collected and available funds to cover the order.

d. Processing Payment Orders. The order in which Bank processes wire transfer payment orders is determined solely by Bank. Customer does not have the right to reverse, adjust or revoke any payment order after it has been received by Bank, provided, however, that Bank will make a reasonable effort to act on such a request by Customer. With respect to a payment order already transmitted to the beneficiary's financial institution, Bank shall, at Customer's request, request the financial institution to return funds previously transferred. Customer understands that the receiving institution is under no legal obligation to comply with this request.

e. Rejection of Payment Orders**.** Bank may reject a payment order from Customer if such payment order is not initiated in accordance with the applicable security procedure, if there is any inconsistency between a payment order and information previously supplied to Bank, if Bank is unable to obtain confirmation of such payment order satisfactory to Bank, if there are insufficient collected funds in Customer's specified account to fund the payment order, if Bank has a reasonable basis to suspect the payment order may be unauthorized or fraudulent, or if Bank has other reasonable grounds not to honor the payment order. Bank will notify Customer by telephone that it has rejected a payment order. Bank may also reject an incoming payment order if it has reasonable grounds to do so.

f. Standing Payment Orders. If requested by Customer and agreed to by Bank, Customer may initiate a standing payment order, which is one where the Customer pre-programs the beneficiary, the beneficiary's financial institution, and the accounts to be debited and credited and such information remains constant for subsequent payment orders. Customer shall provide Bank with the necessary information to execute the standing payment order, including, without limitation, the dollar amount to be transferred or the desired peg balance, the frequency of the order and the day of week or month when the payment order is to be executed. Customer may terminate a standing payment order at any time upon receipt by Bank of a written notice. Bank shall have a reasonable time to act on such notice.

g. Batch Wire; Direct Wire Interface.

(i) Service Specifications. If requested by Customer and agreed to by Bank, the Batch Wire service and Direct Wire Interface service allows Customer to initiate payment orders from its computer to Bank's computer, subject to the provisions of this Agreement. In addition, the Direct Wire Interface service allows Customer to receive reports of incoming wire activity. Customer will comply with the relevant interface specifications established by Bank for these services, including, without limitation, file formats, means of data transmission, or establishing a secure connection (the "Specifications"). Bank may furnish Customer with modifications to the Specifications and Customer shall implement such modifications as soon as reasonably practicable.

(ii) Wire Transfer Software, Confidentiality. Customer or its Agent shall be solely responsible for creating the computer programs to implement the Specifications ("Wire Transfer Software"). Customer shall maintain the confidentiality of the Specifications and the Wire Transfer Software and permit access solely to those responsible for supporting the Wire Transfer Software or authorized to initiate payment orders. Customer shall implement passwords and other security devices commensurate with the highest level of security afforded by Customer to other computer programs and confidential information of Customer.

4. Confirmation of Outgoing Wire Transfers.

a. Confirmation Method. Customer and Bank shall agree to the method of confirming payment orders received from Customer. Customer shall designate Authorized Users to confirm payment orders. Bank recommends a minimum of three potential Authorized Users to confirm payment orders and that Authorized Users serve as an initiator or a confirmer, but not both. Notwithstanding Bank's recommendation, if Customer permits an Authorized User to act as both initiator and confirmer, Customer hereby authorizes Bank to process a wire initiated and confirmed by such Authorized User. Customer may add, change or delete the Authorized Users in accordance with Section II.9 of this Agreement. In the event the designated Authorized Users with authority to confirm are not available to confirm a payment order, Customer agrees that Bank may, at its discretion, elect to process the payment order initiated by an Authorized User. Customer agrees to be bound by any such payment order processed by Bank.

b. Waiver of Confirmation. Bank advises Customer not to waive confirmation. If Customer, however, chooses to waive confirmation, Customer agrees to be liable for all outgoing payment orders, except those payment orders where (1) Customer is able to conclusively prove that the unauthorized transfer could not have been prevented by the use of confirmation procedures; (2) Bank is unable to produce any evidence that the unauthorized transfer could have been prevented by the use of confirmation procedures; and (3) Customer is not otherwise liable for the transfer under this Agreement or applicable law. Customer acknowledges that not using confirmation procedures substantially increases Customer's risk of liability for an unauthorized wire transfer.

c. Confirmation of Wire Transfers Initiated through SinglePoint®, Batch Wire, or Direct Wire Interface (collectively, the "Customer Initiation Methods"). Customer represents and warrants that the confirmation of payment orders initiated through any of the Customer Initiation Methods shall be verified, initiated and confirmed by Customer prior to receipt by Bank. All payment orders shall be initiated and confirmed in accordance with the security procedures established for the relevant Customer Initiation Method.

5. Advices.

a. Advice Method. Customer will select the type of advice it wishes to receive after Bank receives an incoming wire transfer. If Customer selects telephonic advices, Customer may designate person(s) to be contacted and telephone numbers to be used for advice purposes. Bank shall not be required to make more than one attempt to reach Customer's designated location by telephone. If Bank is able to reach the Customer's designated location, but not Customer's designated Agent, Bank may leave a message containing the information to be conveyed.

b. Advices by Facsimile. If Customer selects advices by facsimile ("fax"), Customer shall exercise extreme care in maintaining its own security in the receipt of fax advices. Customer acknowledges that the information to be received by fax may include confidential information, including, without limitation, names, amounts, phone numbers, originating account information and the text of incoming wires. Customer further acknowledges that it alone assumes full responsibility for maintenance of its internal security procedures to keep such information confidential. Customer agrees to indemnify, defend and hold Bank harmless against any and all claims, demands, expenses, liabilities and damages, including attorney fees at trial and on any appeal or petition for review, incurred by Bank arising directly or indirectly from the transmission by fax of an incoming wire transfer advice.

c. Waiver of Advice. Customer may waive its right under the Uniform Commercial Code to receive advices by so indicating on the applicable Implementation Documents.

6. International Wire Transfers.

a. General. Wire Transfers across country borders are customarily done by Bank through a correspondent bank. Outgoing U.S. dollar payment orders may be converted by the correspondent bank or beneficiary bank to the local beneficiary's currency at the applicable rate in effect at any point in the processing chain. Though in some cases Bank may receive compensation from the correspondent bank in accordance with such conversion, the conversion is executed by the correspondent bank in accordance with the policies and procedures of such correspondent bank at an exchange rate set by that correspondent bank in its sole discretion and subject to any applicable regulations. Any fee, commission or charges assessed by Bank, the correspondent bank or the beneficiary bank may be passed on to the Customer or deducted from the wire transfer amount. Bank assumes no liability for delays, non-delivery, market risk or other events resulting from causes beyond Bank's control. In refunding unexecuted payment orders, Bank shall be liable to Customer only to the extent it receives payment from the correspondent bank processing the transfer. Cancellation or rejection of a transfer involving non-U.S. dollar currency is subject to any rate exchange loss as determined by Bank. Customer agrees to sell any canceled or rejected payment order to Bank at the then-current applicable foreign currency buy rate.

b. Remittance Transfer Provider. If Customer is at any time classified as a Remittance Transfer Provider under Regulation E, Customer represents, warrants and agrees that:

(i) Customer shall be responsible for performing and complying with the requirements of 12 CFR Part 1005, including, but not limited to, providing disclosures to the consumer (sender), the error resolution procedures, the provision of any remedies to the consumer, and the cancellation and refund of remittance transfers;

(ii) Bank is acting as an agent and not as a Remittance Transfer Provider when performing activities on behalf of Customer; and

(iii) Even if Bank is deemed a Remittance Transfer Provider under applicable law, Customer shall take all actions necessary to comply with the obligations of a Remittance Transfer Provider.

Customer agrees to indemnify and hold Bank harmless from and against any and all loss, liability, damage, costs and expenses (including attorneys' fees) that Bank may sustain in reliance on Customer's representations and warranties set forth in this Agreement.

7. Reverse Wire Transfers.

a. Authorized Debits. If requested by Customer and agreed to by Bank, Customer authorizes Bank to debit Customer's account(s) with Bank upon receipt of a Fedwire drawdown request, and to send funds to the requesting bank. Each transfer will be done on the Business Day Bank receives the incoming request from the requesting bank if the request is received within a reasonable time to determine whether Customer's Account has sufficient available funds and to obtain access to the Federal Reserve network prior to the close of business.

b. Reverse Wire Funding. Customer acknowledges and agrees that Bank may reject any reverse wire request in excess of the collected and available balance. Requesting bank will be notified if the request is rejected by Bank.

c. Wire Transfer Numbers. Customer's obligation to pay Bank the amount of the funds transfer in the event that the Fedwire message does not identify the same account or financial institution is not excused in such circumstances. When names and numbers are inconsistent, the numbers shall control. With respect to incoming wire transfers that do not indicate an account number recognizable to Bank, Bank may return the wire transfer to the sending financial institution without incurring any liability. Customer does not have the right to reverse, adjust or revoke any Fedwire message after it is received by Bank; however, Bank will use reasonable efforts to act on such a request by Customer to reverse, adjust or revoke such message before Bank has sent the outgoing wire transfer. With respect to an outgoing wire transfer already transmitted by Bank, Bank shall, at Customer's request, request the receiving financial institution to return funds previously transferred. Customer understands and agrees that the receiving financial institution may or may not comply with any such request.

d. Authorizations. Customer's authorization for reverse wire requests shall remain in effect until Customer gives written notice to Bank. Bank will have a reasonable time to act on any written notice received from Customer.

e. Limitation on Bank's Liability. In consideration of Bank's compliance with this authorization, Customer agrees that Bank's treatment of any authorized debit, and Bank's rights with respect to it, shall be the same as if the entry were initiated personally by Customer. Bank shall have no liability if any authorized debit is dishonored.

8. Additional Limits on Bank's Liability. Bank is responsible only for performing the Services described in this Section. Bank shall not be responsible for the acts or omission of Customer, any Federal Reserve Bank or other financial institution, any transmission or communication or any other person, and no such person shall be deemed to be Bank's agent under this Agreement.

F. DATA TRANSLATION SERVICES

1. Introduction. Bank may provide electronic data integration, custom formatting, or data translation ("Data Translation Services") to electronically streamline the exchange of payments, remittance and other information between Customer and Bank and between Customer and its trading partners. If requested by Customer and agreed to by Bank, Bank will provide Data Translation Services in accordance with this Agreement and other procedures provided to the Customer. Customer agrees that Data Translation Services shall be governed by this Section and all other relevant sections of this Agreement.

2. Scope of Services. Data Translation Services may be used by Customer to initiate and receive payments using multiple payment channels or networks, which may include, but are not limited to, checks, wire transfers, ACH, virtual card, SWIFT, Real-Time Payments (RTP), Zelle, Visa or Mastercard, and to provide and receive business communications such as remittance data, payment data, invoices, confirmations, orders, or other information in Customer's preferred format. In order to obtain Data Translation Services, Customer must maintain an analyzed demand deposit account with Bank.

3. Entry Origination/Processing Dates/Deadlines. Customer may from time to time deliver to Bank requests to format information for payments and/or other data translation via the agreed upon means (collectively, "Data Translation Request(s)"). All Data Translation Requests shall conform to the content, format, deadlines and other specifications that may be established by Bank or a third-party software program approved by Bank for use with the Service. Bank may establish different deadlines for Data Translation Requests depending on the method of delivery employed by Customer and all such deadlines are subject to change. Bank must receive Customer's Data Translation Requests at or prior to the deadline established for processing on the Business Day of receipt. Data Translation Requests received after the deadline will be processed on the next Business Day. Customer will be notified if a Data Translation Request is rejected in accordance with procedures established by Bank. Customer represents and warrants that all information in each Data Translation Request delivered to Bank by Customer shall be accurate, timely, authorized and will otherwise comply with all applicable laws, rules and regulations.

4. Content and Transmission of Information. Data Translation Requests are only designed to respond to information provided by Customer. Accordingly, any inaccuracy in any information provided by Customer may result in unintended processing by Bank. Bank bears no responsibility for detecting or reporting any error in data supplied by Customer and shall not be liable to Customer for any information provided by Customer with respect to a Data Translation Request which is inaccurate, incomplete, duplicative or otherwise incorrect. Customer shall retain data on file adequate to permit Customer to remake each request for at least ten (10) Business Days following the date a file is sent to Bank and shall provide such data to Bank on request. Customer acknowledges that Bank has no obligation to maintain back-up copies of requests or other information delivered by Customer to Bank. Customer acknowledges that Data Translation Services may involve the transmission of confidential consumer information that may be subject to privacy laws and regulations, including breach notification regulations. Customer agrees to notify Bank if Customer sends or receives protected health information as part of Data Translation Services. If Customer is the recipient of misdirected information, Customer shall immediately notify Bank and return the information to Bank. Customer agrees not to retain, use, copy, distribute or otherwise disclose the information in any manner.

5. Payment Requests. Customer agrees that its requests to initiate payments utilizing Data Translation Services shall be governed by this Section, the sections of this Agreement governing the applicable payment mechanism, and all other applicable laws, rules and regulations governing the relevant payment mechanism. Customer authorizes Bank to execute all electronic and check payment requests ("Payment Requests"), and settle to the Customer's account all Payment Requests, delivered to Bank in compliance with the terms of this Agreement, including the security procedures. Customer is solely responsible for initiating the Payment Requests sufficiently in advance to meet Customer's contractual obligations to its vendors and/or its customers. Bank shall not be responsible for any late payment or finance charges that may result from Customer's failure to allow sufficient lead-time.

a. Electronic Payment Requests. Depending on the scope of the Data Translation Services solution offered by Bank, Customer may from time to time request that Bank initiate electronic payments using the ACH, card, SWIFT and Zelle networks, The Clearing House system, the wire transfer system or other electronic funds transfer system ("Electronic Payment Requests"). Except as may be provided elsewhere, Customer may not amend or revoke Electronic Payment Requests after they have been received by Bank. Customer acknowledges that the rules of NACHA and other electronic funds transfer systems may make any credit provisional until the financial institution crediting the account of the beneficiary specified in an Electronic Payment Request receives final settlement and that if the financial institution does not receive final settlement, it is entitled to a refund and Customer shall be deemed not to have paid the beneficiary. Electronic Payment Requests with settlement dates of more than thirty (30) calendar days from receipt will not be processed unless prior arrangements have been made. Customer authorizes Bank to use whatever means Bank, in good faith, deems reasonable under the circumstances to execute each Electronic Payment Request, including selection of a funds transfer system, routing and means of transmission.

b. Check Payment Requests. Customer may from time to time request that Bank print checks and related remittance information ("Check Payment Request(s)") and issue and distribute such checks and information. Customer shall designate the account(s) from which Bank is to make payment ("Payment Account") and shall maintain a sufficient balance in the Payment Account to fund its Check Payment Requests. To mitigate against fraud, Bank requires that Customer utilize Bank's Positive Pay Services in conjunction with the Payment Account. Customer agrees that checks drawn in a manner consistent with a Check Payment Request shall be duly authorized to the same extent as a check drawn and signed by Customer and is properly payable by Bank. Customer authorizes Bank to deduct the Payment Account in the amount of the Check Payment Request. If there are insufficient funds in the Payment Account to make a Check Payment Request, Bank may in its sole discretion either refuse to make the payment or make the payment and overdraw the Payment Account. In either event, Customer shall incur fees as disclosed by Bank in the account agreement and related fee schedules and other disclosures. Customer has no right to reverse, adjust or revoke any Check Payment Request after it has been received by Bank. Bank will, however, make reasonable efforts to act on such a request by Customer. If Check Payment Requests relate to printing checks drawn on another financial institution's account ("Off-Us Checks"), Customer acknowledges that Bank shall not be liable for any fraudulent or unauthorized activity that may arise from the use of such Off-Us Checks. If Check Payment Requests relate to printing payroll checks, Customer acknowledges that Bank shall only print payroll checks and shall not be responsible for any other aspect of payroll processing, including, but not limited to, producing IRS Form W-2s, 1099s or other payroll-related tax documents. In addition, Customer represents and warrants that it shall not include any social security numbers in the Check Payment Requests for payroll checks and agrees to indemnify and hold Bank harmless if the checks or check stubs are printed with social security numbers.

6. Security Procedures. Customer shall comply with all security procedures established by Bank for Data Translation Services. Customer agrees that all Data Translation Requests that involve the exchange or transmission of banking information shall only use secure transmission options supported by Bank. For some Services, such as ACH, Customer and Bank may establish alternative, comparable security procedures for accessing such Services when Data Translation Services are utilized. Customer is solely responsible for maintaining its own internal security procedures to prevent errors or unauthorized access to Customer's computer systems by unauthorized employees, vendors or customers. Bank has no responsibility for the security procedures employed by Customer's trading partners.

7. File Confirmation Procedures. Customer shall at all times comply with the applicable file confirmation procedures established by Bank. File confirmation procedures utilizing Data Translation Services are solely for the purpose of verifying Bank's receipt of the Payment Requests but not for identifying errors in transmission or content.

a. Control Totals. Control Totals are an elective option that allows Customer to confirm file totals of Payment Requests transmitted to Bank. If the Control Totals option is selected by Customer, Customer shall call Bank's Audio Response Unit ("ARU") or send a data file to Bank providing the total items and dollar value of the Payment Requests and any other necessary information ("Control Totals"). After Bank receives Customer's Payment Requests, Bank will compare the Payment Requests to the Control Totals. If the Control Totals match the Payment Requests, Bank will process the Payment Requests. Bank will not process the Payment Requests if Bank does not receive conforming Control Totals on or before the established delivery deadline. Bank will notify Customer if the Control Totals do not match the Payment Requests, or if Bank receives Payment Requests without receiving Control Totals or vice versa.

If the Control Totals option is not selected by Customer, upon Bank's receipt of Customer's electronic payments via a data file, Bank shall send an acknowledgement to Customer confirming receipt and acceptance of Customer's Payment Requests. If Customer identifies errors in the content or transmission of Customer's Payment Requests, or if Customer does not receive an acknowledgement from Bank, Customer agrees to notify Bank immediately. Depending on the payment deadlines, Bank may be able to delete or reverse processing of Payment Requests.

b. Payables File Manager. Payables File Manager is an elective Service that allows Customer to confirm that Bank has received Customer's files. Using SinglePoint® or other applications or systems as may be introduced by Bank, Customer may view the status of Data Translation files sent by Customer to Bank. If Customer selects this Service, Customer agrees to promptly and regularly review the status of all files displayed in the Payables File Manager and to notify Bank immediately if any files sent by Customer were not received by Bank. Depending on the payment deadlines, Bank may be able to delete or reverse processing of Payment Requests. Customer bears sole responsibility for any inaccurate or incomplete information sent to Bank if Customer fails to notify Bank prior to Bank's processing of Customer's files.

8. Supplier Prefer Pay. If selected by Customer and agreed to by Bank, the Supplier Prefer Pay Service provides an electronic payment enrollment and storage solution, which also allows use of the stored data for payment origination.

Customer's suppliers or trading partners ("Suppliers") may elect to enroll in a program to receive payment from Customer via ACH or alternative payment methods that may include, but are not limited to, virtual cards (account without the issuance of a physical credit card) and checks. As part of this Service, Bank will: (i) provide online enrollment for Suppliers to register to receive payment from Customer, including the option for Supplier to provide a preferred email address to receive remittance information; (ii) contact Suppliers (with contact information provided solely by Customer) via telephone, email or regular mail to describe the supplier enrollment service and solicit their participation; (iii) support Supplier enrollment; and (iv) at Customer's election, securely store Supplier's banking information. Customer will designate one or more System Administrator(s) responsible for establishing internal security procedures, including, without limitation, setting up and maintaining access to the Service. Customer shall be solely responsible for conducting the necessary due diligence to vet Customer's Suppliers and to ensure that only legitimate Suppliers of Customer enroll in the Service. Bank recommends that Customer establish and utilize robust security procedures in accordance with the guidelines provided by Bank in the Implementation Documents. If Customer declines Bank's recommendation, Customer agrees it will be precluded from asserting any claims against Bank for unauthorized payments, except with respect to claims caused by Bank's own lack of good faith or failure to exercise ordinary care.

Customer acknowledges and agrees that use of the Service may be affected by external factors beyond Bank's control. Interruption of the Service or performance hereunder for any reason shall not relieve Customer of its obligation to make timely payment to Suppliers, and Bank shall not incur any liability to Customer for Customer's failure to timely make any such payment to Suppliers. Customer agrees to indemnify, defend and hold Bank harmless from and against any and all claims, demands, expenses, losses, liabilities, and damages, including reasonable attorney fees and court costs at trial or on appeal that arise directly or indirectly out of any payments made by Customer using the enrollment information furnished by Customer, Suppliers or any other party on behalf of Supplier.

G. COURIER SERVICES

1. Introduction. Courier Services are offered by Bank for Customers who require ground transportation for the pick-up, transportation and delivery of non-cash banking transactions to Bank locations other than a cash vault. Bank has selected a third-party courier ("Courier") to provide the transportation Services on Customer's behalf.

2. Deposit Contents. Customer acknowledges that the Courier Service is not an armored delivery service and agrees to tender check-only deposits to the Courier. Customer agrees that it shall not deposit any currency, securities, documents or other items which cannot be reconstructed or duplicated. Any deposits of cash using this Service shall be at Customer's peril and Customer agrees to assume any and all risk of loss associated with tendering cash deposits.

3. Courier as Agent of Customer. Customer acknowledges and agrees that the Courier is the Agent of Customer and not of Bank. Until Bank takes delivery of the deposits in accordance with Section 7 below, Bank assumes no risk of loss or theft by third parties or employees of the Customer or the Courier. Bank makes no representation or warranty regarding, and assumes no responsibility with respect to, any services performed or promised by the Courier. The Courier maintains ultimate responsibility for scheduling, movement and routing.

4. Packaging. Customer agrees to tender deposits to the Courier using a tamper-evident disposable deposit bag. Customer shall prepare, in duplicate, deposit tickets that list the deposit contents, the total dollar amount of the deposits and the account or accounts of Customer at Bank to which the checks shall be deposited. Customer agrees to place the original deposit ticket in the bag and to retain the duplicate ticket.

5. Reconstruction. Customer agrees to maintain a complete and accurate reconstructible deposit listing of each deposit given to the Courier. Customer agrees to reasonably and promptly cooperate with Bank and/or the Courier in the notification, identification and replacement of any damaged, lost or destroyed deposit items. Such cooperation shall include reasonable requests by Customer to the makers of the checks to issue duplicates for the damaged, lost or destroyed items. Customer shall notify Bank of any damaged, lost or destroyed items no later than sixty (60) days following the day the items were delivered to the Courier. Bank shall have no obligation to research any damaged, lost or destroyed items if Customer fails to notify Bank within the prescribed time.

6. Processing. Bank is authorized to open the bag and to process the contents in accordance with Bank's normal procedures and any applicable availability schedules. All deposits shall be subject to verification and adjustment by Bank. Bank's verification shall be deemed correct and binding upon Customer absent manifest error. If Bank discovers a discrepancy between the contents of the bag and the deposit ticket, Customer hereby authorizes Bank to process and deposit the contents, and to complete an adjustment ticket, which will be mailed or delivered to Customer.

7. Actual Receipt Required. Bank is not liable for any losses, damage or destruction of items that occur while in the custody of the Courier. Bank shall not be considered as an insurer of any deposits placed with the Courier until such time the deposits are received and acknowledged by Bank. Deposits delivered to the Courier are not considered received by Bank until they are actually delivered to Bank's processing center.

8. Delivery of Deposits. Deposits delivered by the Courier after Bank's deadline for the receipt of deposits, may, at Bank's discretion, be held and credited to the Customer's account the next Business Day. Courier Service deliveries on Saturdays, Sundays and on days recognized as bank holidays (when available), shall be held and credited to the Customer's account the next Business Day.

H. CASH VAULT SERVICES

1. Introduction. The Terms "cash", "coin" and "currency" as used herein shall refer to coin and currency of the United States and certain foreign currencies accepted by Bank.

2. Foreign currency. Customer shall not deposit any foreign currency unless Customer has obtained Bank's prior approval. Bank reserves the right, in its sole discretion, to impose restrictions on, or discontinue acceptance of, foreign currency deposits. Section H.5 below does not apply to foreign currency processing. Foreign coin shall not be accepted for deposit by Bank under any circumstances.

3. Account. All deposits of coin, currency and checks will be credited to, and all withdrawals of coin, currency and checks will be debited against, Customer's deposit account at Bank (the "Account") which Customer has designated as being covered by the Services described herein. Customer agrees that it shall not deposit any items, instructions or objects other than coin, currency and checks as outlined in this Agreement and agrees to assume any and all risk of loss associated with tendering items not specified herein.

4. Deposits.

a. Customer shall supply and maintain tamper-evident disposable plastic bags used for deposits. Plastic bags shall be sealed according to manufacturers' instructions and addressed to the appropriate secured facility specified by Bank. Customer will prepare deposits as follows: (i) currency will be batched separately from checks with each currency and check batch accompanied by a deposit ticket fully completed by Customer; (ii) currency will be banded with 100 notes of the same denomination whenever possible; (iii) deposits will be delivered by Customer's approved carrier to the secured facility specified by Bank; and (iv) to receive same-day credit, deposits must be made prior to the daily deadline established by Bank from time to time, and any deposits received by Bank after its deadline may be considered to have been received on the next Business Day. Foreign currency deposits do not qualify for same-day credit and are subject to Bank's prevailing exchange rates.

b. Bank will process Customer's deposits as follows: (i) deposits will be receipted and conditional (subject to verification) credit assigned based on the amount identified on the deposit ticket; (ii) deposit tickets that are missing, blank or do not contain legible "declared balances" are subject to delayed ledger credit of one Business Day; and (iii) coins and currency will be counted and Bank's count will be the valid and controlling count.

c. For U.S. currency, if there is a coin and currency variance of more than USD 10 from the declared balance on Customer's deposit ticket, Bank shall adjust Customer's coin and currency deposits through a separate debit or credit to Customer's account. Any such adjustment shall not be reflected on Customer's deposit ticket. Deposit tickets containing a declared total that includes check deposits may require a separate and additional adjustment for any variances to Customer's check deposits. If there is a coin and currency variance of USD 10 or less from the declared balance on Customer's deposit ticket, Bank shall not make any adjustment to Customer's currency and coin deposits and shall credit Customer's account based on Customer's declared balance. Upon request, Bank will provide Customer with any available information that may assist Customer in reconciliation of the difference.

d. Deposited items are deemed received on the day of delivery if Bank receives the deposit prior to Bank's established deadlines. Deposits will be processed in accordance with normal Bank procedure and any applicable availability schedules. All deposits made by Customer shall be subject to verification and adjustment by Bank. Bank's verification shall be deemed correct and binding upon Customer for all purposes, absent manifest error.

e. If Customer chooses to pre-encode its checks or other items for deposit, Customer agrees to comply with the pre-encoded deposit procedures and specifications as may be established and revised by Bank. Customer shall be responsible for any of its encoding errors. Bank may treat certain deposits as unencoded deposits if there is an unacceptable rate of encoding errors.

5. Withdrawals.

a. Bank may provide Customer with U.S. currency and coin in designated denominations from time to time as requested by Customer through the Bank's automated ordering system ("Cash Orders"). Customer must comply with all of Bank's policies and procedures regarding the placement and delivery of Cash Orders, including, without limitation, the maintenance of a designated password. Customer shall be responsible for maintaining the confidentiality of Customer's password and restricting access to the system to authorized Agents. All Cash Orders will be charged to the account designated by Customer and must be picked up by Customer's Agent or sent by registered mail to a street address. Only approved carriers may pick up Cash Orders directly from a cash vault operated by Bank. Bank may release any Cash Order to any individual that Bank reasonably believes to be Customer's Agent. Customer shall be responsible for any Cash Order after receipt thereof by the Agent. Bank may specify a daily Cash Order limit and Customer agrees that it will not initiate a Cash Order in excess of the designated limit. In no event shall Customer initiate a Cash Order in excess of the immediately available funds in the designated account.

b. Customer may order currency and coin from Bank as follows:

- **(i)** The preferred order for currency is in standard full strap (100 banknotes) quantities only.
- **(ii)** Coin may be ordered in standard full box units (50 rolls), individual rolls or loose standard bags only.
- **(iii)** A charge for the face value of the monies ordered will be made to the Account on the day the order is processed by Bank.
- **(iv)** Orders for coin and currency may be placed no later than the deadline established by Bank from time to time for delivery on the next Business Day. Depending on Customer's location, select cash vault sites may require a multiple-day lead time or more for coin and currency orders.
- **(v)** Bank must be notified of any discrepancies pertaining to coin or currency orders within two Business Days of receipt by Customer of such coin or currency. Customer must return documentation to back-up outages such as plastic change order bag, currency strap, coin wrapper and/or box.

6. Processing. Bank will provide processing on all Business Days. Cash Vault Services using third-party applications with time-stamp data are for informational purposes only and may not reflect actual timing of receipt, posting or verification of Customer's deposits by Bank. Bank shall not be liable for any inaccurate or incomplete information with respect to such time-stamp data provided to Customer.

7. Carrier Service. Any carrier service utilized to deliver or obtain coin, currency or other property to or from Bank, including, without limitation, a common carrier, will act as the agent of Customer and not of Bank. Customer and carrier shall agree upon the pickup and delivery days and times. Customer will bear the entire risk of loss of coins, currency, checks or other property of Customer when in the custody or control of Customer's carrier service.

8. Cash Shipping Solution. If this Service is selected by Customer and agreed to by Bank, Bank may rent a caller box at the United States Postal Service (USPS) post office and engage an armored carrier, on Customer's behalf, to retrieve Customer's deposits from the caller box for delivery to Bank and to deliver Customer's coin and currency orders to the post office. Customer agrees to implement and properly use any and all security procedures prescribed or recommended by USPS and Bank and agrees to hold Bank harmless from any claims or losses arising from Customer's failure to implement and properly use any such prescribed or recommended security procedures. Customer will bear the entire risk of loss of coins, currency, checks or other property of Customer until received at, or upon pick up from, Bank's cash vault.

9. Representations. Customer represents and warrants to Bank that (a) all funds deposited with Bank will be the proceeds of, and all funds ordered and withdrawn from Bank will be intended for use in, Customer's lawful activities and (b) all of Customer's transactions hereunder will be conducted solely on Customer's behalf and not on behalf of any other person or entity.

10. Regulatory Compliance. Upon request, Customer shall immediately provide Bank with any information and shall otherwise cooperate with Bank in every way necessary in order to enable Bank to fulfill its obligations with respect to the reporting of transactions in coin and currency or any other regulatory requirement.

11. Use of and Access to Cash Vault Services. Customer acknowledges and agrees that Cash Vault Services are to be used exclusively for its benefit and, absent prior written approval by Bank, Customer will not permit third parties, including non-Customers or other Agents of Customer (excluding approved carriers or agents making cash deposits into a Customer's account at Bank and agents ordering cash on behalf of a Customer), from accessing or otherwise using any Cash Vault Services offered by Bank.

I. U.S. BANK EASYTAX[SM] SERVICES

1. Authorization; Enrollment. If the EasyTax Service is requested by Customer and agreed to by Bank, Bank will electronically enroll Customer in the Electronic Federal Tax Payment System (EFTPS) if Customer desires to make federal tax payments via EFTPS. Electronic enrollment will allow Bank to process Customer's tax payments in compliance with EFTPS through Bank's tax payment system only. If Customer chooses to pay federal taxes by any other means, payments may not be EFTPS compliant. Customer understands that Bank's EFTPS enrollment form 8655 does not replace the EFTPS form 9779, which is sent to mandated companies by the Internal Revenue Service. Customer may also use the EasyTax Service to make state and/or local municipality tax payments in jurisdictions that support such payments. Customer agrees that the EasyTax Service shall be governed by this Section and all other relevant sections of this Agreement.

2. Submission of Information. Customer shall furnish Bank with complete and accurate master file information which shall enable Bank to file tax deposits via ACH with the appropriate tax authorities in a timely manner. The Service provided by Bank hereunder shall be based solely upon the information furnished by Customer to Bank. Accordingly, any inaccuracy in any information provided by Customer may result in unintended processing by Bank. Customer bears sole and exclusive responsibility to verify that the information provided to Bank is complete and accurate. Bank bears no responsibility for detecting or reporting any error in data supplied by Customer and shall not be liable to Customer for any information provided by Customer with respect to information that is inaccurate, incomplete or otherwise incorrect. The Service provided hereunder does not relieve Customer of any duty imposed on Customer by law to maintain records or from verifying and, if necessary, immediately correcting in writing all data received from Bank relating to the Service. Customer agrees to be bound by any instructions, whether or not authorized, issued in its name and accepted by Bank in accordance with the agreed procedures. Customer shall indemnify and hold Bank harmless from and against all liability, loss and damage (including attorneys' fees and other costs incurred in connection therewith) arising out of the use of information provided by Customer.

3. Requests for Payment. Requests for payment to tax authorities must be made in accordance with instructions which Bank shall provide Customer, which may be amended by Bank from time to time at its discretion, and will be considered complete only if actually received by Bank. All tax deposits must be initiated at least one Business Day in advance of the due date, otherwise deposits may be subject to federal or state penalties. Any request by Customer to make tax deposits hereunder shall be submitted to Bank prior to the daily cut-off time established by Bank from time to time. Any such request received by Bank after its daily cut-off time may be processed on the next Business Day. In the event that an ACH Entry is rejected or returned by an ACH processor for any reason whatsoever, Bank will give Customer notice of any rejected or returned ACH Entry in the usual manner agreed to by the parties. Bank shall have no liability for any delay caused by strikes, telephone failure, equipment or electrical failure, or any other condition beyond the reasonable control of Bank.

4. Receipt of Funds. Funds received by Bank from Customer shall be held as a deposit liability of Bank to Customer until such time as such funds are due and paid to the appropriate tax authorities. Customer is not entitled to interest on such funds and Bank may invest such funds solely for Bank's benefit.

5. Account. Customer shall maintain with Bank a commercial demand deposit account in which Customer shall maintain immediately available funds in an amount sufficient to cover all tax deposits and fees charged by Bank for the Service hereunder. Failure by Customer to maintain such funds shall relieve Bank from providing such Service, notwithstanding any request by Customer to provide the Service.

6. Liability. Bank shall not be liable for any penalties assessed by reason of failure of Customer to make any tax payments. Interruption of the Service or performance hereunder for any reason shall not relieve Customer of its obligation to make any required tax deposits, and Bank shall not incur any liability to Customer for Customer's failure to make any such deposit. If Customer elects to make a tax deposit by any means other than through Bank, Bank shall not be liable for any penalties or interest arising from any error in due date or other calculations for deposits made within the period in which such other deposit was made. Bank may choose to provide its EasyTax Service through a third-party vendor. Bank and its third-party vendor's liability to Customer is limited to correcting any error made by the Bank or third-party vendor. The sole and exclusive remedy, at law or in equity, against Bank or third-party vendor is limited to money damages in an amount not to exceed the total amount paid to Bank for EasyTax fees during the twelve (12) months preceding the event giving rise to the liability. Neither Bank nor third-party vendor will be liable for special, incidental, indirect, punitive or consequential damages. Customer acknowledges that the EasyTax Service would not be available or would be available at substantially increased rates without the liability and remedy limitations set forth in this Agreement.

7. Codes. Customer shall keep confidential the access and PIN codes issued to Customer in connection with the Service, and only Customer shall use such codes. If Customer suspects that any such codes have become known or otherwise accessed by unauthorized persons, Customer shall notify Bank immediately and follow up such notice with written confirmation. The occurrence of unauthorized access will not affect any deposits made in good faith by Bank before Bank has received such notification and had a reasonable time to act to prevent any unauthorized deposits.

J. PAPER-BASED DISBURSEMENT SERVICES

1. Controlled Disbursement.

a. Disbursement Account. If requested by Customer and agreed to by Bank, Customer will open and maintain a demand deposit account ("Disbursement Account") and a primary funding account ("Funding Account") at Bank. The disbursing bank may be a financial institution that is a subsidiary or affiliate of Bank or Bank itself. Customer agrees to use Bank's Positive Pay Services in conjunction with the use of Disbursement Account(s). Should Customer decline to use Bank's Positive Pay Services in conjunction with the use of Disbursement Account(s), Customer agrees that, except with respect to liability, loss or damage caused by Bank's own lack of good faith or failure to exercise ordinary care, it will be precluded from asserting any claims against Bank for paying any unauthorized, altered, counterfeit or other fraudulent item that Bank's Positive Pay Service was designed to detect or deter. Bank also reserves the right to require Customer to execute a separate indemnity agreement related to its use of Disbursement Account(s). Customer hereby authorizes and directs Bank to act on its behalf and as its agent, as Bank in its sole discretion deems necessary or advisable, in performing any of the Controlled Disbursement Services and related Services.

b. Funding Procedures. On each Business Day, Bank shall electronically provide Customer with a report of the total aggregate amount of all presented disbursement checks and ACH transactions posted in the early morning ACH window, net of the prior day adjustment and other charges to the Disbursement Account (the "Total Clearings"). Customer agrees to maintain sufficient collected balances in the Funding Account by the established deadline to fund the Total Clearings. Bank is hereby authorized to debit the Funding Account in an amount equal to the actual or estimated Total Clearings and to transfer funds in said amount for credit to the Disbursement Account. Bank reserves the right to convert the Disbursement Account into a standard prepaid checking account at any time upon notice to Customer.

c. Adjustments. Bank will compare the report of electronic presentments to the checks presented against the Disbursement Account. If the total dollar amount of checks electronically reported is less than the total dollar amount of checks presented, Bank will credit the Disbursement Account for the difference. Bank will add this difference to Customer's Total Clearings the next Business Day.

d. Daily Dollar Limit. A daily dollar limit (the "Dollar Limit") may be established from time to time by Bank with respect to the Disbursement Account in Bank's sole discretion. Bank shall have no obligation to pay disbursement checks and ACH transactions (collectively, "Disbursement Items") in excess of the Dollar Limit. Bank may, at any time, either verbally or in writing (but shall not be deemed obligated to) notify Customer of any change made by Bank in the Dollar Limit. Establishment of the Dollar Limit should not be interpreted or construed by Customer as any commitment or agreement by Bank to provide any credit or loans to Customer, nor as an agreement or commitment to debit the Funding Account when doing so would create a negative balance therein.

e. Special Circumstances. Customer acknowledges that Bank, under some circumstances beyond its control, may at times be unable to provide a report of the total amount of its Total Clearings early enough for Customer to make a complete and acceptable funding of the accounts. Customer nevertheless agrees to fund the Funding Account completely by using an estimate of the Total Clearings.

f. Action Affecting Accounts. Should Bank receive any process, summons, order, injunction, execution, levy, lien, garnishment, or adverse claim notice (either by a governmental authority or third party) (hereinafter referred to as "Process"), which Bank reasonably believes will adversely affect the Funding Account or the Disbursement Account, Bank may, at its option and without liability, refuse to honor orders to pay or withdraw sums from any Disbursement Account and may either hold the Funding Account balance herein until such Process is disposed of to the satisfaction of Bank or pay the balance over to the source of the Process in accordance with applicable law.

g. Return of Disbursement Items Unpaid. Bank reserves the right, in Bank's sole discretion, to return unpaid any or all Disbursement Items presented for payment against the Disbursement Account in the event that:

(i) there are insufficient collected and available balances on deposit in the Funding Account by the established deadline to fund the Total Clearings;

(ii) debits cannot be posted because the Disbursement Account or Funding Account is frozen, blocked, closed or because of any other condition; or

(iii) any communications failure or other condition prevents Bank from monitoring Customer's Dollar Limit and/or the Disbursement Items presented for payment.

h. Stop Payment Orders. Customer may issue stop payment orders on Disbursement Items drawn on the Disbursement Account in accordance with Bank's procedures.

2. Warrant Services.

a. Warrant Account. If requested by Customer and agreed to by Bank, Customer shall open and maintain a demand deposit account upon which warrants shall be drawn and will be charged (the "Warrant Account"). Customer shall maintain on deposit sufficient collected and available balances to cover items drawn on the Warrant Account.

b. Warrant Format. All warrants shall contain on the face of the item the words "warrant" and "payable through U.S. Bank." Customer will also encode all warrants in accordance with Bank specifications. Customer agrees to immediately make any changes to the format of the warrants or encoding when requested to do so by Bank and will be solely responsible for its failure or refusal to comply with Bank's specifications. Any warrant drawn by Customer on the Warrant Account shall be treated by Bank as a warrant regardless of what appears on the face of the warrant and Customer shall hold Bank harmless as a result of so handling any such item.

c. Presentment and Return. Bank shall make warrants presented to Bank available to Customer via electronic presentment. Bank shall notify Customer by electronic means of the account number, warrant number and dollar amount of all presented warrants and provide Customer with a front and back image of each warrant received by Bank. Bank's delivery of the images shall constitute an electronic presentment under the Uniform Commercial Code, Federal Regulation CC and other applicable laws. Warrant Services are additionally subject to the Reverse Positive Pay terms contained elsewhere in this Agreement. Customer shall notify Bank of each warrant that should be returned in the form agreed to by Bank and Customer. If Customer does not specifically decline payment of a warrant by the deadline established by Bank, such warrant will be finally paid by Bank. Customer acknowledges that warrants payable through Bank are considered to be drawn on Bank for purposes of the expeditious return and notice-of-nonpayment requirements of subpart C of Regulation CC of the Federal Reserve Board. If Bank agrees to return a warrant following Bank's deadline, Customer agrees to be responsible for Bank's failure to return the warrant in an expeditious manner as prescribed in Regulation CC. Bank shall be deemed to have made timely presentment to Customer with respect to any warrants that Bank receives at a time when it is prevented from making presentment to Customer as a result of any force majeure event illustrated in Section II.22.

d. Examination of Warrants. Bank shall have no responsibility to examine warrants prior to presentment to Customer for its payment decision. Bank will take ordinary care to see that the amount of each warrant as drawn is accurately posted to Customer's account. Bank will not make any attempt to verify signatures, endorsements or restrictive clauses on warrants. Bank will not examine the dates on which warrants have been drawn for undated, stale or post-dated items. Bank shall have no responsibility for any liability, loss or damage resulting from (i) a payment in accordance with this Section of any warrant that is altered or unsigned or that bears the forged or unauthorized signature of Customer or (ii) return of any check to the depository bank in accordance with this Section.

e. Encashment of Warrants. Unless otherwise instructed by Customer, Bank is authorized to pay warrants issued by Customer that are presented for encashment by payees. Bank will not be liable for the encashment of any warrant which contains, or is purported to contain, a forged signature of a maker or endorser, or any other unauthorized modification, as long as Bank exercises ordinary care in cashing the warrant.

K. POSITIVE PAY SERVICES

1. Introduction. Positive Pay Services are offered by Bank as the most effective way to minimize loss from fraudulent check issuance or payment. If Positive Pay Services are requested by Customer and agreed to by Bank, Customer and Bank agree that in the event of an inconsistency between this Agreement and applicable law, the provisions of this Agreement shall prevail to the extent permitted. Nothing in this Agreement is intended to limit Bank's right to return an item unpaid if there are insufficient available funds in the designated account.

2. Format Specifications. Customer shall comply at all times with Bank's format and data transmission standards for the Positive Pay Service. Customer agrees to issue checks, warrants or other items (collectively, "Items") in accordance with Bank's specifications and will change the Item format when requested to do so by Bank. Bank shall not be responsible for correcting or resolving processing problems caused by substandard quality magnetic encoding.

3. Positive Pay.

a. Customer Responsibilities. Customer shall designate to Bank all account(s) that are to be used with the Positive Pay Service ("Positive Pay Account(s)"). Customer will provide Bank with a file of all outstanding Items prior to activation of this Service. On each day that an Item is written against the Positive Pay Account, Customer shall supply Bank with all required Item issue information prior to the deadline established by Bank. Such information shall include, without limitation, the account number, the issue date, the Item number and the dollar amount. Customer shall be responsible for the accuracy and completeness of all information provided to Bank. Customer agrees to review all Positive Pay Exception Items (as defined below) each Business Day.

b. Bank's Responsibilities. In reliance on the information provided by Customer, Bank shall create a master issue file for each designated Positive Pay Account ("Issue File"). If ARP File Confirmation Service is selected by Customer, Bank shall process the Issue File and provide a confirmation to Customer that the Issue File was received and processed. Excluding valid stop payment orders and issue records voided by Customer request, all Items, including those that have been electronically converted, that match by Item number and dollar amount to Bank's Issue File will be deemed properly payable and Bank is authorized to pay all such Items.

c. Positive Pay Exceptions**.** Each Business Day, Bank shall make reasonable efforts to report to Customer any Item that does not match the Issue File (each, a "Positive Pay Exception") and, if requested and available, provide the front and back images of those Items for that day's presentment; provided, however, no images shall be provided in the case of electronically converted Items. Customer agrees to review and make payment decisions on the Positive Pay Exception Items prior to Bank's established deadline each Business Day. If Customer selects the Positive Pay Same Day service for controlled disbursement accounts, Customer shall receive and may make payment decisions on Positive Pay Exception Items prior to the Items posting to the controlled disbursement accounts or defer payment decisions until the established deadline on the next Business Day. Bank strongly recommends that Customer select "return all" as its default setup for all Positive Pay Exception Items as the most effective fraud protection default setup. If Customer's requested default setup is for Bank to "return all" Positive Pay Exception Items, Bank is authorized to return any Positive Pay Exception Item unless Customer instructs bank to pay a Positive Pay Exception Item prior to the established deadline. If Customer's requested default setup is for Bank to "pay all" Positive Pay Exception Items, Bank is authorized to finally pay any Positive Pay Exception Item unless Customer has instructed Bank to return the Positive Pay Exception Item prior to the established deadline. Bank may rely on any instructions received from Customer that Bank reasonably believes to be genuine. Except with respect to liability, loss or damage caused by Bank's own lack of good faith or failure to exercise ordinary care, Bank shall have no responsibility for any liability, loss or damage resulting from:

(i) payment in accordance with this Section of any Positive Pay Exception Item that is altered or unsigned or which bears the forged or unauthorized signature of Customer;

(ii) the return of any Positive Pay Exception Item to the depository bank in accordance with this Section; or

(iii) Customer's failure to meet Bank's established deadlines. Customer may be required to place a stop payment order on any returned Positive Pay Exception Item, which shall be subject to Bank's customary stop payment fee. Bank's failure to report a discrepancy will not discharge Customer's obligation with regard to any Item and shall not obligate Bank to return any Item if it is otherwise properly payable.

Bank also reserves the right to require Customer to execute a separate indemnity agreement related to Customer's selection of "pay all" as its default setup for Positive Pay Exception Items.

d. Teller Positive Pay. All Positive Pay Accounts will interface with the Bank's teller system unless requested by Customer. Bank will compare Items presented for cash at a branch of the Bank with Customer's Issue File. Customer acknowledges that under some circumstances issuance information submitted by Customer may not be reflected in Customer's Issue File until the opening of the following Business Day. Customer agrees to follow Bank's established procedures should it need to manually add an Item to the Issue File. Bank will make reasonable efforts to assist Customer, but Customer acknowledges that Bank may be unable to process such requests on a same-day basis. If a special handling process for teller-cashed items is selected by Customer and agreed to by Bank, Bank shall attempt to contact Customer for approval prior to the encashment of any item that does not appear in the Issue File. Customer agrees that Bank, in its sole discretion, may refuse to cash any Positive Pay Exception Item and such refusal will not be deemed to be a wrongful dishonor. In the event of dishonor, Bank will refer the presenter to Customer. In the event that Customer requests Bank not activate or temporarily deactivate Teller Positive Pay, Customer agrees to assume all risk of loss for any Bank teller-cashed Item that would have been identified as a Positive Pay Exception Item prior to acceptance.

e. Teller Payee Positive Pay. If Customer selects the Teller Payee Positive Pay service, payee name(s), in addition to the Issue File information, will be verified at Bank's teller lines. Customer shall include in the Issue File the payee name(s) for each Item issued by Customer. Customer shall be responsible for the accuracy and completeness of the payee information provided to Bank. In reliance on the payee information provided by Customer, Bank will compare the payee information on the Item presented for encashment at a Bank teller line with Customer's Issue File. Customer acknowledges that Bank will not be able to validate payee information if payee information is not provided for a particular Item or for electronically converted Items presented to Bank for payment. Customer acknowledges that, under some circumstances, issuance information submitted by Customer may not be reflected in Customer's Issue File until the opening of the following Business Day. Customer agrees to follow Bank's established procedures should it need to manually add an Item to the Issue File. Bank will make reasonable efforts to assist Customer, but Customer acknowledges that Bank may be unable to process such requests on a same-day basis. If a special handling process for teller-cashed items is selected by Customer and agreed to by Bank, Bank shall attempt to contact Customer for approval prior to the encashment of any item that does not appear in the Issue File. Customer agrees that Bank, in its sole discretion, may refuse to cash any Positive Pay Exception Item, including where the payee name is not an exact match and such refusal will not be deemed to be a wrongful dishonor. In the event of dishonor, Bank will refer the presenter to Customer.

f. Payee Positive Pay. If Customer selects this option, which is available only through SinglePoint®, Customer's Item stock may first be tested to ensure it meets Bank's payee name readability rate. Customer shall designate to Bank all Positive Pay Accounts that shall use Payee Positive Pay. In addition to the Issue File information provided by Customer for the Positive Pay Service, Customer shall include in the Issue File the payee name(s) for each Item issued by Customer. Customer shall be responsible for the accuracy and completeness of the payee information provided to Bank. In reliance on the payee information provided by Customer, Bank will compare the payee information on the Item with Customer's Issue File for Items presented or deposited at Bank. Customer acknowledges that Bank will not be able to validate payee information for electronically converted Items presented to Bank for payment. Bank may, in its sole discretion, impose variable parameters for which the payee information will not be reviewed for certain Items processed through the back office. If such parameters are imposed, Bank agrees to assume the risk of loss for an Item that would have been identified as a Positive Pay Exception solely on the basis of the payee information.

4. Reverse Positive Pay.

a. The Paid File**.** Customer shall identify all accounts subject to Reverse Positive Pay ("Reverse Positive Pay Account"). When an Item is presented for payment against an identified Reverse Positive Pay Account, Bank shall notify Customer prior to the designated time, and in no case later than the Business Day following the day of presentment, of the Reverse Positive Pay Account number, Item number and amount of the presented Item (the "Paid File") and, if requested and available, shall provide Customer with the front and back images of the Items. By electing Reverse Positive Pay, Customer assumes all fraudulent and other risks associated with teller-cashed Items, except as may be caused by Bank's own lack of good faith or failure to exercise ordinary care, unless Customer provides standing instructions to Bank to disallow encashment at the teller line.

b. Payment Instructions. Customer shall compare the information provided by Bank with Customer's Item issuance records. Customer shall notify Bank prior to the deadline established by Bank of Customer's decision on any reported Items that should be dishonored. Bank may rely on any instructions received from Customer that it reasonably believes to be genuine. Bank is authorized to finally pay any Item listed on the Paid File unless the Customer instructs Bank to return the Item prior to the established deadline. Except with respect to liability, loss or damage caused by Bank's own lack of good faith or failure to exercise ordinary care, Bank shall have no responsibility for any liability, loss or damage resulting from (i) a payment in accordance with this Section of any Item that is altered or unsigned or which bears the forged or unauthorized signature of Customer or (ii) return of any Item to the depository bank in accordance with this Section. Bank reserves the right to require Customer to place a stop payment order on any Item to be returned. Any such orders will be subject to Bank's customary stop payment fee. Customer shall notify Bank by the designated deadline if the Paid File has not been received from Bank. Bank will make reasonable efforts to provide the Paid File to Customer and honor Customer's instructions. Bank's failure to provide a Paid File will not discharge Customer's obligation with regard to any Item that was otherwise properly payable at the time of presentment.

L. LOCKBOX SERVICES

1. Lockbox Service Requirements. Bank provides wholesale, retail and property management Lockbox Services, as well as E-Lockbox Services to assist customers in expediting receipt of their remittances. Customer will have its customers forward their payments to the location designated by Bank ("Lockbox"). Prior to initiation of any Lockbox Service, Customer must maintain a demand deposit account with Bank associated with the Lockbox Service ("Lockbox Account").

2. Testing; Remittances and Envelopes. Customer shall provide Bank samples of remittances and envelopes for testing and approval prior to using such remittances and envelopes in production. After implementation of Lockbox Services, if there are proposed changes to remittances and envelopes, Customer shall review the proposed changes with Bank and obtain Bank's approval prior to use. Bank may adjust the price for processing Customer's payments if changes are made to Customer's remittances and/or envelopes (including remittance scan line configuration) without such prior approval. Bank may request changes in Customer's remittances or envelopes due to changes in law or regulation, or as reasonably necessary due to equipment or processing improvements. If Customer fails to implement such changes, Bank may adjust the price for payment processing or cease processing Customer's payments as necessary to comply with law or regulation, as reasonably determined by Bank. Customer agrees not to provide any form of prepaid business reply mail envelopes for use with the Lockbox Services.

3. Access to Mail. Customer authorizes Bank or its agent to pick up mail at the appropriate postal facility, to have custody of the keys or combinations and unrestricted and exclusive access to such box, and to collect the mail therein to be processed by Bank as agreed by the parties. Bank shall process remittances in accordance with its standard procedures or in accordance with prior instructions received from Customer and agreed to by Bank. Upon termination of Customer's Lockbox Service, mail received shall be forwarded for sixty (60) days following termination.

4. Proprietary Rights. Bank possesses all proprietary rights to written material, including, without limitation, all computer programs written for Bank's Lockbox processing system, portable media, listings and other documentation originated and prepared by Bank. Customer shall not duplicate, sell or use in any manner such programs or documentation without the prior written consent of Bank.

5. Collections/Availability. Unless otherwise agreed, while Customer receives Lockbox Services, all collected funds held in the Lockbox Account shall be deemed to be Customer's funds for all purposes, including adjustment, attachment, execution, garnishment and other forms of legal process. The crediting and collection of items will be handled under the same agreement as applied to other commercial deposits and shall be subject to Bank's then current funds availability schedule.

6. Transmission of Information. Bank may transmit to Customer remittance information or other information received at the lockbox ("Lockbox Information") via secure electronic transmission. Customer further acknowledges that Bank has a duty to protect Lockbox Information and ensure that it is safely delivered to Customer and that Bank has deemed secure electronic transmissions to be the safest mechanism for delivery. If Customer elects to receive the Lockbox Information using other delivery means including paper reports, Internet delivery, CDs, DVDs, or other portable electronic media, Customer acknowledges that such delivery means are inherently more insecure and agrees to assume all risk, and hold Bank harmless from, any obligations, liability or losses that results from the nonreceipt, disclosure, dissemination, alteration or unauthorized access of the Lockbox Information. If Customer is the recipient of misdirected Lockbox Information, Customer shall immediately notify Bank and return the information to Bank. Customer agrees not to retain, use, copy, distribute or otherwise disclose the information in any manner.

7. Image Delivery Services. Bank shall electronically store check images, check information, remittance information or other information received at the Lockbox in accordance with Bank's record retention schedule. Customer may obtain such images or information via Internet access, CDs, DVDs or file transmission, if available, at the price outlined in the fee schedule. If the images or information are sent via CD or DVD, Customer agrees to verify the contents of the CD or DVD upon receipt and request a replacement, if necessary, within 10 days of receipt. Customer is solely responsible for safeguarding the security and confidentiality of all images and information that is stored on Customer's computer systems, or printed or downloaded from the Internet, CDs, DVDs, other portable media, or file transmissions.

8. Credit/Debit Card Processing. If Customer desires to provide its customers with the option of making their payments via credit card or non-PIN based debit card, Customer shall first secure approval from a payment transaction processor that Bank is able to support. Credit/debit card processing shall be subject to applicable laws, rules and regulations, and the terms of any other agreement between Customer and the payment transaction processor. Customer acknowledges that Bank is acting on behalf of Customer to merely initiate the authorization of payments at the Lockbox site, and that Bank shall have no responsibility for chargebacks, processing fees, payment disputes or other matters related to the credit/debit card transaction. Bank shall enter the credit/debit card information using its best efforts and if adjustments are subsequently required, Customer shall be responsible for handling all adjustments.

9. Foreign currency-denominated items and items drawn on foreign banks. If Customer desires to have non-U.S. dollar items processed by Bank, or items denominated in U.S. dollars but drawn on a foreign bank, Bank shall handle the items within parameters established by Bank based on amount, the type of currency and other considerations outlined in the Implementation Documents. If the item does not fall within Bank's parameters for processing, Bank shall return the item unprocessed to Customer or forward the item for handling as a foreign cash letter collection. If Bank provides Customer with credit at the U.S. dollar conversion rate in effect, and if the item is subsequently returned by the drawee Bank, Bank shall charge Customer's account for the prevailing exchange rate in effect at the time of the chargeback.

10. Compliance with Applicable Law. If specific lockbox handling requirements are required in order for Customer to comply with law or regulations applicable to Customer (for example, Regulation Z), Customer agrees to immediately notify Bank of any such requirements. If Bank is unable to accommodate Customer's specific requirements, Bank or Customer may immediately terminate the Lockbox Services.

11. Customer Responsibility. With respect to each item received at the Lockbox, Customer shall indemnify and hold Bank harmless from and against any and all claims, demands, damages, losses, liabilities, penalties and expenses (including, without limitation, reasonable attorney fees and court costs at trial or on appeal) arising directly or indirectly: (i) from Customer's breach of a representation or warranty under applicable law, clearinghouse rule, Federal Reserve Operating Circular, or other similar rules or regulations; or (ii) from any other act or omission arising out of Bank's action or inaction taken pursuant to any request by Customer or pursuant to this Agreement. This Section 11 shall survive termination of the Agreement.

12. Wholesale Lockbox Processing. Bank offers Wholesale Lockbox Processing services which allows for the processing of primarily business-to-business payments. Bank is authorized to remove and examine the contents of each envelope in accordance with Bank's wholesale lockbox servicing guidelines and shall observe the following guidelines provided in this Section. Bank shall capture, format and send remittance data to Customer via information reporting or data transmission in accordance with the Implementation Documents.

a. Check Date. Bank will not examine any checks or other items with respect to check dates.

b. Check Amount. If Bank is unable to determine the amount of a check, such check will be forwarded unprocessed to Customer as an exception.

c. Payee. Checks made payable to the Acceptable Payees listed in the Implementation Documents or any reasonable derivation thereof are acceptable for deposit. Checks made payable to others may be returned by Bank as exceptions. Customer warrants that each Acceptable Payee is either Customer, its affiliate, or an entity that has authorized Customer to act on its behalf for the Services provided herein. If the Acceptable Payee is an affiliate of Customer or an entity which authorized Customer to act on such entity's behalf, Customer represents and warrants that such affiliate or entity has authorized checks payable to it to be credited to the Lockbox Account. Bank may require written authorization from any Acceptable Payee or written evidence that an Acceptable Payee has authorized Customer to act on its behalf. If Customer designates 'Accept All Payees' in the Implementation Documents and Bank accepts such designation, Bank shall process all checks for credit to the Lockbox Account regardless of the payee name on the check. Such designation may be subject to additional Bank fees. Customer agrees to indemnify and hold Bank harmless for any claims, fines, expenses, and damages that arise out of Bank's processing of checks based on Customer's "Accept All Payees" designation.

d. Missing Signature. In the absence of a signature, Bank will process the check. Customer agrees to reimburse Bank if the check is subsequently returned.

e. Exceptions. If a check is treated as an exception, it will be forwarded by Bank to Customer with the remittance data, and not deposited or otherwise reflected in the account of Customer.

f. Correspondence. Any correspondence, invoices and miscellaneous enclosures which are included with a payment, as well as any envelope that does not contain a check, will be returned to Customer unless Customer specifies different instructions in the Implementation Documents.

g. Notation. Customer agrees that Bank shall disregard any notation on a check containing "paid in full", "lien waiver" or other restrictive notation, whether preprinted or handwritten, and treat any such check as though such notation did not appear thereon. If Customer instructs Bank not to process checks with restrictive notations, Bank will use its best efforts to detect checks bearing such notations, but Bank shall not be liable to Customer for failure to detect any such notation.

h. Document Order. Bank shall use its best efforts to process documents that are not in logical order, are difficult to identify, or which are received in unorganized large packages.

13. Lockbox Remote Capture Services. Lockbox Remote Capture Services is an optional add-on service to the Wholesale Lockbox Processing service which provides eligible customers the ability to scan and transmit to Bank lockbox payments received at office locations. If Customer is approved for Lockbox Remote Capture Services, Customer agrees that Bank's Lockbox Remote Capture Services shall be governed by this this Section L (Lockbox Services) and other relevant sections of this Agreement, including but not limited to, the Electronic Deposit Services section.

14. Retail Lockbox Processing/Property Management Lockbox Processing. Retail Lockbox Processing will no longer be offered to new customers as of January 1, 2019. Bank offers Retail Lockbox Processing services and Property Management Lockbox Processing services which allow for the automated processing of high volumes of consumer-oriented payments. Bank is authorized to open each envelope and remove the contents, disregarding all notations and other marks on the envelopes. Bank shall not examine checks or other items with respect to payee names, check dates and check signatures. Bank is not required to retain remittance envelopes or forward them to Customer. Bank will disregard any restrictive notation on any check, including but not limited to "paid in full", whether preprinted or handwritten, and shall treat any such check as though such language did not appear thereon. Bank will process, endorse and deposit remittances in accordance with its standard procedures. If Bank is unable to determine the amount of a check, such check will be forwarded to Customer as unprocessable. Bank will deliver miscellaneous enclosures, unprocessable transactions and remittance data in accordance with the Implementation Documents.

15. Retail Lockbox ARC Services. **Retail Lockbox Processing will no longer be offered to new customers as of January 1, 2019.** Retail Lockbox ARC Services is an optional add-on service to Retail Lockbox Processing and it provides Customer with the services necessary to convert eligible check payments received within U.S. Bank's retail lockbox into ACH ARC Entries. If Customer selects Retail Lockbox ARC Services, Customer agrees that the Service shall be governed by this Section L (Lockbox Services) and other relevant sections of this Agreement including, but not limited to, the Electronic Deposit Services section. Customer shall adhere to any and all applicable laws, regulations and clearinghouse rules, including but not limited to, obtaining all necessary consents and authorizations from, and/or providing all necessary disclosures to, its customers concerning the conversion of such customers' checks to ACH Entries. Customer is solely responsible for ascertaining the content, method, and frequency of any required authorizations and notifications. Only original paper checks that qualify as a source document may be converted to an ACH Entry under NACHA Rules. Bank will apply certain automated internal edits and screens to determine whether the original paper check is a source document that qualifies for conversion to an ACH Entry. Customer acknowledges and agrees that Customer is the Originator of such ACH Entries under NACHA Rules regardless of whether Customer or Bank initiates the ACH Entry into the payment system. Bank shall not be liable to Customer for failure to electronically process checks if such processing would violate this Agreement, or any other agreement between Customer and Bank. If an ACH Entry is returned because the original paper check was ineligible as a source document for the ACH Entry, Bank shall use reasonable efforts to collect the check related to the ACH Entry by presenting the original paper check (if not destroyed), the check image or a substitute check.

16. E-Lockbox. E-Lockbox provides Customer with the ability to receive consumer payments electronically that are initiated via the consumers' home banking portal or through other payment channels offered by third-party bill consolidators, including consumer credit counseling agencies.

a. Network. "Network" means the MasterCard Remote Payment and Presentment Service ("RPPS"), a division of MasterCard International, Inc., or other originators of consumer-initiated bill payments. Bank receives payments and remittance data via the Network. Bank will credit payments to Customer's account and electronically transmit the remittance data in Bank's standard or other mutually acceptable format for loading to Customer's accounts receivable system.

b. Customer's Responsibilities. Customer shall provide Bank with all data and specifications necessary for the Network to process payments and for Bank to transmit the remittance data to Customer. Customer agrees to conduct tests that Bank may deem necessary to ensure Customer and Bank are able to process the remittance data. The purchase, installation, testing and maintenance of any and all equipment used to receive and process information from Bank is the responsibility of Customer. As soon as possible, and in any event, no later than 48 hours after Bank transmits the remittance data to Customer, Customer agrees to process all such data and to inform Bank of any incorrect, unidentifiable or unprocessable information (collectively, "Returns").

c. Bank's Responsibilities. Bank shall develop a program to process and transmit remittance data received from the Network in Customer's preferred file format. Bank shall transmit Returns to the Network when Customer provides Bank with the Return information. Bank will credit Customer's account in an amount equal to the payments received and debit Customer's account in an amount equal to any Returns and, if applicable, any Reversals (defined below).

d. Reliance on Network. Customer acknowledges that Bank's ability to process payments and remittances are dependent upon the continued use and support of the Network and third-party computers housing the Network and its associated communications network. In the event that access to the Network or its computer communications system is terminated or suspended for any reason, Bank shall not be liable to Customer for any disruptions or failure to provide any part of this Service. Bank assumes no responsibility for the accuracy, timeliness or the completeness of data delivered from the Network to Bank.

e. Optional Reversal Transactions. Reversals are Network-initiated debit messages from payment originators informing of the cancellation of previous transactions. Customer may set debit caps on Reversals to limit the daily debit amount a payment originator may send through the Network. If Customer instructs Bank to accept Reversals, Customer hereby authorizes Bank to debit Customer's account for the amount of the Reversals.

f. Optional Biller Stop Payment. Biller Stop Payment allows Customer to provide Bank with instructions regarding payments that Customer does not want posted to its account. If Customer instructs Bank to stop a payment from posting to its account, Customer hereby authorizes Bank to return the payment through the Network. Payments that are stopped will not be included in Customer's settlement transaction or the remittance data provided to Customer.

M. HEALTHCARE RECEIVABLES MANAGER

U.S. Bank Healthcare Receivables Manager (formerly known as Healthcare Payment Consolidator Services) is a Service that enables Customers to electronically receive, post and reconcile healthcare payments and remittances received from health plans and/or other Agents. The Service accepts images of check payments, remittances and correspondence received by Bank or its vendors in paper form via lockbox, as well as electronically via Automated Clearinghouse (ACH). Electronic remittance files are delivered from the Service to Customer at an agreed upon schedule. Images are made available via website or file transmission. Customer agrees that the Service shall be governed by this Section and all other relevant sections of this Agreement.

1. Introduction. If Customer selects the Service, the Service may include, but is not limited to, lockbox, ACH, image viewing, data translation and file transmission services to assist Customer in expediting and automating receipt of their remittances. Prior to implementation of the Service, Customer must maintain a demand deposit account with Bank.

2. Processing, Collections and Availability. The Service is available where hardware and software have been configured by Bank to accommodate processing. Bank is authorized to examine the checks and remittances received at Customer's designated lockbox in accordance with Bank's lockbox servicing terms and guidelines. The crediting and collection of items will be handled in accordance with other commercial deposits processed by Bank and shall be subject to Bank's then current funds availability schedule.

3. Image Viewing and Storage. The Service processes and stores images of paper checks, explanation of benefits statements, correspondence or other enclosures, as well as images of electronic remittance advices and electronic funds transfers. Images are available to Customer for web viewing or via secure transmission as selected by Customer in the Implementation Documents. Original paper documents will be securely destroyed on a periodic basis.

4. File Transmission and Data Reporting. The Service will transmit to Customer remittance data according to the agreed upon schedule. Customer may elect to receive data through one or more delivery mechanisms as specified in the Implementation Documents. If the Service is terminated, Customer may obtain an FTP transmission or other available format of image information processed at the price outlined in the fee schedule.

5. Accuracy and Timeliness of Information. Performance of the Service may be affected by external factors such as communication network latency, mail delays and other factors beyond Bank's control. Information with respect to all transactions is provided solely for Customer's convenience, and Customer shall have no recourse to Bank with respect to the use of such information.

6. Customer Authorizations, Notifications and Responsibility. Customer authorizes Bank to disclose Customer information to Bank's vendors to the extent required to deliver the Service, and to debit or credit Customer's accounts in performance of the Service hereunder. Customer shall provide Bank or its vendors with all data and specifications necessary for processing. Customer shall conduct tests that Bank or its vendors may deem necessary to ensure that files may be exchanged and the Service implemented. Customer shall adhere to any and all applicable clearinghouse, local, state, or federal laws, rules or regulations.

7. Security Procedures. Customer will use the Service in accordance with the procedures established by Bank and its vendors. Customer will designate one or more System Administrator(s) responsible for establishing internal security procedures, including, without limitation, setting up and maintaining access available through the Service. Customer is solely responsible for maintaining a secure work environment to ensure against unauthorized access to the Service.

8. Proprietary Rights. Bank, or its vendors, possess all proprietary rights to written material including without limitation, all computer programs written for the Service, websites and other product documentation provided by Bank or its vendors. Customer shall not duplicate, sell or use in any manner such programs or documentation without the prior written consent of the applicable party. Customer will be bound by any terms of use and any license agreements associated with the Service.

N. COMMERCIAL SWEEP ACCOUNTS – LOAN OPTION

THIS NOTICE IS GIVEN PURSUANT TO APPLICABLE LAW: IN THE UNLIKELY EVENT OF THE BANK FAILURE, THE FEDERAL DEPOSIT INSURANCE CORPORATION ("FDIC") WILL ALLOW THE LOAN SWEEP TRANSFER OF EXCESS BALANCES IN CUSTOMER'S DEPOSIT ACCOUNT, ABOVE A PRE-ESTABLISHED THRESHOLD, OUT OF THE DEPOSIT ACCOUNT TO PAY DOWN THE LOAN AT BANK ON THE DAY OF FAILURE. THE REMAINING FUNDS IN THE DEPOSIT ACCOUNT WILL BE DEEMED DEPOSITS UNDER FDIC RULES AND WILL BE INSURED UP TO THE APPLICABLE FDIC LIMITS.

1. Definitions.

a. "Account" means Customer's deposit account at Bank which Customer has designated as being covered by the Services described herein.

b. "Available Funds" means the total of the collected funds in the Account as of the close of business on any Business Day, determined in accordance with the manner in which Bank generally provides credit for deposited checks.

c. "Business Day" means any day on which a majority of Bank's offices are open to the public for substantially all banking functions. Saturdays, Sundays, federal or state holidays or any day recognized by a Federal Reserve Bank as a holiday shall not be considered a Business Day, even if Bank's offices are open.

d. "Credit" means any loan arrangement which is designated as a line of credit where Bank has agreed will be subject to the Services described herein.

e. "Credit Agreement" means any loan agreement, promissory note, guaranty or other agreement, instrument or document which evidences, secures or guarantees the Credit.

f. "Deficiency Amount" means the amount by which the Target Balance exceeds the amount of Available Funds as of the close of business on any Business Day.

g. "Event of Insolvency" means any of the following: (i) Customer or Guarantor shall die or cease to exist; (ii) any Guarantor shall attempt to revoke its guaranty or other obligation to Bank, or such guaranty or other obligation shall become unenforceable in whole or in part; (iii) any bankruptcy, insolvency or receivership proceeding, or any assignment for the benefit of creditors, shall be commenced under any Federal or state law by or against Customer or any Guarantor; (iv) Customer or any Guarantor shall become the subject of any out-of-court settlement with its creditors; or (v) Customer or any Guarantor is unable or admits in writing its inability to pay its debts as they mature.

h. "Excess Funds" means the amount of Available Funds as of the close of business on any Business Day which exceeds the Target Balance.

i. "Guarantor" means any guarantor, surety, accommodation party or joint obligor of the obligations of Customer under the Credit.

j. "Target Balance" means that amount of funds which Customer desires to maintain in the Account and which is mutually agreeable to Bank and Customer from time to time.

k. "Transaction" means either a Loan Transaction or a Repayment Transaction.

2. Initiation of Transactions.

a. As of the close of business on each Business Day, Bank will determine the amount of Excess Funds, if any. If Bank determines that there are Excess Funds, Bank will debit the Account and credit the Credit in an amount equal to the lesser of (i) the amount of Excess Funds or (ii) the outstanding principal balance of the Credit plus all interest, fees and charges then outstanding under the Credit (a "Repayment Transaction"); provided, however, that Bank will not be required to initiate any Repayment Transaction in an amount less than a minimum sum mutually agreeable to Bank and Customer. Customer grants Bank a security interest in, and right of set-off to, the Account for purposes of effecting Repayment Transactions.

b. As of the close of business on each Business Day, Bank will determine the Deficiency Amount, if any. If Bank determines that there is a Deficiency Amount, Bank will charge the Credit in an amount equal to the lesser of (i) the amount by which such available balance is less than the Target Balance or (ii) the amount which is available to be borrowed under the Credit (the lesser of such amounts being referred to as the "Loan Amount"), plus the amount of any fees and charges under the Credit, and credit the Account in an amount equal to the Loan Amount (a "Loan Transaction"); provided, however, that Bank will not be required to initiate any Loan Transaction in an amount less than a minimum sum established by Bank, and Bank will not be required to initiate any Loan Transaction if any default exists under any Credit Agreement or this Agreement or Bank is otherwise excused or prohibited under any Credit Agreement or applicable law from making an advance to Customer. In addition, Bank will not be required to initiate any Loan Transaction, and the Services hereunder shall immediately and automatically terminate without notice, if: (A) the Credit has matured or been terminated; (B) Customer has cancelled the Credit; (C) an Event of Insolvency has occurred; or (D) Bank has demanded payment under the Credit.

c. If Bank has agreed to provide any other service to Customer pursuant to which Bank is authorized to transfer Excess Funds from the Account, (i) this Agreement shall prevail over the terms and conditions of such other service, (ii) Bank may initiate a Repayment Transaction or Loan Transaction under this Agreement in lieu of or prior to initiating the transfer of Excess Funds under such other service, and (iii) Bank shall not be in default as to such other service solely by reason of not initiating the transfer of Excess Funds under such other service.

3. Overdrafts. Bank may debit the Account as set forth in Section N.1.a above, even though, subsequent to such debit, and as a result of additional transfers or withdrawals from the Account, the return of checks unpaid, or any other cause, the Account becomes overdrawn. In such event, Customer will be assessed Bank's then prevailing charges for overdrafts.

4. Ordinary Course. Customer and Bank intend that each Repayment Transaction hereunder be (a) in the ordinary course of business or financial affairs of Customer and Bank, and (b) made according to ordinary business terms.

5. Asset-Based Loan Sweep Advance. For each asset-based loan sweep transfer or loan sweep advance (each an "Asset Based Transfer"), Customer certifies to Bank that (i) the Asset Based Transfer is being made in accordance with the certain agreements between Bank and Customer (the "Asset Based Documents"); (ii) the Asset Based Transfer is not revocable by Customer; (iii) the representations and warranties set forth in the Asset Based Documents are true and correct as of the date of each Asset Based Transfer; and (iv) no default or event of default, however denominated, has occurred or is continuing under the Asset Based Documents or will result following the Asset Based Transfer.

O. COMMERCIAL SWEEP ACCOUNTS – INVESTMENT OPTION

NOTICE: INVESTMENT PRODUCTS, INCLUDING MONEY MARKET MUTUAL FUNDS, ARE NOT DEPOSITS OR OBLIGATIONS OF, OR GUARANTEED BY BANK OR ANY OF ITS AFFILIATES, NOR ARE THEY INSURED BY THE FDIC, OR ANY OTHER GOVERNMENT AGENCY. THE INVESTMENT OPTIONS OFFERED BY BANK UNDER THE COMMERCIAL SWEEP ACCOUNT ARE SUBJECT TO INVESTMENT RISKS, INCLUDING LOSS OF PRINCIPAL OF THE AMOUNT INVESTED.

1. General Terms Applicable to All Investment Options.

a. If a Commercial Sweep Account Investment Option has been requested and agreed to by Bank, Customer authorizes Bank to transfer funds on a manual or automated basis to and from the demand deposit account ("DDA") and Investment Option selected by Customer. Funds will be transferred between the accounts so that: (a) to the extent funds are available in either account, Customer's DDA maintains an average collected balance equal to a pre-established balance ("Peg Balance"); and (b) any collected funds in the DDA that exceed the Peg Balance ("Excess Funds") are invested by Bank as directed by Customer in accordance with this Agreement. Amounts invested in money market mutual funds, including investment income, will be redeemed and credited back to the DDA as needed so that the collected balance of Customer's DDA equals the Peg Balance. Amounts invested in other investment options, including interest or other investment income, will be credited back to the DDA each Business Day upon maturity. Bank may limit the amount of Excess Funds that it will invest on behalf of Customer on any particular Business Day. Bank may also impose a maximum redemption amount to bring the DDA to the Peg Balance on a particular Business Day. If Customer's Investment Option is not available on a given Business Day, then all Excess Funds will remain in the DDA until the next Business Day.

b. Bank is authorized to accept verbal instructions, including telephone instructions, from Customer representatives for the transfer of funds between Bank and Customer and between Customer's accounts. Bank may rely on any instructions received from Customer that it reasonably believes to be genuine.

c. Bank is authorized to execute as agent for Customer all certificates of ownership and other instruments required by law or by contract. Bank shall not be accountable for errors in judgment but only for gross negligence or willful misconduct. Bank shall not be required to comply with any direction of Customer which in Bank's judgment, may subject it to liability or to defend or prosecute any suit or action unless indemnified in a manner and amount satisfactory to it.

d. Customer may, by written instrument executed by Customer and delivered to Bank, terminate this Service and withdraw from the account the principal and accumulated income upon paying all sums due to Bank and indemnifying Bank to its satisfaction against liabilities incurred in the administration of the account.

e. Bank will act as agent to invest on the order and for the benefit of Customer. The Services described herein are provided by Bank to Customer solely as bona fide treasury management Services. Bank does not undertake any fiduciary obligation to Customer with respect to these Services. Bank's duties to act for Customer hereunder are solely mechanical and administrative in nature.

2. Investment Options.

a. Repurchase Agreements.

(i) Terms. If Customer chooses to invest Excess Funds in repurchase agreements, Customer and Bank agree to be bound by the Master Repurchase Agreement with Bank. If Customer's investments in repurchase agreements exceed its typical investment amount by $10 million or more on a given Business Day, Customer agrees to notify Bank by providing sufficient advance notice to allow Bank to adequately collateralize the investments. Bank will exercise reasonable efforts to invest the entire amount but cannot guarantee full investment under these circumstances. If Customer fails to notify Bank in advance or if Bank is unable to invest any or all of the additional funds in repurchase agreements, Customer agrees that Bank may be required to withhold or withdraw any interest that may have been previously paid.

(ii) Confirmations. After each repurchase transaction, Bank will deliver to Customer via mail, fax, email, or other electronic means, including without limitation, posting to a password-protected website) a confirmation ("Confirmation") describing any information required by applicable law and any other terms and information which Bank may include at its discretion. The information contained in the Confirmation shall be considered true and correct and conclusively binding unless Customer notifies Bank of any error therein within three (3) Business Days after the date the Confirmation is mailed, faxed, emailed, personally delivered to Customer or sent via other electronic means, including without limitation, posting to a password-protected website. If Customer elects to receive Confirmations electronically, Customer acknowledges and agrees that Customer will no longer receive Confirmations by mail. If Customer desires to discontinue receiving Confirmations electronically, Customer shall provide written notice to Bank, whereupon Bank shall resume delivering mailed Confirmations.

b. Eurodollar Investments.

(i) Terms. If Customer chooses to invest Excess Funds in Eurodollars, Bank is authorized to sweep Excess Funds from Customer's DDA into overnight Eurodollar time deposits at the Cayman Islands branch of Bank. The minimum amount that may be swept pursuant to this option is $1,000. Excess Funds less than $1,000 on a given Business Day will not be invested. The minimum amount may be increased if requested by Customer and agreed to by Bank. Customer's Eurodollar investments may be registered in the name of Bank's nominee or nominees. Earnings in Eurodollar investments shall be credited to Customer's DDA on a daily basis. CUSTOMER ASSUMES ALL RISK OF LOSS ARISING FROM ANY ACTION TAKEN WITH RESPECT TO THE CAYMAN DEPOSIT BY THE GOVERNMENT OF THE CAYMAN ISLANDS OR ANY SOVEREIGN OR MILITARY POWER (DE FACTO OR DE JURE).

(ii) THIS NOTICE IS GIVEN PURSUANT TO APPLICABLE LAW: IN THE UNLIKELY EVENT OF BANK FAILURE, THE BALANCES RESIDING IN CUSTOMER'S EURODOLLAR SWEEP ACCOUNT AT BANK WILL NOT BE DEEMED "DEPOSITS" UNDER RULES PROMULGATED BY THE FEDERAL DEPOSIT INSURANCE CORPORATION ("FDIC") AND WILL NOT BE INSURED BY THE FDIC. IN THE UNLIKELY EVENT OF BANK FAILURE, CUSTOMER'S CLAIM FOR FUNDS THAT WERE SWEPT INTO THE EURODOLLAR SWEEP ACCOUNT WILL BE TREATED AS UNSECURED GENERAL CREDITOR CLAIMS.

c. Money Market Mutual Funds ("Money Fund").

(i) Terms. If Customer chooses the Money Fund sweep option, Excess Funds will be invested in the First American Money Market Fund offered for this Service. Excess Funds will be swept from the DDA to a pooled deposit account held in Bank's name. On the next Business Day, the Excess Funds from the pooled Deposit Account will be swept to the Money Fund to purchase shares. Customer's shares in the Money Fund will be held in Bank's name in an omnibus investment account, as agent on behalf of all Bank customers invested in the Money Fund. Customer grants to Bank a consensual possessory security interest in the omnibus investment account and all accounts maintained with Bank to secure payment of all of Customer's obligations under this Service. Customer will accrue dividends beginning on the Business Day the shares are purchased. Dividends accrue daily and are paid monthly on the last Business Day of the month. No dividends will accrue on the Business Day the shares are sold. If, for any reason, Money Fund shares are not available on any given Business Day, all Excess Funds will not be swept to the Money Fund and no dividends will accrue until shares become available for purchase. Funds in the DDA and in the pooled deposit account held at Bank will be treated as deposits and will be insured up to the applicable FDIC insurance limits. The Money Fund sweep option is only available to entities having a presence in the United States, which may be demonstrated by a U.S. mailing address and U.S. taxpayer identification number in Bank's records.

(ii) Customer Acknowledgments. BY ACCEPTING THIS SERVICE, CUSTOMER HEREBY ACKNOWLEDGES THAT IT HAS RECEIVED A COPY OF THE PROSPECTUS OF THE DESIGNATED FUND. THIS PROSPECTUS FORMS PART OF THE

IMPLEMENTATION DOCUMENTS AND WILL CONTROL OVER THE IMPLEMENTATION DOCUMENTS WITH RESPECT TO MONEY FUND SHARES. CUSTOMER FURTHER ACKNOWLEDGES THAT BANK IS NOT PROVIDING ANY INVESTMENT ADVICE HEREIN TO CUSTOMER AND MAKES NO REPRESENTATION OR WARRANTY AS TO THE SUITABILITY OR SAFETY OF THE INVESTMENTS IN ANY FUND OFFERED UNDER THIS SERVICE.

(iii) Money Fund Disclosures. BANK AFFILIATES SERVE AS INVESTMENT ADVISOR, ADMINISTRATOR, CUSTODIAN, DISTRIBUTOR, TRANSFER AGENT, AND SECURITIES LENDING AGENT AND RECEIVE COMPENSATION FOR SUCH SERVICES AS DISCLOSED IN THE PROSPECTUS FOR THE DESIGNATED FUND. ALTHOUGH MONEY FUNDS SEEK TO PRESERVE THE VALUE OF CUSTOMER'S INVESTMENT AT $1.00 PER SHARE, IT IS POSSIBLE TO LOSE MONEY BY INVESTING IN A MONEY FUND.

(iv) THIS NOTICE IS GIVEN PURSUANT TO APPLICABLE LAW: IN THE UNLIKELY EVENT OF BANK FAILURE, CUSTOMER WILL MAINTAIN ITS INTEREST IN THE MONEY FUND SHARES FOLLOWING A COMPLETED MONEY FUND SWEEP. THE VALUE OF THE SHARES IN THE MONEY FUND OMNIBUS INVESTMENT ACCOUNT WILL NOT BE DEEMED "DEPOSITS" UNDER RULES PROMULGATED BY THE FEDERAL DEPOSIT INSURANCE CORPORATION ("FDIC") AND WILL NOT BE INSURED BY THE FDIC. ON THE DAY OF FAILURE, HOWEVER, THE FDIC MAY DISALLOW THAT DAY'S SWEEP TO OCCUR. IF THE SWEEP IS DISALLOWED, ANY EXCESS FUNDS THAT WOULD HAVE NORMALLY SWEPT ON THAT BUSINESS DAY WILL REMAIN IN THE DDA AND WILL BE TREATED AS DEPOSITS. THOSE DEPOSITS WILL BE INSURED UP TO THE APPLICABLE FDIC INSURANCE LIMITS.

d. Commercial Paper.

(i) Terms. If Customer chooses the Commercial Paper sweep option, Excess Funds shall be invested in an unsecured short-term promissory note issued by U.S. Bank National Association, and held in book entry. At the end of each Business Day, Excess Funds are automatically transferred from Customers' DDA into a sweep account that invests overnight in U.S. Bank National Association Commercial Paper. The minimum amount that may be swept pursuant to this option is $1,000. Excess Funds less than $1,000 on a given Business Day will not be invested. The minimum amount may be increased if requested by Customer and agreed to by Bank.

(ii) THIS NOTICE IS GIVEN PURSUANT TO APPLICABLE LAW: IN THE UNLIKELY EVENT OF BANK FAILURE, THE BALANCES RESIDING IN CUSTOMER'S COMMERCIAL PAPER SWEEP ACCOUNT AT BANK WILL NOT BE DEEMED "DEPOSITS" UNDER RULES PROMULGATED BY THE FEDERAL DEPOSIT INSURANCE CORPORATION ("FDIC") AND WILL NOT BE INSURED BY THE FDIC. IN THE UNLIKELY EVENT OF BANK FAILURE, CUSTOMER'S CLAIM FOR FUNDS THAT WERE SWEPT INTO THE COMMERCIAL PAPER SWEEP ACCOUNT WILL BE TREATED AS UNSECURED GENERAL CREDITOR CLAIMS.

e. Business Savings Sweep. If Customer chooses the Business Savings Sweep option, collected funds with a minimum of $500 in excess of a Peg Balance shall be swept from Customer's DDA into a Business Savings Sweep Account (the "Savings Account"). The Peg Balance shall be set at a minimum of $10,000 unless otherwise agreed to by Bank. Funds remain in the Savings Account until Customer's DDA reaches a negative balance, whereupon available funds are swept back into Customer's DDA in an amount necessary to return the DDA balance to the Peg Balance. In accordance with applicable federal law, sweeps from the Savings Account to Customer's DDA in an amount necessary to return the DDA balance are limited to six per month. In order to comply with applicable regulations, on the sixth transfer from the Savings Account to Customer's DDA, all of the funds are moved from the Savings Account back into Customer's DDA and the sweeps suspend until the first day of the following month's cycle.

P. MASTER REPURCHASE AGREEMENT (MRA)

THIS NOTICE IS GIVEN PURSUANT TO APPLICABLE LAW: ALL FUNDS IN THE REPURCHASE AGREEMENT SWEEP WILL NOT BE DEEMED "DEPOSITS" AND WILL NOT BE INSURED BY THE FEDERAL DEPOSIT INSURANCE CORPORATION ("FDIC"). IN THE UNLIKELY EVENT OF BANK FAILURE, CUSTOMER WILL MAINTAIN ITS OWNERSHIP OR SECURITY INTEREST IN THE SECURITIES THAT ARE SUBJECT TO THE REPURCHASE AGREEMENT AND, UPON LIQUIDATION, WILL RECEIVE THE VALUE OF THE SECURITIES UP TO THE AMOUNT OF FUNDS SWEPT FROM THE ACCOUNT.

1. Applicability. From time to time the parties hereto may enter into transactions in which one party ("Seller") agrees to transfer to the other ("Buyer") securities or other assets ("Securities") against the transfer of funds by Buyer, with a simultaneous agreement by Buyer to transfer to Seller such Securities at a date certain or on demand, against the transfer of funds by Seller. Each such transaction shall be referred to herein as a "Transaction" and, unless otherwise agreed in writing, shall be governed by this MRA and if applicable, Annex III and the Amendment to Annex III (International Transactions) of the SIFMA Master Repurchase Agreement (1996 version).

2. Definitions.

a. "Act of Insolvency", with respect to any party, (i) the commencement by such party as debtor of any case or proceeding under any bankruptcy, insolvency, reorganization, liquidation, moratorium, dissolution, delinquency or similar law, or such party seeking the appointment or election of a receiver, conservator, trustee, custodian or similar official for such party or any substantial part of its property, or the convening of any meeting of creditors for purposes of commencing any such case or proceeding or seeking such an appointment or election, (ii) the commencement of any such case or proceeding against such party, or another seeking such an appointment or election, or the filing against a party of an application for a protective decree under the provisions of the Securities Investor Protection Act of 1970, which (A) is consented to or not timely contested by such party, (B) results in the entry of an order for relief, such an appointment or election, the issuance of such a protective decree or the entry of an order having a similar effect, or (C) is not dismissed within 15 days, (iii) the making by such party of a general assignment for the benefit of creditors, or (iv) the admission in writing by such party of such party's inability to pay such party's debts as they become due;

b. "Additional Purchased Securities", Securities provided by Seller to Buyer pursuant to Paragraph 4(a) hereof;

c. "Buyer's Margin Amount", with respect to any Transaction as of any date, the amount obtained by application of the Buyer's Margin Percentage to the Repurchase Price for such Transaction as of such date;

d. "Buyer's Margin Percentage", with respect to any Transaction as of any date, a percentage (which may be equal to the Seller's Margin Percentage) agreed to by Buyer and Seller or, in the absence of any such agreement, the percentage obtained by dividing the Market Value of the Purchased Securities on the Purchase Date by the Purchase Price on the Purchase Date for such Transaction;

e. "Confirmation", the meaning specified in Paragraph 3(b) hereof;

f. "Income", with respect to any Security at any time, any principal thereof and all interest, dividends or other distributions thereon;

g. "Margin Deficit", the meaning specified in Paragraph 4(a) hereof;

h. "Margin Excess", the meaning specified in Paragraph 4(b) hereof;

i. "Margin Notice Deadline", the time agreed to by the parties in the relevant Confirmation, or otherwise as the deadline for giving notice requiring same day satisfaction of margin maintenance obligations as provided in Paragraph 4 hereof (or, in the absence of any such agreement, the deadline for such purposes established in accordance with market practice);

j. "Market Value", with respect to any Securities as of any date, the price for such Securities on such date obtained from a generally recognized source agreed to by the parties or the most recent closing bid quotation from such a source, plus accrued Income to the extent not included therein (other than any Income credited or transferred to, or applied to the obligations of, Seller pursuant to Paragraph 5 hereof) as of such date (unless contrary to market practice for such Securities);

k. "Price Differential", with respect to any Transaction as of any date, the aggregate amount obtained by daily application of the Pricing Rate for such Transaction to the Purchase Price for such Transaction on a 360-day-per-year basis for the actual number of days during the period commencing on (and including) the Purchase Date for such Transaction and ending on (but excluding) the date of determination (reduced by any amount of such Price Differential previously paid by Seller to Buyer with respect to such Transaction);

l. "Pricing Rate", the per annum percentage rate for determination of the Price Differential;

m. "Prime Rate", the prime rate of U.S. commercial banks as published in The Wall Street Journal (or, if more than one such rate is published, the average of such rates);

n. "Purchase Date", the date on which Purchased Securities are to be transferred by Seller to Buyer;

o. "Purchase Price", (i) on the Purchase Date, the price at which Purchased Securities are transferred by Seller to Buyer, and (ii) thereafter, except where Buyer and Seller agree otherwise, such price increased by the amount of any cash transferred by Buyer to Seller pursuant to Paragraph 4(b) hereof and decreased by the amount of any cash transferred by Seller to Buyer pursuant to Paragraph 4(a) hereof or applied to reduce Seller's obligations under clause (ii) of Paragraph 5 hereof;

p. "Purchased Securities", the Securities transferred by Seller to Buyer in a Transaction hereunder. The term "Purchased Securities" with respect to any Transaction at any time also shall include Additional Purchased Securities delivered pursuant to Paragraph 4(a) hereof and shall exclude Securities returned pursuant to Paragraph 4(b) hereof;

q. "Repurchase Date", the date on which Seller is to repurchase the Purchased Securities from Buyer, including any date determined by application of the provisions of Paragraph 3(c) or 11 hereof;

r. "Repurchase Price", the price at which Purchased Securities are to be transferred from Buyer to Seller upon termination of a Transaction, which will be determined in each case (including Transactions terminable upon demand) as the sum of the Purchase Price and the Price Differential as of the date of such determination;

s. "Seller's Margin Amount", with respect to any Transaction as of any date, the amount obtained by application of the Seller's Margin Percentage to the Repurchase Price for such Transaction as of such date;

t. "Seller's Margin Percentage", with respect to any Transaction as of any date, a percentage (which may be equal to the Buyer's Margin Percentage) agreed to by Buyer and Seller or, in the absence of any such agreement, the percentage obtained by dividing the Market Value of the Purchased Securities on the Purchase Date by the Purchase Price on the Purchase Date for such Transaction.

3. Initiation; Confirmation; Termination.

a. An agreement to enter into a Transaction may be made orally or in writing at the initiation of either Buyer or Seller. On the Purchase Date for the Transaction, the Purchased Securities shall be transferred to Buyer or its agent against the transfer of the Purchase Price to an account of Seller.

b. Upon agreeing to enter into a Transaction hereunder, Buyer or Seller (or both), as shall be agreed, shall promptly deliver to the other party a written confirmation of each Transaction (a "Confirmation"). The Confirmation shall describe the Purchased Securities (including CUSIP number, if any), identify Buyer and Seller and set forth (i) the Purchase Date, (ii) the Purchase Price, (iii) the Repurchase Date, unless the Transaction is to be terminable on demand, (iv) the Pricing Rate or Repurchase Price applicable to the Transaction, and (v) any additional terms or conditions of the Transaction not inconsistent with this MRA. The Confirmation, together with this MRA, shall constitute conclusive evidence of the terms agreed between Buyer and Seller with respect to the Transaction to which the Confirmation relates, unless with respect to the Confirmation specific objection is made promptly after receipt thereof. In the event of any conflict between the terms of such Confirmation and this MRA, this MRA shall prevail.

c. In the case of Transactions terminable upon demand, such demand shall be made by Buyer or Seller, no later than such time as is customary in accordance with market practice, by telephone or otherwise on or prior to the Business Day on which such termination will be effective. On the date specified in such demand, or on the date fixed for termination in the case of Transactions having a fixed term, termination of the Transaction will be effected by transfer to Seller or its agent of the Purchased Securities and any Income in respect thereof received by Buyer (and not previously credited or transferred to, or applied to the obligations of, Seller pursuant to Paragraph 5 hereof) against the transfer of the Repurchase Price to an account of Buyer.

4. Margin Maintenance.

a. If at any time the aggregate Market Value of all Purchased Securities subject to all Transactions in which a particular party hereto is acting as Buyer is less than the aggregate Buyer's Margin Amount for all such Transactions (a "Margin Deficit"), then Buyer may by notice to Seller require Seller in such Transactions, at Seller's option, to transfer to Buyer cash or additional Securities reasonably acceptable to Buyer ("Additional Purchased Securities"), so that the cash and aggregate Market Value of the Purchased Securities, including any such Additional Purchased Securities, will thereupon equal or exceed such aggregate Buyer's Margin Amount (decreased by the amount of any Margin Deficit as of such date arising from any Transactions in which such Buyer is acting as Seller).

b. If at any time the aggregate Market Value of all Purchased Securities subject to all Transactions in which a particular party hereto is acting as Seller exceeds the aggregate Seller's Margin Amount for all such Transactions at such time (a "Margin Excess"), then Seller may by notice to Buyer require Buyer in such Transactions, at Buyer's option, to transfer cash or Purchased Securities to Seller, so that the aggregate Market Value of the Purchased Securities, after deduction of any such cash or any Purchased Securities so transferred, will thereupon not exceed such aggregate Seller's Margin Amount (increased by the amount of any Margin Excess as of such date arising from any Transactions in which such Seller is acting as Buyer).

c. If any notice is given by Buyer or Seller under subparagraph (a) or (b) of this Paragraph at or before the Margin Notice Deadline on any Business Day, the party receiving such notice shall transfer cash or Additional Purchased Securities as provided in such subparagraph no later than the close of business in the relevant market on such day. If any such notice is given after the Margin Notice Deadline, the party receiving such notice shall transfer such cash or Securities no later than the close of business in the relevant market on the next Business Day following such notice.

d. Any cash transferred pursuant to this Paragraph shall be attributed to such Transactions as shall be agreed upon by Buyer and Seller.

e. Seller and Buyer may agree, with respect to any or all Transactions hereunder, that the respective rights of Buyer or Seller (or both) under subparagraphs (a) and (b) of this Paragraph may be exercised only where a Margin Deficit or Margin Excess, as the case may be, exceeds a specified dollar amount or a specified percentage of the Repurchase Prices for such Transactions (which amount or percentage shall be agreed to by Buyer and Seller prior to entering into any such Transactions).

f. Seller and Buyer may agree, with respect to any or all Transactions hereunder, that the respective rights of Buyer and Seller under subparagraphs (a) and (b) of this Paragraph to require the elimination of a Margin Deficit or a Margin Excess, as the case may be, may be exercised whenever such a Margin Deficit or Margin Excess exists with respect to any single Transaction hereunder (calculated without regard to any other Transaction outstanding under this MRA).

5. Income Payments. Seller shall be entitled to receive an amount equal to all Income paid or distributed on or in respect of the Securities that is not otherwise received by Seller, to the full extent it would be so entitled if the Securities had not been sold to Buyer. Buyer shall, as the parties may agree with respect to any Transaction (or, in the absence of any such agreement, as Buyer shall reasonably determine in its discretion), on the date such Income is paid or distributed either (i) transfer to or credit to the account of Seller such Income with respect to any Purchased Securities subject to such Transaction or (ii) with respect to Income paid in cash, apply the Income payment or payments to reduce the amount, if any, to be transferred to Buyer by Seller upon termination of such Transaction. Buyer shall not be obligated to take any action pursuant to the preceding sentence (A) to the extent that such action would result in the creation of a Margin Deficit, unless prior thereto or simultaneously therewith Seller transfers to Buyer cash or Additional Purchased Securities sufficient to eliminate such Margin Deficit, or (B) if an Event of Default with respect to Seller has occurred and is then continuing at the time such Income is paid or distributed.

6. Security Interest. Although the parties intend that all Transactions hereunder be sales and purchases and not loans, in the event any such Transactions are deemed to be loans, Seller shall be deemed to have pledged to Buyer as security for the performance by Seller of its obligations under each such Transaction, and shall be deemed to have granted to Buyer a security interest in, all of the Purchased Securities with respect to all Transactions hereunder and all Income thereon and other proceeds thereof. In all Transactions, Seller is acting as agent for Buyer. In the event of Seller's default under the MRA, Buyer has the right to either: (i) direct Seller to sell the Securities or (ii) sell the Securities, and, following any sale pursuant to this sentence, apply the proceeds in satisfaction of Seller's liability hereunder.

7. Payment and Transfer. Unless otherwise mutually agreed, all transfers of funds hereunder shall be in immediately available funds. All Securities transferred by one party hereto to the other party (i) shall be in suitable form for transfer or shall be accompanied by duly executed instruments of transfer or assignment in blank and such other documentation as the party receiving possession may reasonably request, (ii) shall be transferred on the book entry system of a Federal Reserve Bank, or (iii) shall be transferred by any other method mutually acceptable to Seller and Buyer.

8. Segregation of Purchased Securities. To the extent required by applicable law, all Purchased Securities in the possession of Seller shall be segregated from other securities in its possession and shall be identified as subject to this MRA. Segregation may be accomplished by appropriate identification on the books and records of the holder, including a financial or securities intermediary or a clearing corporation. All of Seller's interest in the Purchased Securities shall pass to Buyer on the Purchase Date and, unless otherwise agreed by Buyer and Seller, nothing in this MRA shall preclude Buyer from engaging in repurchase transactions with the Purchased Securities or otherwise selling, transferring, pledging or hypothecating the Purchased Securities, but no such transaction shall relieve Buyer of its obligations to transfer Purchased Securities to Seller pursuant to Paragraph 3, 4 or 11 hereof, or of Buyer's obligation to credit or pay Income to, or apply Income to the obligations of, Seller pursuant to Paragraph 5 hereof.

Required Disclosure for Transactions in Which the Seller Retains Custody of the Purchased Securities

Seller is not permitted to substitute other securities for those subject to this MRA and therefore must keep Buyer's securities segregated at all times, unless in this MRA Buyer grants Seller the right to substitute other securities. If Buyer grants the right to substitute, this means that Buyer's securities will likely be commingled with Seller's own securities during the trading day. Buyer is advised that, during any trading day that Buyer's securities are commingled with Seller's securities, they [will]* [may]** be subject to liens granted by Seller to [its clearing bank]* [third parties]** and may be used by Seller for deliveries on other securities transactions. Whenever the securities are commingled, Seller's ability to re-segregate substitute securities for Buyer will be subject to Seller's ability to satisfy [the clearing]* [any]** lien or to obtain substitute securities.

* Language to be used under 17 C.F.R. ß403.4(e) if Seller is a government securities broker or dealer other than a financial institution.

** Language to be used under 17 C.F.R. ß403.5(d) if Seller is a financial institution.

9. Substitution. Seller may not substitute other Securities for any Purchased Securities.

10. Representations. Each of Buyer and Seller represents and warrants to the other that (i) it is duly authorized to execute and deliver this MRA, to enter into Transactions contemplated hereunder and to perform its obligations hereunder and has taken all necessary action to authorize such execution, delivery and performance, (ii) it will engage in such Transactions as principal (or, if agreed in writing in advance of any Transaction by the other party hereto, as agent for a disclosed principal), (iii) the person signing this MRA on its behalf is duly authorized to do so on its behalf (or on behalf of any such disclosed principal), (iv) it has obtained all authorizations of any governmental body required in connection with this MRA and the Transactions hereunder and such authorizations are in full force and effect, and (v) the execution, delivery and performance of this MRA and the Transactions hereunder will not violate any law, ordinance, charter, bylaw or rule applicable to it or any agreement by which it is bound or by which any of its assets are affected. On the Purchase Date for any Transaction Buyer and Seller shall each be deemed to repeat all the foregoing representations made by it.

11. Events of Default. In the event that (i) Seller fails to transfer or Buyer fails to purchase Purchased Securities upon the applicable Purchase Date, (ii) Seller fails to repurchase or Buyer fails to transfer Purchased Securities upon the applicable Repurchase Date, (iii) Seller or Buyer fails to comply with Paragraph 4 hereof, (iv) Buyer fails, after one Business Day's notice, to comply with Paragraph 5 hereof, (v) an Act of Insolvency occurs with respect to Seller or Buyer, (vi) any representation made by Seller or Buyer shall have been incorrect or untrue in any material respect when made or repeated or deemed to have been made or repeated, or (vii) Seller or Buyer shall admit to the other its inability to, or its intention not to, perform any of its obligations hereunder (each an "Event of Default"):

a. The non-defaulting party may, at its option (which option shall be deemed to have been exercised immediately upon the occurrence of an Act of Insolvency), declare an Event of Default to have occurred hereunder and, upon the exercise or deemed exercise of such option, the Repurchase Date for each Transaction hereunder shall, if it has not already occurred, be deemed immediately to occur (except that, in the event that the Purchase Date for any Transaction has not yet occurred as of the date of such exercise or deemed exercise, such Transaction shall be deemed immediately canceled). The non-defaulting party shall (except upon the occurrence of an Act of Insolvency) give notice to the defaulting party of the exercise of such option as promptly as practicable.

b. In all Transactions in which the defaulting party is acting as Seller, if the non-defaulting party exercises or is deemed to have exercised the option referred to in subparagraph (a) of this Paragraph, (i) the defaulting party's obligations in such Transactions to repurchase all Purchased Securities, at the Repurchase Price therefore on the Repurchase Date determined in accordance with subparagraph (a) of this Paragraph, shall thereupon become immediately due and payable, (ii) all Income paid after such exercise or deemed exercise shall be retained by the non-defaulting party and applied to the aggregate unpaid Repurchase Prices and any other amounts owing by the defaulting party hereunder, and (iii) the defaulting party shall immediately deliver to the non-defaulting party any Purchased Securities subject to such Transactions then in the defaulting party's possession or control.

c. In all Transactions in which the defaulting party is acting as Buyer, upon tender by the non-defaulting party of payment of the aggregate Repurchase Prices for all such Transactions, all right, title and interest in and entitlement to all Purchased Securities subject to such Transactions shall be deemed transferred to the non-defaulting party, and the defaulting party shall deliver all such Purchased Securities to the non-defaulting party.

d. If the non-defaulting party exercises or is deemed to have exercised the option referred to in subparagraph (a) of this Paragraph, the non-defaulting party, without prior notice to the defaulting party, may: (i) as to Transactions in which the defaulting party is acting as Seller, (A) immediately sell, in a recognized market (or otherwise in a commercially reasonable manner) at such price or prices as the non-defaulting party may reasonably deem satisfactory, any or all Purchased Securities subject to such Transactions and apply the proceeds thereof to the aggregate unpaid Repurchase Prices and any other amounts owing by the defaulting party hereunder or (B) in its sole discretion elect, in lieu of selling all or a portion of such Purchased Securities, to give the defaulting party credit for such Purchased Securities in an amount equal to the price therefore on such date, obtained from a generally recognized source or the most recent closing bid quotation from such a source, against the aggregate unpaid Repurchase Prices and any other amounts owing by the defaulting party hereunder; and (ii) as to Transactions in which the defaulting party is acting as Buyer, (A) immediately purchase, in a recognized market (or otherwise in a commercially reasonable manner) at such price or prices as the non-defaulting party may reasonably deem satisfactory, securities ("Replacement Securities") of the same class and amount as any Purchased Securities that are not delivered by the defaulting party to the non-defaulting party as required hereunder or (B) in its sole discretion elect, in lieu of purchasing Replacement Securities, to be deemed to have purchased Replacement Securities at the price therefore on such date, obtained from a generally recognized source or the most recent closing offer quotation from such a source. The parties acknowledge and agree that (1) the Securities subject to any Transaction hereunder are instruments traded in a recognized market, (2) in the absence of a generally recognized source for prices or bid or offer quotations for any Security, the non-defaulting party may establish the source therefore in its sole discretion, and (3) all prices, bids and offers shall be determined together with accrued Income (except to the extent contrary to market practice with respect to the relevant Securities).

e. As to Transactions in which the defaulting party is acting as Buyer, the defaulting party shall be liable to the non-defaulting party for any excess of the price paid (or deemed paid) by the non-defaulting party for Replacement Securities over the Repurchase Price for the Purchased Securities replaced thereby and for any amounts payable by the defaulting party under Paragraph 5 hereof or otherwise hereunder.

f. For purposes of this Paragraph 11, the Repurchase Price for each Transaction hereunder in respect of which the defaulting party is acting as Buyer shall not increase above the amount of such Repurchase Price for such Transaction determined as of the date of the exercise or deemed exercise by the non-defaulting party of the option referred to in subparagraph (a) of this Paragraph.

g. The defaulting party shall be liable to the non-defaulting party for (i) the amount of all reasonable legal or other expenses incurred by the non-defaulting party in connection with or as a result of an Event of Default, (ii) damages in an amount equal to the cost (including all fees, expenses and commissions) of entering into replacement transactions and entering into or terminating hedge transactions in connection with or as a result of an Event of Default, and (iii) any other loss, damage, cost or expense directly arising or resulting from the occurrence of an Event of Default in respect of a Transaction.

h. To the extent permitted by applicable law, the defaulting party shall be liable to the non-defaulting party for interest on any amounts owing by the defaulting party hereunder, from the date the defaulting party becomes liable for such amounts hereunder until such amounts are (i) paid in full by the defaulting party or (ii) satisfied in full by the exercise of the non-defaulting party's rights hereunder. Interest on any sum payable by the defaulting party to the non-defaulting party under this Paragraph 11(h) shall be at a rate equal to the greater of the Pricing Rate for the relevant Transaction or the Prime Rate.

i. The non-defaulting party shall have, in addition to its rights hereunder, any rights otherwise available to it under any other agreement or applicable law.

12. Single Agreement. Buyer and Seller acknowledge that, and have entered hereinto and will enter into each Transaction hereunder in consideration of and in reliance upon the fact that, all Transactions hereunder constitute a single business and contractual relationship and have been made in consideration of each other. Accordingly, each of Buyer and Seller agrees (i) to perform all of its obligations in respect of each Transaction hereunder, and that a default in the performance of any such obligations shall constitute a default by it in respect of all Transactions hereunder, (ii) that each of them shall be entitled to set off claims and apply property held by them in respect of any Transaction against obligations owing to them in respect of any other Transactions hereunder, and (iii) that payments, deliveries and other transfers made by either of them in respect of any Transaction shall be deemed to have been made in consideration of payments, deliveries and other transfers in respect of any other Transactions hereunder, and the obligations to make any such payments, deliveries and other transfers may be applied against each other and netted.

13. Notices and Other Communications. Any and all notices, statements, demands or other communications hereunder may be given by a party to the other by mail, facsimile, telegraph, messenger or otherwise to the address specified by Bank, or so sent to such party at any other place specified in a notice of change of address hereafter received by the other. All notices, demands and requests hereunder may be made orally, to be confirmed promptly in writing, or by other communication as specified in the preceding sentence.

14. Entire Agreement; Severability. This MRA shall supersede any existing agreements between the parties containing general terms and conditions for repurchase transactions. Each provision and agreement herein shall be treated as separate and independent from any other provision or agreement herein and shall be enforceable notwithstanding the unenforceability of any such other provision or agreement.

15. Nonassignability; Termination.

a. The rights and obligations of the parties under this MRA and under any Transaction shall not be assigned by either party without the prior written consent of the other party, and any such assignment without the prior written consent of the other party shall be null and void. Subject to the foregoing, this MRA and any Transactions shall be binding upon and shall inure to the benefit of the parties and their respective successors and assigns. This MRA may be terminated by either party upon giving written notice to the other, except that this MRA shall, notwithstanding such notice, remain applicable to any Transactions then outstanding.

b. Subparagraph (a) of this Paragraph 15 shall not preclude a party from assigning, charging or otherwise dealing with all or any part of its interest in any sum payable to it under Paragraph 11 hereof.

16. Governing Law. This MRA shall be governed by the laws of the State of New York without giving effect to the conflict of law principles thereof.

17. No Waivers, Etc. No express or implied waiver of any Event of Default by either party shall constitute a waiver of any other Event of Default and no exercise of any remedy hereunder by any party shall constitute a waiver of its right to exercise any other remedy hereunder. No modification or waiver of any provision of this MRA and no consent by any party to a departure herefrom shall be effective unless and until such shall be in writing and duly executed by both of the parties hereto. Without limitation on any of the foregoing, the failure to give a notice pursuant to Paragraph 4(a) or 4(b) hereof will not constitute a waiver of any right to do so at a later date.

18. Use of Employee Plan Assets.

a. If assets of an employee benefit plan subject to any provision of the Employee Retirement Income Security Act of 1974 ("ERISA") are intended to be used by either party hereto (the "Plan Party") in a Transaction, the Plan Party shall so notify the other party prior to the Transaction. The Plan Party shall represent in writing to the other party that the Transaction does not constitute a prohibited transaction under ERISA or is otherwise exempt therefrom, and the other party may proceed in reliance thereon but shall not be required so to proceed.

b. Subject to the last sentence of subparagraph (a) of this Paragraph, any such Transaction shall proceed only if Seller furnishes or has furnished to Buyer its most recent available audited statement of its financial condition and its most recent subsequent unaudited statement of its financial condition.

c. By entering into a Transaction pursuant to this Paragraph, Seller shall be deemed (i) to represent to Buyer that since the date of Seller's latest such financial statements, there has been no material adverse change in Seller's financial condition which Seller has not disclosed to Buyer, and (ii) to agree to provide Buyer with future audited and unaudited statements of its financial condition as they are issued, so long as it is a Seller in any outstanding Transaction involving a Plan Party.

19. Intent.

a. The parties recognize that each Transaction is a "repurchase agreement" as that term is defined in Section 101 of Title 11 of the United States Code, as amended (except insofar as the type of Securities subject to such Transaction or the term of such Transaction would render such definition inapplicable), and a "securities contract" as that term is defined in Section 741 of Title 11 of the United States Code, as amended (except insofar as the type of assets subject to such Transaction would render such definition inapplicable).

b. It is understood that either party's right to liquidate Securities delivered to it in connection with Transactions hereunder or to exercise any other remedies pursuant to Paragraph 11 hereof is a contractual right to liquidate such Transaction as described in Sections 555 and 559 of Title 11 of the United States Code, as amended.

c. The parties agree and acknowledge that if a party hereto is an "insured depository institution," as such term is defined in the Federal Deposit Insurance Act, as amended ("FDIA"), then each Transaction hereunder is a "qualified financial contract," as that term is defined in FDIA and any rules, orders or policy statements thereunder (except insofar as the type of assets subject to such Transaction would render such definition inapplicable).

d. It is understood that this MRA constitutes a "netting contract" as defined in and subject to Title IV of the Federal Deposit Insurance Corporation Improvement Act of 1991 ("FDICIA") and each payment entitlement and payment obligation under any Transaction hereunder shall constitute a "covered contractual payment entitlement" or "covered contractual payment obligation", respectively, as defined in and subject to FDICIA (except insofar as one or both of the parties is not a "financial institution" as that term is defined in FDICIA).

20. Disclosure Relating to Certain Federal Protections. The parties acknowledge that they have been advised that:

a. In the case of Transactions in which one of the parties is a broker or dealer registered with the Securities and Exchange Commission ("SEC") under Section 15 of the Securities Exchange Act of 1934 ("1934 Act"), the Securities Investor Protection Corporation has taken the position that the provisions of the Securities Investor Protection Act of 1970 ("SIPA") do not protect the other party with respect to any Transaction hereunder;

b. In the case of Transactions in which one of the parties is a government securities broker or a government securities dealer registered with the SEC under Section 15C of the 1934 Act, SIPA will not provide protection to the other party with respect to any Transaction hereunder; and

c. In the case of Transactions in which one of the parties is a financial institution, funds held by the financial institution pursuant to a Transaction hereunder are not a deposit and therefore are not insured by the Federal Deposit Insurance Corporation or the National Credit Union Share Insurance Fund, as applicable.

Q. ZERO BALANCE ACCOUNT (ZBA) SERVICES

1. General. ZBA Services allow Customer to concentrate balances across multiple checking accounts consisting of a lead ("Master Account") and one or more sub-accounts funded by the Master Account. At the close of each Business Day, at a time determined by Bank, Bank shall transfer available or collected balances between the Master Account and sub-account(s) via two-way automatic transfers to ensure that the sub-accounts maintain a zero balance or a balance otherwise designated by Customer (collectively, the "Established Balance"). In addition, one-way transfers can be made from: (i) the Master Account to the sub-account; (ii) the sub-account to the Master Account; or (iii) the Master Account to the sub-account with deposits remaining in the sub-account.

Customer agrees to maintain sufficient available funds in the Master Account to cover the aggregate debits made to the sub-accounts to enable the sub-accounts to be maintained at the Established Balance at the close of each Business Day. If the available balance in the Master Account is insufficient to restore the balance in a sub-account to the Established Balance, a lesser amount may be transferred to the sub-account in Bank's sole discretion. If there are multiple sub-accounts and insufficient funds in the Master Account to fund all sub-accounts, Bank may, in its sole discretion, determine which sub-accounts to fund and to what extent. In addition, Bank may, in its sole discretion, either (i) reject any checks or other debit items drawn on any sub-account or (ii) accept any checks or other debit items drawn on a sub-account, even if such acceptance would bring the sub-account below the Established Balance. If Bank must reverse a provisional credit and such reversal causes the Master Account to have a negative balance, Customer agrees that Bank may reverse the transfer of any funds, in whole or in part, between the sub-account and the Master Account, and Bank may additionally reject any items not finally paid on the sub-account. Bank reserves the right to suspend or terminate ZBA Services without prior notice to Customer.

2. Focal Point Plus. If selected by Customer, the Focal Point Plus Service allows Customer to: (i) concentrate balances across multiple checking accounts consisting of a lead ("Master Account") with one or more subaccounts ("Shadow Accounts"), which are all funded by the Master Account; and (ii) track transactions with location reporting. Two-way automatic transfers ensure the Shadow Accounts maintain a zero balance. One-way transfers can also be made from the Shadow Accounts to the Master Account. Customer acknowledges and agrees the Shadow Accounts are deemed to be part of the Master Account for purposes of this Agreement and cannot be used to process transactions independent of the Master Account.

R. SINGLEPOINT® INTERNATIONAL REQUEST FOR TRANSFER SERVICES

The U.S. Bank SinglePoint® International Request for Transfer Services will enable domestic or foreign organizations doing cross-border business to initiate or execute payment or transfer instructions from, or between, Customer accounts held at Bank and foreign banks. Prior to implementation of this Service, the Forwarding Bank and the Executing Bank must enter into a Bilateral Agreement referencing their mutual accession to the SWIFT Request for Transfer (MT101) Service Level or other relevant Service Level. Bank acts in the capacity of the Forwarding Bank with respect to all Requests for Transfer. This Service or other similar remote initiation Services offered by Bank are governed by this Agreement, the Bilateral Agreement, the Interbank Agreement, and all other applicable federal, state and local laws and regulations. Unless otherwise defined, all capitalized terms shall have the meanings set forth in the Interbank Agreement and Bilateral Agreement.

1. Definitions.

a. "Beneficiary" means the person or entity designated in the Originator's instruction to receive funds.

b. "Beneficiary Bank" means the financial institution crediting the funds to the Beneficiary's account.

c. "Execute" or "Execution" means the debiting of the Originator's account by the Executing Bank pursuant to a Request for Transfer from the Forwarding Bank and the forwarding of the credit transfer to the Beneficiary Bank.

d. "Executing Bank" means the financial institution that receives and Executes the Request for Transfer from the Forwarding Bank and then forwards the credit transfer to the Beneficiary Bank.

e. "Forwarding Bank" means a financial institution receiving a Request for Transfer from the Instructing Party and forwarding it to the Executing Bank.

f. "Instructing Party" means a customer of the Forwarding Bank, which could be an office, department or division of the Originator, or a separate legal entity, authorized by the Originator to initiate a Request for Transfer to the Forwarding Bank.

g. "Interbank Agreement" means the Service Level Master Agreement (SLMA) and Request for Transfer Service Level Rules and Regulations (MT 101) or other relevant Service Levels offered by Society for Worldwide Interbank Financial Telecommunication (SWIFT), to which the Forwarding Bank and the Executing Bank are a party.

h. "Originator" means the customer of the Executing Bank whose account is to be debited pursuant to a Request for Transfer.

i. "Request for Transfer" means a transfer instruction received by the Forwarding Bank from the Instructing Party for onward transmission as an MT101 to the Executing Bank, and which is capable of being processed under an Interbank Agreement.

2. Bank as the Forwarding Bank. If Customer selects Bank as the Forwarding Bank, Customer is deemed to be the Instructing Party for all Requests for Transfer. Customer will appoint those individuals authorized to instruct Bank regarding Request for Transfer Services ("Authorized Users") via the relevant Implementation Documents and System Administrator designations establishing the Authorized Users' access authority and transaction limits. Bank may rely on any such authorization until it has received Customer's written notice of revocation and has had a reasonable opportunity to act thereon. Customer and its Authorized Users and other Agents shall maintain the highest possible level of confidentiality with regard to PINs or other security devices and will take all steps necessary to prevent access to them by unauthorized persons. Customer shall be responsible for the accuracy, completeness and timeliness of all Requests for Transfer sent to Bank. Requests for Transfer received after Bank's established deadline or on any non-Business Day, including any Saturday, Sunday, holiday or any day that Bank's wire department is not open, will be considered received on the next Business Day. Customer authorizes Bank to process and forward to the Executing Bank all Requests for Transfer received in accordance with any established security procedures. Notwithstanding the foregoing, Bank does not assume any responsibility for the Execution of the Request for Transfer by the Executing Bank and completion of the credit transfer to the Beneficiary Bank. Customer understands and acknowledges that any applicable callback notifications on PIN limits established by Customer with Bank for wire transfer dollar thresholds do not apply to Requests for Transfer. Customer agrees not to initiate a Request for Transfer in violation of applicable federal, state or local law or regulations.

3. Security Procedures. Customer and Bank shall comply with any established security procedures with respect to the initiation and forwarding of any Request for Transfer, including but not limited to, the SWIFT authentication procedures identified in the SWIFT User Handbook, as amended from time to time. Customer agrees that any such security procedures shall be deemed commercially reasonable. Customer understands that the security procedures are not intended for the purpose of detecting errors in the transmission or content of a Request for Transfer controlled by Customer. Customer agrees to be bound by any Request for Transfer sent in the name of Customer that is processed by Bank in compliance with the agreed security procedures whether or not authorized.

4. Amendment or Cancellation. Customer does not have the right to reverse, adjust or revoke any Request for Transfer after it has been received by Bank; provided, however, that Bank will make a reasonable effort to act on such a request by Customer. With respect to a Request for Transfer that has already been Executed, Bank may intervene at Customer's request, to request that the Beneficiary Bank return all or a portion of the funds. Customer understands that the Beneficiary Bank is under no legal obligation to comply with this request.

5. Rejection/Repair. Bank may reject a Request for Transfer if: (i) it is not initiated or transmitted in accordance with the applicable security procedures; (ii) there is any inconsistency between a Request for Transfer and information previously supplied to Bank; or (iii) Bank has other reasonable grounds not to honor the Request for Transfer. Bank shall have no obligation to repair any Request for Transfer it receives but may, in its absolute discretion, endeavor to repair any Request for Transfer. Bank shall notify Customer of any rejections or suspensions.

6. Limits on Bank's Liability. Bank sends outgoing and receives incoming Requests for Transfer using SWIFT. Bank shall not be responsible for the acts or omissions of Customer, the SWIFT network, other financial institution or any other person. Payment to a foreign country is subject to the laws of the foreign country involved. Bank assumes no liability for foreign exchange risk, delays, non-delivery or other events resulting from causes beyond Bank's control.

S. SWIFT-RELATED SERVICES

The SWIFT-Related Services (the "Service") will enable organizations with domestic or cross-border activity to initiate or execute payment or transfer instructions from Customer's Bank account to another account held at Bank or a third-party bank, and to receive account information and payment notifications from Bank via products and services offered by the Society for Worldwide Interbank Financial Telecommunication ("SWIFT"). This Service or other similar services offered by Bank are governed by this Agreement, applicable SWIFT agreements, rules, and terms and conditions (collectively, "SWIFT Terms"), and all other applicable federal, state and local laws and regulations. Unless otherwise defined, all capitalized terms shall have the meanings set forth in the SWIFT Terms.

1. Definitions.

a. "Account Reporting" means cash management notifications, transaction and account information provided by Bank to Customer.

b. "Beneficiary" means the person or entity (including Customer) designated in Customer's Transfer Request to receive funds.

c. "Beneficiary Bank" means the financial institution (including Bank) that credits the funds to the Beneficiary's account.

d. "Execute" or "Execution" means the debiting of Customer's account by Bank and the forwarding of the credit transfer to the Beneficiary Bank pursuant to a Transfer Request from Customer.

e. "FileAct" means a file transfer service that utilizes the SWIFT infrastructure to enable the transfer of data in various file formats.

f. "Transfer Request" means a MT103 or other SWIFT transfer instruction sent by Customer to Bank for onward processing. If SWIFT-Related services are accessed using SCORE, "Transfer Request" means a MT101 transfer instruction.

g. "SCORE" means the Standardized Corporate Environment, a SWIFT direct access corporate service which offers Customer a secure connection and standardized environment to manage Customer's payments and payment information.

2. Security Procedures. Customer shall comply with all security procedures established by Bank for the SWIFT-Related Services, including but not limited to, the SWIFT authentication procedures identified in the SWIFT User Handbook, as amended from time to time. Customer agrees that any such security procedures shall be deemed commercially reasonable. Customer understands that the security procedures are not intended for the purpose of detecting errors in the transmission or content of any Account Reporting, or of a Transfer Request controlled by Customer. Customer is solely responsible for maintaining its own internal security procedures to prevent errors or unauthorized access to Customer's computer systems by unauthorized employees, vendors or customers. Customer agrees to be bound by any Transfer Request that appears to have been sent by Customer that is processed by Bank in compliance with the agreed security procedures, whether or not authorized. Bank will use reasonable care in transmitting the Account Reporting but assumes no responsibility for the accuracy or timeliness of the information supplied by other financial institutions, the SWIFT network. Customer agrees to immediately notify and fully cooperate with Bank if it suspects or becomes aware of any breach or compromise of the security of the SWIFT-Related Services.

3. Transmission and Processing of Transfer Requests. Customer authorizes Bank to Execute all Transfer Requests delivered to Bank by Customer in compliance with the terms of this Agreement and any established security procedures. Customer shall adhere to formatting and processing requirements established by Bank. Customer authorizes Bank to use whatever means Bank, in good faith, deems reasonable under the circumstances to execute each Transfer Request, including selection of a funds transfer system, routing and means of transmission. Customer shall be responsible for the accuracy, completeness and timeliness of all Transfer Requests sent to Bank for Execution. Transfer Requests with settlement dates of more than thirty (30) calendar days from receipt will not be processed unless prior arrangements have been made. Customer is solely responsible for initiating Transfer Requests sufficiently in advance to meet Customer's contractual obligations to its vendors and/or customers. Bank shall not be responsible for any late payment or finance charges that may result from Customer's failure to allow sufficient lead-time to make a Transfer Request. Bank and any other financial institution may rely on the account, routing or BIC numbers in the Transfer Requests even if such numbers do not correspond to the name of Customer, the Beneficiary or the Beneficiary Bank.

4. Amendment or Cancellation of Transfer Requests. Customer does not have the right to reverse, adjust or revoke any Transfer Request after it has been received by Bank; provided, however, that Bank will make a reasonable effort to act on such a request by Customer. With respect to a Transfer Request that has already been Executed, Bank shall, at Customer's request, request that the Beneficiary Bank return all or a portion of the funds. Customer understands that the Beneficiary Bank is under no legal obligation to comply with this request.

5. Rejection/Repair of Transfer Requests. Bank may reject a Transfer Request if: (i) it is not initiated or transmitted in accordance with the applicable security procedures; (ii) does not adhere to Bank's formatting or processing requirements; (iii) there is any inconsistency between a Transfer Request and information previously supplied to Bank; (iv) Customer's Transfer Requests exceed any applicable transaction limits established by Bank; (v) if there are insufficient collected funds in Customer's account to fund the Transfer Request; or (vi) Bank has other reasonable grounds not to honor the Transfer Request. Bank shall have no obligation to repair any Transfer Request it receives but may, in its absolute discretion, endeavor to do so.

6. Account Reporting. Bank may send notifications that allow Customer to receive advices relating to Customer's payments processed by Bank. Bank may also provide Customer with information on accounts maintained at Bank. If Customer elects to receive notifications and other account information via SWIFT, Customer shall exercise extreme care in maintaining its own security in the receipt of the notifications or information. Customer acknowledges that the data received via SWIFT may include confidential information, including, without limitation, names, amounts, phone numbers and account information. Customer further acknowledges that it alone assumes full responsibility for maintenance of its internal security procedures to keep such information confidential.

7. Limits on Bank's Liability. Bank will use reasonable efforts to provide notifications and information in a prompt fashion but shall not be liable for the temporary failure to provide timely data. Bank assumes no responsibility for any delays caused, or for inaccurate or incomplete information provided, by the SWIFT network or third-party banks with respect to payments and related information. Bank shall not be responsible for the acts or omission of Customer, the SWIFT network, any other financial institution or any other person. Payment to a foreign country is subject to the laws of the foreign country involved. Bank assumes no liability for foreign exchange risk, delays, non-delivery or other events resulting from causes beyond Bank's control.

8. SCORE. If Customer accesses the SWIFT-Related Services using SCORE, Customer shall additionally comply with applicable SWIFT agreements, documentation, user guides, security procedures and all other instructions and recommendations provided by SWIFT or by Bank in relation to the use of SCORE. Customer acknowledges that Bank does not regulate the setup and provision of SWIFT membership, joining the SWIFT network or SCORE, the SWIFT network security or the facilities necessary to access and use them. Customer represents that it is, and will throughout the term of this Service remain, an authorized SWIFT participant. Customer authorizes Bank to act on any instruction contained in a SWIFT message received by Bank through SCORE which appears to have been sent by Customer. In the event that Customer requests Bank to provide SWIFT-Related Services through SCORE to a parent company, subsidiary, affiliate or other commonly owned company, Customer agrees that it shall be jointly and severally liable for such related entity's obligations under this Agreement. Customer represents and warrants that such related entity is a duly authorized agent of the Customer and that the related entity is acting on behalf of Customer in its authorized capacity.

9. FileAct. If the FileAct service is offered by Bank and selected by Customer, Customer may use this service which enables the secure and reliable transfer of files to exchange batches of financial messages, reports, bulk payment files, images and other data over the SWIFT network. FileAct supports both interactive (real-time) and store-and-forward modes. Prior to implementation, Customer shall verify that Bank is capable of supporting the file formats and transaction types that Customer wishes to transmit. If the file format and transaction type is supported by Bank, Customer agrees that the processing of each file shall be additionally subject to all applicable Sections of the Agreement.

V. TERMS APPLICABLE TO SPECIFIC FOREIGN EXCHANGE SERVICES

The following are additional terms and conditions applicable to all Foreign Exchange Services offered by Bank. Bank may change the number or type of Services offered at any time.

1. Conflicting Provisions. With respect to all foreign exchange transactions or other derivative products entered into by Customer, to the extent that any provision of this Agreement conflicts with a provision of any ISDA Master Agreement by and between Customer and Bank or any documents related thereto (the "ISDA"), the ISDA terms shall govern.

2. Foreign Exchange Risk. Many banking and finance transactions carry risk. All foreign exchange transactions, including but not limited to, swaps, options, forwards, foreign exchange transactions currency accounts, and other similar derivatives and related products involve unique risks specific to the nature of these types of transactions and the currency market. These types of transactions are not suitable for all Customers. Customer should fully understand the nature and extent of exposure to risk of loss, if any, which in some circumstances may significantly exceed the amount of any initial payment made by or to Customer. All decisions to enter into foreign exchange transactions should be made by Customer giving appropriate consideration to Customer's experience, objectives, financial resources and business environment.

3. Arm's Length Transactions. Bank is acting solely in the capacity of an arm's length contractual counterparty and not in the capacity of financial advisor to Customer or fiduciary unless otherwise explicitly agreed in writing and then only to the extent so provided.

A. FOREIGN EXCHANGE WEB

1. Introduction. Bank may provide foreign exchange services to Customer in connection with U.S. Bank Foreign Exchange Web, a private Internet site owned and operated by Bank ("USB FX Web"). If requested by Customer and agreed to by Bank, Bank will provide USB FX Web services in accordance with this Agreement and other procedures provided to the Customer. Customer agrees that Customer's use of USB FX Web and all transactions initiated thereby shall be governed by this Section, all other relevant sections of the Agreement and any other related disclosures provided to Customer, in either paper or electronic format. USB FX Web shall be available only during normal business hours as established by Bank, which may vary by day or location. Notwithstanding anything to the contrary herein, Bank does not confirm that the person authorizing any USB FX Web transaction is an Authorized Signer or is otherwise authorized to conduct any USB FX Web transaction on behalf of Customer.

2. Access Devices. USB FX Web shall be available only during normal business hours as established by Bank, which may vary by day or location. Once Bank has granted Customer access to USB FX Web, System Administrator(s) designated by Customer in the Implementation Documents will be provided with one or more access devices, which may include cards, identification numbers and/or passwords. Customer shall use USB FX Web in accordance with the security procedures set forth in this Agreement.

3. Trades.

a. General Procedures. By clicking one or more buttons in USB FX Web, Customer informs Bank that Customer wishes to purchase or sell a stated amount of currency against a second currency on a designated date ("Settlement Date") either unconditionally or at a displayed exchange rate, if one may be obtained ("Trade"). Any transaction that results following the submission of a Trade shall be Customer's legally binding obligation. Trades submitted to Bank via USB FX Web shall be effective only upon acceptance by Bank. Bank will establish from time to time specific times of day after which Trades will not be processed on a "same-day" or "next-day" basis. Trades submitted after Bank's deadline will be considered received on the next business day. Deadlines will differ depending on the Trade currency and other factors. Customer is solely responsible for the accuracy and completeness of any settlement instructions delivered to Bank through USB FX Web and such settlement instructions are subject to the concurrence of Bank. Bank shall make reasonable efforts to provide information and status of the terms of any Trade on the USB FX Web site or by other means established by Bank. Failure by Bank to confirm a Trade for any reason, including without limitation computer malfunction, shall not excuse Customer's obligations related to any Trade. Bank's internal records with respect to each Trade shall constitute conclusive evidence of the terms of each Trade. The terms of each Trade shall be incorporated into and become part of this Agreement.

b. Payment. Once a Trade has been made, Customer agrees to make payment or delivery of currency to Bank on the Settlement Date of the Trade in accordance with the settlement instructions provided by Customer, plus any applicable fees or charges. Should Customer instruct Bank to settle a Trade by debiting an account, Customer agrees to maintain sufficient available funds in the account to settle on the Settlement Date. Should funds be insufficient to settle the trade on the Settlement Date, Bank reserves the right in its sole discretion to debit any of Customer's account with the Bank in the amount of Trade, subject to applicable account fees and charges, or to cancel the Trade.

c. Cancellation or Change. Customer acknowledges and agrees that Customer shall have no right to cancel or reverse a Trade once submitted. Bank will, however, make reasonable efforts in its sole and complete discretion to cancel or amend the terms of a Trade upon Customer's request. Should a Trade be successfully canceled or amended, or in the event that a Trade is canceled due to failure by Customer to make settlement on the Settlement Date or failure to provide Bank with complete settlement instructions prior to the Settlement Date of a Trade, Customer agree to reimburse Bank for any breakage costs and other expenses incurred by Bank to cancel or amend the Trade, including any fees imposed for this extraordinary service. Bank reserves the right to adjust the exchange rate on any Trade requiring a new Settlement Date to reflect any costs associated with carrying that Trade to a new Settlement Date.

4. Orders.

a. General Procedures. Bank may offer and agree to accept conditional instructions from Customer to Bank to buy or sell a stated amount of foreign exchange against U.S. dollars based upon exchange rate target prices ("Orders") via USB FX Web. All Orders requests submitted to the Bank through USB FX Web will not become active until accepted by the Bank. Bank in its sole discretion may decline to accept any Order. All Orders must be in liquid, actively traded currencies and must contain a U.S. dollar component. If an expiration date is not specified, Orders will remain open until filled. Orders must be for an amount of currency equivalent to at least $100,000 U.S. dollars, based upon the exchange rate contained in the Order. Either Bank or Customer may cancel an Order that has been accepted by Bank at any time prior to the execution of that Order. Cancellations, however, must be effected by direct telephone communication between Bank and Customer. Bank shall have a reasonable time to act on any request for cancellation. An Order that has been filled will be binding on the Customer, even if it has not yet been communicated to the Customer as filled. Customer shall have no right to cancel an Order once filled by Bank. Note that there is no single facility, exchange or system for the exchange of currencies and therefore, prices that fulfill the requirements of Orders may be reached at some place in the world at some time of day that is not apparent to Bank or its agents. Bank and its agents monitor markets and systems that are generally best representative of the primary market for foreign exchange and can only be responsible for filling Orders based upon prices traded or available in those markets or systems.

b. Types of Orders. Two types of Orders may be transacted via USB FX Web.

(i) Limit/Profit Orders. Limit/Profit Orders are Orders placed above the current exchange price for sellers and below the current exchange price for buyers. A Limit/Profit Order to sell foreign currency would yield more dollars at the Order price than at the current exchange price and are filled only if wholesale buyers begin bidding for the foreign currency specified in the Order against U.S. dollars at a price equal to or higher than the price stated in the Order. A Limit/Profit Order to buy foreign currency would cost fewer dollars at the Order price than at the current exchange price and are filled if wholesale sellers begin offering the foreign currency specified in the Order against U.S. dollars at a price equal to or less than the price stated in the Order. All Limit/Profit Orders are filled only when they can be filled at a price equal to or better (for the Customer) than the Order price. Limit/Profit Orders for $5,000,000 U.S. dollar equivalent or less will be executed in full, should all the conditions of the Order be met. If Bank or its agents cannot find sufficient liquidity to fill the complete Order at the requested price Limit/Profit, Orders for more than

$5,000,000 U.S. dollars may be filled for less than the Order amount, but in no event for less than $5,000,000 U.S. dollars. Orders larger than $5,000,000 U.S. dollar equivalent with an "all or none" limitation may not be placed through USB FX Web.

(ii) Stop/Loss Orders. Stop/Loss Orders are Orders placed below the current exchange price for sellers, and above the current exchange price for buyers. A Stop/Loss Order to sell foreign currency would yield fewer dollars at the Order price than at the current exchange price and becomes a market Order to be executed at the next available price(s), when actual wholesale market trades are observed to have been executed at or below the Order price. A Stop/Loss Order to buy foreign currency would cost more dollars at the Order price than at the current exchange price and becomes a market Order to be executed at the next available price(s), when actual wholesale market trades are observed to have been executed at or above the Order price. The fill price may be better than, equal to, or worse than the Order price. A Stop/Loss Order may also be filled at multiple prices. The Customer bears all market risk on a Stop/Loss Order.

c. Limited Liability. Bank will rely on market information that it deems adequate and appropriate to determine if, when, and how an Order should be executed. However, Order execution is on a best-efforts basis, and no assurance is given that Bank's traders or agents can or will have access to or even observe every bid, offer or trade available in the over-the-counter foreign exchange market. Except for manifest error, Bank's decisions, prices, execution or non-execution of Orders will be final and conclusive.

5. Foreign Currency Drafts. Bank may offer and agree to provide a service whereby Bank shall act as Customer's agent to arrange for the payment of foreign drafts issued by the Customer via USB FX Web ("Foreign Drafts"), which are drawn on the Bank's accounts at various banks with which Bank has a correspondent relationship (each a "Drawee Bank"). Foreign Drafts may not exceed the monetary draft limit communicated to Customer by Bank from time to time in writing. Customer shall draw Foreign Drafts only in accordance with the terms of this Agreement and any related procedures.

a. Stop Payment Orders. Upon receipt of a stop payment order, Bank shall make reasonable efforts to ascertain whether the Foreign Draft has been paid by the Drawee Bank. If such Foreign Draft has not been paid, Bank will send a stop payment notice to the Drawee Bank. Bank shall have no liability for the Drawee Bank's payment of a Foreign Draft over a stop payment order processed by Bank or if the stop payment order does not prevent a Foreign Draft from being legally enforceable for any reason.

b. Refund; Replacement Foreign Drafts. Customer may request Bank to refund the amount of a Foreign Draft or issue a replacement Foreign Draft (the "Replacement Foreign Draft") if the original Foreign Draft and duplicate, if any, are surrendered to Bank properly endorsed. If the original Foreign Draft is unavailable, Bank will refund the amount of the Foreign Draft or issue a Replacement Foreign Draft in accordance with the terms of the applicable Lost, Stolen or Destroyed Foreign Drafts Affidavit. Any refund shall be at the U.S. dollar equivalent of the amount of the Foreign Draft based upon Bank's buying rate on the date of the refund, and Bank shall deduct from such refund all expenses or fees incurred by Bank or the Drawee Bank in connection with the refund. If Bank determines that there is no ready market for the currency specified in the Foreign Draft, Bank may decline to make such refund unless and until Bank determines such a market exists. Any Replacement Foreign Draft issued shall be priced at the selling rate for the original Foreign Draft.

c. Liability. In addition to liability limitations elsewhere in this Agreement, Bank's liability for any loss or damage shall not exceed the total amount of the fee charged to Customer related to the particular Foreign Draft which gave rise to the loss or damage. Neither Bank nor the Drawee Bank shall be liable for any loss, cost or expenses resulting from the delay in presenting the Foreign Draft for payment or from the refusal or inability of the Drawee Bank to pay the Foreign Draft by reason of any law, decree, moratorium, regulation, compulsion or control of public authority or of domestic or foreign government, de jure or de facto, or any agency thereof, or resulting from declared or undeclared war, censorship, blockade, revolution, insurrection or civil commotion.

d. Drafts; Safekeeping. Bank may deliver to Customer from time to time blank draft forms. Customer shall hold all such draft forms and completed drafts in safekeeping until their use in an authorized transaction by authorized personnel. Customer must destroy all canceled or otherwise used forms and notify Bank in accordance with the procedures.

e. Fees. Customer agrees to pay any service charges incurred by Bank in connection with this service and charges for special services, such as stop payment orders or expenses incurred in attempting to recover the proceeds of erroneously paid Foreign Drafts.

f. Indemnification. Except to the extent caused by Bank's gross negligence or willful misconduct, and except to the extent recovered from the Drawee Bank, the payee or its transferee, Customer shall be liable for and shall indemnify Bank, its directors, officers, employees and agents against any loss, cost or expense (including attorney's fees) arising out of or relating to a Foreign Draft drawn by Customer, including without limitation, the unauthorized completion or use of a Foreign Draft, conversion of a Foreign Draft, regardless of whether the conversion occurs while the Foreign Draft is held by Customer in safekeeping or thereafter, the use of a Foreign Draft for any illegal purpose, the Drawee Bank's payment of a Foreign Draft to a party other than the payee or an authorized transferee, the placement of a stop payment order, the Drawee Bank's failure to honor a timely stop payment order, the Drawee Bank's failure or refusal to pay the Foreign Draft upon presentment, loss of use of funds while recovering a canceled Foreign Draft, errors in the payment of the Foreign Draft, conditions beyond the reasonable control of Bank, exchange rate fluctuations, the insolvency of the Drawee Bank, foreign exchange disruption or suspension caused by political or economic conditions in the Drawee Bank's country or the United States. In the event of any such loss, cost or expense where recovery may be made against persons in the Drawee Bank's country, Bank will make reasonable efforts to assist Customer in attempting to obtain a recovery from those persons; provided, however, that Customer agrees to pay the expense of such recovery efforts, including attorney's fees, and assumes the risk of loss if the recovery efforts do not succeed. Customer's indemnity obligations shall survive any termination of this Agreement.

6. Funds Transfers. Customer authorizes Bank to execute and charge the designated Customer account(s) for wire transfer payment orders delivered to Bank via USB FX Web. Customer agrees that all such wire transfer payment orders will be governed by the relevant Sections of this Agreement.

7. Representations and Warranties. Customer represents and warrants to Bank as of the date of this Agreement and as of the date of each Trade that: (i) Customer is authorized to enter into this Agreement and any Trade, (ii) the persons entering into the Agreement (and each Trade) on Customer's behalf have been duly authorized to do so, (iii) the Agreement (and each Trade) is binding and enforceable against Customer in accordance with its terms, (iv) no Termination Event has occurred or is continuing, and (v) Customer is acting as principal with respect to each Trade.

8. Close-Out Events. Each of the following events shall constitute a close-out event under this Agreement (each a "Close-Out Event"): (i) failure by Customer to pay Bank for any amounts due under this Agreement or any Trade, (ii) any voluntary or involuntary insolvency proceeding (including without limitation any proceeding under any bankruptcy, insolvency or other similar laws governing the operations of Customer) shall have been commenced against Customer, (iii) Customer fails, or is otherwise unable, to pay its debts as they become due, (iv) Customer disaffirms, disclaims or repudiates any Trade, (v) any representation made by Customer under this Agreement shall prove to have been false or misleading in any material way at the time that it was made, or (vi) Customer shall be in default of any agreement between Customer and Bank or its subsidiaries or affiliates.

9. Rights Upon Close-Out Event. If a Close-Out Event has occurred, Bank shall have the right to terminate this Agreement and, upon notice to Customer, close out all outstanding Trades on a date specified by Bank (the "Close-Out Date"). In such event, Bank shall liquidate such Trades by calculating in good faith the gain or loss of all Trades as follows: (i) determine the close out amount of each Trade, which shall be equal to the sum of the face value of each Trade in a particular currency with a Settlement Date that is the same or later than the Close-Out Date and the face value of each Trade in the same currency with a Settlement Date prior to the Close-Out Date, plus interest at the overnight LIBOR rate from and including the Settlement Date, but excluding the Close-Out Date, (ii) convert the close out amount of each group of like currency Trades into U.

S. Dollars at the rate of exchange at which, at the time of the calculation, Bank may buy U.S. dollars with or against currency of each closed out Trade, and (iii) determine for each Trade the sums that would have been owed by Customer to Bank and the sums that would be owed by Bank to Customer (adjusted to present value by discounting the gain or loss at overnight LIBOR from and including the Settlement Date, but excluding the Close-Out Date). The preceding amounts shall be aggregated, so that all such amounts are netted into a single liquidated amount payable to or by Bank. Customer shall pay on demand any amounts owing to Bank pursuant to this Section and Bank's calculations shall be conclusively binding against Customer, absent manifest error.

B. FOREIGN CURRENCY ACCOUNTS

1. Introduction. If requested by Customer and agreed to by Bank, Customer may open a Foreign Currency Account ("FCA") at either U.S. Bank National Association ("Standard FCA") or U.S. Bank National Association, Cayman Branch ("Cayman FCA").

2. Permitted Deposits. Bank may accept the following for deposit into a FCA:

a. Proceeds of matured foreign exchange purchase contracts;

b. Proceeds of foreign currency denominated letters of credit or documentary collection;

c. Incoming international funds transfers;

d. Proceeds of loan disbursements; or

e. Foreign checks and other items subject to collection, which may not be available until funds are received by Bank.

Bank will not accept currency or coin for deposit into a FCA. Deposits not specifically enumerated above may be allowed if agreed to by Bank in writing. Only collected and verified funds can be deposited into a FCA, whereupon funds will be immediately available for withdrawal or transfer by Customer.

3. Withdrawals. Customer can make withdrawals out of a FCA in the following ways:

a. Settlement of a foreign currency exchange sale contract;

b. Negotiation of foreign currency denominated letters of credit or documentary collection;

c. Outgoing international funds transfers by wires initiated in accordance with Bank procedures;

d. Payment of a foreign currency loan; or

e. Payment via foreign draft.

Each of these methods of making a withdrawal will result in an immediate debit to the FCA for the entire amount Customer has elected to withdraw from such FCA.

4. Interest. Interest rates offered on Standard FCAs and Cayman FCAs are determined in Bank's discretion based on the applicable currency. Such interest rates may be set at zero or at a negative interest rate. Interest is calculated based on the average daily balance method. The average daily balance method is an annualized rate that reflects the relationship between the amount of interest each fiscal month and the average daily balance in the account for such fiscal month.

5. Denomination. Customer will elect the denomination of each FCA on a separate account opening document. Transfers of funds into and out of a FCA in the currency in which that particular FCA is denominated will be made without regard to the equivalent value of that sum of foreign currency in U.S. dollars or other foreign currencies. Transfers of funds into and out of a FCA in a currency other than the currency in which that particular FCA is denominated may be accommodated by the Bank in its discretion. Such transfers will be made at the prevailing exchange rate determined by Bank.

6. Non-Business Days. In addition to non-Business Days specified in the Agreement, there will occasionally be other days on which Bank cannot process or complete a transaction due to holidays in foreign countries (including, but not limited to, Cayman Island holidays with respect to Cayman FCAs).

7. Other Terms. Bank may refuse a deposit, limit the amount which Customer may deposit, return all or any part of a deposit or require that Customer close a FCA at any time. Bank may also close a FCA without prior notice and remit to Customer any balance remaining after taking into account all pending debits and charges against such FCA.

8. Foreign Currency Account Risks. Investing in any currency other than the base currency of the Customer carries risk. The value of the balances in such accounts may be significantly affected by changes in currency exchange rates. Some other risks of maintaining foreign currency balances include, but are not limited to: the effects of a different economic system in a foreign country, future political and economic developments, possible imposition of exchange controls or other government restrictions, and with respect to certain countries, the possibility of expropriation or confiscatory taxation, political or social instability, or diplomatic developments which could adversely affect the value of the currency. Should Bank's balances in a foreign country become blocked or withdrawals by Bank become otherwise restricted, Customer's funds in the FCA will likewise be blocked or otherwise restricted.

WHILE DEPOSITS IN STANDARD FCAS MAY BE INSURED BY THE FEDERAL DEPOSIT INSURANCE CORPORATION ("FDIC") UP TO A MAXIMUM AMOUNT ALLOWED BY LAW, CUSTOMER IS NOT PROTECTED BY BANK AGAINST FOREIGN CURRENCY EXCHANGE RATE FLUCTUATIONS OR FROM INABILITY TO ACCESS FUNDS FROM FOREIGN REGULATIONS BY THE FDIC INSURANCE, OR ANY OTHER INSURANCE OR GUARANTY PROGRAM. CUSTOMER ASSUMES ALL RISK OF LOSS ARISING FROM ANY ACTION TAKEN WITH RESPECT TO THE CAYMAN FCAs BY THE GOVERNMENT OF THE CAYMAN ISLANDS OR ANY SOVEREIGN OR MILITARY POWER (DE FACTO OR DE JURE). IN THE UNLIKELY EVENT OF BANK FAILURE, THE BALANCES RESIDING IN CUSTOMER'S CAYMAN FCA WILL NOT BE DEEMED "DEPOSITS" UNDER RULES PROMULGATED BY THE FDIC AND WILL THEREFORE NOT BE INSURED BY THE FDIC. CUSTOMER'S CLAIM FOR FUNDS HELD IN THE CAYMAN FCA WILL BE TREATED AS UNSECURED GENERAL CREDITOR CLAIMS.

9. Limitations on Liability. In addition to other limitations on liability set forth in this Agreement, Customer expressly releases and holds harmless Bank, and its affiliates, agents and employees, from any liability, loss, damage or claim related to currency exchange rates or fluctuations in value of the currency in which the applicable FCA is denominated with respect to the U.S. dollar and other currencies. Customer hereby assumes all risks related to currency exchange rates and fluctuations in currency values, including that the foreign currency in a FCA might be worth less, in U.S. dollars or other foreign currencies, than the U.S. dollar or other foreign currency equivalent of such funds at the time deposited into the FCA. Bank makes no warranty and no representation about the value of any FCA balance at any time.

VI. TERMS APPLICABLE TO SPECIFIC MONEY CENTER AND SAFEKEEPING SERVICES

The following are additional terms and conditions applicable to specific Money Center and Safekeeping Services offered by Bank. In the event of a conflict between this Section VI and any other provision of this Agreement, Section VI shall govern. Bank may change the number or type of Services offered at any time. Customer shall not be bound by the terms and conditions for the specific Services described in this Section VI to the extent Customer is not using such Service(s).

Municipal Advisor Rule Disclosure. This disclosure applies to Customer if Customer is classified as a municipality or an "obligated person" under the Municipal Advisor Rule. For purposes of Section 15B of the Securities Exchange Act of 1934 (the "Act") (SEC Rule 15Ba1-1 et seq.) (the "Rule"), Bank: (1) is not recommending and will not recommend an action to Customer; (2) is not providing and will not provide "advice" to Customer as defined in the Rule, and any information or communication from Bank in respect of Customer's accounts with the Money Center or the Safekeeping Departments of Bank or in respect of any securities transaction or potential securities transaction to be executed via such account(s) is not intended to be and should not be construed as "advice" as defined in the Rule; and (3) is not acting as an advisor to Customer and does not owe Customer any fiduciary duty pursuant to Section 15B of the Act or otherwise with respect to any such account(s), information, communication, transaction or potential transaction. Customer should discuss any information or material provided to Customer by Bank in connection with trading, investing or other activity in the such account(s) with any and all of Customer's internal or external advisors and experts that Customer deems appropriate before acting on any such information or material.

A. INVESTMENT, DEPOSITORY AND SAFEKEEPING SERVICES

From time to time, Customer may effect securities transactions or establish deposits with Bank's Money Center Department and/or request safekeeping services from Bank's Safekeeping Department. All such transactions shall be subject to the terms and conditions of this Agreement.

1. Definitions.

a. "Confirmation" means the confirmation statement from Bank as described in this Agreement.

b. "deposits" means interest-bearing deposit accounts, money market deposit accounts, time deposits and other deposit liabilities of Bank to Customer established under this Agreement.

c. "Safekept Securities" means securities that Bank has agreed to accept and hold for the account of Customer under the terms of this Agreement.

d. "securities" means all securities (as Defined in the Securities Exchange Act of 1934) and all investment securities or products from time to time offered by Bank to Customer, other than certificates of deposit issued by Bank and deposits made with Bank.

e. "Settlement Account" means any settlement account(s) designated by Customer or any replacement account identified by Customer in a written notice delivered to Bank.

2. Capacity of Bank; Compensation.

a. In General. In any securities transaction governed by this Section VI.A, Bank may be acting as principal, riskless principal, or agent. Bank's capacity in any securities transaction will be indicated on the Confirmation.

(i) As Principal. When acting as a principal in securities transactions, Bank will either buy securities for its own account or sell for its own account securities owned by Bank, whether such securities are bought before or after receiving Customer's order. Bank's compensation is reflected in the price at which Bank buys or sells the securities.

(ii) As Riskless Principal. When acting as a riskless principal in securities transactions, after receiving from Customer an order to buy or sell securities, Bank will buy or sell securities for its own account to offset the sale to or purchase from Customer. Bank's compensation is reflected in the price at which Bank buys and sells the securities.

(iii) As Agent. When acting as Customer's agent in securities transactions, Bank will buy or sell securities solely for Customer's account. Bank's compensation due from Customer is the amount of any agency service charge indicated on the Confirmation.

b. Service Fees. In addition to compensation received as a principal, riskless principal or agent, Bank may charge Customer service fees in relation to securities transaction as specified in the current fee schedule as provided to Customer, which may be amended from time to time upon notice to Customer.

c. Other Compensation; Bank Securities**.** Bank may be paid a fee or other compensation by any other party in connection with any securities transaction, and any such fee or compensation will be in addition to fees payable by Customer to Bank under this Agreement. Such additional compensation may include, without limitation, advisory, custodial, distribution and/or shareholder service fees (which may be paid as service fees pursuant to Rule 12b-1 under the Investment Company Act of 1940) that Bank or its affiliates may receive from various mutual funds and/or mutual fund service providers, based upon moneys invested in the funds. Customer acknowledges that those fees or other compensation may be paid to Bank for such services, and that such payments will not reduce or offset any fee or compensation due from Customer to Bank under this Agreement. Further, Customer acknowledges that securities Customer acquires through Bank may directly or indirectly (including through mutual or money market funds) represent an ownership interest in securities issued by Bank or its affiliates or by funds sponsored by Bank or its affiliates.

3. Pledges; Segregation.

a. Pledges. Upon request of Customer, Bank can provide a form of control agreement suitable for transactions where Customer wishes to grant to third parties a lien, pledge or other rights over its property held by or at the Money Center or Safekeeping Departments at Bank. Customer agrees that all costs of Bank, including reasonable fees and expenses of outside counsel if deemed necessary by Bank, will be at Customer's expense if such a control agreement is requested, whether or not a final agreement is entered into.

b. Segregated Assets. Where Customer wishes to effect transactions hereunder on behalf of its customers using the property of such customers, Customer will first notify Bank in writing of its intention to do so before effecting any such transactions. Customer acknowledges that Bank may require one or more additional agreements in order to accept such transactions. Once acceptance of such transactions has been approved by Bank, Customer agrees to include in its instructions to Bank an agreed identifier or designation as to the applicable securities, deposits and transactions.

4. Securities Transaction Requests.

a. Effecting Transactions. Each securities transaction will be effected pursuant to Customer's instructions made verbally, by fax or sent electronically via email or a trading system provided or approved by Bank. Emailed instructions must be directed to Bank's email address as designated from time to time by Bank, and fax instructions must be directed to Bank's fax number as designated from time to time by Bank. Securities transaction requests may be acted upon by Bank without acknowledgment by Bank that it has received such request.

b. Cut-Off Times. Bank establishes cut-off times for receipt of securities transaction requests depending on the type of security and the market in which it is traded. In addition, market holidays, procedural or operational matters, and actions taken by market operators may affect Bank's ability to process securities transaction requests. Customer instructions for same day settlement received before the applicable cut-off time will be submitted for processing that Business Day. Customer instructions for same day settlement received after the applicable cut-off time may be processed by Bank on a 'best efforts' basis that Business Day and otherwise will be submitted for processing the next Business Day.

c. Bank's Rights. Bank may reject, refuse to honor, or reverse all or any portion of any transaction request, with or without prior notice to Customer. If Customer fails to pay in full for any security purchased or fails to deliver security sold, in each case on or before the related settlement date, Bank is authorized in its discretion and without notice or demand to take any one or more of the following actions: cancel the transaction; sell the securities covered thereby; buy-in cover securities or other property required to make delivery; charge the Settlement Account for amounts due; hold Customer liable for any loss, cost or expense including but not limited to, breakage or pair-off fees and the capital charge and interest cost to carry any securities purchased; and/or impose fees.

5. Safekept Securities. Bank, acting through its Safekeeping Department, agrees to hold and keep as custodian hereunder all Safekept Securities, and to deliver such Safekept Securities in accordance with the instructions of Customer, all subject to the terms and conditions of this Agreement.

a. Acceptance and Withdrawal. Securities eligible to be Safekept Securities may be delivered to Bank, and any Safekept Securities may be withdrawn from Bank, in each case upon an instruction of Customer delivered in accordance with this Agreement. Withdrawal or delivery of Safekept Securities is subject to availability (e.g., among other reasons, securities involved in a corporate action or in frozen status, restricted securities or pledged securities may not be available for withdrawal or delivery). Bank shall not be liable or responsible for or on account of any act or omission of any broker or other agent designated by Customer or, in the absence of such designation, selected by Bank to receive or deliver securities for the account of Customer.

b. Registration; Depositories. Bank shall register Safekept Securities in nominee name and may from time to time change the registration of Safekept Securities from nominee name to Customer's name, or vice versa. Customer agrees that it will timely complete any necessary documentation provided by Bank to change the registration of Safekept Securities. Safekept Securities held in nominee name may be deposited with The Depository Trust Company or other third-party depository acceptable to Bank. Securities that are depository eligible will be held at the depository in the depository's nominee name.

c. Securityholder Information. Unless otherwise required by law or pursuant to instructions from Customer, in no event shall Bank be responsible to take any action concerning any puts, calls, conversions, exchanges, reorganizations, offers, tenders or other corporate actions or similar matters relating to Safekept Securities, other than (i) to forward to Customer in accordance with this Agreement the written information received by Bank relating to any such transaction, and (ii) follow Customer's lawful instructions with respect to such actions. Customer may directly vote any proxy or other corporate action, or if it instructs Bank to vote on its behalf, agrees that any instructions to Bank with respect to any such actions shall be delivered to Bank within sufficient time for Bank to act thereon if any action is required. Safekept Securities called for redemption prior to maturity will be presented by Bank for payment provided the trustee or other appropriate entity gives Bank adequate notice of redemption. Should any Safekept Security be called for partial redemption by the issuer of such security, Bank is authorized to accept the allocation applied by any central depository. In the event Bank has to allocate any redemption among its accounts, Bank shall allot the redemption proceeds in accordance with its standard procedures therefor, effected in such manner as it deems appropriate in its sole discretion.

d. Collection of Income and Principal. Bank shall collect and receive the interest, principal and other income payable in connection with the Safekept Securities, and shall pay to Customer or credit to the Settlement Account all such amounts. Bank shall not be obligated (i) to pay to Customer or credit to the Settlement Account any payment of interest, principal or other income until Bank receives such payment in immediately available funds or (ii) to institute or participate in any collection proceedings or other proceedings to enforce Customer's rights relative to any Safekept Securities or to pursue any remedies on behalf of Customer. Bank is hereby authorized to sign on behalf of Customer any declarations, affidavits, certificates of ownership or other documents relating to securities held by Bank in nominee name that may at any time be required with respect to all coupons, registered interest, dividends or other income. If any of Customer's deposits or securities the subject of this Agreement, including Safekept Securities, are subject to a variable or fixed rate of interest and such securities bear a negative interest rate, Customer agrees to pay Bank all amounts of the negative interest (which may also be debited from the Settlement Account by Bank), and Customer agrees that the principal amount of such Safekept Securities may be reduced to the extent necessary to cover the amount of the negative interest if available funds are not otherwise provided by Customer.

e. Return of Payments. Customer will repay Bank, or Bank may charge the Settlement Account, in the event that for any reason (i) Bank is required to return to the issuer or to a third party any payments in respect of Safekept Securities, (ii) Bank fails to receive from the issuer or appropriate other party a payment Bank paid to Customer in respect of Safekept Securities, or (iii) Bank must return to the issuer or appropriate other party a payment Bank paid to Customer in respect of Safekept Securities. Customer further agrees that the principal amount of any Safekept Securities may be reduced, and any remittances due from Bank to Customer (whether or not under this Agreement), and any other accounts of Customer with Bank, may be offset to the extent necessary to cover the amount of such returned payments to the extent that immediately available funds are not otherwise provided by Customer to Bank.

6. Confirmation Statements. Promptly after effecting any transaction pursuant to this Section VI.A, Bank will deliver to Customer a Confirmation which shall identify at least (i) Bank and Customer, (ii) the trade and settlement dates of the transaction, (iii) the issuer and par amount of the related securities (for securities transactions) and the principal amount of any deposit (for deposit transactions), (iv) the interest rate if applicable and/or any discount rate applicable to any securities transactions or deposit transactions, (v) the maturity date of the transaction, if applicable, (vi) the capacity of Bank as principal, riskless principal or agent (if the transaction is a securities transaction) and, if applicable, whether the securities will be Safekept Securities, (vii) any terms and information required by applicable law, and (viii) any other terms and information which Bank may include at its discretion. The information contained on the Confirmation shall be considered true and correct and conclusively binding upon Customer unless Customer notifies Bank of any error therein within three (3) business days after the date the Confirmation is deemed delivered to Customer in accordance with this Agreement. Customer may, by notice from an Authorized User in accordance with this Agreement, elect to receive Confirmations by mail, fax, email, or other electronic means including posting to a password-protected website), subject to the terms of this Agreement.

7. Settlement Account. Unless Bank is otherwise instructed in writing, Customer unconditionally authorizes, empowers, and directs Bank (and authorizes and directs Bank to communicate with any financial institution maintaining the Settlement Account as necessary) to: (i) debit the Settlement Account on the settlement date indicated on the Confirmation for the full amount of each transaction effected under this Section VI(A) (including all fees and charges payable hereunder), notwithstanding that such debit may cause the Settlement Account to be overdrawn; and (ii) credit the Settlement Account with interest payments, principal payments, maturity payments or other payments received in respect of transactions effected under this Agreement. Customer hereby represents and warrants that instruction from any Authorized User is sufficient to authorize Bank to debit or credit the Settlement Account. If the Settlement Account is not held by Bank, Customer confirms to Bank that it has authorized the financial institution maintaining the Settlement Account to accept debit and credit entries to the Settlement Account and that no such authorization will be cancelled except with prior notice to Bank and in sufficient time and in such manner as to allow the financial institution maintaining the Settlement Account and Bank a reasonable opportunity to act on such termination without disruption of any transactions or services under this Agreement. Customer acknowledges that ACH payments to a Settlement Account not held by Bank are subject to ACH processing timelines, which may involve a delay in available funds.

8. Delivery. Through the instructions of an Authorized User, Customer shall specify the account to which any securities purchased hereunder are to be delivered. If such account is maintained by the Safekeeping Department of Bank, the securities will be held in accordance with this Agreement. If such account is maintained by an institution other than Bank, Bank's responsibility for ensuring delivery shall be limited to accurately conveying the instructions for the appropriate delivery account to the depository, agent or issuer of the securities, as applicable for the particular type of securities. Bank will issue no certificate, passbook, or any other evidence of any deposit except for the Confirmation.

9. Interest. All deposits opened under this Agreement, and all certificates of deposit purchased by Customer or held under this Agreement, will earn interest from the date of deposit or settlement date, as applicable, computed at the rate and in the manner established by Bank from time to time for the related product (which, for variable rate products including those whose underlying interest rate is not managed by Bank, may permit changes to the applicable rate at any time without notice to Customer, and which may permit zero or negative rates). Bank will notify Customer of the applicable interest rate and maturity terms, for deposits with Bank opened under this Agreement at the time that the request for such deposit is made.

10. Fixed Investment Periods. Customer acknowledges that certain investments held by Bank under this Agreement have fixed investments periods, and agrees that such investments will be held by Customer until their respective maturity date or through their respective commitment date. Customer agrees that if it withdraws part or all of such an investment before such date, Bank shall be entitled to impose a penalty (including by debiting the Settlement Account for such amounts) in accordance with the terms of such product or the fee schedule provided to Customer, as applicable, and that the principal amount of such investments may be reduced to the extent necessary to cover such penalty if available funds are not otherwise provided by Customer.

11. Repurchase Transactions. Customer shall not effect any securities transactions under this Agreement in the expectation of entering into a repurchase transaction with Bank as counterparty unless Customer shall first have executed and delivered to Bank a written master repurchase agreement, in form and substance satisfactory to Bank, governing such transactions. In any such transaction, where Bank is to hold securities as collateral or as the subject of a transaction, such securities will be held by the Safekeeping Department of Bank subject to the terms of this Agreement, unless Customer is otherwise notified. To the extent of any inconsistency between the terms of any such agreement and the terms of this Agreement, the terms of such other agreement shall control.

12. Fees and Expenses. Customer shall pay to Bank such fees in respect of the services provided under this Agreement, as disclosed to Customer on the current fee schedule (which fee schedule may be amended from time to time by Bank). If the fee schedule is amended, the amended fees will apply to any Safekept Securities being held at that time, and to any securities transactions effected on the day such amendment becomes effective. Customer agrees to pay, and agrees and acknowledges that Bank may debit the Settlement Account for any fees and other amounts owing by Customer to Bank under this Agreement, or exercise an offset for such amounts against any funds of Customer on deposit with Bank, or against any interest, principal or other income received or to be received by Bank on behalf of Customer, whether or not in respect of Safekept Securities. In addition, Customer agrees to reimburse Bank for its commercially reasonable out-of-pocket expenses for providing the services hereunder, including, but not limited to the reasonable fees and expenses of outside counsel if retained by Bank in its discretion in connection with this Section VI. If Customer fails to pay Bank any sums due under this Section VI within thirty (30) days after the same are due (whether or not a late notice is sent to Customer by Bank), Bank may terminate this Agreement and return any Safekept Securities to Customer at Customer's expense, and to avail itself of any other remedy it may have in law or in equity.

13. Termination. Subject to Section VI.A.10, Customer or Bank may terminate the Service(s) described in this Section VI at any time effective upon prior notice to the other party, and Bank may terminate the Service(s) described in this Section VI at any time if Customer's account is inactive for an extended period. If any Service described in this Section VI is terminated for any reason, Customer will continue to be responsible for any obligation incurred by Customer prior to termination and for the fees and costs, if any, payable under this Agreement with respect to delivery of Customer's securities (including Safekept Securities) or funds held by Bank to Customer or to another financial institution.

14. Notices. Except for oral instructions to Bank from Authorized Users or from Bank to Authorized Users, all notices, disclosures and communications (including Confirmations) under this Section VI shall be in writing and delivered by mail, fax, email or other electronic means as provided for in this Agreement. Notices, disclosures and communications (including Confirmations) shall be deemed delivered upon transmission of the same by mail, fax, email or other electronic means as provided for in this Agreement, or on the third (3rd) Business Day after deposit of the same in the United States mail, postage prepaid, and addressed to the mailing address provided by Customer. All written confirmations, notices, instructions, or other communications from Customer to Bank shall be sent to following address (which may be amended from time to time by Bank upon notice to Customer):

For securities transactions:
U.S. Bank National Association
Money Center Department
800 Nicollet Mall, BC-MN-H18T
Minneapolis, MN 55402
Fax: (612) 303-1338
Email: Money.Center.Sales@usbank.com

For safekeeping services:
U.S. Bank National Association
Safekeeping Department
800 Nicollet Mall, BC-MN-H18R
Minneapolis, MN 55402
Fax: (612) 303-0202
Email: Safekeeping@usbank.com

15. Terms and Conditions of Electronic Delivery. All notices, disclosures and communications (including Confirmations and other account information) from Bank may be delivered to Customer by electronic means (including, without limitation posting to a password-protected website) to the extent Customer elects to receive such information through electronic means, subject to the Terms and Conditions of Electronic Delivery set forth in Section VI.B below. Customer agrees that sending information in this manner will constitute good and effective delivery of the information to Customer, regardless of whether Customer actually accesses the website or other electronic medium containing the information.

16. No Investment Advice. Customer acknowledges that Bank will not provide supervision, recommendations or advice to Customer in connection with the investment, purchase, sale, retention or other disposition of any securities or deposits, or the advisability or suitability of any product or transaction.

17. ERISA. If assets of an employee benefit plan subject to the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), are intended to be deposited, invested or used by Customer in a transaction under this Section VI.A, Customer shall notify Bank prior to effecting such deposit, investment or transaction and will provide Bank with such additional information as Bank may reasonably request. Customer represents and warrants to Bank that any deposit, investment, or transaction pursuant to this Section VI.A shall not result in a "prohibited transaction" under ERISA or shall otherwise be exempt under ERISA, and Customer further agrees to indemnify and hold Bank harmless from any loss or claim arising therefrom.

18. No Representation or Warranty. Customer acknowledges and agrees that Bank makes no representation or warranty, express or implied, with respect to the validity, enforceability, collectability or investment quality of any securities bought or sold hereunder, or any deposits made or terminated hereunder.

19. Records; Taxes. Bank will maintain records of Customer's account and provide customer with a Confirmation for transactions in accordance with this Section VI.A and periodic account statements. Bank will also send to Customer such notices and reports as are required by law. Customer acknowledges and agrees that it is Customer's obligation to prepare and file all required tax returns and to pay all taxes due on any income that Bank collects for Customer.

B. TERMS AND CONDITIONS OF ELECTRONIC DELIVERY

The following sets forth the terms and conditions of use of Bank's electronic delivery and notification service (the "Electronic Delivery Service") in connection with account(s) with Bank's Money Center Department or Safekeeping Department.

The Electronic Delivery Service described in this Section VI.B shall constitute an Internet Service as defined in Section III of this Agreement and shall be subject to the terms set forth therein, as well as any other agreements between Customer and Bank and any applicable laws or regulations. If there is a conflict between the terms and conditions set forth in this Section VI.B and the terms and conditions of any other section of this Agreement or any other agreement between Customer and Bank as they relate to the Electronic Delivery Service, the terms and conditions set forth herein will control.

1. Electronic Delivery of Account Communications. Customer may elect to receive Account Communications (defined below) related to Customer's account(s) electronically. All Account Communications will be delivered electronically by posting to Bank's password-protected website designated for Customer's account(s) or, at Bank's election, delivered via electronic mail to the email address provided by Customer to Bank. "Account Communications" include, without limitation, all current and future account statements, Confirmations, security notices, maturity notices, prospectuses, offering and disclosure documents, shareholder communications (such as quarterly, semi-annual and annual reports, proxy statements, etc.), regulatory communications and other information, documents, data, notices and records regarding Customer's account(s) with Bank. Bank may, from time to time, designate additional Account Communications that are then eligible for electronic delivery through the Electronic Delivery Service, the delivery of which will then be subject to these terms and conditions. From time to time, Bank may add to, modify or delete any feature of the Electronic Delivery Service or Account Communications eligible for delivery through the Electronic Delivery Service at its sole discretion. Customer acknowledges and agrees that by being enrolled in the Electronic Delivery Service, Customer will no longer receive Account Communications by mail that is otherwise available for delivery as part of the Electronic Delivery Service.

2. Accessing Account Communications. Bank will notify Customer via email when Account Communications are posted. Bank may also provide, in its sole and absolute discretion, Account Communications directly via email. Customer may access all Account Communications for at least thirty (30) days from the date of initial posting. Customer acknowledges and agrees that all Account Communications will be deemed to constitute good and effective delivery to Customer upon posting, regardless of whether Customer actually or timely receives or accesses the Account Information, or if Account Communications are delivered directly to Customer via email, when so delivered.

3. Changes in Delivery Method. Customer must notify Bank if it wishes to discontinue use of the Electronic Delivery Service. Following Bank's receipt of such notice and after Bank has a reasonable opportunity to act on such notice, Customer will thereafter begin to receive Account Communications via U.S. mail beginning with Customer's next statement cycle and/or mailed Confirmation.

4. Reporting Unauthorized Transactions or Erroneous Statements. Customer agrees to promptly and carefully review all Account Communications as and when delivered and notify Bank in accordance with this Agreement if Customer objects to any of the information provided.

5. Third-Party Services. Customer acknowledges and agrees that Customer's access to the Electronic Delivery Service and Customer's receipt of email notifications when Account Communications are posted may be delayed or prevented by factors affecting Customer's or Bank's Internet or telephone service provider(s) or other similar entities ("Third-Party Service Providers"). Bank makes no representations or warranties whatsoever with regard to the products and services offered by such Third-Party Service Providers and shall not be liable for any loss caused, in whole or in part, by a Third-Party Service Provider.

6. International Use. Bank makes no representations or warranties that any content or use of the Electronic Delivery Service is appropriate, legal or available in locations outside the United States. Customer acknowledges and agrees that accessing the Electronic Delivery Services from territories where its contents or use is illegal and is prohibited by Bank. If Customer accesses the Electronic Delivery Service from locations outside the United States, Customer does so at its own risk. Customer is responsible for compliance with local laws.

7. Proprietary Rights; Materials; Trademarks. All content included or available through the Electronic Delivery Service (other than Customer's account information), such as advertisements, tests, graphics, logos, button icons, images, audio clips and software, is the property of Bank and/or third parties and is protected by copyrights, trademarks or other intellectual property rights. The compilation (meaning the collection, arrangement and assembly) of all content on the Electronic Delivery Service is the exclusive property of Bank and/or its licensors and is protected by copyrights or other intellectual property rights. The trademarks, logos and service marks displayed on the Electronic Delivery Service (collectively, “Trademarks”) are the registered and unregistered Trademarks of Bank or third parties. Under no circumstances may Customer use, copy, alter, modify or change these Trademarks. Nothing contained on the Electronic Delivery Service should be construed as granting by implication or otherwise any license or right to use any Trademark without the express written permission of Bank or the third party that has rights to such Trademark, as the case may be.

Your Deposit Account Agreement

&

General Terms & Conditions

Electronic Transfers

Funds Availability

Effective May 11, 2020

usbank

Frequently Asked Questions to Manage Your Account:

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Terms Applicable to all Accounts

Funds Availability: Your Ability to Withdraw Funds – All Accounts

TERMS APPLICABLE TO ALL ACCOUNTS

THIS IS AN AGREEMENT

Welcome to U.S. Bank and thank you for opening an account with us. This Agreement provides the general rules that apply to the account(s) you have with **U.S. Bank ("us")** described herein. Additional rules will be provided in:

1. disclosures we give you when you open your account for example our *Consumer Pricing Information and Business Pricing Information* brochure(s) and other fee disclosures (Both brochures can be obtained by stopping in a U.S. Bank branch or for the *Consumer Pricing Information* only, call 800.872.2657 to request a copy);
2. disclosures that are applicable to additional products and services (for example the *Digital Services Agreement);*
3. periodic statements;
4. user guides;
5. *Consumer Privacy Pledge* brochure;
6. any appropriate means such as direct mail and notices on or with your statement, including any statements or notices delivered electronically; and
7. disclosures we give you about ATM and Debit Card Overdraft Coverage (applicable to certain consumer accounts, refer to the **Insufficient Funds and Overdrafts** section on page 8 for details).

These things, together, are an agreement between you and **U.S. Bank.**

Please read this carefully and retain it for future reference. This brochure is revised periodically, so it may include changes from earlier versions.

By providing a written or electronic signature on a signature card or other agreement or contract, opening, or continuing to hold an account with us, you agree to the most recent version of this Agreement, which is available to you at your local U.S. Bank branch, at www.usbank.com, or by calling U.S. Bank 24-Hour Banking at a number listed on the last page of this booklet.

This Agreement represents the sole and exclusive agreement between you and us regarding the subject matter described herein and supersedes all previous and contemporaneous oral agreements and understandings. If any terms of your signature card, resolution, or certificate of authority are inconsistent with the terms of this Agreement, the terms of this Agreement will control. Any other variations to this Agreement must be acknowledged by us in writing.

If you have any questions, please call us. Our most commonly used phone numbers are printed on the back of this booklet.

DEFINITIONS

The following definitions apply in this Agreement except to the extent any term is separately defined for purposes of a specific section.

- The words **"we," "our,"** and **"us"** mean **U.S. Bank National Association ("U.S. Bank")**. We are a national bank. We are owned by **U.S. Bancorp**.
- **U.S. Bancorp and U.S. Bank** own or control other companies, directly and indirectly. The members of this family of companies are our **"affiliates."** The words **"you"** and **"your"** mean each account owner and anyone else with authority to deposit, withdraw, or exercise control over an account. If there is more than one owner, then these words mean each account owner separately, and all account owners jointly.
- The term **"account"** means any savings, transaction (for example, checking, NOW Account), and time deposit (for example, certificate of deposit or CD) account or other type of account you have with us, wherever held or maintained.
- An **"owner"** is one who has the power to deal with an account in his, her or its own name. An **"agent,"** in contrast, is one whose power to withdraw from an account comes from, or is on behalf of, the owners. Authorized signers, designated corporate officers, trustees, attorneys-in-fact, and convenience signers are examples of agents.
- Entities such as corporations, limited liability companies, partnerships, estates, conservatorships, and trusts are not natural persons, and can only act through agents. In such cases, it is the **"entity"** that is the owner.
- **"Personal accounts"** are consumer accounts in the names of natural persons (individuals). They are to be distinguished from **"non-personal accounts"** which are accounts in the name of businesses, partnerships, trusts and other entities.
- An **"account cycle"** or **"statement cycle"** represents the period of time when your statement starts and ends. It's approximately 30 days long but doesn't necessarily align with the beginning and end of the month and won't end on a weekend or holiday.

Except where it is clearly inappropriate, words and phrases used in this document should be interpreted so the singular includes the plural and the plural includes the singular.

CELLULAR PHONE CONTACT POLICY

By providing us with a telephone number for a cellular phone or other wireless device, including a number that you later convert to a cellular number, you are expressly consenting to receiving communications—including but not limited to prerecorded or artificial voice message calls, text messages, and calls made by an automatic telephone dialing system—from us and our affiliates and agents at that number. This express consent applies to each such telephone number that you provide to us now or in the future and permits such calls for non-marketing purposes. Calls and messages may incur access fees from your cellular provider.

MONITORING AND RECORDING COMMUNICATIONS

You acknowledge and agree that we, or anyone acting on our behalf, may monitor and/or record any communication between you and us, or anyone acting on our behalf, for quality control and other purposes. You also acknowledge and agree that this monitoring or recording may be done without any further notice to you. The communication that may be monitored or recorded includes telephone calls, cellular or mobile phone calls, electronic mail messages, text messages, instant or live chat, or any other communications in any form.

WAIVERS AND PRECEDENTS

Our Agreement with you gives us rights and duties. If we don't take advantage of all our rights all the time that does not mean we lose them. For example:

- If we make funds available to you for withdrawal ahead of schedule, that does not mean we have to do it again.
- If we pay a check that is more than your account balance, that does not mean we have to do it again.

APPLICABLE LAW

Unless otherwise stated herein, your account and this Agreement will be governed by federal law and, unless superseded by federal law, by the law of the state in which your account is located. If you opened your account in person, it is located in the state in which you opened it. If you opened your account online or by telephone and you reside in a state in which we have a branch at that time (or reside within 50 miles of a branch), it is located in the state in which the branch is located. If you reside anywhere else, then your Account is located in Minnesota.

CUSTOMER IDENTIFICATION PROGRAM NOTICE (USA PATRIOT ACT)

To help the government fight the funding of terrorism and money laundering activities, federal law requires all financial institutions to obtain, verify, and record information that identifies each person who opens an account.

What this means for you

When you open an account, we will ask for your name, address, date of birth, and other information that will allow us to identify you. We may also ask to see other identifying documents like a driver's license or documents showing your existence as a legal entity.

Existing customers

Even if you have been a customer of ours for many years, we may ask you to provide this kind of information and documentation because we may not have collected it from you in the past or we may need to update our records.

Failure to Provide Information

If, for any reason, any owner is unable to provide the information necessary to verify their identity, their account(s) may be blocked or closed, which may result in additional fees assessed to the account(s).

OWNER'S AUTHORITY

Each owner of a personal account, or an agent for a non-personal account, acting alone, has the power to perform all the transactions available to the account. For example, each owner or agent can:

1. make withdrawals by whatever means are available for the account;
2. make deposits by whatever means are allowed for the account;
3. obtain and release information about the account;
4. sign or authenticate any document in connection with the account (for example, an owner can endorse a check payable to a co-owner for deposit to a joint account);
5. give rights to others to access the account (for example, any owner could grant a power of attorney to have access to the account); and
6. close the account.

In addition, if you share ownership of an account with someone else (for example, you have a joint or multi-party account), then each of you can endorse items for deposit to the account on behalf of another owner. If there is shared ownership of an account, it is the intention of all owners that each of you has complete and separate access and withdrawal rights to all the funds in the account irrespective of who had deposited the funds in the account.

AUTHORIZED ACCESS AND POWER OF ATTORNEY

Each owner of your account is independently permitted to authorize someone else to access your account. For example, the following persons will have access to your account:

1. Any person listed on a signature card, resolution, or certificate of authority as being authorized to make withdrawals or transfers, by check or otherwise, from your account;
2. Any person that you authorize to make withdrawals or transfers from the account by whatever means the account allows (for example, pre-authorized withdrawals, wire transfers, ATM card, or debit card transactions);
3. Any person you give rights to act on your behalf, such as a power of attorney;
4. Any person to whom you make your checkbook or your checking account number available for purposes of transacting business on the account. We discourage this type of "authorization" because it is possible that we will detect such transactions and treat them as unauthorized. If you give any such person "authority," we are not responsible whether we honor the transactions or dishonor them; and
5. Any person to whom you make your ATM card or debit card personal identification number (PIN) available. Although we discourage this practice, by allowing this type of "authorization," the person to whom you make your personal identification number (PIN) available may be able to access all of your accounts held with us by using the telephone, ATM, online or other banking access channels. If you give any person such "authority," we are not responsible for actions they take with respect to your accounts.

We will use the word "agent" to mean any person who you authorize to act on your behalf, whether by following the process we require (for example, by designating an authorized signer on a signature card), or on your own (for example, by creating a power of attorney). If you name such an agent:

1. we may require that you use forms we approve and require each owner to sign the form to be effective;
2. the powers you give to your agent, and any limitations on those powers, are between you and your agent, even if we have express written notice of those powers. You understand and agree that we have no duty or responsibility to monitor the acts of your agent or ensure that the acts of your agent are for your benefit. For example, if you only give your agent authority to pay your bills and your agent exceeds that authority, we are not responsible for that breach of authority;
3. you agree not to hold us responsible for any loss or damage you incur as a result of us following instructions given to us by your agent;
4. the owners of the account are responsible to us for any actions of your agent, regardless of whether those actions exceed the authority given or whether the agent is appointed by all the owners or less than all the owners;
5. the agency will end if the owner dies **and** we get notice of that death, or if there is more than one owner, the agency will end after the death of the last owner and we get notice of that death and, in either case, once we've had reasonable opportunity to act on it;
6. the agency will end after the owner notifies us in writing to end the agency and we have had a reasonable opportunity to act on it; and
7. if you authorize any third person, such as a bookkeeping service, an employee, or agent of yours to retain possession of or prepare items, you agree to assume full responsibility for any errors or wrongdoing performed or caused by such third person or any of its agents or employees if we should pay any such item.

YOU CANNOT TRANSFER AN ACCOUNT

You may not transfer an account to someone else without our express written permission. This does not limit your right to access your account by any permissible means.

CHANGE IN AUTHORIZED SIGNERS

Any owner, including one of the owners of a joint account, may add owners or authorized signers to an account; however, we have the right to require the signature of all owners to make the change. Only under special circumstances and subject to prior approval by us may an owner remove another owner or authorized signer from an account.

No change in owners or authorized signers is effective until we have received written notice of the change and have had adequate time to approve and act on it.

ADJUSTMENTS

If we (or you, or you and us together) make an error on your account, we can fix the error without first notifying you. For example, if:

- the dollar amount of your check is paid for the incorrect amount;
- a deposit is added incorrectly;
- we apply a deposit to the wrong account;

we can fix the error without any special notice to you, though such a correction will normally appear on your statement if the error and the correction occur on different business days.

For accounts coded as Consumer and Business accounts, we may not adjust for insignificant errors unless you request it. For all other account types including Corporate and Commercial accounts, we may not adjust for deposit errors of $50.00 or less unless we have agreed with you to a lower adjustment amount.

RETENTION OF DOCUMENTS

You should retain your copy of deposit receipts and other documents associated with your deposit(s). Should you claim that a deposit was incorrectly credited, we may request a copy of your receipt or other documents associated with your deposits.

LIABILITY FOR CHARGES AND OVERDRAFTS

All account owner(s) are responsible to repay to us any overdraft amount **and** any overdraft fees charged to an account, no matter which owner caused it or why. That repayment is due immediately, and we will take it from your next deposit or whenever funds become available in your account. If there is more than one owner, each owner is separately, and all owners are jointly, responsible for an overdraft and any account fees. (This means we can collect the total from any owner(s), on any of the owner(s) accounts, but we won't collect it more than once). For more information on overdrafts please refer to the section titled **Insufficient Funds and Overdrafts.**

We list the charges that you may incur on your account in separate pricing information brochures or agreements for your account.

TRANSACTION POSTING ORDER

We reserve the right to decide the order of the items we will pay and which items will be returned (if any). Our posting order may not be the same as the order in which you conducted a transaction and could result in overdraft fees, if you do not have available funds at the time the item is paid. Generally, we post the following three transaction types after the close of each business day in the following order:

1. Deposits we receive before the daily cutoff time will be posted before any withdrawals. (Refer to our Cutoff Time and/or Funds Availability section for cutoff time description.)

2. Your non-check withdrawals will be posted in date/time order, based on the date and time associated with each transaction. A date and time (if one is available) will be assigned to each transaction based on one of the following: (1) when the transaction was preauthorized (for example a debit card or ATM transaction was approved); **or** (2) when the transaction was processed by U.S. Bank (for example an ACH, or bill pay transaction for which there is no pre-authorization). If a date and time is not available, these transactions are posted to your account after all transactions with a valid date and time or check number are complete, and posted to your account in order of amount, starting with the lowest transaction amount first (frequently referred to as low-to-high).

3. Your checks will be posted in check number order, starting with the lowest number. (For example: on Monday we may receive and post check # 107; on Tuesday we may receive check # 102 and # 105, and those would be posted on Tuesday in the order of lowest check number (i.e., # 102) posting first).

DEPOSITS

When you make a non-cash deposit to your account, we give you credit for that deposit, but that credit is provisional (temporary). If the deposit needs to be collected from another financial institution, we must be paid before the credit becomes final. After a credit is final it may still be reversed if the funds cannot be collected. See the sections titled **Returned Deposited and Cashed Items** and **Funds Availability.** All deposit receipts are issued subject to our count and verification of the items deposited. You should retain your copy of deposit receipts and other documents associated with your deposit(s). Should you claim that a deposit was incorrectly credited, we may request a copy of your receipt or other documents associated with your deposit.

Foreign Currency: Deposits received in a foreign currency, whether by check, wire-transfer, or otherwise, must be converted to U.S. dollars prior to being deposited into your account. U.S. Bank will convert your funds at an exchange rate established by U.S. Bank on the business day when such exchange is processed. Currency exchange rates are determined in our sole discretion based on factors such as market conditions and risk, economic and business factors. The exchange rate is an all-in rate which includes our profit, fees, costs, and charges. Currency exchange rates will be applied to these deposits without notice to you. You agree to this procedure and accept our determination of the currency exchange rates.

Foreign currency conversions can take time and exchange rates fluctuate at times significantly. You acknowledge and accept all risk that may result from such fluctuations. Your transaction is a retail transaction. Retail foreign exchange conversion rates are different from the wholesale exchange rates for large transactions between two banks as may be reported in *The Wall Street Journal* or elsewhere. Exchange rates offered by other banks or shown at other sources (including online sources) may be different from our exchange rates. The exchange rate you are offered may be different from, and likely inferior to, the rate paid by U.S. Bank to acquire the underlying currency. The exchange rate may also be different from a rate offered by U.S. Bank to a different customer, at a different time, for a different transaction amount, or in a different payment channel (checks, wire-transfers, etc.).

U.S. Bank sometimes relies on other financial institutions in the conversion process. In this event, the conversion will be in accordance with the policies and procedures of that bank and the funds will be converted at the exchange rate determined by that bank. Any fees or charges assessed by that bank will be passed on to you. Your final credit will be adjusted to reflect that final exchange rate less all fees or charges.

Foreign Checks: Checks and other items drawn off a foreign financial institution, whether negotiable in a foreign currency or in U.S. dollars may require special funds collection processing by us. As a result, funds availability may be delayed. If you deposit such an item, you agree that we may delay funds availability at our discretion until we are satisfied that we have received final payment of the item.

Deposits by Mail: If you make a deposit by mail, we have to receive it and have time to record it before it becomes effective. (See our **Funds Availability** section.)

Cutoff Time: A deposit made after our daily cutoff time on a business day, or on a day we are not open for all forms of business, will be considered deposited on the next full business day. (Refer to our **Funds Availability** section for cutoff time description.) The cutoff time applies to all accounts (savings, certificate of deposits, payments, etc.), not just checking accounts.

Endorsement: If you make a deposit to an account and you fail to endorse the item, we may add an endorsement on any item and you will be responsible for the item as if you endorsed it yourself.

We can refuse to accept any item or other type of deposit, for any reason, or no reason, or impose conditions on a deposit. For example, we can treat a deposit as an "inquiry" or take an item for "collection" instead of deposit. We may also decline to accept a large cash deposit or require you to make such a deposit at a location and time of our choosing.

RETURNED DEPOSITED AND CASHED ITEMS

The funds you deposit to your account are subject to normal collection processes even after we make the funds available to you for withdrawal (i.e., the check has "cleared"). If we do not collect the funds, or we need to return the funds, your deposit will be reversed and become your responsibility. **Returned items** are charged back to your account and a Return Item Advice notice is mailed to the primary account address on file.

For example:

- The deposit amount of the check is recorded incorrectly to your account. The person who wrote the check catches the error, and reports it to their bank, who in turn reports it to us. We would reverse the incorrect portion of the deposit and correct the mistake.
- A check you deposit has a forged endorsement. The person who wrote the check notices the forgery and reports it to their bank, who reports it to us. We would reverse the deposit and collection of the check would become your responsibility.
- This also applies to checks we might cash for you that you don't deposit. For example, if you bring a check to us and take cash back from a deposit, or we simply cash the check and if that check "bounces" (is returned to us unpaid), we can take the money from your account to reimburse us for the check and you will have to collect it through other channels.

There will be one fee posted for the sum of all Returned Deposited Item or Cashed Check fees returned within a single transaction as well as applicable overdraft fees if sufficient funds are not in your account to cover your items.

CHECK 21

Check processing is getting faster as banks begin to process checks "electronically." We are required by law to provide the notice in the following section **("SUBSTITUTE CHECKS AND YOUR RIGHTS"),** which explains the differences between your original check (which might not be returned) and a substitute check, and your rights in the event the substitute check causes a loss that would have been avoided if the original check was still available.

SUBSTITUTE CHECKS AND YOUR RIGHTS

What is a substitute check?

To make check processing faster, federal law permits banks to replace original checks with "substitute checks". These checks are similar in size to original checks with a slightly reduced image of the front and back of the original check. The front of the substitute check states: "This is a legal copy of your check. You can use it the same way you would use the original check." You may use the substitute check as proof of payment just like the original check.

Some or all of the checks that are returned to you from us may be substitute checks. This notice describes your rights you have when you receive substitute checks from us. The rights in this notice do not apply to original checks, photocopies of original checks, or to electronic debits to your account. However, you have rights under other laws with respect to those transactions.

What are my rights regarding substitute checks?

In certain cases, federal law provides a special procedure that allows you to request a refund for losses you suffer if a substitute check is posted to your account (for example, if you think that we withdrew the wrong amount from your account or that we withdrew money from your account more than once for the same check). The losses you may attempt to recover under this procedure may include the amount that was withdrawn from your account and fees that were charged as a result of the withdrawal (for example, overdraft fees).

The amount of your refund under this procedure is limited to the amount of your loss or the amount of the substitute check, whichever is less. You are also entitled to interest on the amount of your refund if your account is an interest-bearing account. If your loss exceeds the amount of the substitute check, you may be able to recover additional amounts under other law.

If you use this procedure, you may receive up to $2,500.00 of your refund (plus interest, if your account earns interest) within ten business days after we received your claim and the remainder of your refund (plus interest, if your account earns interest) not later than 45 calendar days after we received your claim.

We may reverse the refund (including any interest on the refund) if we later are able to demonstrate that the substitute check was correctly posted to your account.

How do I make a claim for a refund?

If you believe that you have suffered a loss relating to a substitute check that you received and that was posted to your account, please call U.S. Bank 24-Hour Banking (see last page for phone numbers) or write to us at **U.S. Bank, 60 Livingston Ave, EP-MN-WS5D, St. Paul, MN 55107.** You must contact us within 40 calendar days of the date that we mailed (or otherwise delivered by a means to which you agreed) the substitute check in question or the account statement showing that the substitute check was posted to your account, whichever is later. We will extend this time period if you were not able to make a timely claim because of extenuating circumstances.

Your claim must include:

1. a description of why you have suffered a loss (for example, you think the amount withdrawn was incorrect);
2. an estimate of the amount of your loss;
3. an explanation of why the substitute check you received is insufficient to confirm that you suffered a loss; and
4. a copy of the substitute check or identifying information such as the check number and the name of the person to whom you wrote the check.

COPIES OF DOCUMENTS

We do not typically keep the original paper documents (like deposit slips) associated with your account for a long time. We image most of the documents that end up with us and destroy the paper originals. Electronic images is one type of media that is used, but as technology changes, there are and will be other imaging techniques. You agree that such images will be sufficient for all purposes.

See the section titled **CHECK 21.** To facilitate check imaging and electronic check collection, it is important that you take care with the transactions you create on paper. When completing a check, you must:

1. write clearly;
2. use black or dark blue ink in the date, pay to, amount, and signature fields; and

3. use only the space provided for your part of a transaction. (See the section on ENDORSEMENT STANDARDS.)

You agree to reimburse us for any losses and costs we incur as a result of a poor check image caused by a deficiency in the written check, whether due to your failure to follow these guidelines or otherwise. You also agree to reimburse us for any losses and costs we incur as a result of a poor check image caused by a deficiency in the written check that you accepted and deposited as the payee.

NIGHT DEPOSITORY

If you arrange for night depository services, you must comply with the following two rules and also comply with the rules in any separate night depository agreement.

1. **Use of Containers.** Each deposit placed in the depository must be contained in a sealed envelope, or in a bag or pouch that has been approved or supplied by us. Deposits are only processed to accounts held at U.S. Bank.
2. **Care.** You must take appropriate care when you put the container in our night depository or other facility to make sure the container is received by us.

   Our responsibility for the security of the container and the drawer or facility is to use reasonable care. This means we are not automatically liable for just any loss, only for losses that result from our own negligence, only to the extent we caused a loss, and reduced by your contribution to any loss. In legal terms, we are a "bailee" until the point:
   - when we open the container and inventory its contents (if that is what we are asked to do); or
   - when you sign the receipt for or take custody of the container (if we do not open the container).

CHECKS

Post-Dated Checks. We are not responsible to you if we pay a check before its date, even if we have noticed that it is post-dated. If we, at our option, refuse to pay a check because it is presented before its date, you will have to pay, if applicable, the fee we charge for an overdraft. If you want to be sure we do not cash it before its date, you must stop its payment by following our rules for stop payments in the **STOP PAYMENTS** section of this Agreement and follow our procedures for revoking a stop payment request.

Stale-Dated Checks. A "stale-dated" check is one that is brought to us for payment more than six months after its date. We may pay, or refuse to pay, a check brought to us ("presented") more than six months after its date. (The general rule is we will pay the check or may return the check for insufficient funds.) In addition, the check would be subject to an overdraft. If you do not want us to pay a stale-dated check, you must place a stop payment order on the check.

Check Legends. We are not required to honor any legends or memos you put on your checks, even if we are aware of them. By a "legend" or "memo" we mean a message, such as "not valid for more than $50.00" or "do not pay more than ten days after date" or "paid in full".

Check Forms. Checks are sorted and copied by high speed equipment. If you don't buy your checks through us, you must get them approved by us or we will not be responsible if your checks do not process correctly. See the section titled **COPIES OF DOCUMENTS** for additional information on inks and related issues.

Deposits of Checks at ATMs

We reserve the right to refuse to credit your account for ATM deposits of the following items. If an item is refused the item or a substitute check may be returned via mail to the primary account address.

1. All the check payees are not listed on the account;
2. Checks payable to a business and the business name is not listed on the account. (Checks payable to a business must be deposited into an account that includes the name of the business on the associated account);
3. Improperly endorsed (for example, different endorser than payee);
4. Restrictive wording (on the deposited item);
5. Post-dated (greater than one day after the ATM network business day);
6. No date or incomplete date;
7. Altered in any way;
8. Photocopy of item;
9. Not signed by maker;
10. Traveler's check with different counter signature;
11. Drawn on a foreign bank;
12. Missing the numeric amount and/or the written amount;
13. Numeric amount and written amount do not match;
14. No payee listed;
15. Federal tax refund checks not endorsed by payee or payees; and
16. Any other instrument which is not a check or negotiable instrument.

ENDORSEMENT STANDARDS

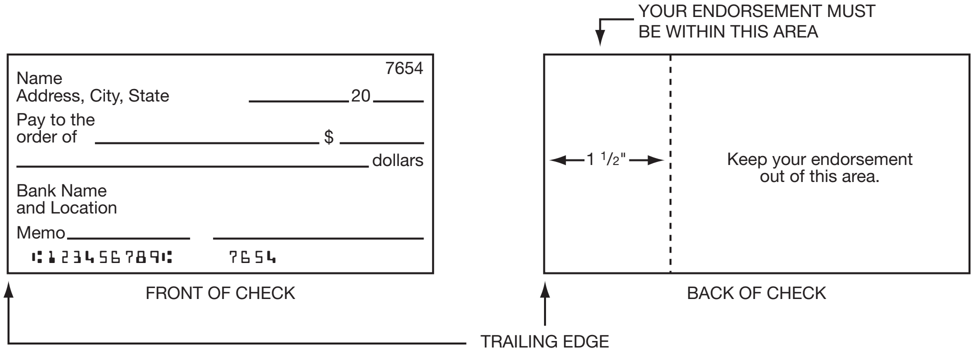
The payee of a check (the person to whom a check is payable) must sign (endorse) the check on the back in the space shown in the picture. If a check is transferred to someone else before it gets deposited or cashed, that person (the transferee) may also be required to sign the check.

Every bank that handles a check on its way to the bank that is asked to pay it also has to identify itself on the back of the check. The space for those banks is to the right of the space shown for the payee and other "holders" (see picture below).

When you endorse a check, you must:

1. clearly sign your name;
2. use black or dark blue ink if possible;
3. never use a faint color, like red, pink or any pastel, or a gel ink (these do not copy well);
4. sign near the top of the space provided, or just below any other signature in that space;
5. stay out of the area below the space for endorsers (most check forms have a line separating the endorsement area); and
6. keep any stamp within the area set aside for handwritten signatures.

The picture on this page shows you the correct endorsement area.



Why is this important?

If your endorsement of a check, or the endorsement of someone from whom you took the check, either:

1. causes a delay in a necessary notice to someone else, or
2. prevents someone from being identified quickly enough (and therefore cannot get notice or cannot get it in time).

You will be responsible for the check and the loss that occurs because it is not paid. It will then be up to you to try and recover from someone else who might be liable.

INSUFFICIENT FUNDS AND OVERDRAFTS

"Account Balance" means the funds in your account, including deposits and withdrawals made to date. Not all your transactions will be immediately reflected. As a result, only part of this balance may be available for withdrawal.

"Available Balance" means the amount of money that can be withdrawn at a point in time. **The Available Balance will be less than the Account Balance when there are pending transactions such as:**

- Funds held from deposits: These funds have been deposited, but are not yet fully available for withdrawal or transfer. Once these funds are available, they will be reflected in the Available Balance.
- Funds held for debit card authorizations: This reflects merchant-authorized requests for payment, when the final charge has not been submitted by the merchant. Debit card authorizations will be reflected as pending transactions from the time we receive the authorization until the merchant presents the item for payment, a completion message is received, or three business days, whichever occurs first. If the debit card transaction has not been presented for payment after three business days, it will be removed from your pending transactions and your Available Balance will no longer be reduced by the authorization amount. Once the final charges have been received and processed, they will be reflected in the Available Balance.
- Any other holds on funds in your account.

Note: The Available Balance does *not* reflect every transaction you have initiated or previously authorized. Items that may not be reflected in your Available Balance include, but are not limited to:

- Outstanding checks and authorized automatic withdrawals (such as recurring debit card transactions, transfers, and ACH transactions that we have not received for payment or processing).
- The final amount of a debit card purchase. For example, we may authorize a purchase amount from a restaurant or a gas station, but the authorized amount may be different from the final charge. Once a final charge has been received and processed, it will be reflected in the Available Balance. (Please refer to "Debit Card Transactions" subsection for more information about how these situations are handled.)
- Scheduled bill payments that have not yet been processed.
- Debit card transactions that have been previously authorized but not sent to us for payment from your account where we have released the transaction authorization hold and the transaction is sent for payment from your account at a later date.

"Insufficient funds" means you do not have enough available funds in your account to pay the withdrawals you are attempting from that account.

Having insufficient funds in your account could lead to returned items, which refers to any withdrawal or transfer that we return because it exceeds your Available Balance on a given day. Examples of withdrawals that could be returned may include any checks, ACH transactions, online bill payments, or any other debit from your account where we return it because it is for more than the Available Balance you have in your account at the time the transaction is presented to your account. We reserve the right to pay an insufficient funds withdrawal and overdraw your account, which may result in an Overdraft Paid Fee, or return the insufficient funds withdrawal, which may result in an Overdraft Returned Fee. Even if we've paid insufficient funds items before, we are not required to do it in the future.

"Overdraft" means a transaction has caused the Available Balance on an account to become a negative number. An overdraft can happen, for example,

- by writing a check without enough money in your checking account to pay the check, and we pay the item;
- by making a withdrawal from your account that exceeds your Available Balance;
- by using your U.S. Bank Debit Card for payment without enough money in your checking account to cover the amount authorized or the amount paid to the merchant. If any debit card transaction results in a negative Available Balance at the time it is presented for payment, even if your Available Balance was positive at the time the debit card transaction was authorized, you may be charged an Overdraft Paid Fee;
- by making a deposit, withdrawing money based on the credit received from that deposit, and then having that deposit reversed because the deposited item is later returned to us unpaid;
- by withdrawing money from your account and not having enough money left to pay any related charges posted to the account;
- when funds are credited to your account in error and you use the funds, and the reversal of the credit results in an overdraft; or
- when fees such as monthly maintenance fees are charged and you do not have sufficient funds to cover.

Our Options: You do not have the right to withdraw funds that exceed the Available Balance on your account. When an item of yours overdraws an account, we can either pay or return the item. You cannot choose which items we pay or return, except as identified in your selection of "Overdraft Handling" (as identified later).

If we get a **batch, or multiple batches,** of such items in a day (for example, checks, ATM purchase transactions, and debit card purchase transactions typically come in batches), and if one, some or all of them would overdraw the account if paid, we will post items in accordance with the **"Transaction Posting Order"** section listed within this Agreement. This may result in processing larger dollar items before smaller dollar items, even though this would have the effect of reducing your Available Balance more quickly.

Our Fees: We charge an Overdraft Returned Fee for each withdrawal (e.g., in-person, ATM, automatic payment, or other paper or electronic withdrawal transaction) we return because it exceeds your Available Balance on a given day. We charge an Overdraft Paid Fee for each item or transaction we pay that causes the Available Balance to become negative or occurs while the Available Balance is negative on the checking account. We may charge you an Extended Overdraft Fee if your Available Balance remains negative for an extended period of time. See the current pricing information brochure for information on fees and how fees will be assessed. Any Overdraft Returned or Overdraft Paid fees are deducted from your account on the next business day; additionally, the Extended Overdraft Fee assessed after seven consecutive calendar days with a negative balance is deducted from your account on the next business day. The Extended Overdraft Fee may be suspended during a fraud investigation or dispute. Once the investigation or dispute is resolved, an Extended Overdraft Fee may be assessed if the account remains negative. If you want to avoid the inconvenience and extra expense of overdraft fees, refer to the section titled "Overdraft Protection Plans" on page 10 for information.

There are some circumstances that can take your account into a negative balance where we will not charge a fee, for example:

- If certain fees such as your monthly maintenance fee are the only items that resulted in the negative balance.
- If the negative Available Balance is less than our threshold. See your *Consumer Pricing or Business Pricing Information* brochure for specific information. (Both brochures can be obtained by stopping in a U.S. Bank branch or for the *Consumer Pricing Information* only, call 800.872.2657 to request a copy.)

Your responsibilities for overdrafts: If you have an overdraft on your account, you must deposit enough money into your account to pay both the overdraft amount and the fees we charge, and you must do so immediately. If you share ownership of your account with someone else, you are responsible to us for the overdraft, whether or not you personally caused the overdraft or benefited from it.

OVERDRAFT HANDLING

Consumer Checking and Money Market Accounts:

Most U.S. Bank Consumer checking and money market accounts come with Standard Overdraft Coverage. Under Standard Overdraft Coverage we will authorize and pay overdrafts for these types of transactions at our discretion:

- Checks and other transactions using your checking account number
- Automatic bill payments
- Recurring debit card transactions, for example setting up your debit card to automatically pay a monthly gym membership. We rely on the merchant to inform us if a debit card transaction is a one-time or a recurring transaction.

If we pay these transactions into overdraft, we may charge an Overdraft Paid Fee. If we do not pay these transactions, we may charge an Overdraft Returned Fee.

In addition to Standard Overdraft Coverage, you have the following options outlined below.

ATM and Debit Card Overdraft Coverage:

Upon opening your U.S. Bank Consumer checking OR money market account, you will receive a notice advising you of your choice to say 'Yes' or 'No' to ATM and Debit Card Overdraft Coverage.

If you say 'Yes'

If you choose to say 'Yes', you allow U.S. Bank to authorize and pay ATM and everyday debit card transactions (purchases made with your debit card on a day-to-day basis) that may cause the Available Balance in your account to become negative. If this happens we may charge an Overdraft Paid Fee.

If you say 'No'

If you choose to say 'No', you do not allow U.S. Bank to authorize and pay ATM and everyday debit card transactions into a negative Available Balance. If we do not authorize and pay an overdraft your transaction will be declined and you will not be charged a fee.

In limited circumstances, your ATM or everyday debit card transaction may be processed, resulting in your Available Balance becoming negative. These situations may include, but are not limited to:

- A debit card transaction is processed for more than the preauthorized amount. For example, we may authorize a purchase amount from a restaurant or a gas station, but the authorized amount may differ from the final charge (Please refer to "Debit Card Transactions" subsection for more information about how these situations are handled.);
- A debit card transaction that obtained an authorization based on a sufficient Available Balance in your account, but is sent to us for payment later when your Available Balance is no longer sufficient to cover the item;

In these situations, if you have chosen 'No' you will not be charged an Overdraft Paid Fee.

If you wish to discuss your options or change your account election at any time, contact a local U.S. Bank branch, call U.S. Bank 24-Hour Banking or visit usbank.com. Please be aware it may take up to five business days to implement your request.

Requested Return:

You may ask us to place your account in *Requested Return* status. When you select this option, you are automatically choosing to say **'No'** to ATM and Debit Card Overdraft Coverage (refer to **If you say 'No'** for more details). In addition, we will attempt to return items which would result in an overdraft to your account such as checks and automatic bill pay transactions.

- Note that when you select *Requested Return,* **an Overdraft Returned Fee may be charged for returned items.** You may also be charged fees by the merchant or service provider.
- Please understand we will not be able to return all items. **If we pay an item, for any reason, you will be charged the applicable Overdraft Paid Fee** (with the exception of ATM and everyday debit card transactions). These situations include, but are not limited to: recurring debit card transactions when a merchant had obtained an authorization for the first instance, but did not obtain a new authorization for subsequent occurrences (for example, a monthly gym membership); or other transactions/adjustments that may be processed in accordance with our Transaction Posting Order resulting in an insufficient Available Balance (Refer to **"Transaction Posting Order"** section listed within this Agreement). We rely on the merchant to inform us if a debit card transaction is a one-time or a recurring transaction.

If you wish to select *Requested Return,* contact a local U.S. Bank branch or call U.S. Bank 24-Hour Banking (see last page for phone numbers). Please be aware it may take up to five business days to implement your request.

Business Options for Checking and Money Market Accounts

For Business Checking and Business Money Market accounts, we will authorize and pay overdrafts for all types of transactions at our discretion. If we pay these transactions into overdraft, we may charge an Overdraft Paid Fee. If we do not pay these transactions, we may charge an Overdraft Returned Fee.

Requested Return

You may ask us to place your account in *Requested Return* status. When choosing this option, we will attempt to return and/or decline items which would result in an overdraft to your account.

- Note that when you select *Requested Return,* an **Overdraft Returned Fee may be charged for returned items.** You may also be charged fees by the merchant or service provider.

- Please understand we will not be able to return all items. **If we pay an item, for any reason, you may be charged an Overdraft Paid Fee.**

If you wish to request *Requested Return,* contact a local U.S. Bank branch or call U.S. Bank 24-Hour Banking (see last page for phone numbers). Please be aware it may take up to five business days to implement your request.

Other sections: While many other sections of this Agreement relate to these issues, these sections are particularly appropriate:
- Setoff (page 21)
- Security Interest in Accounts (page 21)
- Funds Availability: Your Ability to Withdraw Funds - All Accounts (page 22)
- Electronic Banking Agreement for Consumer Customers (page 25)
- Limits on Transfers (page 26)
- Electronic Banking Agreement for Business Customers (page 29)

OVERDRAFT PROTECTION PLANS

Consumer Overdraft Protection

U.S. Bank offers Overdraft Protection Plans to help you avoid the inconvenience of having a check returned, and/or a debit card purchase rejected, resulting in the expense of overdraft fees. These Overdraft Protection Plans allow an eligible account to be linked to a U.S. Bank Personal Checking Account(s) ("checking account(s)") to cover overdraft situations when the Available Balance is insufficient to cover checks presented for payment **and/or** Available Balance has been reduced due to pending authorized debit card transactions, as specified in subsection "Debit Card Transactions".

U.S. Bank lets you choose which eligible accounts are linked to your checking account for Overdraft Protection, and the order in which those accounts are accessed to transfer funds to your checking account. Some eligible accounts (e.g. depository accounts) do not have Overdraft Protection Transfer fees, and if you have deposit and credit accounts linked for Overdraft Protection, the first Overdraft Protection Account determines whether a fee is charged (if any).

You can choose to link up to three eligible U.S. Bank accounts to your personal checking account for Overdraft Protection. Owner(s) who are signers on the checking account must also be signers on the account(s) linked for Overdraft Protection.

Eligible accounts include:
- U.S. Bank Savings Account or Money Market Account
- U.S. Bank Reserve Line of Credit
- U.S. Bank Credit Card
- A secondary U.S. Bank Personal Checking Account
- U.S. Bank Personal Line of Credit
- U.S. Bank Home Equity Line of Credit
- Other U.S. Bank Lines of Credit

If you have linked eligible accounts, and the Available Balance in your checking account is or would be overdrawn by $5.01 or more, the advance amount will transfer in multiples of $50.00 and an Overdraft Protection Transfer Fee may be charged (fee waived for transfers from a depository account). If, however, the Available Balance is or would be overdrawn by $5.00 or less, the amount advanced will be $5.00 **and** the Overdraft Protection Transfer Fee will be waived.

If the negative Available Balance in your checking account is caused by monthly fees, such as a maintenance fee or statement/image fee only, overdraft protection will not advance. (For example, the account is overdrawn due to a Monthly Maintenance Fee, overdraft protection will not advance. If additional transactions post, overdraft protection will advance to cover the negative Available Balance amount and an Overdraft Protection Transfer Fee may be charged.) If the account linked for Overdraft Protection does not have enough funds to cover the overdrawn amount, the current Available Balance will still be transferred to reduce the overdrawn amount.

If there is more than one account linked for Overdraft Protection and the Available Balance of the first linked account is not enough to cover the overdrawn balance, the next linked account will transfer funds in multiples of $50.00 to cover the remaining overdrawn balance. When multiple accounts are linked as Overdraft Protection, the first account funds are transferred from determines the amount of the Overdraft Protection Transfer Fee (if any).

For each day an Overdraft Protection transfer occurs, a Bank fee will be charged to the checking account that received the transfer. (Refer to the *Consumer Pricing Information* brochure – Overdraft Protection Transfer Fee for fee amount. This brochure can be obtained by contacting a U.S. Bank branch or calling 800.872.2657.) While no fee will be charged to your U.S. Bank savings account or secondary checking account, U.S. Bank Reserve Line of Credit, U.S. Bank Credit Card, U.S. Bank Personal Line of Credit, or U.S. Bank Home Equity Line of Credit, for any automated advance to cover an overdraft to your associated deposit account, you will incur an interest charge according to the terms of your agreement governing your credit account. Advances on a U.S. Bank Credit Card Overdraft Protection Plan account are subject to the standard cash advance interest rate, as well as the current cash advance fee. Please refer to your U.S. Bank Reserve Line of Credit, U.S. Bank Credit Card, U.S. Bank Personal Line of Credit or U.S. Bank Home Equity Line of Credit for information regarding interest charges.

When the Bank accesses funds from an eligible savings account(s) and money market account(s), these types of transfers are also subject to transaction limitations and the Excessive Withdrawal Fee noted in the *Consumer Pricing Information* brochure regarding Federal Regulation D governing savings and money market transaction limitations and also noted in subsection **"Savings Withdrawal Limitations"** of this agreement. (The *Consumer Pricing Information* brochure can be obtained by contacting a U.S. Bank branch or calling 800.872.2657.)

When the Bank accesses funds from an eligible line of credit or credit card, these types of transfers may be subject to additional charges such as annual fees. In addition, you may be subject to interest that will accrue on the amounts advanced in accordance with your line of credit or cardmember agreement.

Business Banking Overdraft Protection

U.S. Bank offers Overdraft Protection Plans to help you avoid the inconvenience of having a check returned, and/or a debit card purchase rejected, resulting in the expense of overdraft fees. These Overdraft Protection Plans allow an eligible account to be linked to a U.S. Bank Business Checking Account(s) ("checking account(s)") to cover overdraft situations when the Available Balance is insufficient to cover checks presented for payment and/or Available Balance has been reduced due to pending authorized debit card transactions, as specified in subsection "Debit Card Transactions".

U.S. Bank lets you choose which eligible accounts are linked to your checking account for overdraft protection. Only one deposit product and one credit product may link to a business checking account. If the checking account has both a credit product and a deposit product linked as overdraft protection, the system will always advance first from the credit product. Funds only draw from the deposit product if the credit product has insufficient available funds.

The name of the business on the business checking account must match the name of the business on the business credit overdraft protection plan account. The name(s) of the account signer(s) on the business checking account may also be required to match the account signer(s) on the business Overdraft Protection Plan account.

Eligible accounts include:
- U.S. Bank Business Savings or Money Market Account

- A secondary U.S. Bank Business Checking Account
- U.S. Bank Business Reserve Line of Credit
- U.S. Bank Business Credit Cards
- U.S. Bank Cash Flow Manager or Advantage Line
- If you have a U.S. Bank Business Savings, Business Money Market account, or secondary U.S. Bank Business Checking account linked as Overdraft Protection, any automatic advances will be in $200.00 increments made to cover the overdraft. Automated transfers from a U.S. Bank deposit account are not assessed Overdraft Protection Transfer Fees.
- When the Bank accesses funds from an eligible savings or money market account, these types of transfers are also subject to transaction limitations and the fee(s) noted in the *Business Pricing Information* brochure regarding Federal Regulation D governing savings and money market transaction limitations and also noted in subsection **"Savings Withdrawal Limitations"** of this agreement. (The *Business Pricing Information* brochure can be obtained by stopping in a U.S. Bank branch.)

If you have a U.S. Bank Business Reserve Line of Credit linked as overdraft protection, any automatic advances will be in $200.00 increments made to cover the overdraft. Please refer to your U.S. Bank Business Reserve Line Agreement for information regarding interest charges.

U.S. Bank Business Credit Card linked as overdraft protection, any automatic advances will be in $25.00 increments made to cover the overdraft. Advances on a U.S. Bank Business Credit Card Overdraft Protection Plan account are subject to the standard cash advance interest rate, as well as the current cash advance fee.

When the Bank accesses funds from an eligible line of credit or credit card, these types of transfers may be subject to additional charges such as annual fees. In addition, you may be subject to interest that will accrue on the amounts advanced in accordance with your line of credit or Cardmember Agreement. Please refer to your Cardmember Agreement for information regarding charges and fees.

Each time an overdraft protection transfer from a Business Reserve Line or a U.S. Bank Business Credit Card automatically transfers funds to the checking account, an Overdraft Protection Transfer Fee (daily fee) applies. The transfer fee amount posts as a separate transaction to the checking account.

Refer to the *Business Pricing Information* brochure for current fees. This brochure can be obtained by stopping in a U.S. Bank branch.

If you have a U.S. Bank Cash Flow Manager linked as overdraft protection, any automatic advances will be in $100.00 increments made to cover the overdraft. While no Overdraft Protection Transfer Fee is charged to the Cash Flow Manager account for any automated advance to cover an overdraft to your associated deposit account, you will incur an interest charge according to the terms of your agreement governing your credit account. Please refer to your U.S. Bank Cash Flow Manager agreement for information regarding interest charges.

If the negative Available Balance is caused by a monthly maintenance fee, service fee or statement/image fee only, overdraft protection will not advance. (For example, the account is overdrawn due to a Monthly Maintenance fee, overdraft protection will not advance. If additional transactions post, overdraft protection will advance to cover the negative Available Balance amount and an Overdraft Protection Transfer Fee may be charged.)

Business Overdraft Protection Agreements
U.S. Bank also offers certain business customers overdraft protection through separate written agreement. The terms of such agreement shall govern those Business Overdraft Protection Plans.

REFUSING PAYMENT ON YOUR CHECKS

You must fill in an amount (in words and numbers) correctly and clearly, and sign your name on checks you write. You should fill in the date and name a payee on your checks. If you don't name a payee, anyone can cash the check. If you fail to follow these rules, we may refuse to honor your checks.

When a check you write is presented to us by another bank for payment, we will generally accept the endorsements on the check, because if an endorsement is missing or forged, we have rights against the other bank that protect us. When a check of yours comes to us *other than through another bank,* we might not cash it if we are not comfortable with the endorsements on it or the identity of the person who presents it. This is especially true with an endorsement in the name of a business entity.

We may require anyone who presents a check for payment in person (other than an account owner presenting a check on his or her own account) to:
- pay a fee to cash the check if applicable; and
- give a fingerprint or thumbprint, and identification, as a condition of cashing a check.

If the presenter of the check refuses to comply with these requirements, or complies but later asserts that these requirements infringed on their legal rights, you understand and agree that imposing these requirements will not be considered a "wrongful dishonor" of your checks.

FUNDS TRANSFERS

Unless we have entered into a specific written agreement with you that provides otherwise, payment orders you give to us for the transfer of funds out of the account by wire transfer or otherwise, and payment orders we receive for the transfer of funds into the account, will be governed by this paragraph. In addition, your rights and obligations with respect to a payment order, and our rights and obligations, will be governed by (a) any separate written agreement with us; then (b) this section; and then, to the extent not specified in a separate written agreement or this Agreement; (c) by Article 4A of the Uniform Commercial Code ("UCC4A") as enacted in the state in which you have your account with us.

We reserve the right to refuse to accept any payment order. Payment orders are accepted when they are executed by us. We may process any payment order request (as well as any amendment or cancellation request concerning a payment order) that we believe is transmitted or authorized by you if we act in compliance with a security procedure agreed upon by you and us. Such payment orders will be deemed effective as if made by you, and you will be obligated to pay us in the amount of such orders, even though they are not transmitted or authorized by you. Unless we agree on another security procedure, you agree that we may confirm the authenticity and content of a payment order (among other ways) by placing a telephone call to you. If we cannot reach you, or if the payment order is not confirmed or approved in the manner we require, we may refuse to execute the payment order.

YOU AGREE THAT IF A PAYMENT ORDER OR CANCELLATION THEREOF IDENTIFIES THE BENEFICIARY BY BOTH NAME AND AN IDENTIFYING NUMBER, AND THE NAME AND NUMBER IDENTIFY DIFFERENT PERSONS OR ACCOUNT HOLDERS, EXECUTION AND PAYMENT TO THE BENEFICIARY OR CANCELLATION MAY BE MADE SOLELY ON THE BASIS OF THE IDENTIFYING NUMBER. YOU ALSO AGREE THAT IF A PAYMENT ORDER IDENTIFIES AN INTERMEDIARY BANK OR THE BENEFICIARY'S BANK BY BOTH NAME AND AN IDENTIFYING NUMBER AND THE NAME AND NUMBER IDENTIFY DIFFERENT PERSONS, EXECUTION OF THE PAYMENT ORDER BY ANY BANK MAY BE MADE SOLELY ON THE BASIS OF THE IDENTIFYING NUMBER.

If we receive a funds transfer into any account you have with us, we are not required to give you any notice of the receipt of the funds transfer. The funds transfer will appear on your next periodic statement. To confirm the completion of funds transfers, please contact us through U.S. Bank 24-Hour Banking (see last page for phone numbers), usbank.com or the U.S. Bank Mobile App. Prior to the acceptance of an outgoing payment order, the outgoing payment order may be cancelled, but may not be amended or modified, if the beneficiary's bank is located within the United States of America and the outgoing payment order is to be paid in U.S. dollars. Other outgoing payment orders may not be cancelled, amended or modified. We must receive your cancellation in a reasonable time prior to the time we execute the outgoing payment order. Payment orders sent by Fedwire will be subject to the Federal Reserve's Regulation J, and payment orders sent via other payment systems will be subject to the rules of those systems. You agree that we may record all telephone conversations and data transmissions received from, made for or made on behalf of you pursuant to or in connection with a payment order.

YOU AGREE THAT IF A PAYMENT ORDER, OR ANY CANCELLATION OR AUTHORIZATION RELATING THERETO, BUT FOR THE APPLICABILITY OF THE ELECTRONIC FUND TRANSFERS ACT OF 1978 (AS IN EFFECT FROM TIME TO TIME), CONSTITUTES A PORTION OF A FUNDS TRANSFER AS DEFINED IN UCC4A, ALL ACTIONS AND DISPUTES CONCERNING SUCH PAYMENT ORDER, CANCELLATION OR AUTHORIZATION SHALL BE DETERMINED PURSUANT TO UCC4A AND THIS AGREEMENT TO THE FULL EXTENT PERMITTED BY LAW. If an outgoing payment order in a foreign currency cannot be completed, the exchange rate that will apply to any refund due you will be the exchange rate in effect at the time on the day the refund is made. Additional fees may be deducted from a payment order amount by other banks involved in the funds transfer process.

We may route payment at our own discretion for each outgoing wire transfer. A wire transfer is irrevocable once payment has been transmitted to the beneficiary's bank. At your request, we may request that the beneficiary's bank return funds previously transferred. However, you acknowledge that the beneficiary's bank is under no obligation to comply with this request.

WITHDRAWAL RIGHTS, OWNERSHIP OF ACCOUNT, AND BENEFICIARY DESIGNATION

The following rules govern the ownership and withdrawal rights of deposit accounts with the various titles given to them.

There are two primary issues that these rules control. The first is "withdrawal rights" and the second is "ownership."

By "withdrawal rights" we mean who has access to the funds in the account for all purposes. These withdrawal rights will control, for example, whose instructions we must follow, whose checks we must pay, and whose withdrawal requests we must honor. These withdrawal rights do not control who actually owns the funds, as between multiple parties to an account.

By "ownership" we generally mean who owns the funds in the account. In particular, by selecting a particular ownership, you are expressing your intention of how and to whom your interest in the funds in the account should pass in the event of your death.

If you create a type of account, you retain the right to change or close the account to the extent of the withdrawal rights you retain in your own name.

We make no representations as to the appropriateness or effectiveness of any particular ownership or beneficiary designations. Our only responsibility is to permit access to the account as provided by the withdrawal rights. You must consult with your own attorney or financial advisor as to whether and how to effect any change in actual ownership of funds in the account.

Individual Account. This is an account in the name of one person. Such an account is also referred to as a "single ownership" account.

Withdrawal Rights. The holder of such an account is the only person who has the right to withdraw from the account, unless we permit the holder to designate an agent or attorney-in-fact to the account.

Ownership. The holder of such an account is presumed to be the owner. Holding such an account, by itself, creates no additional ownership rights nor survivorship rights (nor does such type of ownership create or extinguish any community property rights). In almost all instances this type of account will pass, on the death of the owner, through the estate of the owner. (You must consult your own estate planner to be sure.)

Agents and "Attorneys-in-Fact." The owner of this type of account can nominate an authorized signer or attorney-in-fact.

Joint Account - With Survivorship. This is an account in the names of two or more natural persons, with the following features:

Withdrawal Rights. Each joint tenant has complete and separate access to the funds and withdrawal rights, and each authorizes the other(s) to endorse for deposit any item payable to the joint tenant. Upon the death of any joint tenant, any surviving joint tenant will have complete withdrawal rights to the balance of the account. If there is more than one surviving joint tenant, such survivors remain as joint tenants with right of survivorship with the same withdrawal rights provided in this section.

Each joint tenant reserves the right to change the ownership of the account to the extent of that owner's withdrawal rights.

Ownership. Each joint tenant is presumed to "own" the funds in proportion to that person's net contribution to the account. Each joint tenant intends upon his or her death that the funds owned by such person will be owned by the survivor. If there is more than one survivor, the "ownership" of the decedent's funds will be shared equally with such survivors.

Other Titles. In some states, it is advisable to add either "not as tenancy in common" or "not as a tenancy by the entirety" or both to insure the intention described above.

Agents and "Attorneys-in-Fact." Any joint tenant can nominate an authorized signer or attorney-in-fact who can hold all the same withdrawal and deposit rights as the authorizing owner, except the authorized signer or attorney-in-fact will not be an owner (a joint tenant).

Joint Account with Survivorship - Arizona. A Joint Account with Survivorship in Arizona has a unique feature that will change the "ownership" rights on the death of one of the joint owners if there is more than one surviving joint tenant and one of the surviving joint tenants is the surviving spouse of the deceased joint tenant.

Withdrawal Rights. This rule will not change the withdrawal rights to the account on the death of a joint tenant; it only affects the actual ownership of the account balance, which will only affect the survivors, and will not affect our responsibilities under the account.

Ownership. If two or more parties survive and one is the surviving spouse of the deceased party, the amount to which the deceased party, immediately before death, was beneficially entitled by law belongs to the surviving spouse. If two or more parties survive and none is the spouse of the decedent, the amount to which the deceased party, immediately before death, was beneficially entitled by law belongs to the surviving parties in equal shares, and augments the proportion to which each surviving party, immediately before the deceased party's death, was beneficially entitled under law, and the right of survivorship continues between the surviving parties.

Tenancy in Common Accounts. A Tenancy in Common account is another form of joint account without the survivorship feature. A Tenancy in Common account is also in the name of two or more individual owners.

Withdrawal Rights. Each joint tenant has complete and separate access to the funds and withdrawal rights, and each authorizes the other(s) to endorse for deposit any item payable to the joint tenant. Until we receive notice of the death of any joint tenant, any tenant in common will have complete withdrawal rights to the entire account balance.

If more than one tenant in common survives the death of another tenant in common, such survivors remain as tenants in common between them.

Each tenant in common reserves the right to change the ownership of the account to the extent of that owner's withdrawal rights.

Ownership. Each tenant in common is presumed to "own" the funds in proportion to that person's net contribution to the account. However, because of the extreme difficulty in determining such proportions over time, you agree that upon the death of one tenant in common, the balance in the account at the time immediately before the death of the tenant in common will be deemed to be owned in equal shares between all tenants in common. After death and our receipt of notice of such death, the decedent's share will be set aside for the estate of the decedent, and the survivor's share in the account balance will be at the disposal of the surviving tenant in common.

Other Titles. In some states this account is referred to as Joint Tenancy WITHOUT Right of Survivorship.

Agents and "Attorneys-in-Fact." Any tenant in common can nominate an authorized signer or attorney-in-fact who can hold all the same withdrawal and deposit rights as the authorizing owner, except the authorized signer or attorney-in-fact will not be an owner (a tenant in common).

Marital Account (Wisconsin). This account is an account established by two persons in Wisconsin who claim to be husband and wife. This account is, for such persons, the same as the Tenancy in Common account described above.

Marital Account with P.O.D. Beneficiaries (Wisconsin). This account is, first, the same as a Wisconsin Marital Account (which is, in turn, the same as a Tenancy in Common account described above).

Withdrawal Rights. During the lives of both parties to the marriage, the withdrawal rights will be the same as for the Marital Account. The beneficiaries have no withdrawal rights until the death of one of the marriage partners.

Ownership. Upon the death of one of the spouses, the surviving spouse owns 50% of the funds on deposit, and the P.O.D. beneficiary named by the deceased party (if that beneficiary is then surviving) owns the other 50%. Each spouse can name his or her own beneficiary.

If there is more than one beneficiary who is named by a party who survives, the shares of those beneficiaries will be equal.

On the death of one of the marriage partners, the account will have to be retitled and beneficiary shares will have to be redeposited or withdrawn.

Pay-on-Death Account. This is an account where one or more persons create the account and name one or more living persons as beneficiaries. Frequently the account title is A.B. Pay-on-Death to C.D. beneficiary.

Withdrawal Rights. The person who creates this type of account retains complete withdrawal rights in such an account during his or her lifetime and for his or her own benefit. The named beneficiary has no withdrawal rights to the account during the lifetime of the creator of the account. The owner can change or close the account, and change beneficiaries at any time.

On the death of the creator of the account, the beneficiary (on proof of death of the creator and proof of the identity as the named beneficiary), can withdraw the entire account balance. If there is more than one beneficiary who is named and survives the creator, the surviving beneficiaries acquire and can withdraw an equal share with the other surviving beneficiaries, without survivorship rights between beneficiaries. If a beneficiary dies before the creator, neither the beneficiary's estate nor heirs acquire anything on the death of the owner.

If more than one person creates such an account, then such creators have complete and separate withdrawal rights between them during their joint lives, and the survivor of them will have complete withdrawal rights upon the death of the other creator. Named beneficiaries can withdraw a share of the account balance only upon the death of the last creator and only if such beneficiaries are then alive (and upon proof of the deaths of the creators and their own identity as the named beneficiaries). In effect, if more than one person creates this type of account, with one or more beneficiaries, the account has first all the incidents of a "Joint Account with Survivorship" and only after there is but one joint tenant does the account have the incidents of a "Pay-on-Death" account.

Ownership. The creator of this type of account is presumed to own the funds during his or her lifetime and intends that ownership to pass to the beneficiary only upon his or her death and only if the named beneficiary survives him or her. If there is more than one creator, the ownership between such creators is the same as that between joint tenants with right of survivorship, with the same incidents upon the death of a joint tenant.

If there is more than one beneficiary who is named and survives the creator(s), the creators intend his, her or their ownership rights to pass to the then surviving beneficiaries in equal shares, with no survivorship rights between them.

Other Titles. This type of account has other names such as "Tentative Trust," "Totten Trust," "In Trust For" and "Revocable Trust." In states where one of these trust accounts is recognized, the creators of such accounts will be referred to as a "settlor" or "grantor." Nevertheless, all the incidents of such an account, the rights of the grantor(s) and beneficiaries are exactly the same as described for "Pay-on-Death" accounts above. Only the names have been changed.

Revocable Trust or Pay-on-Death Account (not subject to the Nonprobate Transfers Law of Missouri)
In Missouri, a Revocable Trust or Pay-on-Death account may include an appendage to its title "not subject to the Nonprobate Transfers Law of Missouri." This appendage does not change the features of the account as described above for Pay-on-Death accounts.

Registration in Beneficiary Form - Missouri
Adding the acronym ***LDPS*** (which stands for lineal descendants, per stirpes) to a Revocable Trust or Pay-on-Death account in Missouri, changes the rights of beneficiaries of such accounts. LDPS designation means that if a named beneficiary of such an account dies before the account owner, then the unnamed lineal descendants of that deceased beneficiary will acquire the share of the deceased beneficiary on the death of the owner per stirpes.

UTMA (Uniform Transfers to Minors Act) Account
This is an account in the name of an adult custodian (or possibly a corporate custodian) for the benefit of a person who is a minor at the time the account is created.

Withdrawal Rights. During the minority of the child (as defined under applicable UTMA laws), the custodian has all withdrawal rights, but is required by law to exercise those rights solely for the benefit of the child. We, however, have no duty or agreement whatsoever to monitor or insure that the acts of the custodian are for the child's benefit.

The custodian is required to turn over the account balance when the child reaches the age of majority. The custodian authorizes us, at our discretion, to exercise the custodian's duty to transfer funds to the child at the child's request upon reaching the age of majority.

Ownership. The child/beneficiary is at all times the owner of the funds in the account.

UGMA (Uniform Gifts to Minors Act) Account
A few states have not adopted the Uniform Transfers to Minors Act. These few states have, for our purposes, an equivalent statute known as the Uniform Gifts to Minors Act, which has the same incidents as those described above for the UTMA account.

Fiduciary Account
A fiduciary account is an account opened by or taken over by an executor, administrator, personal representative, guardian, conservator, trustee, or other fiduciary in such capacity. Any fiduciary named as a signer on a fiduciary account shall be solely responsible for acting in accordance with the terms of the applicable laws, will, court order or trust instrument establishing and covering the fiduciary relationship, and we are not responsible for examining, or insuring compliance with the provisions of any such law or instrument.

Corporate, Partnership, Limited Liability Company and other Organizational Accounts
These are accounts opened by any business organization or association. We reserve the right to require the account holder(s) to furnish us with such resolutions, agreements or documents as we may reasonably request to evidence the authority of individuals to act on behalf of the account holder(s). We will honor such an

authorization until we receive written notice of change from the governing body of the organization. It is mutually agreed that the power and authority of each person named as authorized to take action with respect to the account shall continue in full force and effect until we receive actual written notice of revocation, whether the same be brought about by dissolution of the account holder or otherwise.

PLEDGES AND SECURITY INTERESTS IN FAVOR OF OTHERS

You cannot give a security interest or pledge your account to someone other than us without first getting our express written consent. We are not required to give consent to a security interest or pledge to someone else.

Unless we agree in a separate writing otherwise a security interest or pledge to someone else must be satisfied or released before any right to withdraw from the account can be exercised, including any right that arises by surviving the death of an owner (for example, a surviving joint tenant or beneficiary of a pay-on-death account).

ACCRUAL OF INTEREST

We will begin to accrue interest on deposits drawn from other banks at the time we get credit for the deposit in the collection process, which is not necessarily the same time as the time we make funds available for withdrawal.

If your account (for example a savings account) earns a variable rate of interest, we can change that rate at any time without notice to you, except as specifically provided in writing in the account disclosure or agreement. For business accounts, the variable rate of interest may be zero or a negative rate. If your business account bears a negative interest rate, we reserve the right to charge your account for the negative interest.

You can find out our current rates on accounts that earn interest in our branches, from U.S. Bank 24-Hour Banking, or at usbank.com. The telephone number is at the end of this booklet.

STOP PAYMENTS

Unless otherwise provided, the rules in this section cover stopping payment of items such as checks and drafts drawn on your account. Rules for stopping payment on other types of transfers of funds, such as consumer electronic fund transfers, are covered elsewhere in the **Electronic Banking Agreement For Consumer Customers** section.

Here is what you must do to stop a payment:

ACH Check Conversion

An ACH Check Conversion is a transaction that starts as a paper check that you give to a merchant. The merchant converts the check, using the information on the paper, to send an electronic message to a bank to immediately take the money from your account. The merchant is required to post a notice about ACH Check Conversion in a prominent and conspicuous location at the time of the transaction. You can stop payment on an ACH Check Conversion only if it has not yet been presented by the merchant.

Electronic Fund Transfers

You can stop payment of certain types of electronic transactions. Please refer to the Electronic Banking Agreement section for details.

Checks and drafts

If you want to stop payment of a check, you must stop by a U.S. Bank branch or call U.S. Bank 24-Hour Banking (see last page for phone numbers). Writing to us will take too much time and we will not have time to act on your request before the check is paid. We will need the following information:

1. the account number the check is written on;
2. the check number;
3. the dollar amount;
4. the date; and
5. the name of the person you wanted to pay.

This information must be exact and correct. If it is not, we will not be responsible if the item is paid.

Who can stop a payment and for how long?

1. Any owner can stop payment of any check on the account whether that owner wrote the check or not (and assuming the item can still be stopped).
2. A stop payment order is effective for 24 months or longer, as determined at the time the stop payment order is placed. You must renew it prior to the expiration of the stop payment effective period or the item could get paid. We will not notify you when the stop payment effective period ends. Fees may be assessed for placing a stop payment order.
3. Only the owner who made the stop payment order can release it.
4. You must give us sufficient notice so that we have a reasonable period of time to act upon your request and verify that the item has not been paid.

Effect of a stop payment

When you stop payment of a check, you may still be obligated to the payee, and the payee may still have the right to collect on the check or the underlying transaction. If we have to defend ourselves for letting you stop payment on a check, you have to protect us by paying our expenses, including our reasonable attorney's fees.

What if we don't stop payment?

We cannot stop payment of a check that has already been paid.

If you ask us to stop payment of a check and we pay it anyway, we gain whatever rights the payee has against you. This means, if the check should have been paid, or the payee has the right to collect from you anyway, we can collect from you. Therefore, if we pay an item that should have been stopped, before we recredit your account, you will have to prove to us that by our payment you have suffered a loss and the cause is our failure to stop the payment.

What kinds of checks does this NOT apply to?

This section does not apply to items not drawn on your account, such as teller's checks, official (cashier's) checks, and accepted checks (e.g., certified checks). We have no responsibility to honor your request to stop payment of items not drawn on your account. If we agree to stop payment on these items, we may require you to provide us with additional security (for example, a bond or collateral) and you agree to indemnify us for any damages and costs we incur as a result of stopping payment of such items.

Fee

To stop a payment you must pay our fee, the amount of which is disclosed in the pricing information brochure or agreement for your account.

DORMANT ACCOUNTS AND ESCHEAT

A **dormant account** is an account that has been inactive. Generally, subject to state law, "inactive" means there has been no deposit, withdrawal or other communication from you about the account for the period of time as follows:

1. after 11 months for a checking account;
2. after 23 months for a savings account including those that offer limited (no more than six per month) check writing options.

For security reasons, we may refuse a withdrawal or transfer from an account we internally classify as inactive if we cannot reach you in a timely fashion to confirm the transaction's authorization.

We charge a dormant account fee, unless excluded by account type or prohibited or restricted by state law. The dollar amount and frequency is disclosed in our pricing information brochure.

If your account has a zero balance, we reserve the right to close it. Any accounts linked as overdraft protection will be de-linked as part of the closure process. Refer to CLOSING YOUR ACCOUNT for additional information.

Escheat is the term that is used to describe the process of transferring an account balance to the state government after an account has been dormant and if our attempts to find you fail.

The time period after which funds must escheat to the state varies from state to state. Once the funds are transferred to the state, you may be able to recover the funds from the state itself, but not from us.

We may charge a fee to transfer funds to the state.

SPECIAL PROVISIONS FOR THIRD-PARTY ACCOUNTS

If you have opened a deposit account on behalf of the beneficial owner(s) of the funds in the account (for example as an agent, nominee, guardian, executor, custodian or funds held in some other capacity for the benefit of others), those beneficial owners may be eligible for "pass-through" insurance from the FDIC. This means the account could qualify for more than the standard maximum deposit insurance amount (currently $250,000 per depositor in the same ownership capacity). If the account has transactional features (such as check writing capabilities or the use of debit cards), as defined in 12 C.F.R. 370.2(j), you as the account holder must be able to provide a record of the interests of the beneficial owner(s) in accordance with 12 C.F.R. 370.5(a) and with the FDIC's requirements as specified below.

The FDIC has published a Deposit Broker's Processing Guide that describes the process to follow and the information you will need to provide in the event U.S. Bank fails. That information can be accessed on the FDIC's website at https://www.fdic.gov/deposit/deposits/brokers/ In addition, the FDIC published an Addendum to the Deposit Broker's Processing Guide, section VIII, which is a good resource to understand the FDIC's alternative recordkeeping requirements for pass-through insurance and is accessible at the website above. The Addendum sets forth the expectations of the FDIC for pass-through insurance coverage of any deposit accounts, including those with transactional features. The Addendum will provide information regarding the records you keep on the beneficial owners of the funds, identifying information for those owners, and the format in which to provide the records to the FDIC upon failure of U.S. Bank. You must be able to provide this information in a timely manner in order to receive payment for the insured amount of pass-through deposit insurance coverage as soon as possible. You have an opportunity to validate the capability to deliver the required information in the appropriate format so that a timely calculation of deposit insurance coverage can be made. Please contact your account representative for details on the validation process.

You agree to cooperate fully with us and the FDIC in connection with determining the insured status of funds in such accounts at any time. In the event of failure of U.S. Bank, you agree to provide the FDIC with the information described above in the required format within 24 hours of the failure of U.S. Bank. As soon as the FDIC is appointed, a hold may be placed on your account so that the FDIC can conduct the deposit insurance determination; that hold will not be released until the FDIC obtains the necessary data to enable the FDIC to calculate the deposit insurance. You understand and agree that your failure to provide the necessary data to the FDIC may result in a delay in receipt of insured funds and legal claims against you from the beneficial owners of the funds in the account. If you do not provide the required data, your account may be held or frozen until the information is received, which could delay when the beneficial owners could receive funds. Notwithstanding other provisions in this Agreement, this section survives after a receiver is appointed for us, and the FDIC is considered a third-party beneficiary of this section.

CONSUMER ELECTRONIC CHECK REPRESENTMENT

If you write a check on a personal account that we return unpaid because of insufficient or uncollected funds, the depositor of the check or the depositor's bank may resend ("represent") the check to us electronically. That is, the depositor or the depositor's bank may send us an electronic instruction ("electronic represented check") to charge your account in the amount of the check.

Our Handling of Electronic Represented Checks. If we receive an electronic represented check from the depositor or the depositor's bank, we will pay or return the electronic represented check as if the original paper check were being represented to us. The section titled **"Electronic Fund Transfers"** will not apply to any electronic represented check.

Ineligible or Unauthorized Electronic Represented Checks. For an electronic represented check to be charged to your account, all of the following must be true:

- the electronic represented check must relate to a paper check drawn on a personal account that we returned unpaid because of insufficient or uncollected funds;
- the paper check must not have contained an unauthorized signature or an alteration and must not have been a counterfeit;
- you must not have placed a stop payment on the paper check after we returned it unpaid but before it was collected electronically;
- the paper check must have been less than $2500.00 in amount;
- the paper check must have been dated 180 days or less before the date on which the electronic represented check is sent to us;
- the electronic represented check must be for the face amount of the paper check only and may not include any collection fee charged by the depositor, the depositor's bank, or a collection agency;
- the payee of the paper check must have given you notice that, if we returned the paper check unpaid because of insufficient or uncollected funds, the fee could be collected electronically; and
- the electronic represented check must have been sent to us no more than twice after the first time we returned the paper check, or no more than once after the second time we returned the paper check.

You may have the right to reverse any ineligible or unauthorized electronic represented check that we charged to your account. If you want to reverse an electronic represented check because you placed a stop payment on the paper check to which the electronic represented check relates after we returned the paper check unpaid but before it was collected electronically, you must notify us within 15 days after we send or make available to you the periodic statement that reflects payment of that electronic represented check. If you want to reverse an electronic represented check for any other reason, you must give us an ACH Claim Form within 15 days after we send or make available to you the periodic statement that reflects payment of that electronic represented check. An ACH Claim Form may be obtained by contacting U.S. Bank 24-Hour Banking or a local U.S. Bank branch. In your claim form, you must declare and swear under oath that the electronic represented check was ineligible or unauthorized. If we receive your notice or claim form within the 15-day period, we will recredit your account with the amount of the charge but will not be responsible for any other damages associated with the transaction.

Stop Payment. If you wish to stop payment of any electronic represented check, you must follow the procedures contained in the rules for stopping payment of checks, not the procedures contained in the rules for stopping payment on electronic loan or bill payments.

CHECKING ACCOUNTS AND "SUBACCOUNTS"

For regulatory accounting purposes we may designate two sub-accounts for a checking account; one sub-account is a savings (non-transaction) account and the other is a checking account. Checks and other third-party transfers are paid from the checking (transaction) account. As necessary, we transfer funds from the savings sub-account to the checking sub-account automatically. You cannot access the savings sub-account directly. This accounting device does not affect either the appearance or the operation of your checking account in any way.

TELEPHONE TRANSFERS

If you have more than one account with us, including a credit card or open-end loan account, you can transfer funds between your accounts by telephone. You will need to have a PIN, and enter your account numbers, and other qualifications, but if you meet them,

1. you can transfer funds between your accounts by calling our 24-hour phone banking (see last page of this booklet for phone numbers), and
2. telephone transfers may be made by the same account owners/signers and usually under the same conditions as generally applicable to withdrawals made in writing or by other means.

A transfer made by telephone is not immediately completed. It may take as long as one business day for us to verify the transaction and make the transfer. Consumer customers are assigned or can choose a PIN when requesting a ATM or Debit Card. Consumer customers without a debit card or ATM card can request a PIN by speaking to a 24-Hour Banking representative at 800.872.2657. A form is sent by 24-Hour Banking to the customer for completion and must be mailed back to the address on the form. A confirmation letter is mailed to the customer once the PIN has been established.

REAL-TIME PAYMENTS/PROHIBITION ON FOREIGN PAYMENTS

Real-Time Payments ("RTP") is an electronic payment system which permits payment senders to send funds in real-time to payment receivers for deposit into the payment receiver's account(s). This means that a payment receiver will have near immediate availability of funds sent using an RTP system. The RTP system is intended for domestic payments only. It prohibits payments which involve either a sender or receiver located outside the United States. You agree that to the extent you either send or receive payments through an RTP system, you will not use your accounts to do so on behalf of a person who is not a United States resident or otherwise domiciled in the United States and that you will comply with all regulations of the Office of Foreign Assets Control.

REQUIRED SIGNATURES

Signature Comparison. We process certain items mechanically, based on information encoded on checks and other transaction items, and we are not required to examine items and debits drawn on your account. We collect your signature to obtain your agreement to the rules we establish for your account, but this does not create any responsibility on our part to verify signatures on items and other charges to your account.

Number of Signatures. You agree that if you

1. require the signatures of two or more persons to open an account;
2. have an account in which more than one signature is required to complete a transaction;
3. authorize someone to transact some but not all transactions on your account;
4. authorize someone to transact business on your account for limited purposes and no others; or
5. use checks that require two or more signatures,

such arrangements are strictly between you and the other person(s) you authorize, whether we have notice of your arrangement (including in a form we provide you) or not. You cannot assert a claim against us for permitting a transaction so long as any one of the owners or authorized persons sign or initiate the transaction, even if a person exercises more authority than you have given.

CHANGES TO OUR AGREEMENT WITH YOU

We may change any term of this Agreement. We will give you reasonable notice in writing or by any other method permitted by law. You agree that in any event 30 days written notice is reasonable.

If we notify you that the terms of your account have changed, and you continue to have your account after the effective date of the change, you have agreed to the new terms. For consumer customers, rules governing changes in interest rates are provided for separately in the Truth-in-Savings disclosure(s) or in another document.

CLOSING YOUR ACCOUNT

This section does not apply to an active time deposit (or certificate of deposit) account.

If you intend to close your account: If you intend to close your account with us, you should tell us; simply transferring all the money in your account and reducing your account balance to $0.00 is insufficient notice and may result in additional fees charged to your account.

If you close your account,

1. you are still responsible for transactions you arranged for, including those that arrive after the account is closed;
2. you should pay special attention to pre-authorized electronic deposits to your account and payments from that account; you should reroute the deposits to another account and make other arrangements for the payments, with us and the other institutions involved;
3. you should not close your account until all the transactions you arranged for have been cleared, and you should leave enough funds to clear them and the fees that might be due; and
4. if it is an interest-bearing account, accrued interest will not be paid.

If your account is closed and you have a debit or ATM card associated with the account, you will need to either:

1. close the associated card; or
2. select a new account to be linked to your card.

If you do not designate a new account, the bank will automatically assign your ATM/debit card to a new account from any eligible account where you are an owner/joint owner. If there are no eligible accounts the card will be closed.

We can close your account:

We can close your account, ATM and debit card for any reason or for no reason at all. If we close your account, we will send you notice within ten days after closing and/or indicate the closure on your next account statement. We will send the collected account balance to you at your last known address as reflected in our account records. At our sole discretion we may, but are not required to, withhold a sufficient sum to cover any outstanding items and likely fees. If we withhold any money for such contingencies, we will refund that to you after we are satisfied that no further withholding is necessary.

If your account is closed for any reason, you authorize us to re-open your account to process any transactions authorized prior to account closure, or for other purposes consistent with applicable law.

As part of the account closure, any accounts linked to the Checking Account as overdraft protection will be de-linked. If a U.S. Bank Reserve Line of Credit is linked as overdraft protection to a Checking Account that is closed for any reason, the Reserve Line will also be closed, and you must repay any remaining balance according to the monthly payment coupon included in your future periodic statements.

STATEMENTS AND NOTICES

Statements. We will periodically make available to you a paper or eStatement of your checking or savings account. These statements show the transactions that occurred in the time period covered by the statement. If you elect **not** to receive or review your statement, you are still responsible for having access to the information provided in the statement. At our option, a statement will not be produced in any statement period in which service charges, fees, reversals, refunds or interest are the only transactions on the account. When other activity exists, such as a deposit or withdrawal, a statement will be available to you and will include all transactions which have occurred since the last statement (this includes any service charges, fees, reversals, refunds or interest that occurred since the last available statement). At a minimum, all accounts will receive an annual statement. Regardless of how frequently a statement is made available, monthly service charges and other account fees will continue to be deducted from the account. In addition, applicable interest will continue to accrue and be paid periodically as disclosed in the product pricing information brochure.

Combined Statements. If you have multiple accounts with us, we may at any time automatically combine your accounts on a single, easy-to-read monthly statement. We will only combine statements for accounts that have common ownership (meaning at least one owner is common across multiple accounts) and the same address and Social Security Number.

If you prefer to continue receiving separate statements, please contact U.S. Bank within 30 days of receiving your combined statement. You may reach us by calling one of the numbers listed on the back of this brochure, sending a letter to U.S. Bank, 60 Livingston Ave, EP-MN-WS5D, St. Paul, MN 55107, or sending a secured email by logging on to usbank.com and selecting "Contact Us". Please include the following information in your correspondence: your name, account number(s) and the reference code "CMBSTMN."

Your address. You must give us your correct address, and if you move or change your address, you must keep us advised. You are responsible for messages and statements we send to the most recent address you have given us. We may also update your address in our records without a request from you if we receive an address change notice from the U.S. Postal Service or if we receive updated address information from our mail services vendor.

If you agree to accept mail electronically, you must give us your accurate email address and keep us up to date with any changes to your address. You are responsible for keeping your email functioning properly, or advising us if it does not work.

Multiple owners. Periodic statements and notices that we make available to one owner or agent/signer of an account will be the same as providing statements and notices to all owners of an account. You agree to designate the primary address for purposes of receiving statements and other account correspondence. Each account owner agrees that we may send any legal notice or legal process affecting any owner or the account to the primary address designated on the account. Each account owner agrees to notify the other owners of any legal notice received at that address pertaining to such other account owner or to the account.

Your Duty to Examine Your Statement. As used in this section, the term "problem" means any error, alteration, counterfeit check, or unauthorized transaction (including, but not limited to, forged or missing signatures and excluding consumer electronic banking transactions) related to your account. Because you are in the best position to discover any problem, you agree to promptly examine your statement and report to us any problem on or related to your statement within 30 calendar days after we mail the statement (or make the statement available) to you. You agree that we will not be responsible for:

1. any problem that you do not report to us in writing within a reasonable time not to exceed 30 calendar days after we mail the statement (or make the statement available) to you;
2. subsequent problems or fraudulent items occurring after 30 days of the first occurrence; if you fail to report the problem within 30 days of the first occurrence reported on your statement;
3. results from a forgery, counterfeit or alteration so clever that a reasonable person cannot detect it (for example, unauthorized checks made with your facsimile or other mechanical signature device or that look to an average person as if they contain an authorized signature); or
4. as otherwise provided by law or regulation.

You agree to waive any rights to recovery you may have against us if you do not provide notice to us in the manner and within the time required by this Agreement. You may not start a legal action against us because of any problem unless: (a) you have given us the above notice and (b) the legal action begins within one year after we send or make your statement available to you. You agree that if the problem is the result of a series of events (for example, multiple forgeries over a period of time) then the date the first event occurred is the date from which the period to bring a legal action will begin to run. If you make a claim against us in connection with a problem, we reserve the right to conduct a reasonable investigation before re-crediting your account and you agree to fully cooperate in such investigation. Within 30 days of the date of mailing, you agree to complete and return an affidavit of unauthorized paper debit on the form we provide you along with any other information we may request. You further agree to file a police report if we request. If you refuse to sign such an affidavit or fail to return the affidavit and other requested documentation within 30 days of the date we mail it to you, you agree that we may consider the matter resolved and reverse any provisional credit provided. At our sole discretion, we may, but are not obligated to, provisionally credit your account during the investigation for all or a portion of the amount claimed. Any provisional credit to your account may be reversed if you fail to fully cooperate in our investigation or, if as a result of our investigation, we determine that the charge to your account was proper. You agree to pay any fees assessed or accrued against your account during the investigation or that may arise upon reversal of any provisional credit.

For problems involving an electronic banking transaction, please refer to the **"Electronic Banking Agreement"** sections of this brochure.

This time period for you to examine your statement and report problems to us are without regard to our level of care or the commercial reasonableness of our practices, and without regard to whether cancelled checks are supplied to you.

Contact us if you do not receive your regular statement. If this is a business account, you agree that you will have at least two people review your statements, notices, and returned checks, or in the alternative, the person who reviews these will be someone who does not have authority to transact business on the account.

RETURN OF CANCELLED CHECKS

For some specific consumer and business checking accounts we currently offer three plans, with respect to the return of cancelled checks:

1. Check Safekeeping: paid checks that are not returned - your statement will show the check number, the amount, and the date it is paid;
2. Image Checks on Statement: paid checks that are not returned - your statement will include a reduced image of the front of the check or front and back of a check in addition to the number, amount and date the check is paid as part of the statement; (See the **CHECK 21** section; the images sent with your statement are **not** substitute checks themselves, but some may be images of substitute checks.) and
3. Returned Checks in Statement: paid checks that are returned with the statement - at our option, the paid checks may be a full-size image of the front and back of the paid check in addition to the number, amount and date the check is paid as part of the statement. (See the **CHECK 21** section for more information about substitute checks.)

Option 1 is what you will get unless you specifically ask for option 2 or 3. The checking accounts for which these options are available vary. The products and our fee structures for each option are disclosed in the *Consumer Pricing Information* or *Business Pricing Information* brochure or agreement for your account. (Both brochures can be obtained by stopping in a U.S. Bank branch or for the *Consumer Pricing Information* only, call 800.872.2657 to request a copy.)

If you take option 1 or 2, and you have need for a specific paper check, we can provide a substitute copy to you upon request.

CHECKS, CHECKING ACCOUNTS AND SAVINGS ACCOUNTS WITH DRAFT ACCESS

NOW Accounts: Transaction accounts are NOW Accounts on which you can write negotiable orders of withdrawal. Negotiable orders of withdrawal look and function like checks, and the rules governing checks also apply to them. Depending on account features, NOW Accounts may or may not bear interest. Although we have no intention of exercising this right, federal regulations require that we reserve the right to require at least seven days' written notice prior to withdrawal or transfer of any funds on your NOW Account.

SAVINGS ACCOUNTS

By the term "savings" account we mean an account that earns interest but has no specific maturity date or required notice period. (A maturity date or a required notice period is a characteristic of a time deposit or certificate of deposit.)

We will provide you with a periodic (quarterly, monthly, annually based on your account type and account activity) statement for your savings account and you must examine your statement for errors or forgeries just as you should for your checking account.

Savings Account Transaction Policy

Unlimited Transactions

Withdrawals and transfers from your savings or money market account made in person or at an ATM are unlimited.

Transfer and/or Withdrawal Restrictions

You are limited to six of the following transactions from your savings or money market account each account cycle:

- Preauthorized or automatic withdrawals or transfers including, but not limited to:
  - Automatic transfers from your savings account to cover an overdraft.
  - Online or mobile banking transfer of funds from your savings or money market account to third parties or to other deposit accounts at U.S. Bank.
  - Payments using U.S. Bank or external bill pay services.
  - Preauthorized ACH or electronic transfers.
  - U.S. Bank telephone banking or any other arrangement to pay a third party from your savings or money market account.
- Point-of-sale transactions with an ATM or debit card.
- Checks or drafts payable to third parties.

Excessive Transfers and/or Withdrawals

Withdrawals and/or transfers exceeding the six per account cycle allowance will result in an excessive withdrawal fee per transaction. Refer to the *Consumer Pricing Information* or *Business Pricing Information* brochure for additional information. We will send you notice after the first and second account cycle of excessive withdrawals or transfers. After three instances within the last 12 account cycle periods, of exceeding the allowable number of withdrawals or transfers, your savings/money market account will be either converted to a checking account or closed and funds placed in a new checking account and priced accordingly.

We reserve the right to require seven days' notice before any withdrawal from any savings account, though it is very unlikely we will require such notice and, if we do, we will require it for all savings accounts.

S.T.A.R.T. PROGRAM AGREEMENT

(New enrollment discontinued as of November 15, 2015)

Savings Today And Rewards Tomorrow®

S.T.A.R.T. is a program offered by U.S. Bank to help you achieve and maintain your savings goals. The following information provides the terms of the S.T.A.R.T. Program (the "Program"), the details you need to know to enroll in and manage your savings plan, as well as the terms for earning rewards under the Program. We may change these terms at any time, in which case we will provide you notice of those changes. Please read these terms carefully and contact us if you have any questions. By enrolling in the Program, you agree to these terms.

Enrollment Process and Eligibility

To be eligible for the Program, you must meet, and continue to meet, the following three requirements:

1. Open and/or maintain an active U.S. Bank Package, including:
   - A Silver, Gold or Platinum Package Checking account AND
   - A Package Money Market Savings account

   Note: Account ownership must be identical for both the package checking and package money market savings accounts.
2. Enroll in the Program.
3. Schedule and maintain a qualifying transfer from your Package Checking account to your Package Money Market Savings account.

Qualifying Transfers Options

A qualifying transfer must occur at least once per month from your Package Checking account ("checking account") to your Package Money Market Savings account ("savings account"). Three transfer options are available for you to choose. You are required to set up at least one option but can utilize all three choices.

Note: Qualifying transfers may not be processed if your checking account has a negative Available Balance or if your balance would become negative as a result of the transfer.

1. Scheduled Transfer option: A recurring regularly scheduled transfer based on a specific amount transferred from the Package Checking to the Package Money Market Savings on a specific date(s) you select.

- Transfers can occur daily, weekly, every other week, or can be based on a specified date(s) or day(s) during the month. One-time or same-day transfers do not qualify.
- Example: Schedule a transfer of $10.00 from your checking account to your savings account on the 1st of each month.

2. Transfers Based on Debit Card Purchases: A recurring transfer from the Package Checking account to the Package Money Market Savings account based on each number of U.S. Bank Debit Card purchases you make, transferred on the business day after the transaction is posted.

- Select a dollar amount between $.25 and $5.00 to transfer for each purchase transaction.

- The total number of debit card purchase transactions posted to your checking account each day will be multiplied by the per transaction dollar amount selected. That amount will be transferred from your Package Checking account to your Package Money Market Savings account.
- The debit card must be associated with the enrolled checking account. For joint checking accounts, more than one debit card can be designated and a separate transfer will occur for the activity of each card.
- Example: You have selected a transfer amount of $.50. If five debit card purchases post on Tuesday, a transfer of $2.50 will occur on Wednesday (from your checking account to your savings account).

3. Transfers Based on Credit Card Purchases: A recurring transfer based on the number of U.S. Bank Credit Card purchases you make, transferred on the business day after the transaction is posted.

- Select a dollar amount between $.25 and $5.00 to transfer from the Package Checking account to the Package Money Market Savings account for each credit card purchase transaction.
- The total number of credit card purchase transactions posted to your credit card each day will be multiplied by the dollar amount selected. That amount will be transferred from your Package Checking account to your Package Money Market Savings account.
- The credit card owner's name must also be an owner on the enrolled S.T.A.R.T. checking account. For joint checking accounts, more than one credit card can be designated, and a separate transfer will occur for the activity of each card.
- All U.S. Bank-branded, co-branded or affinity credit cards are eligible.
- If more than one credit card is enrolled in S.T.A.R.T. for this transfer option, separate transfers will occur for the total purchases posted to each card.
- Example: You have selected a transfer amount of $3.00. If two credit card purchases post on Monday, a transfer of $6.00 will occur on Tuesday (from your checking account to your savings account).

S.T.A.R.T. Goals and Rewards

The Program offers two rewards that can be earned by achieving and maintaining a specific account balance – called your Goal Balance – in your savings account. Your Goal Balance is the account balance of your Package Money Market Savings account at time of enrollment, plus $1,000.00. You must reach Goal 1 before you become eligible for Goal 2.

S.T.A.R.T. Goal 1: When you reach the Goal 1 Balance in your Package Money Market Savings account AND a qualifying transfer occurs within 35 days of meeting the Goal 1 Balance, you will earn a $50.00 U.S. Bank Rewards Card.

S.T.A.R.T. Goal 2: When you maintain the Goal Balance in your Package Money Market Savings account for 12 consecutive months from the date of meeting Goal 1, you will earn a $50.00 U.S. Bank Rewards Card.

Note: Reward(s) will be sent to the primary savings accountholder within 30 days of goal verification. Rewards will be reported as interest earned on IRS Form 1099-INT. The accountholder is responsible for any applicable taxes. If your savings account is subject to State or Federal tax withholding, the amount of your U.S. Bank Rewards Card will have taxes withheld. A customer is eligible to earn only one of each goal type, for a maximum reward of $100.00.

The U.S. Bank Rewards Card cannot be reloaded with additional funds, nor can it be used at an ATM. No cash access. Terms and conditions, including fees, apply. Visit usbankrewardscard.com for current terms. This Rewards Card is issued by U.S. Bank National Association pursuant to a license from Visa U.S.A. Inc. © 2020 U.S. Bank. Lost or stolen cards can be replaced if the card number is available. Other conditions apply. See the cardholder agreement for complete details.

Monitor and Make Changes to your S.T.A.R.T. Selections

You can make changes to any transfer option, add or delete transfer selections, and monitor your goal progress: by accessing your account via online banking, speaking with a banker at a participating branch, or calling U.S. Bank 24-Hour Banking (see last page for phone numbers). Additionally, S.T.A.R.T. mobile or email alerts can be set-up through online banking, and your monthly statements will provide S.T.A.R.T. progress information.

Program Termination

Your participation in S.T.A.R.T. will end if:

- You notify your banker that you no longer wish to participate in the Program.
- Your Package Checking account or Package Money Market Savings account is closed, is transferred to another product, or the account ownership does not match on both the checking and savings accounts.
- A qualifying transfer is not scheduled for six consecutive months when working towards Goal 1 achievement.

TIME DEPOSITS

A time deposit is more commonly known as a certificate of deposit or CD. With a time deposit, you agree to keep your deposit with us for a specified period of time, or agree to give a required advance notice prior to withdrawal, and we agree to pay you interest at an agreed upon rate, or an agreed formula for a rate, for that period of time.

We are not required to permit an early withdrawal from a time deposit, and if we do, it will be on condition that you pay an early withdrawal fee and penalty. The amount of that penalty will be disclosed to you when you open such an account.

All the features of your time deposit will be disclosed to you when you open the account. You can call 24-Hour Banking, visit a local U.S. Bank branch, or go to usbank.com to find out what CD products and terms we offer.

If your time deposit, including single maturity, automatically renewable or Individual Retirement Account CDs, remains inactive for a pre-determined period of time, as required by state, and our attempts to find you fail we may transfer or escheat your funds to the state as required.

Escheat is the term that is used to describe the process of transferring an account balance to the state government after an account has been dormant for a pre-determined period of time, as required by state, and if our attempts to find you fail.

The time period after which funds must escheat to the state varies from state to state. Once the funds are transferred to the state, you may be able to recover the funds from the state itself, but not from us.

We may charge a fee to transfer funds to the state.

LIMIT OF LIABILITY

We process millions of transactions every day, with the help of complicated technology and other companies. If we make a mistake and charged you more than we should have, or failed to give you credit you were due, we will correct the error, so long as you give us sufficient and timely notice and an opportunity to fix it. See the section above titled **Statements and Notices,** for your duty to pay attention to your statement and report any errors.

You agree – to the extent allowed by law – to waive any indirect, incidental, special, consequential and punitive damages for errors or mistakes we make in good faith. This includes damages that might otherwise be available in a tort or contract action, and whether the consequences are foreseeable or not.

ELECTRONIC MESSAGES AND AGREEMENTS

Many customers use the Internet and email as their primary form of communication with us. If you provide us with an email address, you agree that we may communicate with you via email and you further agree to notify us of any changes to your email address.

You agree that we may make agreements with you by electronic means. Your authorization and consent to such an agreement, or your delivery of instructions, may be made by use of certain numbers, codes, marks, signs, personal identification numbers (PINs), public or private keys or other means, acceptable to you and to us, to establish your identity and acceptance of the electronic communications. All electronic communications that meet these requirements will be deemed to be valid and authentic and you intend and agree that those electronic communications will be given the same legal effect as written paper communications signed by you. You agree that electronic copies of communications are valid and you will not contest the validity of the originals or copies, absent proof of altered data or tampering.

You are not required to accept electronic communications; we want you to be aware that this is an option for you to accept. **We will never ask you for sensitive account information, such as, passwords, PINs, Social Security numbers or account numbers via email. If you receive an email that appears to be from U.S. Bank asking for this type of information, immediately forward the email in its entirety (not as an attachment) to fraud_help@usbank.com.**

LEVIES, GARNISHMENTS AND OTHER LEGAL PROCESS

We are a national bank with many locations. You agree that for purposes of this part, we may treat your funds as existing at any and all locations where legal process can be served upon us or on an appointed agent of ours on our behalf. You understand and agree that a creditor or governmental agency may attach your account by service of legal process on any of our locations, at any site designated by us for acceptance of service of process, on any appointed agent of ours, or any other method authorized by law, court rule, or regulation. We may accept and comply with legal process served by any means, whether in person, by mail, facsimile, electronic transmission, or other means. You agree that we may not contest such legal process.

If we are served with a garnishment, levy, execution, or other legal process of apparent validity (together referred to as "legal process"), you understand and agree that we will pay all amounts in the account, or release information about your account, in satisfaction of the legal process and in compliance with our understanding of applicable law. If your account is a joint account, for purposes of responding to legal process, we will consider each joint owner to have an undivided interest in the entire account. Therefore, you agree we may pay all amounts in the account in satisfaction of any legal process, even if it attaches to the interest of fewer than all the account owners. You agree that we may process a levy, garnishment, or other legal process served on us even if we do not process it on the same day it was received. If you believe your funds are exempt from legal process, or otherwise should not be subject to the legal process (for example, if you own funds and the legal process applies to another joint owner, you believe the court, garnishor, or levying authority lacks jurisdiction over you or the property, or you believe the garnishment or levy names the wrong party as garnishee), you agree that it is your responsibility to raise any defense to the legal process against the party who originated the legal process or seek reimbursement from a joint owner, and you agree that we have no obligation to do so.

If we are served with any legal process that tries to attach or in some way prevent you from freely using your funds, you give us the right, but we have no obligation, to hold any portion of the funds during any time necessary to determine to our satisfaction who has the legal right to the funds. If we are not able to determine whether the funds are subject to the legal process, you agree that we may deposit the funds with any court which we deem to have jurisdiction over us or the property in your account and ask that court to determine to whom the funds belong. You consent to the jurisdiction of such court to determine the legal right to the property in your account and agree to reimburse us for our expenses, including attorney's fees and expenses, arising out of the service of the legal process on us and our response to it.

If the legal process requires us to release information about one or more accounts for which combined statements are provided, we may release the entire combined statement even if other accounts on the statement are not covered by the legal process.

All legal process is subject to our rights of setoff and our security interest in your account. We will assess a service fee against your account for any legal process served on us regardless of whether the process is subsequently revoked, vacated, or released. Unless expressly prohibited by law, we will set off or enforce our security interest against your account for such fee prior to our honoring the legal process. We will not be liable to you if an attachment, a hold, or the payment of our fee from your account leaves insufficient funds to cover outstanding items. You agree to hold us harmless from any claim relating to or arising out of how we handle legal process pursuant to this part.

RESOLVING ACCOUNT DISPUTES AND ADVERSE CLAIMS

If a dispute arises concerning your account (including, for example, a dispute over who is an authorized signer or owner), or if we believe we have a claim against you or we have or receive a claim by a third party (including our affiliates) to all or a portion of the property (including money, certificates of deposit, securities and other investment property, financial assets, etc.) in your account, or if we have concerns regarding your account or the use of your account, we have the right to hold any portion of the property in your account until the dispute, claim, or concern is resolved to our satisfaction. We will not be liable to you if the hold we place on your account leaves insufficient funds to cover outstanding items. For purposes of this section, "account" includes any account you have with us or any of our affiliates (including, without limitation, agency, custody, safekeeping, brokerage, and revocable trust accounts). If the dispute, claim or concern remains unresolved, you agree that we may at our option deposit the property in your account with a court and ask the court to determine to whom the property belongs. If we deposit your property with a court, you agree that we may charge your account for our costs, including attorney's fees and expenses.

INCREASED COSTS TO MAINTAIN YOUR ACCOUNT

If your account becomes subject to a receivership, court order or bankruptcy, and we are required to implement changes as to your account that increase our costs to maintain your account (for example, a requirement for us to pledge property to secure your account above the amount of any deposit insurance on your account), you agree to reimburse us for the additional costs and any expenses incurred by us (including legal fees) to implement such required changes as to your account.

CONSUMER REPORT DISPUTES

We may report information about your deposit accounts to Consumer Reporting Agencies (CRA). As a result, this may prevent you from obtaining services at other financial institutions. If you believe we have inaccurately reported information to a CRA, you may submit a dispute by calling 844.624.8230 or by writing to:

U.S. Bank Attn: CBDH Management, P. O. Box 3447, Oshkosh, WI 54903-3447. In order for us to assist you with your dispute, you must provide: your name, address and phone number; the account number; the specific information you are disputing; the explanation of why it is incorrect; and any supporting documentation (e.g., affidavit of identity theft), if applicable.

ACCOUNT INFORMATION

Our Privacy Pledge discloses the information we share with other entities for marketing purposes. We also may be required to provide information about you and your account when and as required or permitted by law for other purposes, such as, for example:

1. reporting of interest you earn to federal and state tax authorities;
2. reporting of cash transactions that are at reportable limits;
3. investigating and reporting of transactions that we reasonably determine to be suspicious; and
4. responding to subpoenas, court orders, or government investigations.

SETOFF

We have the right under the law to set off amounts you owe us against your accounts with us. For purposes of this section, "account" includes any account you have with us or any of our divisions, departments, and affiliates (including, without limitation, agency, custody, safekeeping, securities, investment, brokerage, and revocable trust accounts) and "you" includes, without limitation, your revocable trust, any partnership in which you are a general partner, any prior or successor entity by way of an entity conversion, and any other series of your series limited liability company (as applicable). In addition to this legal right, you give us and our affiliates the contractual right to apply, without demand or prior notice, all or part of the property (including money, certificates of deposit, securities and other investment property, financial assets, etc.) in your accounts, against any debt any one or more of you owe us or our affiliates. If your account is a joint account, you agree we may consider each joint owner to have an undivided interest in the entire account, so we may exercise our contractual right of setoff against the entire account. This includes, for example, debts that now exist and debts that you may incur later, your obligations under a guaranty, and also includes all fees you owe us or our affiliates. We will not be liable to you if enforcing our rights of setoff against your account(s) leaves insufficient funds to cover outstanding items or other obligations. You agree to hold us harmless from any claim arising as the result of our enforcement of our rights of setoff in, or enforcement of our rights of setoff against, your account(s).

Our contractual right of setoff does not apply:

1. to an account that is an IRA or other tax-deferred retirement account;
2. to a debt that is created by a consumer credit transaction under a credit card plan (but this does not affect our rights under any consensual security interest); or
3. if our records demonstrate to our satisfaction that the right of withdrawal that a depositor/debtor has with us only arises in a representative capacity (for example, only as an authorized signer, attorney-in-fact or a fiduciary) for someone else.

This right of setoff is in addition to any security interest that we or an affiliate of ours might have in your deposit account.

SECURITY INTEREST IN ACCOUNTS

You grant to us and our affiliates, a security interest in all your accounts with us, and all property in your accounts (including money, certificates of deposit, securities and other investment property, financial assets, etc.), to secure any amount you owe us or our divisions, department, and affiliates, now or in the future. This includes, for example, debts that now exist and debts that you may incur later, your obligations under a guaranty, and also includes all fees you owe us or our affiliates. For purposes of this section, "account" includes any account you have with us or any of our affiliates (including, without limitation, agency, custody, safekeeping, securities, investment, brokerage, and revocable trust accounts) and "you" includes, without limitation, your revocable trust, any partnership in which you are a general partner, any prior or successor entity by way of an entity conversion, and any other series of your series limited liability company (as applicable). In order to provide us and our affiliates with control over your account and all property in your account for purposes of perfecting the security interest granted above, you agree that we shall comply with any and all order, notices, requests and instructions originated by us or any of our affiliates directing disposition of the funds in your account without any further consent from you, even if such instructions are contrary to your instructions or demands or result in our dishonoring items which are presented for payment.

If your account is a joint account, you agree we may consider each joint owner to have an undivided interest in the entire account, so we may exercise our security interest against the entire account. We may enforce our security interest without demand or prior notice to you. You agree, for purposes of this security interest, that our affiliates may comply with any instructions we give them regarding your accounts held with them, without further consent. You also agree that we may comply with any instructions regarding your accounts that we receive from our affiliates pursuant to a security interest they have in your accounts with us. We will not be liable to you if enforcing our security interest against your account(s) leaves insufficient funds to cover outstanding items or other obligations.

You agree to hold us harmless from any claim arising as the result of our security interest in, or enforcement of our security interest against, your account(s).

SECURITY

It is your responsibility to protect the account numbers, including card numbers and electronic access devices (e.g., an ATM card, debit card, username and password or PIN) we provide to you for your account(s). Do not discuss, compare, or share information about your account number(s) with anyone unless you are willing to give him or her full use of your money. An account number can be used by thieves to encode your number on a false demand draft which looks like and functions like an authorized check.

If you furnish your access device and grant actual authority to make transfers to another person (a family member, coworker or employee, for example) who then exceeds that authority, you are liable for the transfers unless we have been notified that transfers by that person are no longer authorized.

Your account number can also be used to electronically remove money from your account. If you provide your account number in response to a telephone solicitation for the purpose of making a transfer (to purchase a service or merchandise, for example), payment can be made from your account even though you did not contact us directly and order the payment.

You must also take precaution in safeguarding your blank checks. Notify us at once if you believe your checks have been lost or stolen. As between you and us, if you are negligent in safeguarding your checks, you must bear the loss entirely yourself or share the loss with us (we may have to share some of the loss if we failed to use ordinary care and if we substantially contributed to the loss).

We reserve the right to place a hold on your account if we suspect irregular, fraudulent, unlawful or other unauthorized activity involved with your account. We may attempt to notify you of such a hold, but we are not required to provide notice prior to placing the hold. You agree that we may maintain such a hold until all claims against you or us to the funds held in your account, whether civil or criminal in nature, have been resolved fully in our sole satisfaction.

RESOLUTION OF DISPUTES BY ARBITRATION

PLEASE READ THIS PROVISION CAREFULLY. UNDER THIS PROVISION, YOU WAIVE YOUR RIGHTS TO TRY ANY COVERED CLAIM IN COURT BEFORE A JUDGE OR JURY AND TO BRING OR PARTICIPATE IN ANY CLASS OR OTHER REPRESENTATIVE ACTION.

The following provision applies to any claim, cause of action, proceeding, or any other dispute between you, on the one hand, and us, our respective parents, subsidiaries, affiliates, agents, employees, predecessors-in-interest, personal representatives, heirs and/or successors, and assigns, on the other hand (each a "Claim" as further defined under the heading "Claims Covered by Arbitration"), including all questions of law or fact related thereto.

Agreement to Arbitrate: Either you or we may elect in writing, and without the consent of the other, to arbitrate all Claims covered by this provision.

Claims Covered By Arbitration: Claims subject to our agreement to arbitrate shall include all of the following: (1) Claims related to or arising out of this account Agreement, or any prior or later versions of this account Agreement as well as any changes to the terms of this account Agreement; (2) Claims related to or arising out of any aspect of any relationship between us that is governed by this account Agreement, whether based in

contract, tort, statute, regulation, or any other legal theory; and (3) Claims that relate to the construction, scope, applicability, or enforceability of this arbitration provision. Claims include Claims that arose before we entered into this account Agreement (such as Claims related to advertising) and after termination of this account Agreement.

Claims Not Covered By Arbitration: Claims subject to our agreement to arbitrate shall not include any Claim you file in a small claims court, so long as the Claim remains in such court and advances only an individual claim for relief.

Commencing an Arbitration: The party initiating arbitration must choose one of the following arbitration forums to administer the arbitration:

- **The American Arbitration Association ("AAA") under AAA's Consumer Arbitration Rules, except as modified by this account Agreement. AAA's Rules may be obtained from www.adr.org or 1-800-778-7879 (toll-free).**
- **JAMS/Endispute ("JAMS") under JAMS' Comprehensive Arbitration Rules & Procedures or Streamlined Arbitration Rules & Procedures, including JAMS' Consumer Minimum Standards, except as modified by this account Agreement. JAMS' Class Action Procedures shall not apply. JAMS' rules may be obtained from www.jamsadr.com or 1-800-352-5267 (toll-free).**

If the chosen arbitration forum is for any reason unable to serve, then the parties may agree to a comparable substitute organization. If the parties are unable to agree, then a court of competent jurisdiction shall appoint a substitute organization.

Arbitration Procedure: The arbitration shall be decided by a single neutral arbitrator selected in accordance with AAA's or JAMS' rules, as applicable. The arbitrator will decide the dispute in accordance with the terms of our account Agreement and applicable substantive law, including the Federal Arbitration Act and applicable statutes of limitation. The arbitrator shall honor claims of privilege recognized at law. The arbitrator may award damages or other relief (including injunctive relief) available to the individual claimant under applicable law. The arbitrator will not have the authority to award relief to, or against, any person or entity who is not a party to the arbitration. The arbitrator will take reasonable steps to protect customer account information and other proprietary or confidential information. Any arbitration hearing shall take place in the federal judicial district that includes your home address, unless you and we agree in writing to a different location or the arbitrator so orders. If all Claims are for $10,000 or less, you may choose whether the arbitration will be conducted solely on the basis of documents submitted to the arbitrator, through a telephonic hearing, or by an in-person hearing in accordance with AAA's or JAMS' rules.

At your or our request, the arbitrator will issue a reasoned written decision sufficient to explain the essential findings and conclusions on which the award is based. The arbitrator's award shall be final and binding, subject to judicial review only to the extent allowed under the Federal Arbitration Act. You or we may seek to have the award vacated or confirmed and entered as a judgment in any court having jurisdiction.

No Class Action or Joinder of Parties: You and we agree that no class action, private attorney general, or other representative claims may be pursued in arbitration, nor may such action be pursued in court if either you or we elect arbitration. Unless mutually agreed to by you and us, Claims of two or more persons may not be joined, consolidated, or otherwise brought together in the same arbitration (unless those persons are joint account owners or beneficiaries on your account and/or related accounts, or parties to a single transaction or related transaction). If this specific paragraph is determined by the arbitrator to be unenforceable, then this entire provision shall be null and void.

Arbitration Costs: Unless the applicable arbitration rules at the time of filing a Claim are more favorable to you, we will advance (i) all arbitration costs in an arbitration that we commence, and (ii) the first $2,500 in arbitration filing, administration, and arbitrator's fees in an arbitration that you commence. To the extent allowed by applicable law and our agreements, the arbitrator may award arbitration costs and attorneys' fees to the prevailing party.

Applicable Law: You and we agree that you and we are participating in transactions that involve interstate commerce and that this provision and any resulting arbitration are governed by the Federal Arbitration Act. To the extent state law applies, the laws of the state governing your account relationship apply. No state statute pertaining to arbitration shall apply.

Severability: Except as this provision otherwise provides, if any part of this provision is deemed to be invalid or unenforceable by the arbitrator, that part will be severed from the remainder of this provision and the remainder of this provision will be enforced.

ATTORNEY'S FEES

Where used, "attorney's fees" includes our attorney's fees, court costs, collection costs, and all related costs and expenses. Notwithstanding any provision in this Agreement to the contrary, any provision for attorney's fees in this Agreement shall not be enforceable in any dispute governed by the laws of California or Oregon.

FUNDS AVAILABILITY: YOUR ABILITY TO WITHDRAW FUNDS – ALL ACCOUNTS

This funds availability policy applies to deposits into a checking or savings account made at a branch or ATM. This policy may not apply to deposits made remotely through a mobile or other electronic device.

Some sections of this disclosure apply to all accounts and all customers. There are special sections for New Accounts, Commercial Accounts, Wealth Management Accounts and Retail Consumer and Business Accounts. We will make that clear in the section headings.

Funds "availability" means your ability to withdraw funds from your account, whether those withdrawals are to be in cash, by check, automatic payment, or any other method we offer you for access to your account. If deposited funds are not "available" to you on a given day, you may not withdraw the funds in cash and we may not use the funds to pay items that you have written or honor other withdrawals you request. If we pay items that you have written or honor other withdrawals before funds are available to you, we may charge a fee for this. Please review the product pricing information brochure for information regarding overdraft fees associated with your accounts.

Please remember that even after the item has "cleared," we have made funds available to you, and you have withdrawn the funds, you are still responsible for items you deposit that are returned to us unpaid and for any other problems involving your deposit. See our **Returned Deposited and Cashed Items** section.

DETERMINING THE AVAILABILITY OF A DEPOSIT – ALL ACCOUNTS

The day funds become available is determined by counting business days from the day of your deposit. Every day is a business day except Saturdays, Sundays, and federal holidays. If you make a deposit in person before our "cutoff time" on a business day we are open, we will consider that day to be the day of your deposit for purposes of calculating when your funds will become available. However, if you make a deposit after the cutoff time, or on a day we are not open, we will consider that the deposit was made on the next business day we are open.

Our cutoff times vary from branch to branch. The earliest cutoff time at any of our branches is 2:00 p.m. (local time at the branch).

If a deposit is made after 8:00 p.m. (local time at the ATM location) or on a day we are not open, we will consider the deposit to be made on the next business day we are open.

Deposits you send by mail are considered deposited on the business day it arrives if it arrives by the cutoff time at the branch of deposit. In all cases, availability of any deposit assumes that a requested withdrawal will not overdraw the account.

IMMEDIATE AVAILABILITY – ALL ACCOUNTS

The following types of deposits will usually be available for withdrawal immediately under normal circumstances:

- Cash (if deposited in person to an employee of ours);
- Electronic direct deposits;
- Wire transfers; and
- The first $225.00 from the total of all other deposits made on any given day.

Cash and wire transfer deposits are subject to the **Special Rules for New Accounts** and the $225.00 availability is subject to the rule in the section titled **Longer Delays May Apply.**

LONGER DELAYS MAY APPLY

Government Checks, Cashier's Checks, and Other Types of Special Checks. If you make a deposit of one of the following items in person to one of our employees, our policy is to make the funds from those deposits available no later than the first business day after the day of deposit:

- State and local government checks that are payable to you;
- Cashier's, certified, and teller's checks that are payable to you; and
- Federal Reserve Checks, Federal Home Loan Checks, and U.S. Postal Money orders that are payable to you.

If you do not make your deposit in person to an employee of the bank (for example, if you mail us the deposit), funds from these deposits may be available no later than the second business day after the day of deposit. However, we may delay funds for a longer period of time, see section titled **Longer Delays May Apply – Safeguard Exceptions.**

Case-by-Case Delays. In some cases, we will not make all of the funds that you deposit available to you as provided above. Depending on the type of check that you deposit, funds may not be available until the second business day after the day of your deposit. The first $225.00 of your deposit, however, will be available no later than the first business day after the day of deposit, and usually immediately.

If we are not going to make all of the funds from your deposit available on the first business day, we will notify you at the time you make your deposit. We will also tell you when the funds will be available. If your deposit is not made directly to one of our employees (including a deposit made at an ATM) or if we decide to take this action after you have left the premises, we will mail you the notice by the day after we receive your deposit.

If you will need the funds from a deposit right away, you should ask us when the funds will be available.

Safeguard Exceptions. In addition, funds you deposit by check may be delayed for a longer period under the following circumstances:

- We believe a check you deposit will not be paid.
- You deposit checks totaling more than $5,525.00 on any one day.
- You redeposit a check that has been returned unpaid.
- You have overdrawn your account repeatedly in the last six months.
- There is an emergency, such as failure of computer or communications equipment.

We will notify you if we delay your ability to withdraw funds for any of these reasons, and we will tell you when the funds will be available. They will generally be available no later than the seventh business day after the day of your deposit.

RETAIL CONSUMER, BUSINESS AND COMMERCIAL ACCOUNTS

Our general availability policy for these accounts is to make funds available to you on the first business day after the day of deposit. We generally make some portion of a day's deposits available for withdrawal immediately. See the previous section for the types and amounts of deposits that are available immediately.

WEALTH MANAGEMENT ACCOUNTS

Our general availability policy for **Private Client Accounts** is to make funds you deposit available to you immediately. This immediate availability policy includes all deposits at any ATM. The section above titled **Longer Delays May Apply** also applies to your accounts. If we impose a delay as provided in that section, then the sections titled **Cashing Checks** and **Other Accounts** may also apply.

DEPOSITS AT AUTOMATED TELLER MACHINES – RETAIL CONSUMER, BUSINESS AND COMMERCIAL ACCOUNTS

Our Machines. If you make a deposit at a deposit-accepting ATM identified as ours with the U.S. Bank name, your deposit will generally be available on the first business day after the day of deposit. However, in certain circumstances, and at U.S. Bank's discretion, the funds may not be available until the second business day after the day of deposit.

Partner ATMs. U.S. Bank has established alliances to expand ATM convenience. These partner ATMs display the U.S. Bank logo and are included in the definition of a U.S. Bank ATM. However, these ATMs generally do not accept deposits. If we permit a deposit at a partner ATM, your deposit will not be available until the fifth business day after the day of deposit.

Other Machines. Generally, deposits at an ATM that is not identified as ours with the U.S. Bank name are not permitted. If we permit a deposit at an ATM that is not identified as ours with the U.S. Bank name, your deposit will not be available until the fifth business day after the day of deposit.

SPECIAL RULES FOR NEW ACCOUNTS – RETAIL CONSUMER AND BUSINESS ACCOUNTS

If you are a new customer, the following special rules will apply during the first 30 days your account is open.

Funds from electronic direct deposits and deposits of cash and wire transfers to your account will be available on the day we receive the deposit. The first $5,525.00 of a day's total deposits of cashier's, certified, teller's, traveler's, on-us checks (checks drawn on U.S. Bank), and federal, state and local government checks will be available on the first business day after the day of your deposit if the deposit meets certain conditions. For example, the checks must be payable to you (and you may have to use a special deposit slip). The excess amount over $5,525.00 will be available on the fifth business day after the day of your deposit. If your deposit of these checks (other than a U.S. Treasury check) is not made in person to one of our employees, the first $5,525.00 will not be available until the second business day after the day of your deposit.

Funds from all other check deposits will generally be available on the fifth business day after the day of your deposit. In certain instances, we may hold funds from other check deposits for longer than five business days. For example, if we receive a check that falls within the Safeguard Exception description above, we may delay funds for up to seven business days. If we do so, we will provide you with a hold notice at the time of deposit or when we learn that we will hold the funds from the deposit.

CASHING CHECKS

If we cash a check for you that is drawn on another bank, we may withhold the availability of a corresponding amount of funds that are already in your account. Those funds will be available at the time funds from the check we cashed would have been available if you had deposited it.

OTHER ACCOUNTS

If we accept for deposit a check that is drawn on another bank, we may make funds from the deposit available for withdrawal immediately but delay your availability to withdraw a corresponding amount of funds that you have on deposit in another account with us. The funds in the other account would then not be available for withdrawal until the day the deposited item would have been available, which will usually be the first business day after the day of deposit.

ADDITIONAL TERMS FOR BUSINESS ACCOUNTS

All other sections of this Agreement apply to consumer and business accounts alike, (except when a rule specifically says it will apply to consumers). The following sections apply to accounts used primarily for business purposes.

UNLAWFUL INTERNET GAMBLING AND OTHER ILLEGAL TRANSACTIONS

You agree that you, or anyone acting on your behalf, will not use your account, access device or banking relationship with us to facilitate illegal transactions such as those prohibited by the Unlawful Internet Gambling Act of 2006, or otherwise violate any law, rule or regulation applicable to you. If we identify a suspected illegal transaction, we may block such transactions, and further we may close your account or terminate our banking relationship with you.

DEPOSIT OF PRE-AUTHORIZED DRAFTS

A pre-authorized draft is an arrangement whereby you get authority from a person (a customer, usually) to access a deposit account owned by that person to pay a debt that person owes you. You deposit these “drafts” into a deposit account with us, and we collect them from your customers, who may have accounts with us or other banks. (These “drafts” are checks you create based on information your customer provides you, such as the customer’s name and account number, and the express permission your customer gave you to draw on his account.)

When you deposit these pre-authorized drafts, you make the following agreements and warranties:

1. You have express, verifiable and binding authorization from your customer to access his, her or its account for the amount you ask us to collect;
2. You will keep the proof of your authorization in retrievable form for not less than two years from: (a) the date of the authorization of a one-time draft; or (b) from the date of revocation of the authorization of recurring drafts. You agree to provide us with such proof upon our request;
3. We may reverse any credit given to you for any draft deposited to your account and returned to us regardless of when it is returned or the reason for the return. We may take funds in your account to pay the amount you owe us, and if there are insufficient funds in your account, you will still owe us the remaining balance.

EARNINGS CREDIT

Fees for services used by you may be assessed in full to your accounts or may be offset through account analysis by applying earnings credit to your service charges to determine a single monthly net service charge. Your earnings credit rate is established by us and will change from time to time. Your net service charge could be zero if your earnings credit equals or exceeds your total charges in a given month. If your earnings credit is not sufficient to offset the amount due hereunder, you agree to pay such amounts to us upon demand.

WAIVER OF NOTIFICATION OF REDEPOSITED CHECKS

When you deposit checks to your account, you have a right to be notified whenever a check you deposit is returned unpaid. We offer a plan (to businesses who elect it) whereby we will automatically redeposit checks returned unpaid due to insufficient funds. To simplify collection of these items, you give up this right to notification for those items we redeposit. If these items are returned unpaid a second time, you will receive standard notification.

We may withhold the availability of funds represented by a redeposited check. We will notify you of such delay.

FACSIMILE SIGNATURES

You may wish to use a facsimile signature stamp or other mechanical signature device to sign checks or other orders relating to your accounts. If you do, we will, without contacting you, debit your account for items bearing an imprint that looks substantially like your authorized mechanical signature, whether or not such items bear the actual facsimile signature stamp. You agree to notify us and give us a sample imprint if you plan to use such a device. If you do not give us a sample, this section still applies to your use of the device. You are responsible for the security of any mechanical signature device. We will not be responsible for payment of unauthorized items bearing an imprint from, or similar to, your authorized mechanical signature.

DEPOSITS

Truncation, Substitute Checks, and Other Check Images: If you truncate an original check and create a substitute check or other replacement document, or other paper or electronic image of the original check, you warrant that no one will be asked to make payment on the original check, a substitute check or any other electronic or paper image, if the payment obligation relating to the original check has already been paid. You also warrant that any substitute check(s) you create conforms to the legal requirements and generally accepted specifications for substitute checks. You agree to retain the original check in conformance with the time requirements as outlined in your remote deposit capture agreement with us. You agree to indemnify us for any loss we may incur as a result of any truncated check transaction you initiate. We can refuse to accept substitute checks that have not previously been warranted by a bank or other financial institution in conformance with the Check 21 Act. Unless specifically stated in a separate agreement between you and us, we do not have to accept any other electronic or paper image of an original check.

Deposit Preparation, Sorting, and Endorsements: You agree to properly prepare, sort, and endorse all deposits according to requirements specified in any applicable user guides and Federal Regulation CC. We require that you include the external processing code of “6” in Position 44 of the MICR line for all remotely created checks, and we reserve the right to dishonor any remotely created check that does not meet the requirement. You agree to indemnify us for any loss we incur that results from your failure to comply with these requirements.

Requalification: If you elect to have another bank or entity receive and process all of your returned checks, such other bank’s endorsement may be obscured by our depository bank endorsement. You understand and agree that any other endorsement placed on your checks that identify another bank as the depository bank or the bank to which checks should be returned may result in illegible or double endorsements, which may delay the return of your checks. You agree we shall not be liable for any such delays.

FRAUD PREVENTION MEASURES.

We offer certain products and services, such as “positive pay,” and account blocks and filters that are designed to detect or deter fraud. Failure to use such services could substantially increase the likelihood of fraud. If you fail to implement any of these products or services, or if you fail to follow these or other precautions reasonable for your type of account or circumstances, you agree that you will be precluded from asserting any claims against us for paying any unauthorized, altered, counterfeit or other fraudulent item that such product, service or precaution was designed to detect or deter, and we will not be required to re-credit your account or otherwise have any liability for paying such items.

CUSTOMER SEGREGATED ACCOUNTS. Notwithstanding anything to the contrary in this Agreement or any other agreement, we will maintain all money designated as client money—by broker-dealers, future commission merchants, or derivatives clearing organizations—in customer segregated accounts in accordance with acknowledgement letters required by applicable SEC and CFTC rules and regulations.

ELECTRONIC BANKING AGREEMENT FOR CONSUMER CUSTOMERS

This section applies to payment orders and funds transfers governed by the Electronic Fund Transfer Act. When you enroll in online or mobile banking we will provide you with the U.S. Bank *Digital Services Agreement* that governs the use of all online and mobile services ("Digital Services").

If you have any questions regarding electronic banking transactions or believe that an unauthorized transaction has occurred, please call U.S. Bank 24-Hour Banking (see last page for phone numbers), visit a local U.S. Bank branch or write to:

U.S. Bank 24-Hour Banking
EP-MN-WS5D,
60 Livingston Ave.,
St. Paul, MN 55107

Please read this disclosure carefully because it tells you your rights and obligations for the transactions listed. You should keep this notice for future reference.

TYPES OF TRANSACTIONS

These are the types of Electronic Fund Transfers that you can accomplish with us (assuming you make arrangements to do so).

Electronic Fund Transfers Initiated by Third Parties. You may authorize a third party to initiate electronic fund transfers between your account and the third party's account. These transfers to make or receive payment may be one-time occurrences or may recur as directed by you. These transfers may use the Automated Clearing House (ACH) or other payments network. Your authorization to the third party to make these transfers can occur in a number of ways. In all cases, these third-party transfers will require you to provide the third party with your account number and bank information. Thus, you should only provide your bank and account number information (whether over the phone, the Internet, or via some other method) to trusted third parties whom you have authorized to initiate these electronic fund transfers. Examples of these transfers include, but are not limited to:

Direct Deposits. You can arrange for direct deposits to your checking or savings account(s).

Preauthorized Payments. You can arrange to pay certain recurring bills from your checking or savings account(s).

Electronic check conversion. You may authorize a merchant or other payee to make a one-time electronic payment from your checking account using information from your check to pay for purchases or pay bills.

Electronic returned check charge. You may authorize a merchant or other payee to initiate an electronic fund transfer to collect a charge in the event a check is returned for insufficient funds.

Expanded Account Access

What it is. Any card or PIN (personal identification number) can be used to access up to five checking, savings, line of credit and credit card account(s) held in the same name at U.S. Bank or any of its bank affiliates; and any account you open with us and our affiliates may be accessed by your card or PIN. "Access" means use of a card or account number and PIN to conduct a transaction or obtain information at ATMs, over the telephone, through personal computer banking, or any other available method. If the card or PIN is for a joint account, that card or PIN can be used to access all the accounts linked to the card or PIN account, whether joint or individual. Expanded Account Access is also applicable to your Digital Services.

The "cards" that can get Expanded Account Access. All U.S. Bank Debit Cards and ATM cards (excluding prepaid cards), and all U.S. Bank-issued Credit Cards (including, but not limited to, co-branded credit cards, and all credit lines issued through U.S. Bank and U.S. Bank affiliates).

Fees and Charges for Expanded Account Access. There are no additional fees or charges just for Expanded Account Access, but fees applicable to each applicable account will continue to apply in accordance with the terms of the applicable account agreements. The fees and terms for each of your accounts will be as disclosed in the *Consumer Pricing Information* brochure. (This document can be obtained by contacting a U.S. Bank branch or calling 800.872.2657.)

The fees and terms for your personal credit cards and lines of credit are disclosed in the applicable cardmember agreement.

How to Cancel. You can visit a branch or call the U.S. Bank 24-Hour Banking number at any time to cancel Expanded Account Access. If you cancel Expanded Account Access for any account, that account will not be accessible by any card or PIN other than the card or PIN specifically designated for that account.

Account Access at Automated Teller Machines

You can access up to five checking, five savings, and five line(s) of credit or credit card accounts at U.S. Bank ATMs through all your cards held in the same name (excluding prepaid cards).

You may perform the following transactions at ATMs:

- Make cash withdrawals from your checking and savings accounts associated with your card. Cash denominations vary by ATM.
- Get cash advances from your credit card or line of credit account using your U.S. Bank Debit Card or ATM card. (Refer to your cardmember agreement for any cash advance fees and finance charges that may apply.)
- Deposit funds to checking and savings accounts associated with your card. Deposit up to 30 checks and 50 bills in a single transaction. Instant availability for cash deposits if deposited before 6:00 p.m. local time in a non-envelope deposit ATM.
- Transfer funds from your account(s) associated with your card.
- Make payments to credit card or line of credit accounts from a deposit account associated with your card.
- Check the current balance of your checking, savings, credit card and line of credit accounts associated with your card.
- Request a statement showing your most recent deposit account transactions. (Refer to the *Consumer Pricing Information* brochure regarding any fees for purchasing statements at ATMs. This brochure can be obtained by contacting a U.S. Bank branch or calling 800.872.2657.)
- Change your ATM or debit card PIN.
- Make certain charitable contributions from a deposit account associated with your card.

Some of these transactions are not available at all ATMs.

Purchases at Merchants

You may use any of your U.S. Bank Debit Cards to make purchases at merchants that accept Visa® debit cards. You may use your U.S. Bank ATM Card and any of your U.S. Bank Debit Cards to make purchases by entering your PIN at participating merchants. You may also get cash from a merchant, if the merchant permits. Purchases made with your card will result in debits to your "primary" checking account. These transactions will be itemized on your monthly statement, including the merchant name, location, the date of purchase and the amount of the purchase.

Partial Debit Card Transactions

Some merchants may be enrolled in Visa's Partial Authorization service. This means that if you chose 'No' to ATM and Debit Card Overdraft Coverage, your transaction may be approved for only part of your total purchase amount. This occurs when you do not have a sufficient Available Balance, necessary to pay for the entire transaction, at the time of the purchase. Additionally, funds from your designated account(s) linked for Overdraft Protection (if applicable) may be considered when determining the amount that is authorized.

For example, if you attempt a $30.00 transaction when your account has an Available Balance of $20.00, your purchase may be approved for $20.00 instead of the entire transaction being declined.

Other Electronic Transactions

In addition to transactions initiated by using your U.S. Bank Debit Card, there are other electronic banking transactions that you may arrange through your account. These include:

- Telephone/personal computer activated transfers of funds from your accounts with us to other accounts with us or to third parties. These include but are not limited to transfers made by telephone, text, online and mobile banking.
- Automatic transfer of funds between checking and savings accounts.
- Automatic periodic payments to third parties or us from checking or savings accounts (for example, monthly mortgage payments, installment loan payments, insurance payments, utility payments).
- Direct deposit to checking or savings accounts (for example, payroll checks, social security payments).
- Electronic check conversions from your checking account using a blank, partial or fully completed personal check at merchant locations.
- Payments made to your account through your U.S. Bank Debit Card.
- You can also use any of your U.S. Bank Debit Cards to obtain a cash advance from your checking account at any Visa® member bank anywhere in the world.

LIMITS ON TRANSFERS

The terms of your deposit account may restrict the number of withdrawals you may make from your account each month. Restrictions described earlier in this brochure and in other disclosures and agreements you received at the time your account was opened or when additional products or services were accessed, will also apply to your electronic withdrawals and electronic payments unless specified otherwise.

New Accounts

Generally, you cannot make deposits at a non-U.S. Bank ATM. If we permit a deposit at an ATM that is not identified as ours with the U.S. Bank name, your deposit will not be available until the fifth business day after the day of deposit.

Security

For security reasons, there are limitations on the transactions that you may perform with any of your U.S. Bank Debit Cards or U.S. Bank ATM Cards per day. There are limitations on the number of transactions that can be performed per day and the limits may vary. For security reasons we do not disclose these limits. There are limitations on the dollar amount of cash withdrawals at ATMs and/or cash that you receive from merchants over the amount of your purchase. There are also limitations on the total dollar amount of purchases at merchants and/or cash advances at Visa® member banks you may perform during each 24-hour period beginning at 4:30 p.m. Central Time. Our standard transaction limits for ATM cards are $300.00 per day for cash withdrawals and $1,000.00 per day for purchases. Our standard transaction limits for debit cards are $500.00 per day for cash withdrawals and $1,000.00 per day for purchases and/or cash advances at banks. Our standard transaction limits for receiving money through your U.S. Bank Debit Card are $3,000.00 per transaction and $10,000.00 per day. We may change these limitations based on periodic risk assessments and we reserve the right to make such changes without notice to you. Transfer limits are also subject to temporary reductions to protect the security of customer accounts or transfer systems.

Debit Card Transactions

When you use your U.S. Bank Debit Card (Debit Card) for payment, the merchant requests U.S. Bank to authorize the transaction amount. We rely on the merchant to inform us if a debit card transaction is a one-time or a recurring transaction. At the time of the request, we authorize (promise to pay) or decline the merchant's request. If we authorize (promise to pay) we will reduce your Available Balance by the amount of the merchant's authorization request. Some merchants (e.g., hotels, restaurants, gas stations, car rental agencies) request an authorization that is an estimated amount of the anticipated purchase instead of the full purchase amount. As a result, the reduction of your Available Balance may be less or greater than the final debit card transaction amount presented for payment. It is important to note that your Available Balance may change between the time a debit card transaction is authorized and when the debit card transaction is presented for payment.

Debit card authorizations will be reflected as pending transactions from the time we receive the authorization until the merchant presents the item for payment, a completion message is received, or three business days, whichever occurs first. If the debit card authorization has not been presented for payment after three business days, it will be removed from your pending transactions and your Available Balance will no longer be reduced by the authorization amount. Due to prior authorization (promise to pay), if the debit card transaction is presented for payment at a later date we will pay the item regardless of your Available Balance.

If any debit card transaction results in a negative Available Balance at the time it is presented for payment—even if your Available Balance was positive at the time the debit card transaction was authorized—you may be charged an Overdraft Paid Fee. For more information on Available Balance please see the section titled **INSUFFICIENT FUNDS AND OVERDRAFTS.**

Please know, it is your responsibility to ensure your account has a sufficient Available Balance to cover all transactions you conduct. We recommend keeping a record of your balance and deducting every transaction at the time you initiate it.

FEES

We will charge you fees for electronic fund transfers in accordance with the information found in our *Consumer Pricing Information* brochure. (This brochure can be obtained by contacting a U.S. Bank branch or calling 800.872.2657.) The fees may be changed at any time, subject to our giving you any notice required by law.

ATM Surcharges. When you use an ATM that is not identified as ours with the U.S. Bank name, and the ATM does not participate in the MoneyPass® Network, you may be charged a fee by the ATM operator or any network used to complete the transfer. To find MoneyPass ATM locations, please visit www.moneypass.com.

USING YOUR CARD FOR INTERNATIONAL TRANSACTIONS

You may use your U.S. Bank Debit Card or ATM card for retail purchases with international merchants, for international cash advances and all transactions performed at international ATMs that bear any of the network logos found on your card. Refer to our *Consumer Pricing Information* brochure for fee information. (This brochure can be obtained by contacting a U.S. Bank branch or calling 800.872.2657.) We may block transactions in certain foreign countries. Call us at 800.872.2657 for more information. Some merchant and ATM transactions, even if you and/or the merchant or ATM are located in the United States, are considered international transactions under the applicable network rules, in which case we will add International Processing Fees to those transactions.

U.S. Bank does not control how these merchants, ATMs and transactions are classified for this purpose. If the transaction requires a currency conversion, the exchange rate in effect when processed may differ from the rate in effect on the date of the transaction or the date of the posting to your Account.

Transactions processed through the Visa® system will be converted according to the applicable rules established by Visa®. The foreign currency transaction will be converted to U.S. Dollars by multiplying the amount of the foreign currency times (a) a rate selected by Visa® from the range of rates available in wholesale currency markets for the applicable central processing date, which rate may vary from the rate Visa® itself receives, or (b) the government-mandated rate in effect for the applicable central processing date. For transactions processed through other networks, the international currency transaction will be converted by that network in accordance with their rules.

Additional fees may apply. If you need to contact us about your card while outside of the United States, call us collect at 503.401.9991.

ADVISORY AGAINST ILLEGAL USE

You agree not to use your card(s) for illegal gambling or any other illegal purpose. Display of a payment card logo by, for example, an online merchant does not necessarily mean that transactions are lawful in all jurisdictions in which you may be located; therefore, we reserve the right to decline all online (Internet) gambling transactions.

DOCUMENTATION

Terminal transfers. You can get a receipt at the time you make any transfer to or from your account using automated teller machines or point-of-sale terminals. However, you may not get a receipt if the amount of the transfer is $15.00 or less.

Pre-authorized credits. If you have arranged to have direct deposits made to your account at least once every 60 days from the same person or company, you can call U.S. Bank 24-Hour Banking or visit our online banking site at usbank.com to find out whether or not the deposit has been made.

Periodic statements. You will get a monthly account statement unless there are no transfers in a particular month. In any case, you will get the statement at least quarterly for an account to or from which you have arranged for electronic access. In the event your account has become inactive as defined in the section titled Dormant Accounts and Escheat (refer to page 14) and you have had no electronic activity, you will receive an annual statement.

PREAUTHORIZED PAYMENTS

If you have arranged for automatic periodic payments to be deducted from your checking or savings account and these payments vary in amount, you will be notified by the person you are going to pay ten calendar days prior to the payment date of the amount to be deducted. If the date upon which your payment is scheduled to be deducted changes, the person you are going to pay will notify you seven calendar days prior to the new scheduled date. To confirm the completion of automatic transfers, payments and/or direct deposits, please contact U.S. Bank 24-Hour Banking or visit our online banking site at usbank.com.

Right to Stop Payment of Preauthorized Transfers

To stop a preauthorized electronic payment or transfer, please call U.S. Bank 24-Hour Banking (see last page for phone numbers). You must call in time for us to receive your request and to be able to act upon it, which in the case of these electronic payments, is at least three business days before the transfer is scheduled to occur. We may also require you to put your request in writing and forward it to us within 14 days after you call.

If you order us to stop one of these payments at least 3 business days before the transfer is scheduled, and we do not do so, we will be liable for your losses or damages.

OUR LIABILITY

Liability for failure to make transfers. If we do not complete a transfer to or from your account on time or in the correct amount according to our agreement with you, we will be liable for your losses or damages. However, there are some exceptions. We will not be liable, for instance:

1. If, through no fault of ours, you do not have enough money in your account to make the transfer.
2. If you have an overdraft line and the transfer would go over the credit limit.
3. If the automated teller machine where you are making the transfer does not have enough cash.
4. If the terminal or system was not working properly and you knew about the breakdown when you started the transfer.
5. If circumstances beyond our control (such as fire or flood) prevent the transfer, despite reasonable precautions that we have taken.
6. There may be other rules/limitations stated in our agreement(s) with you that excuse our failure to make a requested transfer (for example, the monthly limit on certain transfers out of non-transaction savings accounts; refer to Savings Accounts, Withdrawal section on page 18 for additional details).

Authorized Transactions

We assume that all transactions performed with your U.S. Bank ATM Card or any of your U.S. Bank Debit Cards and/or your personal identification number (PIN) are authorized unless you promptly notify us to the contrary. If you intentionally provide another person with the means to perform electronic banking transactions using your account, any resulting transactions will be treated as if they were performed and authorized by you. Such treatment will continue until you notify U.S. Bank Fraud Liaison Center (see page 31) that the other person is no longer authorized to use your card and/or PIN (in which case the card and PIN will have to be deactivated).

UNAUTHORIZED TRANSACTIONS AND LOST OR STOLEN CARDS

An unauthorized transaction is one that another person conducts without your permission and from which you receive no benefit.

In order to avoid unauthorized transactions, please observe the following basic precautions:

- Do not keep your U.S. Bank ATM Card or U.S. Bank Debit Card and personal identification number (PIN) together. Do not write your PIN on your card.
- Do not provide your card or reveal your PIN to another person. If you do so, you authorize that person to conduct transactions using your card or PIN. You are liable for that person's transactions until you notify U.S. Bank Fraud Liaison Center (see below) that the person is no longer authorized to use your card or PIN.
- Notify U.S. Bank Fraud Liaison Center or any U.S. Bank branch of the loss, theft or unauthorized use of your card or PIN.
- Notify U.S. Bank Fraud Liaison Center or any U.S. Bank branch if you think an electronic banking transaction is incorrectly reported on a receipt or statement. Failure to promptly notify U.S. Bank Fraud Liaison Center or any U.S. Bank branch of the loss, theft, or unauthorized use of your card or PIN will result in inconvenience to you and will hinder the efficient operation of your account.

U.S. Bank Fraud Liaison Center
877.595.6256

We reserve the right to cancel, block, and not renew your access device for any reason, with or without prior notice. Reasons for suspension of access may include, for example:

- Detection of suspicious or fraudulent activity;
- Lack of usage;
- Misuse; or

- Access devices returned as undeliverable by postal service.

CONSUMER LIABILITY FOR UNAUTHORIZED TRANSFERS

Zero Liability for All Transactions. Except as provided in the next paragraph, you are generally protected from all liability for unauthorized use of any of your U.S. Bank Debit Cards, the associated account numbers printed on them (including purchases made over the phone or online) and your ATM card or its associated personal identification number (PIN). You still need to report the loss or theft of these cards, PINs, and any unauthorized transactions to us as soon as you can. This is necessary so you can get any unauthorized transactions reversed, prevent further unauthorized transactions, and avoid liability for subsequent purchases we could have prevented had you given us notice. This policy also protects you from liability for other types of electronic fund transfers. Please follow the section entitled **Error Resolution Notice** to report any unauthorized activity on your account.

After 60 Days from Statement Notice. If you fail to give us notice of an unauthorized electronic fund transfer within 60 days of when we first deliver a statement to you that discloses that unauthorized transaction, you will be liable for all unauthorized electronic fund transfers that occur after that 60-day period expires if we could have prevented such transaction had you reported it to us within the 60-day period. This rule applies to all forms of electronic fund transfers (including but not limited to ATM transactions, preauthorized withdrawals, Online transactions, and purchases with any of your U.S. Bank Debit Cards, etc.) that occur after the 60-day period following the first statement notice.

If a good reason (such as a long trip or hospital stay) kept you from telling us, we may extend this time period.

MINNESOTA LIABILITY DISCLOSURE

If our records assign your account to a branch located in the State of Minnesota, you may bring a civil action against any person violating the consumer privacy and unauthorized withdrawal provisions of Minnesota Statutes § 47.69, and may recover, in addition to actual damages or $500.00, whichever is greater, punitive damages when applicable, and the court costs and reasonable attorney's fees incurred.

BUSINESS DAYS

Bank "business days" are Monday through Friday. Federal holidays are not included.

CONFIDENTIALITY

We will disclose information to third parties about your account as permitted by law or the transfers you make:

1. where it is necessary for completing transfers; or
2. in order to verify the existence and condition of your account for a third party, such as a credit bureau or merchant; or
3. in order to comply with government agency or court orders; or
4. if you give us your written permission; or
5. according to our privacy pledge, which generally permits us to share information with companies that perform marketing or other services on our behalf.

ERROR RESOLUTION NOTICE

In case of errors or questions about your electronic transfers, call U.S. Bank 24-Hour Banking at a number on the last page, visit any U.S. Bank branch or write us at the address listed below, as soon as you can, if you think your statement or receipt is wrong or if you need more information about a transfer listed on the statement or receipt. We must hear from you no later than 60 days after we sent the FIRST statement on which the problem or error appeared.

1. Tell us your name and account number (if any).
2. Describe the error or the transfer you are unsure about and explain as clearly as you can why you believe it is an error or why you need more information.
3. Tell us the dollar amount of the suspected error.

If you tell us orally, we may require that you send us your dispute or question in writing within ten business days. We will determine whether an error occurred within ten business days after we hear from you and will correct any error promptly. If we need more time, however, we may take up to 45 days to investigate your dispute or question. If we decide to do this, we will credit your account within ten business days for the amount you think is in error, so that you will have the use of the money during the time it takes us to complete our investigation. If we ask you to put your dispute or question in writing and we do not receive it within ten business days, we might not provisionally credit your account.

For errors involving new accounts, point-of-sale, or foreign-initiated transactions, we may take up to 90 days to investigate your dispute or question. For new accounts, we may take up to 20 business days to credit your account for the amount you think is in error.

We will tell you the results within three business days after completing our investigation. If we decide that there was no error, we will send you a written explanation.

You may ask for copies of the documents that we used in our investigation. Write to us at:

U.S. Bank
EP-MN-WS5D
60 Livingston Ave.
St. Paul, MN 55107

Error resolution and contact information with respect to online banking services is provided in our *Digital Services Agreement.* The online banking site may be accessed by going to the U.S. Bank web site at usbank.com and following the directions to log in to online and mobile banking. More detailed information is available on request.

NOTICE OF ATM/NIGHT DEPOSIT FACILITY USER PRECAUTIONS

As with all financial transactions, please exercise discretion when using an automated teller machine (ATM) or night deposit facility. For your own safety, be careful. The following suggestions may be helpful:

1. Prepare for your transactions at home (for instance, by filling out a deposit slip) to minimize your time at the ATM or night deposit facility.
2. Mark each transaction in your account record, but not while at the ATM or night deposit facility. Always save your ATM receipts. Do not leave them at the ATM or night deposit facility because they may contain important account information.
3. Compare your records with the account statements you receive.
4. Do not lend your ATM card to anyone.
5. Remember, do not leave your card at the ATM. Do not leave any documents at a night deposit facility.
6. Protect the secrecy of your Personal Identification Number (PIN). Protect your ATM card as though it were cash. Don't tell anyone your PIN. Don't give anyone information regarding your ATM card or PIN over the telephone. Never enter your PIN in any ATM that does not look genuine, has been

modified, has a suspicious device attached, or is operating in a suspicious manner. Don't write your PIN where it can be discovered. For example, don't keep a note of your PIN in your wallet or purse.

7. Prevent others from seeing you enter your PIN by using your body to shield their view.
8. If you lose your ATM card or if it is stolen, promptly notify us. You should consult the other disclosures you have received about electronic fund transfers for additional information about what to do if your card is lost or stolen.
9. When you make a transaction, be aware of your surroundings. Look out for suspicious activity near the ATM or night deposit facility, particularly if it is after sunset. At night, be sure that the facility (including the parking area and walkways) is well lighted. Consider having someone accompany you when you use the facility, especially after sunset. If you observe any problem, go to another ATM or night deposit facility.
10. Do not accept assistance from anyone you do not know when using an ATM or night deposit facility.
11. If you notice anything suspicious or if any other problem arises after you have begun an ATM transaction, you may want to cancel the transaction, pocket your card and leave. You might consider using another ATM or coming back later.
12. Do not display your cash; pocket it as soon as the ATM transaction is completed and count the cash later when you are in the safety of your own car, home, or other secure surrounding.
13. At a drive-up facility, make sure all the car doors are locked and all of the windows are rolled up, except the driver's window. Keep the engine running and remain alert to your surroundings.
14. We want the ATM and night deposit facility to be safe and convenient for you. Therefore, please tell us if you know of any problem with a facility. For instance, let us know if a light is not working or there is any damage to a facility. Please report any suspicious activity or crimes to both the operator of the facility and local law enforcement officials immediately.

ELECTRONIC BANKING AGREEMENT FOR BUSINESS CUSTOMERS

This section governs transactions initiated by you or your employees using a U.S. Bank Business Debit Card or ATM Card, or other U.S. Bank card products offered to business customers from time to time by U.S. Bank ("Business Debit Card(s)"). Your use of business debit cards is subject to the fees and terms of your checking and savings accounts as set forth elsewhere in this Agreement and in related brochures and fee schedules, which are available at any branch in your state. Some ATM networks impose an additional transaction fee unrelated to our fees and charges and may be assessed to your account. Other electronic transactions against your account, whether or not initiated or authorized by you will be governed by the specific Agreement between us related to such transactions and/or all applicable rules and regulations governing such transactions, including without limitation, the rules of the National Automated Clearing House Association (NACHA) as may be amended from time to time.

Under NACHA rules we cannot return an unauthorized electronic transaction (ACH debit) unless you notify us no later than 5:00 p.m. Central Time on the business day following the settlement date of the transaction. Otherwise, your sole recourse is to the originator of the transaction.

ACCOUNT ACCESS

Any business debit card or personal identification number (PIN) issued to or selected by you, except sole proprietors who choose to have a sole proprietor business debit card, may access only related business checking or business savings accounts (for example, accounts with the same name or tax identification number). Sole proprietor business debit cards, however, can access up to five checking accounts, five savings accounts, and five line of credit or credit card accounts through Expanded Account Access. Sole proprietor cards may access business and personal accounts. For more information on Expanded Account Access, see the Consumer Electronic Banking Agreement.

Access methods will differ depending on the business debit card selected by you and approved by us. All business debit card services may not be available depending on the access method selected.

LIMITS ON TRANSFERS

The terms of your deposit account may restrict the number of withdrawals you may make from your account each month. Restrictions described on page 26 and in other disclosures and agreements you received at the time your account was opened or when additional products or services were accessed, will also apply to your electronic withdrawals and electronic payments unless specified otherwise.

New Accounts

Generally, you cannot make deposits at a non-U.S. Bank ATM. If we permit a deposit at an ATM that is not identified as ours with the U.S. Bank name, your deposit will not be available until the fifth business day after the day of deposit.

Security

For security reasons, there are limitations on the transactions that you may perform with any of your U.S. Bank Business Debit Cards or U.S. Bank Business ATM Cards, per day. There are limitations on the number of transactions that can be performed per day and the limits may vary. For security reasons we do not disclose these limits. There are limitations on the dollar amount of cash withdrawals at ATMs and/or cash that you receive from merchants over the amount of your purchase. There are also limitations on the total dollar amount of purchases at merchants and/or cash advances at Visa® member banks you may perform during each 24-hour period beginning at 4:30 p.m. Central Time. Our standard transaction limits for business ATM cards are $500.00 per day for cash withdrawals and $2,500.00 per day for purchases. Our standard transaction limits for business debit cards are $500.00 per day for cash withdrawals and $10,000.00 per day for purchases and/or cash advances at banks. Our standard transaction limits for receiving money through your U.S. Bank Debit Card are $3,000.00 per transaction and $10,000.00 per day. We may change these limitations based on periodic risk assessments and we reserve the right to make such changes without notice to you. Transfer limits are also subject to temporary reductions to protect the security of customer accounts or transfer systems.

Debit Card Transactions

When you use your U.S. Bank Business Debit Card (Debit Card) for payment, the merchant requests U.S. Bank to authorize the transaction amount. We rely on the merchant to inform us if a debit card transaction is a one-time or a recurring transaction. At the time of the request, we authorize (promise to pay) or decline the merchant's request. If we authorize (promise to pay) we will reduce your Available Balance by the amount of the merchant's authorization request. Some merchants (e.g., hotels, restaurants, gas stations, car rental agencies) request an authorization that is an estimated amount of the anticipated purchase instead of the full purchase amount. As a result, the reduction of your Available Balance may be less or greater than the final debit card transaction amount presented for payment. It is important to note that your Available Balance may change between the time a debit card transaction is authorized and when the debit card transaction is presented for payment.

Debit card authorizations will be reflected as pending transactions from the time we receive the authorization until the merchant presents the item for payment, a completion message is received, or three business days, whichever occurs first. If the debit card authorization has not been presented for payment after three business days, it will be removed from your pending transactions and your Available Balance will no longer be reduced by the authorization amount. Due to prior authorization (promise to pay), if the debit card transaction is presented for payment at a later date we will pay the item regardless of your Available Balance.

If any debit card transaction results in a negative Available Balance at the time it is presented for payment—even if your Available Balance was positive at the time the debit card transaction was authorized—you may be charged an Overdraft Paid Fee. For more information on Available Balance please see the section titled **INSUFFICIENT FUNDS AND OVERDRAFTS.**

Please know, it is your responsibility to ensure your account has a sufficient Available Balance to cover all transactions you conduct. We recommend keeping a record of your balance and deducting every transaction at the time you initiate it.

Account Access at Automated Teller Machines

You may use any of your Business Debit Cards (except as noted below in **Employee Debit Cards and ATM Cards**) to make the following transactions at ATMs:

- Make cash withdrawals from your checking and savings accounts. Cash denominations vary by ATM.
- Get cash advances from your credit card or line of credit account. (Refer to your cardmember agreement for any cash advance fees and finance charges that may apply.)
- Deposit funds to checking and savings accounts associated with your card. Deposit up to 30 checks and 50 bills in a single transaction. Instant availability for cash deposits if deposited before 6:00 p.m. local time in a non-envelope deposit ATM.
- Transfer funds from your account associated with your card.
- Make payments to credit card or line of credit accounts from a deposit account associated with your card.
- Check the current balance of your linked checking, savings, credit card and line of credit accounts.
- Request a statement showing your most recent deposit account transactions. (Refer to your account fee disclosures regarding any fees for purchasing statements at ATMs.)
- Change your ATM or debit card PIN.
- Make certain charitable contributions from a deposit account associated with your card.

Some of these transactions are not available at all ATMs.

Purchases at Merchants

You may use any of your Business Debit Cards (except as noted below in **Employee Debit Cards and ATM Cards**) to make purchases at Visa® merchants that accept debit cards. You may use any of your business debit cards to make purchases by entering your PIN at participating merchants. You may also get cash from a merchant, if the merchant permits. Purchases made with your card will result in debits to your “primary” checking account. These transactions will be itemized on your monthly statement, including the merchant name, location, the date of purchase and the amount of the purchase.

Employee Debit Cards and ATM Cards

Business debit cards issued to employees only allow ATM deposits at an automated teller machine. They do not allow ATM cash withdrawals. Employee ATM cards do not have purchase access at merchants.

Other Electronic Transactions

In addition to transactions initiated by using your business debit card, there are other electronic banking transactions that you may arrange through your account. These include:

- Telephone/personal computer activated transfers of funds from your accounts with us to other accounts with us or to third parties. These include but are not limited to transfers made by telephone, text, online and mobile banking.
- Automatic transfer of funds between checking and savings accounts.
- Automatic periodic payments to third parties or us from checking or savings accounts (for example, monthly mortgage payments, installment loan payments, insurance payments, utility payments).
- Direct deposit to checking or savings accounts (for example, payroll checks, social security payments).
- Electronic check conversions from your checking account using a blank, partial or fully completed personal check at merchant locations.
- Payments made to your account through your U.S. Bank Debit Card.
- You can also use any of your Business Debit Cards to obtain a cash advance from your checking account at any Visa® member bank anywhere in the world.

FEES

We will charge you fees for electronic fund transfers in accordance with the information found in our *Business Pricing Information* brochure. The fees may be changed at any time, subject to our giving you any notice required by law.

ATM Surcharges. When you use an ATM that is not identified as ours with the U.S. Bank name, and the ATM does not participate in the MoneyPass® Network, you may be charged a fee by the ATM operator or any network used to complete the transfer. To find MoneyPass ATM locations, please visit www.moneypass.com.

USING YOUR CARD FOR INTERNATIONAL TRANSACTIONS

You may use your business debit card for retail purchases with international merchants, for international cash advances and all transactions performed at international ATMs that bear any of the network logos found on your card. Refer to our *Business Pricing Information* brochure for fee information. (This brochure can be obtained by stopping into a U.S. Bank branch. We may block transactions in certain foreign countries. Call us at 800.673.3555 for more information.) Some merchant and ATM transactions, even if you and/or the merchant or ATM are located in the United States, are considered international transactions under the applicable network rules, in which case we will add International Processing Fees to those transactions. U.S. Bank does not control how these merchants, ATMs, and transactions are classified for this purpose. If the transaction requires a currency conversion, the exchange rate in effect when processed may differ from the rate in effect on the date of the transaction or the date of the posting to your Account.

Transactions processed through the Visa® system will be converted according to the applicable rules established by Visa®. The foreign currency transaction will be converted to U.S. Dollars by multiplying the amount of the foreign currency times (a) a rate selected by Visa® from the range of rates available in wholesale currency markets for the applicable central processing date, which rate may vary from the rate Visa® itself receives, or (b) the government-mandated rate in effect for the applicable central processing date. For transactions processed through other networks, the international currency transaction will be converted by that network in accordance with their rules.

Additional fees may apply. If you need to contact us about your card while outside of the United States, call us collect at 503.401.9991.

BALANCE REQUIREMENTS

Transactions using your business debit card will be completed only if sufficient funds are available in the applicable account balance, overdraft protection or other linked credit facility to fully perform the transaction.

UNAUTHORIZED TRANSACTIONS AND LOST OR STOLEN CARDS AND SECURITY

You are solely responsible for maintaining the security of your business debit cards and PINs and their use by you and your employees and other agents. You shall be liable for the acts of your employees and agents related to your business debit cards, including business debit card applications and other service requests. If you provide another person with the means to perform transactions related to your accounts using your business debit card or PIN, any resulting transactions will be treated as if they were performed and authorized by you.

You are generally protected from all liability for unauthorized use of your business debit card.

The U.S. Bank Zero Liability policy is subject to certain conditions. If we determine that the unauthorized transaction was caused by your gross negligence or fraud, the U.S. Bank Zero Liability policy will not apply. You still need to report the loss or theft of these cards, PINs, and any unauthorized transactions to us as soon as you can. This is necessary so you can get any unauthorized transactions reversed, prevent further unauthorized transactions, and avoid liability for subsequent purchases we could have prevented had you given us notice.

You must report an unauthorized debit card transaction to us within a reasonable time, not to exceed 60 days, from the day we send or make your account statement available to you on which an unauthorized transaction is first reported. If you fail to give us notice of an unauthorized debit card transaction within 60 days of when we first deliver a statement to you that discloses that unauthorized transaction, you will be liable for all debit card transactions that occur after that 60-day period expires if we could have prevented such transaction had you reported it to us within the 60-day period.

Please be aware that consumer rights governed by the Electronic Fund Transfer Act do not apply to business accounts and we are not liable to reimburse you for unauthorized or erroneous transactions that may occur on your business account via electronic fund transfer.

If you believe that an erroneous or unauthorized transaction has occurred using your business debit card, or if your card has been lost or stolen, or if you want to cancel a business debit card issued to you or your employee/agent, or if you want to change your PIN, you must immediately telephone us at:

U.S. Bank Fraud Liaison Center
877.595.6256

U.S. Bank 24-Hour Banking	
Cincinnati Metro Area:	513.632.4141
Denver Metro Area:	303.585.8585
Milwaukee Metro Area:	414.765.4636
St. Louis Metro Area:	**314.425.2000**
Minneapolis/St. Paul Metro Area:	**612.USBANKS (872.2657)**
Portland Metro Area:	**503.USBANKS (872.2657)**
All Other Areas:	**800.USBANKS**
Outside the U.S.:	503.401.9991 (call collect)

U.S. Bank Business Service Center	
Monday - Friday:	8:00 a.m. to 8:00 p.m. CT
Saturday:	8:00 a.m. to 6:30 p.m. CT
Minneapolis/St. Paul Metro Area:	651.244.7770
All Other Areas within the U.S.:	800.673.3555
Outside the United States:	503.401.9992

U.S. Bank Fraud Liaison Center
877.595.6256

U.S. Bank accepts relay calls.

usbancorp

2019

ANNUAL REPORT

Building on a position of strength

Fellow shareholders: As a leadership team at U.S. Bancorp, we are proud of our position in the industry. We are one of the largest banks in the United States with global reach through our trust and payments businesses.

We have a diverse mix of profitable businesses. We have a strong culture, an efficient operating platform and healthy customer loyalty scores. We are committed to our communities and being a socially responsible corporate citizen. We are a Fortune® Most Admired Company, one of the Ethisphere® World's Most Ethical Companies®, among Forbes® best banks in America, and recognized in the DiversityInc® Top 50 for our focus on diversity, equity and inclusion. Our financial results continue to lead the industry; at the end of 2019 on a full-year basis, we were among the best in class in return on assets, return on equity and efficiency. We are also one of the highest-rated banks in the world.

It is clear we are doing well, and we are committed to building on this position of strength.

Our focus as we face 2020 is how to retain those attributes and use them as differentiators while recognizing that they, alone, are insufficient in a changing world.

"World's Most Ethical Companies" and "Ethisphere" names and marks are registered trademarks of Ethisphere LLC.

Andy Cecere
Chairman, President and Chief Executive Officer

The evidence of that evolution is all around us. Customer expectations and behaviors are shifting, and how they interact with us is being driven by experiences they have in industries outside our own. The face of retail banking is changing, with a greater focus on digital capabilities and modified footprints; geography is no longer a barrier to forming a relationship. In fact, about 70 percent of all banking transactions now happen digitally — often on devices that did not exist 10 years ago. Further advancements in technology and innovation will only elevate that statistic. As a result, we are actively investing in digital capabilities and real-time payments, and leveraging artificial intelligence, machine learning and data analytics to enhance our ability to serve.

These trends have led to an emergence of non-traditional competition. Companies that have not historically been in banking are entering financial services typically through money movement or payments activities, and they are creating alternatives that are pushing us to innovate and adapt as the industry evolves.

Industry consolidation has also continued, and a decade after the financial crisis, we saw the first large merger of equals in 2019. Sometimes overlooked, however, is the shift in merger and acquisition activity away from solely geographic plays. Now, more than ever, the emphasis is on partnerships and finding ways to acquire capabilities banks traditionally have not had to meet the changing demands of consumers.

We are addressing these realities via our approach to our long-term strategy. We are leveraging our strengths (our financial and risk disciplines, culture, commitment to the community and dedication to customers) and transforming to grow. We understand that what made us successful in the past will not necessarily enable us to succeed in the years to come — and that while we want to excel in the short term, we are playing the long game.

For the past year, we have focused our energy on defending our core, by modernizing our approaches in the consumer, wealth and commercial spaces and leveraging our scale as a global company to digitally transform our offerings. We have invested significantly in our payments business, knowing that the future of banking is deeply rooted in revolutionizing money movement today.

We worked to embed additional strategic focus in our organization, taking a more holistic look at our entire operation and using our strategy to advise how we allocate capital and give top-down financial guidance. We exited non-core businesses, and we continued to enhance our risk management processes to ensure sustainability and build nimble but clear discipline in more agile areas of our company.

We also focused on balance: making decisions that allowed us to optimize our business while freeing up capital to reinvest in important areas. We are looking at all our consumer markets, for instance, and determining what mix of physical and digital assets we need to serve customers, while reconsidering what a branch should look like, how big it should be, and how it should be staffed.

Make no mistake: there is a role for branches in today's banking world, but they have a different function, expectation and experience to offer.

Along those lines, we began looking at expansion beyond our existing footprint through a branch lite strategy that emphasizes digital enablement and brand impact as cornerstones of the customer relationship. In October, we opened our first retail branch under this new approach in Charlotte, North Carolina because of the large employee and customer base we already had in-market. We will expand in Charlotte and bring this format to other cities that meet our strategic objectives as we refine the model.

Among the more significant achievements in the past year has been our approach to digital. We created a new Chief Digital Office to oversee our transformation. This team has introduced us to terms like "above the glass" and "below the glass," developed a successful test-and-learn model and pushed us to innovate more rapidly than we ever have before. More than 215 banking activities can now be done on a do-it-yourself basis through our digital consumer app, and we are focused on providing as much opportunity as customers want for these accommodations as their expectations continue to change. We believe we can both strengthen relationships and deliver products and services more effectively by enhancing our digital capabilities.

We took strategic approaches to evolve our operations more broadly, as well. We are now employing an agile methodology

that allows us to responsibly but quickly move from concept to reality for products and services, as well as modeling experiences. With our "Experience Studios," as we call them, we can create — from a customer's point of view and with their involvement — things that used to take years to build in just a matter of weeks. Through this methodology, which is common in the technology space, we have created and launched an entirely re-concepted and redesigned mobile app, a new instant decisioning process for mortgage, a solution for quicker small business lending, and more.

At the same time, we are bringing new focus and attention to our culture and talent processes and experiences, investing in our human resources function and shifting investment to digital workforce management, programs to attract and retain the talent of the future, and more deliberate culture development and championship. We are preparing our team for the roles we will need, including the introduction of upskilling and reskilling opportunities that help people gain new skills as their jobs evolve or train for roles that have yet to be created. Ultimately, our work is all about people, and we will need to blend the best of what our employees can do with the best of what our technology can deliver to serve customers.

Moving forward, we will place a concerted focus on what the future of U.S. Bancorp looks like, how the enterprise strategy is directly aligned with and incorporated into our business line strategies, and how we can leverage economies of size and scale to accelerate our growth.

Through all of this, we are building on the trust that has been placed in us, and we are successfully executing our company strategy that will position us for future success. We will offer a great place to work to our employees, provide unmatched experience to our customers, develop strong partnerships with our communities, and create value for our shareholders.

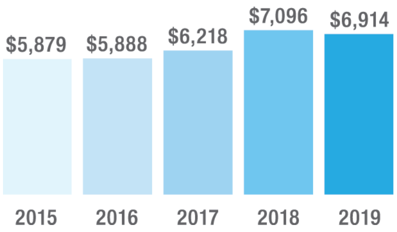
It is our privilege to share our success with you.

Sincerely,

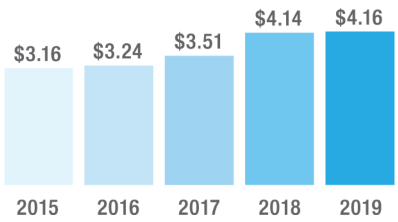
Andy Cecere
Chairman, President and
Chief Executive Officer
U.S. Bancorp
February 20, 2020

Financial highlights

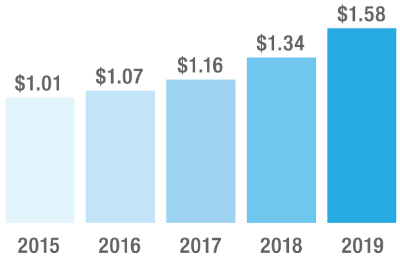
Net Income Attributable to U.S. Bancorp (in millions)



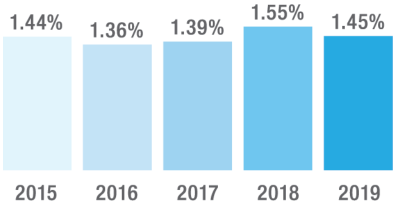
Diluted Earnings per Common Share



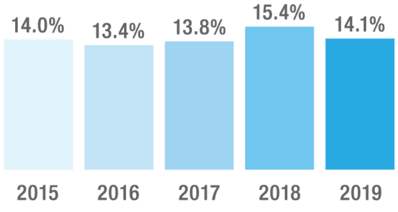
Dividends Declared per Common Share



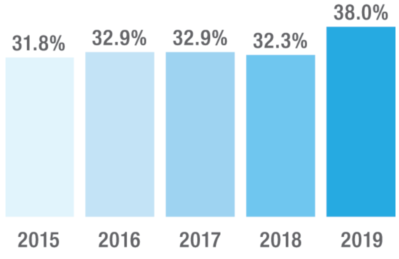
Return on Average Assets



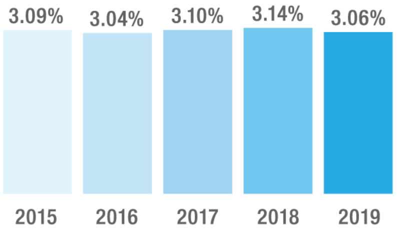
Return on Average Common Equity



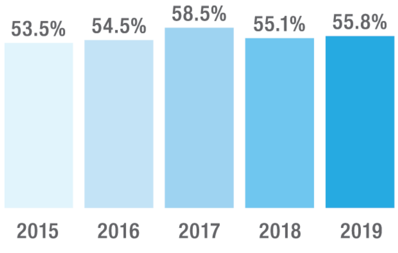
Dividend Payout Ratio



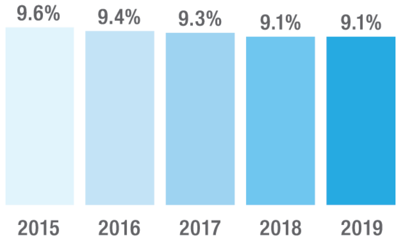
Net Interest Margin (a)



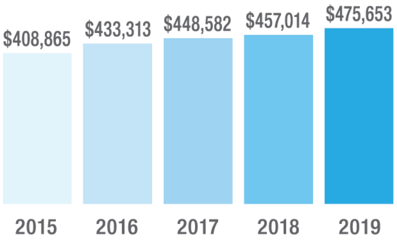
Efficiency Ratio (b)



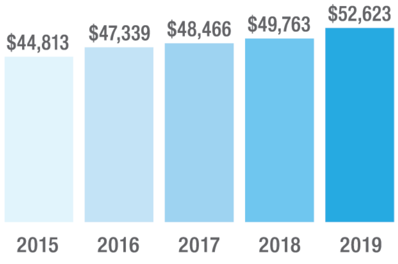
Common Equity Tier 1 Capital (c)



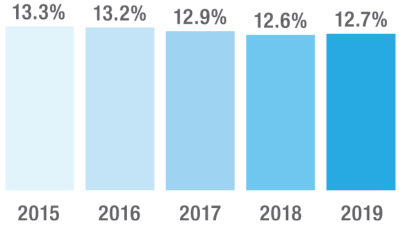
Average Assets (in millions)



Average U.S. Bancorp Shareholders' Equity (in millions)



Total Risk-Based Capital (c)



(a) Taxable-equivalent basis based on federal income tax rates of 21 percent for 2019 and 2018 and 35 percent for 2017, 2016, and 2015, for those assets and liabilities whose income or expense is not included for federal income tax purposes.

(b) See Non-GAAP Financial Measures beginning on page 62.

(c) Calculated under the Basel III standardized approach.

Financial summary

Year Ended December 31 (Dollars and Shares in Millions, Except Per Share Data)	2019	2018	2017	2019 v 2018	2018 v 2017
Net interest income	$13,052	$12,919	$12,380	1.0%	4.4%
Taxable-equivalent adjustment[a]	103	116	205	(11.2)	(43.4)
Net interest income (taxable-equivalent basis)[b]	13,155	13,035	12,585	.9	3.6
Noninterest income	9,831	9,602	9,317	2.4	3.1
Total net revenue	22,986	22,637	21,902	1.5	3.4
Noninterest expense	12,785	12,464	12,790	2.6	(2.5)
Provision for credit losses	1,504	1,379	1,390	9.1	(.8)
Income taxes and taxable-equivalent adjustment	1,751	1,670	1,469	4.9	13.7
Net income	6,946	7,124	6,253	(2.5)	13.9
Net (income) loss attributable to noncontrolling interests	(32)	(28)	(35)	(14.3)	20.0
Net income attributable to U.S. Bancorp	$6,914	$7,096	$6,218	(2.6)	14.1
Net income applicable to U.S. Bancorp common shareholders	$6,583	$6,784	$5,913	(3.0)	14.7
Per Common Share					
Earnings per share	$4.16	$4.15	$3.53	.2%	17.6%
Diluted earnings per share	4.16	4.14	3.51	.5	17.9
Dividends declared per share	1.58	1.34	1.16	17.9	15.5
Book value per share[c]	29.90	28.01	26.34	6.7	6.3
Market value per share	59.29	45.70	53.58	29.7	(14.7)
Average common shares outstanding	1,581	1,634	1,677	(3.2)	(2.6)
Average diluted common shares outstanding	1,583	1,638	1,683	(3.4)	(2.7)
Financial Ratios					
Return on average assets	1.45%	1.55%	1.39%		
Return on average common equity	14.1	15.4	13.8		
Net interest margin (taxable-equivalent basis)[a]	3.06	3.14	3.10		
Efficiency ratio[b]	55.8	55.1	58.5		
Average Balances					
Loans	$290,686	$280,701	$276,537	3.6%	1.5%
Investment securities[d]	117,150	113,940	111,820	2.8	1.9
Earning assets	430,537	415,067	406,421	3.7	2.1
Assets	475,653	457,014	448,582	4.1	1.9
Deposits	346,812	333,462	333,514	4.0	--
Total U.S. Bancorp shareholders' equity	52,623	49,763	48,466	5.7	2.7
Period End Balances					
Loans	$296,102	$286,810	$280,432	3.2%	2.3%
Allowance for credit losses	4,491	4,441	4,417	1.1	.5
Investment securities	122,613	112,165	112,499	9.3	(.3)
Assets	495,426	467,374	462,040	6.0	1.2
Deposits	361,916	345,475	347,215	4.8	(.5)
Total U.S. Bancorp shareholders' equity	51,853	51,029	49,040	1.6	4.1
Capital Ratios					
Basel III standardized approach:					
Common equity tier 1 capital	9.1%	9.1%	9.3%		
Tier 1 capital	10.7	10.7	10.8		
Total risk-based capital	12.7	12.6	12.9		
Leverage	8.8	9.0	8.9		
Tangible common equity to tangible assets[b]	7.5	7.8	7.6		
Tangible common equity to risk-weighted assets[b]	9.3	9.4	9.4		

(a) Based on federal income tax rate of 21 percent for 2019 and 2018 and 35 percent for 2017, for those assets and liabilities whose income or expense is not included for federal income tax purposes.
(b) See Non-GAAP Financial Measures beginning on page 62.
(c) Calculated as U.S. Bancorp common shareholders' equity divided by common shares outstanding at end of the period.
(d) Excludes unrealized gains and losses on available-for-sale investment securities and any premiums or discounts recorded related to the transfer of investment securities at fair value from available-for-sale to held-to-maturity.

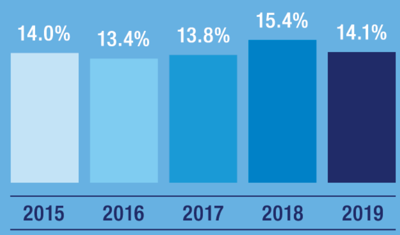
A position of strength

We’re taking what makes us great — from our culture to our financial discipline — and using that position of strength and our strategy to shape our future as business, customer and employee demands change.

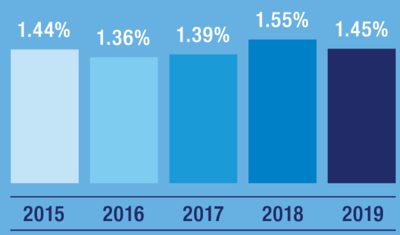
Long history of industry-leading returns and financial discipline.

Our track record of industry-leading returns and efficiency for the last 10 years and the highest debt ratings across the globe proves our strength and longevity. Our excellence in finance and credit risk management gives us a solid foundation on which we continue to build.

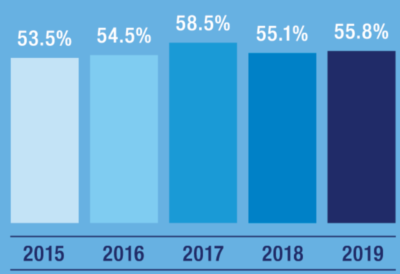
Return on Average Common Equity



Return on Average Assets



Efficiency Ratio*



*See Non-GAAP Financial Measures beginning on page 62.

A strong business model

Our diverse business mix is key to our ongoing success. Our blend of fee- and non-fee businesses sets us apart by enabling us to deliver consistently in any environment.

Consumer and Business Banking

Products and services:
Branches; 24-hour customer centers; mobile banking; online banking; mortgages; consumer lending; ATM and debit processing; workplace banking; student banking

Payment Services

Products and services:
Credit, debit, gift and prepaid cards; payment processing; treasury management

Wealth Management and Investment Services

Products and services:
Wealth planning, investments, trust services and private banking; specialty asset management; custody solutions; global fund services; corporate and institutional trust services

Corporate & Commercial Banking

Products and services:
Lending, equipment finance and small-ticket leasing; correspondent banking; depository services; capital markets; international trade

U.S. Bank leaders at the U.S. Bank Women of Europe Conference in 2019.

A strong reputation

Our culture, brand and reputation are sources of competitive advantage for U.S. Bank and differentiate us from our peers.

Inclusion at U.S. Bank:

- HRC named us a "Best Place to Work" for LGBTQ Equality
- We signed the CEO Champions for Change pledge, a commitment to advance women
- Nearly 26,000 employees engaged through our Business Resource Groups
- We invested $1 million in the Smithsonian's National Museum of African American History and Culture

Our culture is grounded in five core values, starting with doing the right thing. Our commitment to operating with ethics and integrity and our focus on building trust are in everything we do, and we're recognized for that work through accolades from organizations like The Ethisphere® Institute, Fortune,® Forbes® and DiversityInc®.

Our brand stands tall on national and international stages as we work to help people turn their dreams into reality. Our brand value — the financial significance a brand carries — grew by 55% in the last three years[1] in response to our efforts to build brand awareness and strategically market ourselves.

Our community giving and engagement program is focused on closing gaps and creating economic opportunities in the areas of work, home and play. We drive social impact by working with and through our partners, including the nonprofit leaders of our Community Advisory Committee, who provide perspective and feedback from underserved communities. Read more about our commitment to be a responsible corporate citizen within our communities at **usbank.com/CSR2019**.

Our strength in these areas lets us hire and retain top talent, become more central to our customers' financial lives, partner with our communities and drive top line growth.

1. Brand Finance, brandfinance.com.

A strong strategy

Our growth strategy guides us in identifying what differentiates us now and what will set us apart in the future.

The attributes that make us great allow for a strategy that's flexible for the future, performs for our stakeholders in any environment and is steadfast to who we are at our core.

The most trusted choice

Doing the right thing is in the DNA of our culture, and we work hard to earn the privilege of trust and the opportunity to deepen it. We grow by investing in and staying true to our ethical culture, risk and financial discipline and our commitment to keeping customers safe and secure.

Driving one U.S. Bank

More than 70,000 of us work together with a common purpose — to harness the power of U.S. Bank for the good of each of our millions of customers. The continued evolution of our employee experience ensures they have the tools, knowledge and collaboration to be central to the financial lives of our customers. This work is showcased in the creation of personalized, meaningful experiences and strategies for consumer, business, corporate and commercial customers.

Striving for simplicity

We created a nimble and agile environment that makes it easier for customers to do business with us. We're optimizing everything from business line processes to vendor management efforts to deliver strong results.

Creating the future now

We're readying ourselves to meet changing customer expectations today and in the future by optimizing resources, adding skills and leveraging technology and innovation.

Simplicity at work:

Our U.S. Bank eBill Service speeds up payments by giving our business customers and their clients simple and secure ways for payments.

Building on success

Our success is long-established and we're securing the capabilities we need to execute on our strategy to deliver today and in the future.

Changing the experience

As customer expectations and the banking industry change, we work to serve our customers when, where and how they prefer. We're making banking easier and faster at physical locations and through digital solutions.

As we look at new markets, we're taking a digital-forward approach to expansion and reinvestment.

North Carolina expansion

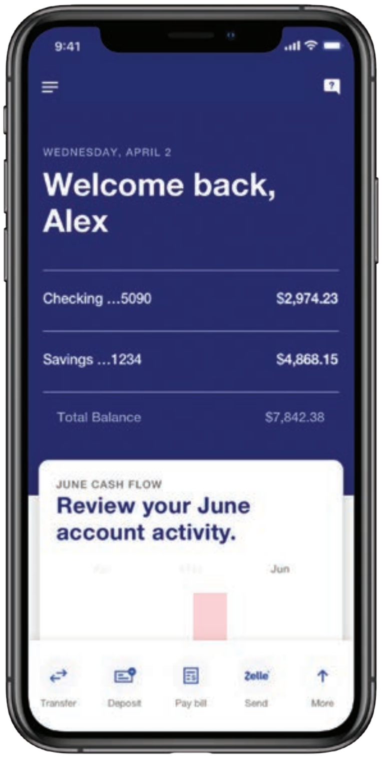
In the fall of 2019, we expanded our consumer retail banking presence to a new state by opening a branch in Charlotte, North Carolina. Charlotte already is home to 800 employees — including senior leaders — across mortgage, investment services, and corporate and commercial banking.

In addition to our entry into North Carolina, we're reinvesting in existing core markets, an effort that will result in approximately 60-80 new, relocated or redesigned branches by the end of 2020. We're also exploring new markets for our consumer retail banking services in locations where we already have a high concentration of employees and mortgage, auto and credit card customers.

Our "Made in Charlotte" food truck teamed up with local businesses throughout the week of the grand opening. Nearly 3,000 people stopped by to chat with U.S. Bank ambassadors, enjoy a complimentary lunch and visit the newest bank in town.

Transforming the way we work

The power of One U.S. Bank comes to life in how we work together to improve efficiency. We had 23 Experience Studio teams in play at the end of 2019. These cross functional teams produce better results in a fraction of the time.



Once we launch a product, the studios use ongoing employee and customer feedback to quickly adjust deliverables and make banking smarter, faster and easier. We're expanding this new, more agile way of doing business and plan to scale it further across the company by the end of 2020.

In addition to our tech teams, other key experts necessary to bring a deliverable to market — like design, finance, ethics, risk, and customer service — are at the table so the work happens concurrently rather than consecutively, bringing ideas to reality more quickly and true to our U.S. Bank brand and culture of trust.

In 2019, the studios produced our new U.S. Bank® Mobile App and online near-instant decisions for mortgages and home equity lines of credit among many other transformative results for customers and employees.

The rebuilt app provides real-time dashboards, bilingual options, easy person-to-person money movement, and has delivered nearly 600 million personalized insights to customers — and we're adding new features all the time. It combines our strengths in collaboration and customer centrality with a new, transformative way of working. Shaped by our experts and real-time input of 5,000 customers, we created it in just nine months.

Our world continues to evolve faster than ever — to remain competitive, we're developing new, innovative ways to meet and exceed our customers' and employees' expectations.

The U.S. Bank® Mobile App provides:

- Personalized insights
- Real-time dashboards
- Bilingual options
- Person-to-person money movement
- Regular updates and improvements

Enhancing capabilities

Customer expectations have blurred the lines of industry. People assume they'll have the same experience when moving their money as they do ordering a pizza or sharing a photo.

To make sure we always provide an experience that customers expect and trust, we're building out the tools and talent we need to grow. The days of expansion by geography alone are gone — in a digital world, capabilities are the new physical assets.

Expanding tools

We announced the acquisition of companies like talech and U.K.-based Sage Pay to elevate our software and payments processing capabilities. U.S. Bank always has excelled at money movement, and now we will be excellent at digital money movement.

Developing talent

We're working to recruit and keep top talent. We want to be as strong in digital as we are in finance and risk management, so we created a chief digital officer role reporting to the CEO, which reflects our belief in the importance of this work.

We also built out our employee experience and customer experience teams to deliver value to both stakeholder groups to further cultivate relationships with them.

Leveraging data

Data is on every consumer's mind. As a central part of their lives, our customers know that we have a wealth of data. It's our imperative to be safe and responsible in our use of it as we distill the data down to insights that help our customers live their best financial lives.

We built a force of more than 300 employees to protect and analyze data to benefit the customer and to create a smarter, faster, easier banking experience.

Improving skills

We continually evaluate the skills we need to grow and how best to cultivate them. When building or acquiring a skill is not prudent, we find unique opportunities to create smart partnerships to make banking even better for our customers.

We play an important part of the fintech ecosystem. We've teamed up with several fintech companies to enhance our payments and tech capabilities. We also participate in Plug and Play, a biannual program that connects the world's largest financial institutions with cutting-edge startups.

Investing in the future

Executing our strategy will deliver new digital products and features to our customers at the speed and quality they expect. We're investing now to increase customer satisfaction, help our customers use digital channels to bank any time or place, and increase interactions that support growth.

Data science

Being a central part of our customers' financial lives means we manage a tremendous amount of data and assume the responsibility for the ethical use of it. We're focused on strategic decisions through centralized data and analytics and we've built a dedicated team of experienced professionals to distill and protect that data to benefit our customers in meaningful ways.

We're investing to personalize a customer's interaction with us by using their own data. By leveraging that data with artificial intelligence and machine learning to generate real-time insights, we'll build new and further cultivate existing relationships with our millions of customers by anticipating their needs.

Money movement

In a world that's becoming increasingly cashless, our experts in Payment Services continue to lead the field in advancing money movement. As consumer preferences change, we're helping our business customers make the shift to streamline their operations and best serve their clients.

Whether it's helping a company move from paper checks to real-time payments, helping a nonprofit generate donations on the street with card payments, or creating simplicity in person-to-person payments — we're invested in engineering money movement solutions.

Digital strategy

With billions of customer interactions each year, we know great digital experiences are critical to the overall health of our customer relationships. And the importance and frequency of these digital interactions with customers will only increase.

We'll deepen our relationship with customers as we roll out new, best-in-class, hyper-personalized digital features. We're working at speed and scale to build capabilities and tools that allow customers to use our insights to manage their money both independently and in a shared experience with a banker.

In 2019, a newly formed digital team created a strategic digital growth plan — a guiding star for our digital transformation. We're focused on and developing initiatives designed to yield significant return, increase engagement and deepen relationships with our millions of digital customers.

The Royal British Legion's annual Poppy Appeal used 1,100 of our cashless terminals along with our employee volunteers to collect funds for the United Kingdom's Armed Forces in a "tap to donate" campaign in the fall of 2019.

Environmental sustainability

Environmental sustainability is integral to the success of our business and important for our future. That's why, since 2008, we have invested more than $22 billion in environmentally beneficial business opportunities. We embrace a balanced approach centered on learning and partnering with our stakeholders as we address climate change and the needs of our communities, customers, employees and shareholders.

U.S. Bank is a national leader in financing renewable energy, financing about 15% of all solar installations in the United States each year via tax equity financing, which makes communities more environmentally sustainable, and builds economic resiliency through access to affordable energy and the promotion of job growth.

Throughout 2019, we provided $1.2 billion to help finance the development of 2.2 gigawatts of solar power across the country. These projects supported roughly 18,000 construction jobs and will provide enough solar energy to power over 340,000 homes each year. The carbon offset of these investments is equal to removing 522,000 passenger vehicles from the road or planting three million acres of forest.

Environmental sensitivity is an important component, which is integrated into our overall risk management philosophy. We have an ongoing partnership with Ceres, a nonprofit whose mission is to integrate sustainability into capital markets, that helps us improve our understanding of how our work supports and advances the recommendations from the Task Force on Climate-Related Financial Disclosures (TCFD). We're dedicated to operating in a more sustainable manner. Under a 2014 baseline, we set a goal to reduce our operational greenhouse gas (GHG) emissions by 40% by 2029 and 60% by 2044. As of year-end 2018, we have reduced our emissions by 28% and are continuing to follow sustainable principles in the design of our new facilities with plans to maintain this focus in the future.

Investments bring benefits to environment, communities

One of our continued efforts in environmental sustainability resulted in a major milestone: financing more than 10 gigawatts of solar installations. Since 2008, the U.S. Bancorp Community Development Corporation (USBCDC) has invested more than $11 billion in Renewable Energy Tax Credits in solar installation projects to achieve the 10-gigawatt milestone.

Solar installation projects are not only good for the environment, they also create jobs for local communities. The 10 gigawatts of solar installations are spread throughout communities across the country and have direct impact on job and overall economic growth. In South Carolina, we participated in the financing of the state's first utility-sponsored community solar program, providing solar options for those who have historically lacked access including renters and low-to-moderate income individuals. Near Rosamond, California, we worked with one of the nation's top renewable energy providers by financing one of the largest solar facilities in its fleet, a 150 megawatt solar farm comprising of more than 477,000 solar panels extending over 1,100 acres of land. In Washington D.C., we are investing in a project with a nonprofit that's installing solar on commercial rooftops and donating the electricity credits to low-income households.

As a result of direct, indirect and induced impacts — from construction jobs to build the projects to workers grabbing lunch at local restaurants — the 10 gigawatts of solar installations we helped finance suggests an overall economic impact of $50 billion.

Extended partnership with GRID Alternatives

We continue to support GRID Alternatives, a national leader in making clean, affordable solar power and solar jobs accessible to low-income communities and communities of color. GRID plans to install up to 1.2 megawatts of solar power on over 60 low-income tribal homes and community buildings for tribal partners in Arizona, California, Colorado, New Mexico, North Dakota, South Dakota and Washington in the coming year. Additionally, the extended partnership allowed GRID to provide hands-on solar training for up to 100 tribal members.

We also worked with the American Indian College Fund to award scholarships to students pursuing post-secondary degrees in fields of study that lead to careers in solar energy. The college fund supports higher education attainment, career readiness services, hands-on training, and job placement for these scholars, thereby supporting environmental sustainability and energy sovereignty for tribal communities.

Community investments

Our unified giving and engagement strategy, Community Possible, focuses on closing gaps between people and possibility in the areas of Work, Home and Play. We believe the building blocks of all thriving communities where all things are possible include: stable employment opportunities, a home to call your own, and a community connected through culture, arts, recreation and play.

Our 2019 investments include:

$60M

In grants and contributions to nonprofit organizations

$10M

Donated through our employee giving campaign

$4.1B

Loaned and invested to revitalize communities

$22B

Invested in environmentally beneficial business since 2008

#1

In our annual engagement survey, our employees rated diversity and inclusion highest of all the dimensions

A-

Received a score of A- from CDP (formerly Carbon Disclosure Project)

150,000

Individuals educated in financial matters

334,000

Hours of employee volunteer time

Learn more at usbank.com/community.

Managing Committee

Andrew Cecere
Chairman, President and Chief Executive Officer

Ismat Aziz
Senior Executive Vice President and Chief Human Resources Officer

James L. Chosy
Senior Executive Vice President and General Counsel

Terrance R. Dolan
Vice Chair and Chief Financial Officer

Leslie V. Godridge
Vice Chair, Corporate & Commercial Banking (Retiring June 30, 2020)

Gunjan Kedia
Vice Chair, Wealth Management and Investment Services

James B. Kelligrew
Vice Chair, Corporate & Commercial Banking

Shailesh M. Kotwal
Vice Chair, Payment Services

Katherine B. Quinn
Vice Chair and Chief Administrative Officer

Jodi L. Richard
Vice Chair and Chief Risk Officer

Mark G. Runkel
Senior Executive Vice President and Chief Credit Officer

Jeffry H. von Gillern
Vice Chair, Technology and Operations Services

Timothy A. Welsh
Vice Chair, Consumer and Business Banking

Derek J. White
Vice Chair and Chief Digital Officer

Board of Directors

Andrew Cecere
Chairman, President and Chief Executive Officer

Warner L. Baxter
Chairman, President and Chief Executive Officer, Ameren Corporation

Dorothy Bridges
Former Senior Vice President, Federal Reserve Bank of Minneapolis

Elizabeth L. Buse
Former Chief Executive Officer, Monitise PLC

Marc N. Casper
President and Chief Executive Officer, Thermo Fisher Scientific Inc.

Arthur D. Collins, Jr.*
Retired Chairman and Chief Executive Officer, Medtronic, Inc.

Kimberly J. Harris
Retired President and Chief Executive Officer, Puget Energy, Inc.

Roland A. Hernandez
Founding Principal and Chief Executive Officer, Hernandez Media Ventures

Doreen Woo Ho*
Commissioner, San Francisco Port Commission

Olivia F. Kirtley
Business Consultant (Incoming Lead Director)

Karen S. Lynch
Executive Vice President, CVS Health Corporation

Richard P. McKenney
President and Chief Executive Officer, Unum Group

Yusuf Mehdi
Corporate Vice President, Microsoft Corporation

David B. O'Maley*
Retired Chairman, President and Chief Executive Officer, Ohio National Mutual Holdings, Inc. (Lead Director)

O'dell M. Owens, M.D., M.P.H.*
President and Chief Executive Officer, Interact for Health

Craig D. Schnuck*
Former Chairman and Chief Executive Officer, Schnuck Markets, Inc.

John P. Wiehoff
Chairman and Retired Chief Executive Officer, C.H. Robinson Worldwide, Inc.

Scott W. Wine
Chairman and Chief Executive Officer, Polaris Industries Inc.

* These directors will not be standing for re-election at our 2020 Annual Meeting of Shareholders.

About us

U.S. Bancorp, with more than 70,000 employees and $495 billion in assets as of December 31, 2019, is the parent company of U.S. Bank, the fifth-largest commercial bank in the United States.

Founded in 1863, U.S. Bank is committed to serving its millions of retail, business, wealth management, payment, corporate, commercial and investment services customers around the world as a trusted financial partner.

2019 supplier diversity

At U.S. Bank, we support diverse suppliers. A diverse supplier is a company at least 51 percent owned, controlled and managed by one or more women, veterans, disabled veterans, LGBTQ individuals or members of an ethnic minority group.

- More than **$560+ million** spent with certified diverse suppliers and growing
- **294** certified diverse supplier relationships

Revenue mix by business line

40% Consumer and Business Banking

29% Payment Services

17% Corporate & Commercial Banking

14% Wealth Management and Investment Services

4Q 2019 taxable-equivalent basis

Business line revenue percentages exclude Treasury and Corporate Support

Our strategic pillars

Our strategy is how we will grow; it comes to life by activating our pillars.

- Being the Most Trusted Choice
- Driving One U.S. Bank
- Striving for Simplicity
- Creating the Future Now

800.USBANKS / usbank.com

The following pages discuss in detail the financial results we achieved in 2019 — results that reflect how we are creating the future now.

The following information appears in accordance with the Private Securities Litigation Reform Act of 1995:

This report contains forward-looking statements about U.S. Bancorp. Statements that are not historical or current facts, including statements about beliefs and expectations, are forward-looking statements and are based on the information available to, and assumptions and estimates made by, management as of the date hereof. These forward-looking statements cover, among other things, anticipated future revenue and expenses and the future plans and prospects of U.S. Bancorp. Forward-looking statements involve inherent risks and uncertainties, and important factors could cause actual results to differ materially from those anticipated. Deterioration in general business and economic conditions or turbulence in domestic or global financial markets could adversely affect U.S. Bancorp's revenues and the values of its assets and liabilities, reduce the availability of funding to certain financial institutions, lead to a tightening of credit, and increase stock price volatility. In addition, changes to statutes, regulations, or regulatory policies or practices could affect U.S. Bancorp in substantial and unpredictable ways. U.S. Bancorp's results could also be adversely affected by changes in interest rates; deterioration in the credit quality of its loan portfolios or in the value of the collateral securing those loans; deterioration in the value of its investment securities; legal and regulatory developments; litigation; increased competition from both banks and non-banks; changes in the level of tariffs and other trade policies of the United States and its global trading partners; changes in customer behavior and preferences; breaches in data security; failures to safeguard personal information; effects of mergers and acquisitions and related integration; effects of critical accounting policies and judgments; and management's ability to effectively manage credit risk, market risk, operational risk, compliance risk, strategic risk, interest rate risk, liquidity risk and reputation risk.

Additional factors could cause actual results to differ from expectations, including the risks discussed in the "Corporate Risk Profile" section on pages 36–56 and the "Risk Factors" section on pages 146–156 of this report. In addition, factors other than these risks also could adversely affect U.S. Bancorp's results, and the reader should not consider these risks to be a complete set of all potential risks or uncertainties. Forward-looking statements speak only as of the date hereof, and U.S. Bancorp undertakes no obligation to update them in light of new information or future events.

Management's Discussion and Analysis

Overview

In 2019, U.S. Bancorp and its subsidiaries (the "Company") continued to demonstrate its financial strength and shareholder focus. Despite a challenging interest rate environment, the Company had record net revenue and diluted earnings per share, while continuing to invest in digital capabilities and key business initiatives to drive growth and improve efficiencies in the future.

The Company earned $6.9 billion in 2019, a decrease of $182 million (2.6 percent) from 2018, reflecting higher noninterest expense, partially offset by net revenue growth. Net interest income increased as a result of loan growth and higher yields on the reinvestment of securities, partially offset by the impact of a flatter yield curve and changes in deposit and funding mix. Noninterest income increased due to growth in mortgage banking revenue, payment services revenue, trust and investment management fees, and commercial products revenue, partially offset by a decrease in deposit service charges. The Company's continued focus on controlling expenses allowed it to achieve an industry-leading efficiency ratio of 55.8 percent in 2019. In addition, the Company's return on average assets and return on average common equity were 1.45 percent and 14.1 percent, respectively.

The Company remains deeply committed to value creation for shareholders. During 2019, the Company increased its dividend rate per common share by 13.5 percent and expanded its common share repurchase program, resulting in the Company returning $7.0 billion of its earnings to common shareholders through dividends and common share repurchases during the year. This expanded capital distribution reflects the Company's ability to prudently manage capital as it responds to changes in the regulatory landscape, while continuing to invest for the future.

The Company's common equity tier 1 to risk-weighted assets ratio using the Basel III standardized approach was 9.1 percent at December 31, 2019. Refer to Table 23 for a summary of the statutory capital ratios in effect for the Company at December 31, 2019 and 2018. Further, credit rating organizations rate the Company's debt among the highest of any bank in the world. This comparative financial strength provides the Company with favorable funding costs, strong liquidity and the ability to attract new customers.

In 2019, average loans increased $10.0 billion (3.6 percent) over 2018, reflecting higher demand for loans from new and existing customers. Loan growth included increases in residential mortgages, commercial loans, credit card loans and other retail loans. These increases were partially offset by a decrease in commercial real estate loans, due to new originations being more than offset by customers paying down balances over the past year and prudent credit underwriting, given the later stage of the business cycle.

The Company's provision for credit losses in 2019 increased $125 million (9.1 percent) over 2018 and was $50 million higher than net charge-offs in 2019, compared with $25 million higher than net charge-offs in 2018. The increases in the provision and allowance for credit losses during 2019 reflected loan portfolio growth.

The Company's strong 2019 financial results and momentum in its lending and fee businesses position it well for 2020. The Company's focus on value creation supported continued customer acquisition and deepening of existing relationships across the franchise, which in turn drove strong account and volume growth in its fee businesses and strong loan and deposit growth in its banking businesses. The Company remains committed to delivering best-in-class products and services and in 2020 will continue to enhance its digital capabilities aimed at improving the customer experience and making it simpler and more productive to do business with.

TABLE 1 Selected Financial Data

Year Ended December 31 (Dollars and Shares in Millions, Except Per Share Data)	2019	2018	2017	2016	2015
Condensed Income Statement					
Net interest income	$ 13,052	$ 12,919	$ 12,380	$ 11,666	$ 11,151
Taxable-equivalent adjustment(a)	103	116	205	203	213
Net interest income (taxable-equivalent basis)(b)	13,155	13,035	12,585	11,869	11,364
Noninterest income	9,758	9,572	9,260	9,268	8,818
Securities gains (losses), net	73	30	57	22	—
Total net revenue	22,986	22,637	21,902	21,159	20,182
Noninterest expense	12,785	12,464	12,790	11,527	10,807
Provision for credit losses	1,504	1,379	1,390	1,324	1,132
Income before taxes	8,697	8,794	7,722	8,308	8,243
Income taxes and taxable-equivalent adjustment	1,751	1,670	1,469	2,364	2,310
Net income	6,946	7,124	6,253	5,944	5,933
Net (income) loss attributable to noncontrolling interests	(32)	(28)	(35)	(56)	(54)
Net income attributable to U.S. Bancorp	$ 6,914	$ 7,096	$ 6,218	$ 5,888	$ 5,879
Net income applicable to U.S. Bancorp common shareholders	$ 6,583	$ 6,784	$ 5,913	$ 5,589	$ 5,608
Per Common Share					
Earnings per share	$ 4.16	$ 4.15	$ 3.53	$ 3.25	$ 3.18
Diluted earnings per share	4.16	4.14	3.51	3.24	3.16
Dividends declared per share	1.58	1.34	1.16	1.07	1.01
Book value per share(c)	29.90	28.01	26.34	24.63	23.28
Market value per share	59.29	45.70	53.58	51.37	42.67
Average common shares outstanding	1,581	1,634	1,677	1,718	1,764
Average diluted common shares outstanding	1,583	1,638	1,683	1,724	1,772
Financial Ratios					
Return on average assets	1.45%	1.55%	1.39%	1.36%	1.44%
Return on average common equity	14.1	15.4	13.8	13.4	14.0
Net interest margin (taxable-equivalent basis)(a)	3.06	3.14	3.10	3.04	3.09
Efficiency ratio(b)	55.8	55.1	58.5	54.5	53.5
Net charge-offs as a percent of average loans outstanding	.50	.48	.48	.47	.47
Average Balances					
Loans	$290,686	$280,701	$276,537	$267,811	$250,459
Loans held for sale	3,769	3,230	3,574	4,181	5,784
Investment securities(d)	117,150	113,940	111,820	107,922	103,161
Earning assets	430,537	415,067	406,421	389,877	367,445
Assets	475,653	457,014	448,582	433,313	408,865
Noninterest-bearing deposits	73,863	78,196	81,933	81,176	79,203
Deposits	346,812	333,462	333,514	312,810	287,151
Short-term borrowings	18,137	21,790	15,022	19,906	27,960
Long-term debt	41,572	37,450	35,601	36,220	33,566
Total U.S. Bancorp shareholders' equity	52,623	49,763	48,466	47,339	44,813
Period End Balances					
Loans	$296,102	$286,810	$280,432	$273,207	$260,849
Investment securities	122,613	112,165	112,499	109,275	105,587
Assets	495,426	467,374	462,040	445,964	421,853
Deposits	361,916	345,475	347,215	334,590	300,400
Long-term debt	40,167	41,340	32,259	33,323	32,078
Total U.S. Bancorp shareholders' equity	51,853	51,029	49,040	47,298	46,131
Asset Quality					
Nonperforming assets	$ 829	$ 989	$ 1,200	$ 1,603	$ 1,523
Allowance for credit losses	4,491	4,441	4,417	4,357	4,306
Allowance for credit losses as a percentage of period-end loans	1.52%	1.55%	1.58%	1.59%	1.65%
Capital Ratios					
Basel III standardized approach:					
Common equity tier 1 capital	9.1%	9.1%	9.3%	9.4%	9.6%
Tier 1 capital	10.7	10.7	10.8	11.0	11.3
Total risk-based capital	12.7	12.6	12.9	13.2	13.3
Leverage	8.8	9.0	8.9	9.0	9.5
Tangible common equity to tangible assets(b)	7.5	7.8	7.6	7.5	7.6
Tangible common equity to risk-weighted assets(b)	9.3	9.4	9.4	9.2	9.2

(a) Based on federal income tax rates of 21 percent for 2019 and 2018 and 35 percent for 2017, 2016 and 2015, for those assets and liabilities whose income or expense is not included for federal income tax purposes.

(b) See Non-GAAP Financial Measures beginning on page 62.

(c) Calculated as U.S. Bancorp common shareholders' equity divided by common shares outstanding at end of the period.

(d) Excludes unrealized gains and losses on available-for-sale investment securities and any premiums or discounts recorded related to the transfer of investment securities at fair value from available-for-sale to held-to-maturity.

Results for 2018 Compared With 2017 For discussion related to changes in financial condition and results of operations for 2018 compared with 2017, refer to “Management’s Discussion and Analysis” in the Company’s Annual Report on Form 10-K for the year ended December 31, 2018, which was filed with the Securities and Exchange Commission on February 21, 2019.

Earnings Summary The Company reported net income attributable to U.S. Bancorp of $6.9 billion in 2019, or $4.16 per diluted common share, compared with $7.1 billion, or $4.14 per diluted common share, in 2018. Return on average assets and return on average common equity were 1.45 percent and 14.1 percent, respectively, in 2019, compared with 1.55 percent and 15.4 percent, respectively, in 2018. The results for 2019 included the impact of restructuring charges including severance and certain asset impairments, and an increased derivative liability related to Visa shares previously sold by the Company. Combined, these items decreased 2019 diluted earnings per common share by $0.17.

Total net revenue for 2019 was $349 million (1.5 percent) higher than 2018, reflecting a 1.0 percent increase in net interest income (0.9 percent on a taxable-equivalent basis), and a 2.4 percent increase in noninterest income. The increase in net interest income from the prior year was mainly a result of loan growth and higher yields on the reinvestment of securities, partially offset by the impact of a flatter yield curve and changes in deposit and funding mix. The increase in noninterest income was primarily driven by growth in mortgage banking revenue, payment services revenue, trust and investment management fees, and commercial products revenue, partially offset by a decrease in deposit service charges, driven by the sale of the Company’s ATM third-party processing business in late 2018.

Noninterest expense in 2019 was $321 million (2.6 percent) higher than 2018, primarily due to an increase in personnel expense, reflecting the impact of hiring to support business growth and higher fee revenue production in mortgage activities, and higher technology and communications expense and net occupancy and equipment expense, both in support of business growth. Partially offsetting these increases was lower other noninterest expense driven by lower Federal Deposit Insurance Corporation (“FDIC”) assessment costs.

Statement of Income Analysis

Net Interest Income Net interest income, on a taxable-equivalent basis, was $13.2 billion in 2019, compared with $13.0 billion in 2018. The $120 million (0.9 percent) increase in net interest income, on a taxable-equivalent basis, in 2019 compared with 2018, was principally driven by earning assets growth and higher yields on reinvestment of securities, partially offset by declining interest rates and a flatter yield curve, as well as changes in deposit and funding mix. Average earning assets were $15.5 billion (3.7 percent) higher in 2019, compared with 2018, driven by increases in loans, investment securities and other earning assets. The net interest margin, on a taxable-equivalent basis, in 2019 was 3.06 percent, compared with 3.14 percent in 2018. The decrease in the net interest margin in 2019, compared with 2018, was primarily due to the impacts of changes in the yield curve in addition to changes in deposit and funding mix. Refer to the “Interest Rate Risk Management” section for further information on the sensitivity of the Company’s net interest income to changes in interest rates.

Average total loans were $290.7 billion in 2019, compared with $280.7 billion in 2018. The $10.0 billion (3.6 percent) increase was driven by growth in residential mortgages, commercial loans, credit card loans and other retail loans, partially offset by a decrease in commercial real estate loans and the fourth quarter of 2018 sale of the majority of the Company’s loans covered by FDIC loss-sharing agreements. Subsequent to the sale in the fourth quarter of 2018, any remaining covered loan balances were reclassified to their respective portfolio category. Average residential mortgages increased $5.9 billion (9.5 percent) as origination activity more than offset customers paying down balances. The $4.3 billion (4.4 percent) increase in average commercial loans was driven by higher demand for loans from new and existing customers. Average credit card balances increased $1.6 billion (7.6 percent) due to new and existing customer growth. The $910 million (1.6 percent) increase in average other retail loans was primarily due to higher installment, auto and retail leasing loans, partially offset by decreases in home equity loans and revolving credit balances. Average commercial real estate loans decreased $591 million (1.5 percent) in 2019, compared with 2018, due to new originations being more than offset by customers paying down balances and prudent credit underwriting, given the later stage of the business cycle.

TABLE 2 Analysis of Net Interest Income[(a)]

Year Ended December 31 (Dollars in Millions)	2019	2018	2017	2019 v 2018	2018 v 2017
Components of Net Interest Income					
Income on earning assets (taxable-equivalent basis)	$ 17,607	$ 16,298	$ 14,559	$ 1,309	$ 1,739
Expense on interest-bearing liabilities (taxable-equivalent basis)	4,452	3,263	1,974	1,189	1,289
Net interest income (taxable-equivalent basis)[(b)]	$ 13,155	$ 13,035	$ 12,585	$ 120	$ 450
Net interest income, as reported	$ 13,052	$ 12,919	$ 12,380	$ 133	$ 539
Average Yields and Rates Paid					
Earning assets yield (taxable-equivalent basis)	4.09%	3.93%	3.58%	.16%	.35%
Rate paid on interest-bearing liabilities (taxable-equivalent basis)	1.34	1.04	.65	.30	.39
Gross interest margin (taxable-equivalent basis)	2.75%	2.89%	2.93%	(.14)%	(.04)%
Net interest margin (taxable-equivalent basis)	3.06%	3.14%	3.10%	(.08)%	.04%
Average Balances					
Investment securities[(c)]	$117,150	$113,940	$111,820	$ 3,210	$ 2,120
Loans	290,686	280,701	276,537	9,985	4,164
Earning assets	430,537	415,067	406,421	15,470	8,646
Noninterest-bearing deposits	73,863	78,196	81,933	(4,333)	(3,737)
Interest-bearing deposits	272,949	255,266	251,581	17,683	3,685
Total deposits	346,812	333,462	333,514	13,350	(52)
Interest-bearing liabilities	332,658	314,506	302,204	18,152	12,302

(a) Interest and rates are presented on a fully taxable-equivalent basis based on federal income tax rates of 21 percent for 2019 and 2018, and 35 percent for 2017.

(b) See Non-GAAP Financial Measures beginning on page 62.

(c) Excludes unrealized gains and losses on available-for-sale investment securities and any premiums or discounts recorded related to the transfer of investment securities at fair value from available-for-sale to held-to-maturity.

Average investment securities in 2019 were $3.2 billion (2.8 percent) higher than in 2018, primarily due to purchases of mortgage-backed securities, net of prepayments and maturities.

Average total deposits for 2019 were $13.4 billion (4.0 percent) higher than 2018. Average total savings deposits for 2019 were $11.9 billion (5.5 percent) higher than 2018, driven by increases in Wealth Management and Investment Services, Corporate and Commercial Banking, and Consumer and Business Banking balances. Average time deposits for 2019 were $5.8 billion (14.9 percent) higher than 2018. The increase was primarily related to those deposits managed as an alternative to other funding sources, based largely on relative pricing and liquidity characteristics, in addition to the migration of consumer customer deposit balances to higher yielding products. Average noninterest-bearing deposits were $4.3 billion (5.5 percent) lower in 2019, compared with 2018, primarily due to the migration of balances to interest-bearing deposits and the continued deployment by customers of business deposits within Corporate and Commercial Banking.

TABLE 3 Net Interest Income — Changes Due to Rate and Volume(a)

Year Ended December 31 (Dollars in Millions)	2019 v 2018 Volume	2019 v 2018 Yield/Rate	2019 v 2018 Total	2018 v 2017 Volume	2018 v 2017 Yield/Rate	2018 v 2017 Total
Increase (decrease) in						
Interest Income						
Investment securities	$ 75	$ 201	$ 276	$ 44	$ 302	$ 346
Loans held for sale	28	(31)	(3)	(14)	35	21
Loans						
Commercial	167	267	434	96	568	664
Commercial real estate	(28)	66	38	(89)	182	93
Residential mortgages	224	54	278	115	71	186
Credit card	192	(57)	135	86	101	187
Other retail	40	176	216	30	164	194
Covered loans	(134)	—	(134)	(65)	24	(41)
Total loans	461	506	967	173	1,110	1,283
Other earning assets	27	42	69	34	55	89
Total earning assets	591	718	1,309	237	1,502	1,739
Interest Expense						
Interest-bearing deposits						
Interest checking	5	72	77	3	63	66
Money market savings	86	473	559	(29)	463	434
Savings accounts	2	53	55	1	23	24
Time deposits	87	208	295	41	263	304
Total interest-bearing deposits	180	806	986	16	812	828
Short-term borrowings	(65)	48	(17)	68	170	238
Long-term debt	111	109	220	41	182	223
Total interest-bearing liabilities	226	963	1,189	125	1,164	1,289
Increase (decrease) in net interest income	$ 365	$(245)	$ 120	$112	$ 338	$ 450

(a) This table shows the components of the change in net interest income by volume and rate on a taxable-equivalent basis based on federal income tax rates of 21 percent for 2019 and 2018, and 35 percent for 2017. This table does not take into account the level of noninterest-bearing funding, nor does it fully reflect changes in the mix of assets and liabilities. The change in interest not solely due to changes in volume or rates has been allocated on a pro-rata basis to volume and yield/rate.

Provision for Credit Losses The provision for credit losses reflects changes in the size and credit quality of the entire portfolio of loans. The Company maintains an allowance for credit losses considered appropriate by management for probable and estimable losses, based on factors discussed in the "Analysis and Determination of Allowance for Credit Losses" section.

In 2019, the provision for credit losses was $1.5 billion, compared with $1.4 billion in 2018. The provision for credit losses was higher than net charge-offs by $50 million and $25 million in 2019 and 2018, respectively. The increase in the allowance for credit losses during 2019 reflected loan portfolio growth. Net charge-offs increased $100 million (7.4 percent) in 2019, compared with 2018, primarily due to higher credit card, commercial and commercial real estate loan net charge-offs, partially offset by lower residential mortgage loan net charge-offs. Nonperforming assets decreased $160 million (16.2 percent) from December 31, 2018 to December 31, 2019, primarily driven by improvements in nonperforming residential mortgages, commercial real estate loans, other retail loans, and other real estate owned ("OREO").

Refer to "Corporate Risk Profile" for further information on the provision for credit losses, net charge-offs, nonperforming assets and other factors considered by the Company in assessing the credit quality of the loan portfolio and establishing the allowance for credit losses.

TABLE 4 Noninterest Income

Year Ended December 31 (Dollars in Millions)	2019	2018	2017	2019 v 2018	2018 v 2017
Credit and debit card revenue	$1,413	$1,401	$1,289	.9%	8.7%
Corporate payment products revenue	664	644	575	3.1	12.0
Merchant processing services	1,601	1,531	1,486	4.6	3.0
Trust and investment management fees	1,673	1,619	1,522	3.3	6.4
Deposit service charges	909	1,070	1,035	(15.0)	3.4
Treasury management fees	578	594	618	(2.7)	(3.9)
Commercial products revenue	934	895	954	4.4	(6.2)
Mortgage banking revenue	874	720	834	21.4	(13.7)
Investment products fees	186	188	173	(1.1)	8.7
Securities gains (losses), net	73	30	57	*	(47.4)
Other	926	910	774	1.8	17.6
Total noninterest income	$9,831	$9,602	$9,317	2.4%	3.1%

* *Not meaningful.*

Noninterest Income Noninterest income in 2019 was $9.8 billion, compared with $9.6 billion in 2018. The $229 million (2.4 percent) increase in 2019 over 2018 reflected growth in mortgage banking revenue, payment services revenue, trust and investment management fees, commercial products revenue and other noninterest income, partially offset by a decline in deposit service charges. Mortgage banking revenue increased 21.4 percent in 2019, compared with 2018, driven by higher mortgage production and gain on sale margins, partially offset by changes in mortgage servicing rights ("MSRs") valuations, net of hedging activities. Payment services revenue was higher in 2019, compared with 2018, due to a 0.9 percent increase in credit and debit card revenue, a 3.1 percent increase in corporate payment products revenue and a 4.6 percent increase in merchant processing services revenue, all driven by higher sales volumes. Trust and investment management fees increased 3.3 percent due to business growth and favorable market conditions. Commercial products revenue increased 4.4 percent primarily due to higher corporate bond fees and trading revenue related to stronger capital markets activities. Other noninterest income increased 1.8 percent in 2019, compared with 2018, primarily due to higher transition services agreement revenue associated with the sale of the Company's ATM third-party servicing business in 2018, a 2019 gain on the sale of a loan portfolio and higher equity investment income, partially offset by a 2019 charge of $140 million for an increased derivative liability related to Visa shares previously sold by the Company and the 2018 net impact of the $340 million gain recorded from the sale of the ATM third-party servicing business and $264 million of asset impairment charges related to the sale of a majority of the Company's covered loans and certain other assets. The change in value of the derivative liability related to the Visa shares reflected judgement as to the estimated resolution date of the Visa litigation discussed in Note 22 of the Notes to Consolidated Financial Statements. Deposit service charges decreased 15.0 percent in 2019, compared with 2018, primarily due to the ATM third-party servicing business sale.

TABLE 5 Noninterest Expense

Year Ended December 31 (Dollars in Millions)	2019	2018	2017	2019 v 2018	2018 v 2017
Compensation	$ 6,325	$ 6,162	$ 5,746	2.6%	7.2%
Employee benefits	1,286	1,231	1,134	4.5	8.6
Net occupancy and equipment	1,123	1,063	1,019	5.6	4.3
Professional services	454	407	419	11.5	(2.9)
Marketing and business development	426	429	542	(.7)	(20.8)
Technology and communications	1,095	978	903	12.0	8.3
Postage, printing and supplies	290	324	323	(10.5)	.3
Other intangibles	168	161	175	4.3	(8.0)
Other	1,618	1,709	2,529	(5.3)	(32.4)
Total noninterest expense	$12,785	$12,464	$12,790	2.6%	(2.5)%
Efficiency ratio[(a)]	55.8%	55.1%	58.5%		

(a) See Non-GAAP Financial Measures beginning on page 62.

Noninterest Expense Noninterest expense in 2019 was $12.8 billion, compared with $12.5 billion in 2018. The Company's efficiency ratio was 55.8 percent in 2019, compared with 55.1 percent in 2018. The $321 million (2.6 percent) increase in noninterest expense in 2019 over 2018 reflected higher personnel expense, technology and communications expense, net occupancy and equipment expense, and professional services expense, partially offset by lower other noninterest expense. Compensation expense increased 2.6 percent in 2019 over 2018, principally due to the impact of hiring to support business growth, merit increases and higher variable compensation related to business production within mortgage banking, while employee benefits expense increased 4.5 percent primarily due to increased medical costs. Technology and communications expense increased 12.0 percent and net occupancy and equipment expense increased 5.6 percent, primarily to support business growth. Professional services expense increased 11.5 percent primarily due to business investments and enhancements to risk management programs. Other noninterest expense decreased 5.3 percent in 2019, compared with 2018, due to lower FDIC assessment costs driven by the elimination of the surcharge in late 2018, and lower costs related to tax-advantaged projects. These decreases in other noninterest expense were partially offset by the net impact of $200 million of severance charges and asset impairment accruals recorded in 2019, and $174 million of severance charges and legal matter accruals recorded in 2018.

Pension Plans Because of the long-term nature of pension plans, the related accounting is complex and can be impacted by several factors, including investment funding policies, accounting methods and actuarial assumptions.

The Company's pension accounting reflects the long-term nature of the benefit obligations and the investment horizon of plan assets. Amounts recorded in the financial statements reflect actuarial assumptions about participant benefits and plan asset returns. Changes in actuarial assumptions and differences in actual plan experience, compared with actuarial assumptions, are deferred and recognized in expense in future periods.

Pension expense is expected to increase by approximately $45 million in 2020 primarily due to a lower discount rate. Because of the complexity of forecasting pension plan activities, the accounting methods utilized for pension plans, the Company's ability to respond to factors affecting the plans and the hypothetical nature of actuarial assumptions, the actual pension expense increase may differ from the expected amount.

Refer to Note 16 of the Notes to the Consolidated Financial Statements for further information on the Company's pension plan funding practices, investment policies and asset allocation strategies, and accounting policies for pension plans.

The following table shows the effect of hypothetical changes in the discount rate and long-term rate of return ("LTROR") on the Company's expected 2020 pension expense:

Discount Rate (Dollars in Millions)	Down 100 Basis Points	Up 100 Basis Points
Incremental benefit (expense)	$ (92)	$ 77
Percent of 2019 net income	(.99)%	.83%
LTROR (Dollars in Millions)	Down 100 Basis Points	Up 100 Basis Points
Incremental benefit (expense)	$ (55)	$ 55
Percent of 2019 net income	(.59)%	.59%

Income Tax Expense The provision for income taxes was $1.6 billion (an effective rate of 19.2 percent) in 2019, compared with $1.6 billion (an effective rate of 17.9 percent) in 2018. In late 2017, tax reform was enacted that, among other provisions, reduced the federal statutory rate for corporations from 35 percent to 21 percent effective in 2018. The Company revalued its deferred tax assets and liabilities at December 31, 2017 resulting in the recording of a deferred tax benefit in the provision for income taxes in 2017. The 2018 provision for income taxes reflected the currently effective statutory rate and the favorable impact of deferred tax assets and liabilities adjustments related to tax reform estimates.

For further information on income taxes, refer to Note 18 of the Notes to Consolidated Financial Statements.

Balance Sheet Analysis

Average earning assets were $430.5 billion in 2019, compared with $415.1 billion in 2018. The increase in average earning assets of $15.4 billion (3.7 percent) was primarily due to increases in loans of $10.0 billion (3.6 percent), investment securities of $3.2 billion (2.8 percent) and other earning assets of $1.7 billion (10.1 percent).

For average balance information, refer to Consolidated Daily Average Balance Sheet and Related Yields and Rates on pages 144 and 145.

Loans The Company's loan portfolio was $296.1 billion at December 31, 2019, compared with $286.8 billion at December 31, 2018, an increase of $9.3 billion (3.2 percent). The increase was driven by increases in residential mortgages of $5.6 billion (8.5 percent), credit card loans of $1.4 billion (6.1 percent), commercial loans of $1.4 billion (1.4 percent), other retail loans of $688 million (1.2 percent) and commercial real estate loans of $207 million (0.5 percent). Table 6 provides a summary of the loan distribution by product type, while Table 12 provides a summary of the selected loan maturity distribution by loan category. Average total loans increased $10.0 billion (3.6 percent) in 2019, compared with 2018. The increase was due to growth in most loan portfolio categories in 2019.

Commercial Commercial loans, including lease financing, increased $1.4 billion (1.4 percent) at December 31, 2019, compared with December 31, 2018. Average commercial loans increased $4.3 billion (4.4 percent) in 2019, compared with 2018. The growth was primarily driven by higher demand from new and existing customers. Table 7 provides a summary of commercial loans by industry and geographical location.

Commercial Real Estate The Company's portfolio of commercial real estate loans, which includes commercial mortgages and construction and development loans, increased $207 million (0.5 percent) at December 31, 2019, compared with December 31, 2018, primarily the result of new originations, partially offset by customers paying down balances. Average commercial real estate loans decreased $591 million (1.5 percent) in 2019, compared with 2018. Table 8 provides a summary of commercial real estate loans by property type and geographical location.

The Company reclassifies construction loans to the commercial mortgage category if permanent financing criteria are met. In 2019, approximately $493 million of construction loans were reclassified to the commercial mortgage category. At December 31, 2019 and 2018, $101 million and $130 million, respectively, of tax-exempt industrial development loans were secured by real estate. The Company's commercial mortgage and construction and development loans had unfunded commitments of $11.3 billion and $10.3 billion at December 31, 2019 and 2018, respectively.

The Company also finances the operations of real estate developers and other entities with operations related to real estate. These loans are not secured directly by real estate but have similar characteristics to commercial real estate loans. These loans were included in the commercial loan category and totaled $9.5 billion and $9.8 billion at December 31, 2019 and 2018, respectively.

TABLE 6 Loan Portfolio Distribution

At December 31 (Dollars in Millions)	2019 Amount	2019 Percent of Total	2018 Amount	2018 Percent of Total	2017 Amount	2017 Percent of Total	2016 Amount	2016 Percent of Total	2015 Amount	2015 Percent of Total
Commercial										
Commercial	$ 98,168	33.2%	$ 96,849	33.8%	$ 91,958	32.8%	$ 87,928	32.2%	$ 83,116	31.9%
Lease financing	5,695	1.9	5,595	1.9	5,603	2.0	5,458	2.0	5,286	2.0
Total commercial	103,863	35.1	102,444	35.7	97,561	34.8	93,386	34.2	88,402	33.9
Commercial Real Estate										
Commercial mortgages	29,404	9.9	28,596	10.0	29,367	10.5	31,592	11.6	31,773	12.2
Construction and development	10,342	3.5	10,943	3.8	11,096	4.0	11,506	4.2	10,364	3.9
Total commercial real estate	39,746	13.4	39,539	13.8	40,463	14.5	43,098	15.8	42,137	16.1
Residential Mortgages										
Residential mortgages	59,865	20.2	53,034	18.5	46,685	16.6	43,632	16.0	40,425	15.5
Home equity loans, first liens	10,721	3.6	12,000	4.2	13,098	4.7	13,642	5.0	13,071	5.0
Total residential mortgages	70,586	23.8	65,034	22.7	59,783	21.3	57,274	21.0	53,496	20.5
Credit Card	24,789	8.4	23,363	8.1	22,180	7.9	21,749	7.9	21,012	8.1
Other Retail										
Retail leasing	8,490	2.9	8,546	3.0	7,988	2.8	6,316	2.3	5,232	2.0
Home equity and second mortgages	15,036	5.1	16,122	5.6	16,327	5.8	16,369	6.0	16,384	6.3
Revolving credit	2,899	1.0	3,088	1.1	3,183	1.1	3,282	1.2	3,354	1.3
Installment	11,038	3.7	9,676	3.4	8,989	3.2	8,087	3.0	7,030	2.7
Automobile	19,435	6.5	18,719	6.5	18,934	6.8	17,571	6.4	16,587	6.3
Student	220	.1	279	.1	1,903	.7	2,239	.8	2,619	1.0
Total other retail	57,118	19.3	56,430	19.7	57,324	20.4	53,864	19.7	51,206	19.6
Covered Loans	—	—	—	—	3,121	1.1	3,836	1.4	4,596	1.8
Total loans	$296,102	100.0%	$286,810	100.0%	$280,432	100.0%	$273,207	100.0%	$260,849	100.0%

TABLE 7 Commercial Loans by Industry Group and Geography

At December 31 (Dollars in Millions)	2019 Amount	2019 Percent of Total	2018 Amount	2018 Percent of Total
Industry Group				
Manufacturing	$ 14,889	14.3%	$ 15,064	14.7%
Real estate, rental and leasing	12,347	11.9	12,270	12.0
Finance and insurance	11,990	11.5	10,301	10.0
Wholesale trade	8,392	8.1	8,310	8.1
Retail trade	7,674	7.4	8,211	8.0
Healthcare and social assistance	5,229	5.0	5,769	5.6
Transport and storage	4,270	4.1	3,559	3.5
Public administration	4,263	4.1	4,773	4.7
Professional, scientific and technical services	3,928	3.8	3,358	3.3
Information	3,537	3.4	3,576	3.5
Arts, entertainment and recreation	3,239	3.1	4,089	4.0
Educational services	2,774	2.7	3,139	3.1
Utilities	2,134	2.1	2,760	2.7
Mining	2,126	2.0	1,636	1.6
Other services	1,714	1.7	1,691	1.6
Agriculture, forestry, fishing and hunting	1,162	1.1	1,235	1.2
Other	14,195	13.7	12,703	12.4
Total	$103,863	100.0%	$102,444	100.0%
Geography				
California	$ 12,432	12.0%	$ 13,507	13.2%
Colorado	4,025	3.9	4,071	4.0
Illinois	5,482	5.3	5,356	5.2
Minnesota	7,294	7.0	7,832	7.6
Missouri	3,875	3.7	3,274	3.2
Ohio	4,777	4.6	4,913	4.8
Oregon	1,986	1.9	2,135	2.1
Washington	3,910	3.8	3,672	3.6
Wisconsin	3,975	3.8	3,630	3.5
Iowa, Kansas, Nebraska, North Dakota, South Dakota	4,375	4.2	5,094	5.0
Arkansas, Indiana, Kentucky, North Carolina, Tennessee	6,461	6.2	6,439	6.3
Idaho, Montana, Wyoming	1,010	1.0	1,114	1.1
Arizona, Nevada, New Mexico, Utah	4,194	4.0	4,183	4.1
Total banking region	63,796	61.4	65,220	63.7
Florida, Michigan, New York, Pennsylvania, Texas	20,869	20.1	18,031	17.6
All other states	19,198	18.5	19,193	18.7
Total outside Company's banking region	40,067	38.6	37,224	36.3
Total	$103,863	100.0%	$102,444	100.0%

Residential Mortgages Residential mortgages held in the loan portfolio at December 31, 2019, increased $5.6 billion (8.5 percent) over December 31, 2018, as origination activity more than offset the effect of customers paying down balances during 2019. Average residential mortgages increased $5.9 billion (9.5 percent) in 2019, compared with 2018. Residential mortgages originated and placed in the Company's loan portfolio include well-secured jumbo mortgages and branch-originated first lien home equity loans to borrowers with high credit quality.

Credit Card Total credit card loans increased $1.4 billion (6.1 percent) at December 31, 2019, compared with December 31, 2018, reflecting new and existing customer growth during the year. Average credit card balances increased $1.6 billion (7.6 percent) in 2019, compared with 2018.

TABLE 8 Commercial Real Estate Loans by Property Type and Geography

At December 31 (Dollars in Millions)	2019 Amount	2019 Percent of Total	2018 Amount	2018 Percent of Total
Property Type				
Business owner occupied	$ 9,111	22.9%	$ 9,769	24.7%
Commercial property				
Industrial	2,650	6.7	1,695	4.3
Office	5,783	14.5	5,351	13.5
Retail	3,947	9.9	4,150	10.5
Other commercial	3,542	8.9	3,399	8.6
Multi-family	8,260	20.8	8,592	21.7
Hotel/motel	3,154	7.9	3,520	8.9
Residential homebuilders	3,040	7.7	2,764	7.0
Healthcare facilities	259	.7	299	.8
Total	$39,746	100.0%	$39,539	100.0%
Geography				
California	$ 9,980	25.1%	$ 9,784	24.7%
Colorado	1,649	4.1	1,883	4.8
Illinois	1,379	3.5	1,484	3.8
Minnesota	1,927	4.9	1,896	4.8
Missouri	1,114	2.8	1,157	2.9
Ohio	1,235	3.1	1,278	3.2
Oregon	1,735	4.4	1,718	4.4
Washington	3,505	8.8	3,383	8.6
Wisconsin	1,713	4.3	1,892	4.8
Iowa, Kansas, Nebraska, North Dakota, South Dakota	2,049	5.2	2,085	5.3
Arkansas, Indiana, Kentucky, North Carolina, Tennessee	2,828	7.1	2,742	6.9
Idaho, Montana, Wyoming	1,004	2.5	962	2.4
Arizona, Nevada, New Mexico, Utah	3,056	7.7	3,130	7.9
Total banking region	33,174	83.5	33,394	84.5
Florida, Michigan, New York, Pennsylvania, Texas	3,892	9.8	3,613	9.1
All other states	2,680	6.7	2,532	6.4
Total outside Company's banking region	6,572	16.5	6,145	15.5
Total	$39,746	100.0%	$39,539	100.0%

Other Retail Total other retail loans, which include retail leasing, home equity and second mortgages and other retail loans, increased $688 million (1.2 percent) at December 31, 2019, compared with December 31, 2018, reflecting increases in installment loans and auto loans, partially offset by decreases in home equity loans and revolving credit balances. Average other retail loans increased $910 million (1.6 percent) in 2019, compared with 2018. Of the total residential mortgages, credit card and other retail loans outstanding at December 31, 2019, approximately 73.2 percent were to customers located in the Company's primary banking region, compared with 74.0 percent at December 31, 2018. Tables 9, 10 and 11 provide a geographic summary of residential mortgages, credit card loans and other retail loans outstanding, respectively, as of December 31, 2019 and 2018.

TABLE 9 Residential Mortgages by Geography

At December 31 (Dollars in Millions)	2019 Amount	2019 Percent of Total	2018 Amount	2018 Percent of Total
California	$22,945	32.5%	$20,176	31.0%
Colorado	3,864	5.5	3,586	5.5
Illinois	3,488	4.9	3,301	5.1
Minnesota	4,359	6.2	4,322	6.6
Missouri	1,704	2.4	1,710	2.6
Ohio	2,017	2.9	2,062	3.2
Oregon	2,485	3.5	2,427	3.7
Washington	4,075	5.8	3,702	5.7
Wisconsin	1,503	2.1	1,527	2.3
Iowa, Kansas, Nebraska, North Dakota, South Dakota	1,970	2.8	2,055	3.2
Arkansas, Indiana, Kentucky, North Carolina, Tennessee	3,921	5.6	3,804	5.9
Idaho, Montana, Wyoming	1,354	1.9	1,326	2.0
Arizona, Nevada, New Mexico, Utah	5,229	7.4	4,851	7.5
Total banking region	58,914	83.5	54,849	84.3
Florida, Michigan, New York, Pennsylvania, Texas	5,162	7.3	4,744	7.3
All other states	6,510	9.2	5,441	8.4
Total outside Company's banking region	11,672	16.5	10,185	15.7
Total	$70,586	100.0%	$65,034	100.0%

TABLE 10 Credit Card Loans by Geography

At December 31 (Dollars in Millions)	2019 Amount	2019 Percent of Total	2018 Amount	2018 Percent of Total
California	$ 2,550	10.3%	$ 2,399	10.3%
Colorado	854	3.4	808	3.5
Illinois	1,257	5.1	1,176	5.0
Minnesota	1,305	5.3	1,275	5.5
Missouri	787	3.2	758	3.2
Ohio	1,272	5.1	1,215	5.2
Oregon	710	2.9	684	2.9
Washington	903	3.6	877	3.8
Wisconsin	1,043	4.2	1,017	4.3
Iowa, Kansas, Nebraska, North Dakota, South Dakota	1,122	4.5	1,100	4.7
Arkansas, Indiana, Kentucky, North Carolina, Tennessee	2,106	8.5	1,985	8.5
Idaho, Montana, Wyoming	395	1.6	384	1.6
Arizona, Nevada, New Mexico, Utah	1,286	5.2	1,183	5.1
Total banking region	15,590	62.9	14,861	63.6
Florida, Michigan, New York, Pennsylvania, Texas	4,763	19.2	4,440	19.0
All other states	4,436	17.9	4,062	17.4
Total outside Company's banking region	9,199	37.1	8,502	36.4
Total	$24,789	100.0%	$23,363	100.0%

TABLE 11 Other Retail Loans by Geography

At December 31 (Dollars in Millions)	2019 Amount	2019 Percent of Total	2018 Amount	2018 Percent of Total
California	$ 9,596	16.8%	$ 9,826	17.4%
Colorado	2,015	3.5	2,079	3.7
Illinois	2,772	4.8	2,938	5.2
Minnesota	3,147	5.5	3,298	5.8
Missouri	1,820	3.2	1,961	3.5
Ohio	2,594	4.5	2,626	4.7
Oregon	1,530	2.7	1,530	2.7
Washington	1,810	3.2	1,755	3.1
Wisconsin	1,289	2.3	1,350	2.4
Iowa, Kansas, Nebraska, North Dakota, South Dakota	2,320	4.1	2,343	4.2
Arkansas, Indiana, Kentucky, North Carolina, Tennessee	3,927	6.9	3,797	6.7
Idaho, Montana, Wyoming	1,090	1.9	1,043	1.8
Arizona, Nevada, New Mexico, Utah	3,144	5.5	2,976	5.3
Total banking region	37,054	64.9	37,522	66.5
Florida, Michigan, New York, Pennsylvania, Texas	12,564	22.0	11,752	20.8
All other states	7,500	13.1	7,156	12.7
Total outside Company's banking region	20,064	35.1	18,908	33.5
Total	$57,118	100.0%	$56,430	100.0%

TABLE 12 Selected Loan Maturity Distribution

At December 31, 2019 (Dollars in Millions)	One Year or Less	Over One Through Five Years	Over Five Years	Total
Commercial	$40,211	$ 59,926	$ 3,726	$103,863
Commercial real estate	10,322	22,028	7,396	39,746
Residential mortgages	2,490	9,041	59,055	70,586
Credit card	24,789	—	—	24,789
Other retail	10,830	24,741	21,547	57,118
Total loans	$88,642	$115,736	$91,724	$296,102
Total of loans due after one year with				
Predetermined interest rates				$ 97,933
Floating interest rates				$109,527

The Company generally retains portfolio loans through maturity; however, the Company's intent may change over time based upon various factors such as ongoing asset/liability management activities, assessment of product profitability, credit risk, liquidity needs, and capital implications. If the Company's intent or ability to hold an existing portfolio loan changes, it is transferred to loans held for sale.

Loans Held for Sale Loans held for sale, consisting primarily of residential mortgages to be sold in the secondary market, were $5.6 billion at December 31, 2019, compared with $2.1 billion at December 31, 2018. The increase in loans held for sale was principally due to a higher level of mortgage loan closings in late 2019, compared with the same period of 2018, reflecting the impact of declining interest rates. Almost all of the residential mortgage loans the Company originates or purchases for sale follow guidelines that allow the loans to be sold into existing, highly liquid secondary markets; in particular in government agency transactions and to government sponsored enterprises ("GSEs").

TABLE 13 Investment Securities

At December 31 (Dollars in Millions)	2019 Amortized Cost	2019 Fair Value	2019 Weighted-Average Maturity in Years	2019 Weighted-Average Yield[e]	2018 Amortized Cost	2018 Fair Value	2018 Weighted-Average Maturity in Years	2018 Weighted-Average Yield[e]
U.S. Treasury and agencies	$ 19,845	$ 19,839	2.7	1.68%	$ 24,706	$ 24,218	3.0	1.77%
Mortgage-backed securities[a]	95,385	95,564	4.4	2.39	81,464	79,725	5.6	2.60
Asset-backed securities[a]	375	383	3.1	3.09	402	411	3.5	3.69
Obligations of state and political subdivisions[b][c]	6,499	6,814	6.6	4.29	6,842	6,708	10.4	4.35
Other	13	13	.3	2.66	17	17	1.0	3.52
Total investment securities[d]	$122,117	$122,613	4.2	2.38%	$113,431	$111,079	5.3	2.52%

(a) Information related to asset and mortgage-backed securities included above is presented based upon weighted-average maturities that take into account anticipated future prepayments.

(b) Information related to obligations of state and political subdivisions is presented based upon yield to first optional call date if the security is purchased at a premium, and yield to maturity if the security is purchased at par or a discount.

(c) Maturity calculations for obligations of state and political subdivisions are based on the first optional call date for securities with a fair value above par and the contractual maturity date for securities with a fair value equal to or below par.

(d) At December 31, 2019, all investment securities were classified as available-for-sale. At December 31, 2018, total investment securities included held-to-maturity investment securities with a total amortized cost and fair value of $46.0 billion and $45.0 billion, respectively, and available-for-sale investment securities with a total amortized cost and fair value of $67.4 billion and $66.1 billion, respectively. Held-to-maturity investment securities are carried at historical cost, adjusted for amortization of premiums and accretion of discounts. Available-for-sale investment securities are carried at fair value with unrealized net gains or losses reported within accumulated other comprehensive income (loss) in shareholders' equity.

(e) Weighted-average yields for obligations of state and political subdivisions are presented on a fully-taxable equivalent basis based on a federal income tax rate of 21 percent. Yields on investment securities are computed based on amortized cost balances, excluding any premiums or discounts recorded related to the transfer of investment securities at fair value from available-for-sale to held-to-maturity.

Investment Securities The Company uses its investment securities portfolio to manage interest rate risk, provide liquidity (including the ability to meet regulatory requirements), generate interest and dividend income, and as collateral for public deposits and wholesale funding sources. While the Company intends to hold its investment securities indefinitely, it may sell available-for-sale securities in response to structural changes in the balance sheet and related interest rate risk and to meet liquidity requirements, among other factors.

Investment securities totaled $122.6 billion at December 31, 2019, compared with $112.2 billion at December 31, 2018. The $10.4 billion (9.3 percent) increase reflected $8.7 billion of net investment purchases and a $1.8 billion favorable change in net unrealized gains (losses) on available-for-sale investment securities. On December 31, 2019, the Company transferred all $43.6 billion of its held-to-maturity investment securities to the available-for-sale category to reflect its new intent for these securities, as a result of changes to regulatory capital requirements promulgated in 2019.

Average investment securities were $117.2 billion in 2019, compared with $113.9 billion in 2018. The weighted-average yield of the investment securities portfolio was 2.38 percent at December 31, 2019, compared with 2.52 percent at December 31, 2018. The weighted-average maturity of the investment securities portfolio was 4.2 years at December 31, 2019, compared with 5.3 years at December 31, 2018. Investment securities by type are shown in Table 13.

The Company's available-for-sale securities are carried at fair value with changes in fair value reflected in other comprehensive income (loss) unless a security is deemed to be other-than-temporarily impaired. At December 31, 2019, the Company's net unrealized gains on available-for-sale securities were $496 million, compared with $1.3 billion of net unrealized losses at December 31, 2018. The favorable change in net unrealized gains (losses) was primarily due to increases in the fair value of U.S. Treasury, mortgage-backed and state and political securities as a result of changes in interest rates. Gross unrealized losses on available-for-sale securities totaled $448 million at December 31, 2019, compared with $1.4 billion at December 31, 2018. The Company conducts a regular assessment of its investment portfolio to determine whether any securities are other-than-temporarily impaired. When assessing unrealized losses for other-than-temporary impairment, the Company considers the nature of the investment, the financial condition of the issuer, the extent and duration of unrealized losses, expected cash flows of underlying assets and market conditions. At December 31, 2019, the Company had no plans to sell securities with unrealized losses, and believes it is more likely than not that it would not be required to sell such securities before recovery of their amortized cost.

Refer to Notes 4 and 21 in the Notes to Consolidated Financial Statements for further information on investment securities.

TABLE 14 Deposits

The composition of deposits was as follows:

At December 31 (Dollars in Millions)	2019 Amount	2019 Percent of Total	2018 Amount	2018 Percent of Total	2017 Amount	2017 Percent of Total	2016 Amount	2016 Percent of Total	2015 Amount	2015 Percent of Total
Noninterest-bearing deposits	$ 75,590	20.9%	$ 81,811	23.7%	$ 87,557	25.2%	$ 86,097	25.7%	$ 83,766	27.9%
Interest-bearing deposits										
Interest checking	75,949	21.0	73,994	21.4	74,520	21.5	66,298	19.8	59,169	19.7
Money market savings	120,082	33.2	100,396	29.1	107,973	31.1	109,947	32.9	86,159	28.7
Savings accounts	47,401	13.1	44,720	12.9	43,809	12.6	41,783	12.5	38,468	12.8
Total savings deposits	243,432	67.3	219,110	63.4	226,302	65.2	218,028	65.2	183,796	61.2
Time deposits less than $100,000	10,624	2.9	7,422	2.1	7,315	2.1	8,040	2.4	9,050	3.0
Time deposits greater than $100,000										
Domestic	13,077	3.6	19,958	5.8	10,792	3.1	7,230	2.2	7,272	2.4
Foreign	19,193	5.3	17,174	5.0	15,249	4.4	15,195	4.5	16,516	5.5
Total interest-bearing deposits	286,326	79.1	263,664	76.3	259,658	74.8	248,493	74.3	216,634	72.1
Total deposits	$361,916	100.0%	$345,475	100.0%	$347,215	100.0%	$334,590	100.0%	$300,400	100.0%

The maturity of time deposits was as follows:

At December 31, 2019 (Dollars in Millions)	Time Deposits Less Than $100,000	Time Deposits Greater Than $100,000 Domestic	Time Deposits Greater Than $100,000 Foreign	Total
Three months or less	$ 3,807	$ 5,020	$19,158	$27,985
Three months through six months	2,019	2,958	34	5,011
Six months through one year	2,065	2,669	1	4,735
Thereafter	2,733	2,430	—	5,163
Total	$10,624	$13,077	$19,193	$42,894

Deposits Total deposits were $361.9 billion at December 31, 2019, compared with $345.5 billion at December 31, 2018. The $16.4 billion (4.8 percent) increase in total deposits reflected an increase in total savings deposits, partially offset by decreases in noninterest-bearing and time deposits. Average total deposits in 2019 increased $13.4 billion (4.0 percent) over 2018.

Interest-bearing savings deposits increased $24.3 billion (11.1 percent) at December 31, 2019, compared with December 31, 2018. The increase was related to higher money market, savings account and interest checking account deposit balances. Money market deposit balances increased $19.7 billion (19.6 percent), primarily due to higher Wealth Management and Investment Services, and Corporate and Commercial Banking balances. Savings account balances increased $2.7 billion (6.0 percent), primarily due to higher Consumer and Business Banking balances. Interest checking balances increased $2.0 billion (2.6 percent) primarily due to higher Consumer and Business Banking, and Corporate and Commercial Banking balances, partially offset by lower Wealth Management and Investment Services balances. Average interest-bearing savings deposits in 2019 increased $11.9 billion (5.5 percent), compared with 2018, reflecting higher Wealth Management and Investment Services, Corporate and Commercial Banking, and Consumer and Business Banking balances.

Noninterest-bearing deposits at December 31, 2019, decreased $6.2 billion (7.6 percent) from December 31, 2018. Average noninterest-bearing deposits decreased $4.3 billion (5.5 percent) in 2019, compared with 2018. The decreases were primarily due to lower Wealth Management and Investment Services, and Corporate and Commercial Banking balances, resulting primarily from balance migration to interest-bearing deposits and continued deployment of deposits by customers.

Interest-bearing time deposits at December 31, 2019, decreased $1.7 billion (3.7 percent), compared with December 31, 2018. Average time deposits increased $5.8 billion (14.9 percent) in 2019, compared with 2018. The changes were primarily driven by those deposits managed as an alternative to other funding sources, based largely on relative pricing and liquidity characteristics, as well as the migration of consumer customer deposit balances to higher yielding products.

Borrowings The Company utilizes both short-term and long-term borrowings as part of its asset/liability management and funding strategies. Short-term borrowings, which include federal funds purchased, commercial paper, repurchase agreements, borrowings secured by high-grade assets and other short-term borrowings, were $23.7 billion at December 31, 2019, compared with $14.1 billion at December 31, 2018. The $9.6 billion (67.8 percent) increase in short-term borrowings was primarily due to higher commercial paper, federal funds purchased and other short-term borrowings balances, partially offset by lower repurchase agreement balances.

Long-term debt was $40.2 billion at December 31, 2019, compared with $41.3 billion at December 31, 2018. The $1.1 billion (2.8 percent) decrease was primarily due to $8.0 billion of bank note repayments and maturities, and $1.5 billion of medium-term note repayments, partially offset by issuances of \$4.8 billion of bank notes, \$2.7 billion of medium-term notes and \$1.0 billion of subordinated notes.

Refer to Notes 12 and 13 of the Notes to Consolidated Financial Statements for additional information regarding short-term borrowings and long-term debt, and the "Liquidity Risk Management" section for discussion of liquidity management of the Company.

Corporate Risk Profile

Overview Managing risks is an essential part of successfully operating a financial services company. The Company's Board of Directors has approved a risk management framework which establishes governance and risk management requirements for all risk-taking activities. This framework includes Company and business line risk appetite statements which set boundaries for the types and amount of risk that may be undertaken in pursuing business objectives and initiatives. The Board of Directors, primarily through its Risk Management Committee, oversees performance relative to the risk management framework, risk appetite statements, and other policy requirements.

The Executive Risk Committee ("ERC"), which is chaired by the Chief Risk Officer and includes the Chief Executive Officer and other members of the executive management team, oversees execution against the risk management framework and risk appetite statements. The ERC focuses on current and emerging risks, including strategic and reputation risks, by directing timely and comprehensive actions. Senior operating committees have also been established, each responsible for overseeing a specified category of risk.

The Company's most prominent risk exposures are credit, interest rate, market, liquidity, operational, compliance, strategic, and reputation. Credit risk is the risk of not collecting the interest and/or the principal balance of a loan, investment or derivative contract when it is due. Interest rate risk is the potential reduction of net interest income or market valuations as a result of changes in interest rates. Market risk arises from fluctuations in interest rates, foreign exchange rates, and security prices that may result in changes in the values of financial instruments, such as trading and available-for-sale securities, mortgage loans held for sale ("MLHFS"), MSRs and derivatives that are accounted for on a fair value basis. Liquidity risk is the possible inability to fund obligations or new business at a reasonable cost and in a timely manner. Operational risk is the risk of loss arising from inadequate or failed internal processes or systems, people, or adverse external events, including the risk of loss resulting from breaches in data security. Operational risk can also include the risk of loss due to failures by third parties with which the Company does business. Compliance risk is the risk that the Company may suffer legal or regulatory sanctions, material financial loss, or loss to reputation through failure to comply with laws, regulations, rules, standards of good practice, and codes of conduct. Strategic risk is the risk to current or projected financial condition arising from adverse business decisions, poor implementation of business decisions, or lack of responsiveness to changes in the banking industry and operating environment. Reputation risk is the risk to current or anticipated earnings, capital, or franchise or enterprise value arising from negative public opinion. This risk may impair the Company's competitiveness by affecting its ability to establish new customer relationships, offer new services or continue serving existing customer relationships. In addition to the risks identified above, other risk factors exist that may impact the Company. Refer to "Risk Factors" beginning on page 146, for a detailed discussion of these factors.

The Company's Board and management-level governance committees are supported by a "three lines of defense" model for establishing effective checks and balances. The first line of defense, the business lines, manages risks in conformity with established limits and policy requirements. In turn, business line leaders and their risk officers establish programs to ensure conformity with these limits and policy requirements. The second line of defense, which includes the Chief Risk Officer's organization as well as policy and oversight activities of corporate support functions, translates risk appetite and strategy into actionable risk limits and policies. The second line of defense monitors first line of defense conformity with limits and policies, and provides reporting and escalation of emerging risks and other concerns to senior management and the Risk Management Committee of the Board of Directors. The third line of defense, internal audit, is responsible for providing the Audit Committee of the Board of Directors and senior management with independent assessment and assurance regarding the effectiveness of the Company's governance, risk management and control processes.

Management regularly provides reports to the Risk Management Committee of the Board of Directors. The Risk Management Committee discusses with management the Company's risk management performance, and provides a summary of key risks to the entire Board of Directors, covering the status of existing matters, areas of potential future concern and specific information on certain types of loss events. The Risk Management Committee considers quarterly reports by management assessing the Company's performance relative to the risk appetite statements and the associated risk limits, including:

- Macroeconomic environment and other qualitative considerations, such as regulatory and compliance changes, litigation developments, and technology and cybersecurity;
- Credit measures, including adversely rated and nonperforming loans, leveraged transactions, credit concentrations and lending limits;
- Interest rate and market risk, including market value and net income simulation, and trading-related Value at Risk ("VaR");
- Liquidity risk, including funding projections under various stressed scenarios;
- Operational and compliance risk, including losses stemming from events such as fraud, processing errors, control breaches, breaches in data security or adverse business decisions, as well as reporting on technology performance, and various legal and regulatory compliance measures;

– Capital ratios and projections, including regulatory measures and stressed scenarios; and
– Strategic and reputation risk considerations, impacts and responses.

Credit Risk Management The Company's strategy for credit risk management includes well-defined, centralized credit policies, uniform underwriting criteria, and ongoing risk monitoring and review processes for all commercial and consumer credit exposures. The strategy also emphasizes diversification on a geographic, industry and customer level, regular credit examinations and management reviews of loans exhibiting deterioration of credit quality. The Risk Management Committee oversees the Company's credit risk management process.

In addition, credit quality ratings as defined by the Company, are an important part of the Company's overall credit risk management and evaluation of its allowance for credit losses. Loans with a pass rating represent those loans not classified on the Company's rating scale for problem credits, as minimal risk has been identified. Loans with a special mention or classified rating, including loans that are 90 days or more past due and still accruing, nonaccrual loans, those loans considered troubled debt restructurings ("TDRs"), and loans in a junior lien position that are current but are behind a modified or delinquent loan in a first lien position, encompass all loans held by the Company that it considers to have a potential or well-defined weakness that may put full collection of contractual cash flows at risk. The Company's internal credit quality ratings for consumer loans are primarily based on delinquency and nonperforming status, except for a limited population of larger loans within those portfolios that are individually evaluated. For this limited population, the determination of the internal credit quality rating may also consider collateral value and customer cash flows. The Company strives to identify potential problem loans early, record any necessary charge-offs promptly and maintain appropriate allowance levels for probable loan losses. Refer to Notes 1 and 5 in the Notes to Consolidated Financial Statements for further discussion of the Company's loan portfolios including internal credit quality ratings.

The Company categorizes its loan portfolio into two segments, which is the level at which it develops and documents a systematic methodology to determine the allowance for credit losses. The Company's two loan portfolio segments are commercial lending and consumer lending.

The commercial lending segment includes loans and leases made to small business, middle market, large corporate, commercial real estate, financial institution, non-profit and public sector customers. Key risk characteristics relevant to commercial lending segment loans include the industry and geography of the borrower's business, purpose of the loan, repayment source, borrower's debt capacity and financial flexibility, loan covenants, and nature of pledged collateral, if any. These risk characteristics, among others, are considered in determining estimates about the likelihood of default by the borrowers and the severity of loss in the event of default. The Company considers these risk characteristics in assigning internal risk ratings to, or forecasting losses on, these loans, which are the significant factors in determining the allowance for credit losses for loans in the commercial lending segment.

The consumer lending segment represents loans and leases made to consumer customers, including residential mortgages, credit card loans, and other retail loans such as revolving consumer lines, auto loans and leases, home equity loans and lines, and student loans, a run-off portfolio. Home equity or second mortgage loans are junior lien closed-end accounts fully disbursed at origination. These loans typically are fixed rate loans, secured by residential real estate, with a 10- or 15-year fixed payment amortization schedule. Home equity lines are revolving accounts giving the borrower the ability to draw and repay balances repeatedly, up to a maximum commitment, and are secured by residential real estate. These include accounts in either a first or junior lien position. Typical terms on home equity lines in the portfolio are variable rates benchmarked to the prime rate, with a 10- or 15-year draw period during which a minimum payment is equivalent to the monthly interest, followed by a 20- or 10-year amortization period, respectively. At December 31, 2019, substantially all of the Company's home equity lines were in the draw period. Approximately $1.3 billion, or 10 percent, of the outstanding home equity line balances at December 31, 2019, will enter the amortization period within the next 36 months. Key risk characteristics relevant to consumer lending segment loans primarily relate to the borrowers' capacity and willingness to repay and include unemployment rates and other economic factors, customer payment history and credit scores, and in some cases, updated loan-to-value ("LTV") information reflecting current market conditions on real estate-based loans. These risk characteristics, among others, are reflected in forecasts of delinquency levels, bankruptcies and losses which are the primary factors in determining the allowance for credit losses for the consumer lending segment.

The Company further disaggregates its loan portfolio segments into various classes based on their underlying risk characteristics. The two classes within the commercial lending segment are commercial loans and commercial real estate loans. The three classes within the consumer lending segment are residential mortgages, credit card loans and other retail loans.

Because business processes and credit risks associated with unfunded credit commitments are essentially the same as for loans, the Company utilizes similar processes to estimate its liability for unfunded credit commitments. The Company also engages in non-lending activities that may give rise to credit risk, including derivative transactions for balance sheet hedging purposes, foreign exchange transactions, deposit overdrafts and interest rate contracts for customers, investments in securities and other financial assets, and settlement risk, including Automated Clearing House transactions and the processing of credit card transactions for merchants. These activities are subject to credit review, analysis and approval processes.

Economic and Other Factors In evaluating its credit risk, the Company considers changes, if any, in underwriting activities, the loan portfolio composition (including product mix and geographic, industry or customer-specific concentrations), collateral values, trends in loan performance and macroeconomic factors, such as changes in unemployment rates, gross domestic product and consumer bankruptcy filings, as well as the potential impact on customers and the domestic economy resulting from new tariffs or increases in existing tariffs.

During 2019, domestic economic conditions continued to be favorable as evidenced by overall growth and a strong labor market with the lowest unemployment rate in decades, despite the challenging headwinds created by trade conflict and slowing global growth. The domestic economy has experienced moderate productivity growth over the past few years supported by strong consumer spending, although business investment remains muted due to weak foreign growth and domestic trade policies. In an effort to reduce the impact of these risks to the domestic economy, the Federal Reserve Bank decreased short-term interest rates during 2019. Although the domestic economy is expected to grow at a modest pace in the next year, supported by strong consumer confidence and a healthy job market, uncertainty remains of the impact resulting from new tariffs, increases in existing tariffs, or future changes in interest rates or other domestic economic or trade policies. Current or anticipated changes to these policies that lessen their expansionary effect on the domestic economy could slow or further slow the expansion of the domestic and global economies.

Credit Diversification The Company manages its credit risk, in part, through diversification of its loan portfolio which is achieved through limit setting by product type criteria, such as industry, and identification of credit concentrations. As part of its normal business activities, the Company offers a broad array of traditional commercial lending products and specialized products such as asset-based lending, commercial lease financing, agricultural credit, warehouse mortgage lending, small business lending, commercial real estate lending, health care lending and correspondent banking financing. The Company also offers an array of consumer lending products, including residential mortgages, credit card loans, auto loans, retail leases, home equity loans and lines, revolving credit arrangements and other consumer loans. These consumer lending products are primarily offered through the branch office network, home mortgage and loan production offices, mobile and on-line banking, and indirect distribution channels, such as auto dealers. The Company monitors and manages the portfolio diversification by industry, customer and geography. Table 6 provides information with respect to the overall product diversification and changes in the mix during 2019.

The commercial loan class is diversified among various industries with higher concentrations in manufacturing, finance and insurance, wholesale trade, retail trade, and real estate, rental and leasing. Additionally, the commercial loan class is diversified across the Company's geographical markets with 61.4 percent of total commercial loans within the Company's Consumer and Business Banking region. Credit relationships outside of the Company's Consumer and Business Banking region relate to the corporate banking, mortgage banking, auto dealer and leasing businesses, focusing on large national customers and specifically targeted industries, such as healthcare, utilities, energy and public administration. Loans to mortgage banking customers are primarily warehouse lines which are collateralized with the underlying mortgages. The Company regularly monitors its mortgage collateral position to manage its risk exposure. Table 7 provides a summary of significant industry groups and geographical locations of commercial loans outstanding at December 31, 2019 and 2018.

The commercial real estate loan class reflects the Company's focus on serving business owners within its geographic footprint as well as regional and national investment-based real estate owners and builders. Within the commercial real estate loan class, different property types have varying degrees of credit risk. Table 8 provides a summary of the significant property types and geographical locations of commercial real estate loans outstanding at December 31, 2019 and 2018. At December 31, 2019, approximately 22.9 percent of the commercial real estate loans represented business owner-occupied properties that tend to exhibit less credit risk than non owner-occupied properties. The investment-based real estate mortgages are diversified among various property types with somewhat higher concentrations in multi-family, office and retail properties. From a geographical perspective, the Company's commercial real estate loan class is generally well diversified. However, at December 31, 2019, 25.1 percent of the Company's commercial real estate loans were secured by collateral in California, which has historically experienced higher credit quality deterioration in recessionary periods due to excess inventory levels and declining valuations. Included in commercial real estate at year-end 2019 was approximately $407 million in loans related to land held for development and $433 million of loans related to residential and commercial acquisition and development properties. These loans are subject to quarterly monitoring for changes in local market conditions due to a higher credit risk profile. The commercial real estate loan class is diversified across the Company's geographical markets with 83.5 percent of total commercial real estate loans outstanding at December 31, 2019, within the Company's Consumer and Business Banking region.

The Company's consumer lending segment utilizes several distinct business processes and channels to originate consumer credit, including traditional branch lending, mobile and on-line banking, indirect lending, correspondent banks and loan brokers. Each distinct underwriting and origination activity manages unique credit risk characteristics and prices its loan production commensurate with the differing risk profiles.

Residential mortgage originations are generally limited to prime borrowers and are performed through the Company's branches, loan production offices, mobile and on-line services, and a wholesale network of originators. The Company may retain residential mortgage loans it originates on its balance sheet or sell the loans into the secondary market while retaining the servicing rights and customer relationships. Utilizing the secondary markets enables the Company to effectively reduce its credit and other asset/liability risks. For residential mortgages that are retained in the Company's portfolio and for home equity and second mortgages, credit risk is also diversified by geography and managed by adherence to LTV and borrower credit criteria during the underwriting process.

The Company estimates updated LTV information on its outstanding residential mortgages quarterly, based on a method that combines automated valuation model updates and relevant home price indices. LTV is the ratio of the loan's outstanding principal balance to the current estimate of property value. For home equity and second mortgages, combined loan-to-value ("CLTV") is the combination of the first mortgage original principal balance and the second lien outstanding principal balance, relative to the current estimate of property value. Certain loans do not have a LTV or CLTV, primarily due to lack of availability of relevant automated valuation model and/or home price indices values, or lack of necessary valuation data on acquired loans.

The following tables provide summary information of residential mortgages and home equity and second mortgages by LTV and borrower type at December 31, 2019:

Residential Mortgages (Dollars in Millions)	Interest Only	Amortizing	Total	Percent of Total
Loan-to-Value				
Less than or equal to 80%	$2,536	$57,774	$60,310	85.5%
Over 80% through 90%	12	5,942	5,954	8.4
Over 90% through 100%	1	719	720	1.0
Over 100%	–	189	189	.3
No LTV available	–	27	27	–
Loans purchased from GNMA mortgage pools[(a)]	–	3,386	3,386	4.8
Total	$2,549	$68,037	$70,586	100.0%
Borrower Type				
Prime borrowers	$2,549	$64,048	$66,597	94.3%
Sub-prime borrowers	–	603	603	.9
Loans purchased from GNMA mortgage pools[(a)]	–	3,386	3,386	4.8
Total	$2,549	$68,037	$70,586	100.0%

(a) Represents loans purchased from Government National Mortgage Association ("GNMA") mortgage pools whose payments are primarily insured by the Federal Housing Administration or guaranteed by the United States Department of Veterans Affairs.

Home Equity and Second Mortgages (Dollars in Millions)	Lines	Loans	Total	Percent of Total
Loan-to-Value				
Less than or equal to 80%	$11,124	$ 937	$12,061	80.2%
Over 80% through 90%	1,653	679	2,332	15.5
Over 90% through 100%	328	61	389	2.6
Over 100%	120	10	130	.9
No LTV/CLTV available	118	6	124	.8
Total	$13,343	$1,693	$15,036	100.0%
Borrower Type				
Prime borrowers	$13,309	$1,655	$14,964	99.5%
Sub-prime borrowers	34	38	72	.5
Total	$13,343	$1,693	$15,036	100.0%

Home equity and second mortgages were $15.0 billion at December 31, 2019, compared with $16.1 billion at December 31, 2018, and included $3.8 billion of home equity lines in a first lien position and $11.2 billion of home equity and second mortgage loans and lines in a junior lien position. Loans and lines in a junior lien position at December 31, 2019, included approximately $4.5 billion of loans and lines for which the Company also serviced the related first lien loan, and approximately $6.7 billion where the Company did not service the related first lien loan. The Company was able to determine the status of the related first liens using information the Company has as the servicer of the first lien or information reported on customer credit bureau files. The Company also evaluates other indicators of credit risk for these junior lien loans and lines, including delinquency, estimated average CLTV ratios and updated weighted-average credit scores in making its assessment of credit risk, related loss estimates and determining the allowance for credit losses.

The following table provides a summary of delinquency statistics and other credit quality indicators for the Company's junior lien positions at December 31, 2019:

	Junior Liens Behind		
(Dollars in Millions)	Company Owned or Serviced First Lien	Third Party First Lien	Total
Total	$4,514	$6,709	$11,223
Percent 30 - 89 days past due	.30%	.53%	.44%
Percent 90 days or more past due	.06%	.07%	.06%
Weighted-average CLTV	69%	66%	67%
Weighted-average credit score	780	776	778

See the "Analysis and Determination of the Allowance for Credit Losses" section for additional information on how the Company determines the allowance for credit losses for loans in a junior lien position.

Credit card and other retail loans are diversified across customer segments and geographies. Diversification in the credit card portfolio is achieved with broad customer relationship distribution through the Company's and financial institution partners' branches, retail and affinity partners, and digital channels.

Tables 9, 10 and 11 provide a geographical summary of the residential mortgage, credit card and other retail loan portfolios, respectively.

Loan Delinquencies Trends in delinquency ratios are an indicator, among other considerations, of credit risk within the Company's loan portfolios. The entire balance of a loan account is considered delinquent if the minimum payment contractually required to be made is not received by the date specified on the billing statement. The Company measures delinquencies, both including and excluding nonperforming loans, to enable comparability with other companies. Delinquent loans purchased from Government National Mortgage Association ("GNMA") mortgage pools whose repayments are primarily insured by the Federal Housing Administration or guaranteed by the United States Department of

TABLE 15 Delinquent Loan Ratios as a Percent of Ending Loan Balances

At December 31 90 days or more past due **excluding** nonperforming loans	2019	2018	2017	2016	2015
Commercial					
Commercial	.08%	.07%	.06%	.06%	.06%
Lease financing	–	–	–	–	–
Total commercial	.08	.07	.06	.06	.05
Commercial Real Estate					
Commercial mortgages	.01	–	–	.01	–
Construction and development	–	–	.05	.05	.13
Total commercial real estate	.01	–	.01	.02	.03
Residential Mortgages[(a)]	.17	.18	.22	.27	.33
Credit Card	1.23	1.25	1.28	1.16	1.09
Other Retail					
Retail leasing	.05	.04	.03	.02	.02
Home equity and second mortgages	.32	.35	.28	.25	.25
Other	.13	.15	.15	.13	.11
Total other retail	.17	.19	.17	.15	.15
Covered Loans	–	–	4.74	5.53	6.31
Total loans	.20%	.20%	.26%	.28%	.32%

At December 31 90 days or more past due **including** nonperforming loans	2019	2018	2017	2016	2015
Commercial	.27%	.27%	.31%	.57%	.25%
Commercial real estate	.21	.29	.37	.31	.33
Residential mortgages[(a)]	.51	.63	.96	1.31	1.66
Credit card	1.23	1.25	1.28	1.18	1.13
Other retail	.46	.54	.46	.45	.46
Covered loans	–	–	4.93	5.68	6.48
Total loans	.44%	.49%	.62%	.78%	.78%

(a) Delinquent loan ratios exclude $1.7 billion, $1.7 billion, $1.9 billion, $2.5 billion, and $2.9 billion at December 31, 2019, 2018, 2017, 2016, and 2015, respectively, of loans purchased from GNMA mortgage pools whose repayments are primarily insured by the Federal Housing Administration or guaranteed by the United States Department of Veterans Affairs. Including these loans, the ratio of residential mortgages 90 days or more past due including all nonperforming loans was 2.92 percent, 3.21 percent, 4.16 percent, 5.73 percent, and 7.15 percent at December 31, 2019, 2018, 2017, 2016, and 2015, respectively.

Veterans Affairs, are excluded from delinquency statistics. In addition, in certain situations, a consumer lending customer's account may be re-aged to remove it from delinquent status. Generally, the purpose of re-aging accounts is to assist customers who have recently overcome temporary financial difficulties and have demonstrated both the ability and willingness to resume regular payments. To qualify for re-aging, the account must have been open for at least nine months and cannot have been re-aged during the preceding 365 days. An account may not be re-aged more than two times in a five-year period. To qualify for re-aging, the customer must also have made three regular minimum monthly payments within the last 90 days. In addition, the Company may re-age the consumer lending account of a customer who has experienced longer-term financial difficulties and apply modified, concessionary terms and conditions to the account. Such additional re-ages are limited to one in a five-year period and must meet the qualifications for re-aging described above. All re-aging strategies must be independently approved by the Company's risk management department. Commercial lending loans are generally not subject to re-aging policies.

Accruing loans 90 days or more past due totaled $605 million at December 31, 2019, compared with $584 million at December 31, 2018. Accruing loans 90 days or more past due are not included in nonperforming assets and continue to accrue interest because they are adequately secured by collateral, are in the process of collection and are reasonably expected to result in repayment or restoration to current status, or are managed in homogeneous portfolios with specified charge-off timeframes adhering to regulatory guidelines. The ratio of accruing loans 90 days or more past due to total loans was 0.20 percent at December 31, 2019, unchanged from December 31, 2018.

The following table provides summary delinquency information for residential mortgages, credit card and other retail loans included in the consumer lending segment:

At December 31 (Dollars in Millions)	Amount 2019	Amount 2018	As a Percent of Ending Loan Balances 2019	As a Percent of Ending Loan Balances 2018
Residential Mortgages[(a)]				
30-89 days	$154	$181	.22%	.27%
90 days or more	120	114	.17	.18
Nonperforming	241	296	.34	.46
Total	$515	$591	.73%	.91%
Credit Card				
30-89 days	$321	$324	1.30%	1.39%
90 days or more	306	293	1.23	1.25
Nonperforming	—	—	—	—
Total	$627	$617	2.53%	2.64%
Other Retail				
Retail Leasing				
30-89 days	$ 45	$ 37	.53%	.43%
90 days or more	4	3	.05	.04
Nonperforming	13	12	.15	.14
Total	$ 62	$ 52	.73%	.61%
Home Equity and Second Mortgages				
30-89 days	$ 77	$ 90	.51%	.56%
90 days or more	48	57	.32	.35
Nonperforming	116	145	.77	.90
Total	$241	$292	1.60%	1.81%
Other[(b)]				
30-89 days	$271	$276	.81%	.87%
90 days or more	45	48	.13	.15
Nonperforming	36	40	.11	.13
Total	$352	$364	1.05%	1.15%

(a) Excludes $428 million of loans 30-89 days past due and $1.7 billion of loans 90 days or more past due at December 31, 2019, purchased from GNMA mortgage pools that continue to accrue interest, compared with $430 million and $1.7 billion at December 31, 2018, respectively.

(b) Includes revolving credit, installment, automobile and student loans.

Restructured Loans In certain circumstances, the Company may modify the terms of a loan to maximize the collection of amounts due when a borrower is experiencing financial difficulties or is expected to experience difficulties in the near-term. In most cases the modification is either a concessionary reduction in interest rate, extension of the maturity date or reduction in the principal balance that would otherwise not be considered.

Troubled Debt Restructurings Concessionary modifications are classified as TDRs unless the modification results in only an insignificant delay in the payments to be received. TDRs accrue interest if the borrower complies with the revised terms and conditions and has demonstrated repayment performance at a level commensurate with the modified terms over several payment cycles, which is generally six months or greater. At December 31, 2019, performing TDRs were $3.8 billion, compared with $3.9 billion, $4.0 billion, $4.2 billion and $4.7 billion at December 31, 2018, 2017, 2016 and 2015, respectively. Loans classified as TDRs are considered impaired loans for reporting and measurement purposes.

The Company continues to work with customers to modify loans for borrowers who are experiencing financial difficulties. Many of the Company's TDRs are determined on a case-by-case basis in connection with ongoing loan collection processes. The modifications vary within each of the Company's loan classes. Commercial lending segment TDRs generally include extensions of the maturity date and may be accompanied by an increase or decrease to the interest rate. The Company may also work with the borrower to make other changes to the loan to mitigate losses, such as obtaining additional collateral and/or guarantees to support the loan.

The Company has also implemented certain residential mortgage loan restructuring programs that may result in TDRs. The Company modifies residential mortgage loans under Federal Housing Administration, United States Department of Veterans Affairs, and its own internal programs. Under these programs, the Company offers qualifying homeowners the opportunity to permanently modify their loan and achieve more affordable monthly payments by providing loan concessions. These concessions may include adjustments to interest rates, conversion of adjustable rates to fixed rates, extensions of maturity dates or deferrals of payments, capitalization of accrued interest and/or outstanding advances, or in limited situations, partial forgiveness of loan principal. In most instances, participation in residential mortgage loan restructuring programs requires the customer to complete a short-term trial period. A permanent loan modification is contingent on the customer successfully completing the trial period arrangement, and the loan documents are not modified until that time. The Company reports loans in a trial period arrangement as TDRs and continues to report them as TDRs after the trial period.

Credit card and other retail loan TDRs are generally part of distinct restructuring programs providing customers modification solutions over a specified time period, generally up to 60 months.

In accordance with regulatory guidance, the Company considers secured consumer loans that have had debt discharged through bankruptcy where the borrower has not reaffirmed the debt to be TDRs. If the loan amount exceeds the collateral value, the loan is charged down to collateral value and the remaining amount is reported as nonperforming.

Acquired loans restructured after acquisition are not considered TDRs for purposes of the Company's accounting and disclosure if the loans evidenced credit deterioration as of the acquisition date and are accounted for in pools.

The following table provides a summary of TDRs by loan class, including the delinquency status for TDRs that continue to accrue interest and TDRs included in nonperforming assets:

At December 31, 2019 (Dollars in Millions)	Performing TDRs	As a Percent of Performing TDRs: 30-89 Days Past Due	As a Percent of Performing TDRs: 90 Days or More Past Due	Nonperforming TDRs	Total TDRs
Commercial	$ 279	4.4%	2.2%	$ 87[(a)]	$ 366
Commercial real estate	160	.9	—	38[(b)]	198
Residential mortgages	1,274	3.0	4.4	148	1,422[(d)]
Credit card	263	10.8	6.3	—	263
Other retail	153	7.2	6.9	32[(c)]	185[(e)]
TDRs, excluding loans purchased from GNMA mortgage pools	2,129	4.3	4.2	305	2,434
Loans purchased from GNMA mortgage pools[(g)]	1,622	—	—	—	1,622[(f)]
Total	$3,751	2.4%	2.4%	$305	$4,056

(a) Primarily represents loans less than six months from the modification date that have not met the performance period required to return to accrual status (generally six months) and small business credit cards with a modified rate equal to 0 percent.

(b) Primarily represents loans less than six months from the modification date that have not met the performance period required to return to accrual status (generally six months).

(c) Primarily represents loans with a modified rate equal to 0 percent.

(d) Includes $306 million of residential mortgage loans to borrowers that have had debt discharged through bankruptcy and $34 million in trial period arrangements or previously placed in trial period arrangements but not successfully completed.

(e) Includes $85 million of other retail loans to borrowers that have had debt discharged through bankruptcy and $17 million in trial period arrangements or previously placed in trial period arrangements but not successfully completed.

(f) Includes $137 million of Federal Housing Administration and United States Department of Veterans Affairs residential mortgage loans to borrowers that have had debt discharged through bankruptcy and $415 million in trial period arrangements or previously placed in trial period arrangements but not successfully completed.

(g) Approximately 6.9 percent and 47.3 percent of the total TDR loans purchased from GNMA mortgage pools are 30-89 days past due and 90 days or more past due, respectively, but are not classified as delinquent as their repayments are insured by the Federal Housing Administration or guaranteed by the United States Department of Veterans Affairs.

Short-term Modifications The Company makes short-term modifications that it does not consider to be TDRs, in limited circumstances, to assist borrowers experiencing temporary hardships. Consumer lending programs include payment reductions, deferrals of up to three past due payments, and the ability to return to current status if the borrower makes required payments. The Company may also make short-term modifications to commercial lending loans, with the most common modification being an extension of the maturity date of three months or less. Such extensions generally are used when the maturity date is imminent and the borrower is experiencing some level of financial stress, but the Company believes the borrower will pay all contractual amounts owed. Short-term modifications were not material at December 31, 2019.

Nonperforming Assets The level of nonperforming assets represents another indicator of the potential for future credit losses. Nonperforming assets include nonaccrual loans, restructured loans not performing in accordance with modified terms and not accruing interest, restructured loans that have not met the performance period required to return to accrual status, OREO and other nonperforming assets owned by the Company. Interest payments collected from assets on nonaccrual status are generally applied against the principal balance and not recorded as income. However, interest income may be recognized for interest payments if the remaining carrying amount of the loan is believed to be collectible.

At December 31, 2019, total nonperforming assets were $829 million, compared with $989 million at December 31, 2018. The $160 million (16.2 percent) decrease in nonperforming assets, from December 31, 2018 to December 31, 2019, was driven by improvements in nonperforming residential mortgages, commercial real estate loans, other retail loans and OREO. The ratio of total nonperforming assets to total loans and other real estate was 0.28 percent at December 31, 2019, compared with 0.34 percent at December 31, 2018.

OREO was $78 million at December 31, 2019, compared with $111 million at December 31, 2018, and was related to foreclosed properties that previously secured loan balances. These balances exclude foreclosed GNMA loans whose repayments are primarily insured by the Federal Housing Administration or guaranteed by the United States Department of Veterans Affairs.

TABLE 16 Nonperforming Assets[(a)]

At December 31 (Dollars in Millions)	2019	2018	2017	2016	2015
Commercial					
Commercial	$172	$186	$ 225	$ 443	$ 160
Lease financing	32	23	24	40	14
Total commercial	204	209	249	483	174
Commercial Real Estate					
Commercial mortgages	74	76	108	87	92
Construction and development	8	39	34	37	35
Total commercial real estate	82	115	142	124	127
Residential Mortgages[(b)]	241	296	442	595	712
Credit Card	—	—	1	3	9
Other Retail					
Retail leasing	13	12	8	2	3
Home equity and second mortgages	116	145	126	128	136
Other	36	40	34	27	23
Total other retail	165	197	168	157	162
Covered Loans	—	—	6	6	8
Total nonperforming loans	692	817	1,008	1,368	1,192
Other Real Estate[(c)]	78	111	141	186	280
Covered Other Real Estate	—	—	21	26	32
Other Assets	59	61	30	23	19
Total nonperforming assets	$829	$989	$1,200	$1,603	$1,523
Accruing loans 90 days or more past due[(b)]	$605	$584	$ 720	$ 764	$ 831
Nonperforming loans to total loans	.23%	.28%	.36%	.50%	.46%
Nonperforming assets to total loans plus other real estate[(c)]	.28%	.34%	.43%	.59%	.58%

Changes in Nonperforming Assets

(Dollars in Millions)	Commercial and Commercial Real Estate	Residential Mortgages, Credit Card and Other Retail	Total
Balance December 31, 2018	$ 338	$ 651	$ 989
Additions to nonperforming assets			
New nonaccrual loans and foreclosed properties	683	303	986
Advances on loans	14	2	16
Total additions	697	305	1,002
Reductions in nonperforming assets			
Paydowns, payoffs	(217)	(145)	(362)
Net sales	(266)	(90)	(356)
Return to performing status	(13)	(193)	(206)
Charge-offs[(d)]	(218)	(20)	(238)
Total reductions	(714)	(448)	(1,162)
Net additions to (reductions in) nonperforming assets	(17)	(143)	(160)
Balance December 31, 2019	$ 321	$ 508	$ 829

(a) Throughout this document, nonperforming assets and related ratios do not include accruing loans 90 days or more past due.

(b) Excludes $1.7 billion, $1.7 billion, $1.9 billion, $2.5 billion and $2.9 billion at December 31, 2019, 2018, 2017, 2016 and 2015, respectively, of loans purchased from GNMA mortgage pools that are 90 days or more past due that continue to accrue interest, as their repayments are primarily insured by the Federal Housing Administration or guaranteed by the United States Department of Veterans Affairs.

(c) Foreclosed GNMA loans of $155 million, $235 million, $267 million, $373 million and $535 million at December 31, 2019, 2018, 2017, 2016 and 2015, respectively, continue to accrue interest and are recorded as other assets and excluded from nonperforming assets because they are insured by the Federal Housing Administration or guaranteed by the United States Department of Veterans Affairs.

(d) Charge-offs exclude actions for certain card products and loan sales that were not classified as nonperforming at the time the charge-off occurred.

The following table provides an analysis of OREO, as a percent of their related loan balances, including geographical location detail for residential (residential mortgage, home equity and second mortgage) and commercial (commercial and commercial real estate) loan balances:

	Amount		As a Percent of Ending Loan Balances	
At December 31 (Dollars in Millions)	2019	2018	2019	2018
Residential				
Illinois	$10	$ 11	.22%	.25%
California	7	11	.03	.04
Minnesota	6	5	.10	.08
New York	6	8	.66	.97
Oregon	4	5	.12	.15
All other states	41	66	.09	.16
Total residential	74	106	.09	.13
Commercial				
California	3	3	.01	.01
Idaho	—	1	—	.09
All other states	1	1	—	—
Total commercial	4	5	—	—
Total	$78	$111	.03%	.04%

Analysis of Loan Net Charge-offs Total loan net charge-offs were $1.5 billion in 2019, compared with $1.4 billion in 2018. The $100 million (7.4 percent) increase in total net charge-offs in 2019, compared with 2018, reflected higher credit card, commercial, and commercial real estate loan net charge-offs, partially offset by lower residential mortgage loan net charge-offs. The ratio of total loan net charge-offs to average loans outstanding was 0.50 percent in 2019, compared with 0.48 percent in 2018.

Commercial and commercial real estate loan net charge-offs for 2019 were $299 million (0.21 percent of average loans outstanding), compared with $232 million (0.17 percent of average loans outstanding) in 2018. The increase in net charge-offs in 2019, compared with 2018, reflected higher commercial and commercial real estate loan charge-offs and lower commercial real estate loan recoveries.

Residential mortgage loan net charge-offs for 2019 were $3 million, compared with $17 million (0.03 percent of average loans outstanding) in 2018. Credit card loan net charge-offs in 2019 were $893 million (3.83 percent of average loans outstanding), compared with $846 million (3.90 percent of average loans outstanding) in 2018. Other retail loan net charge-offs for 2019 were $259 million (0.45 percent of average loans outstanding), compared with $259 million (0.46 percent of average loans outstanding) in 2018. The increase in total residential mortgage, credit card and other retail loan net charge-offs in 2019, compared with 2018, reflected higher credit card loan net charge-offs due to portfolio growth, partially offset by lower residential mortgage loan net charge-offs due to favorable economic conditions during 2019.

TABLE 17 Net Charge-offs as a Percent of Average Loans Outstanding

Year Ended December 31	2019	2018	2017	2016	2015
Commercial					
Commercial	.28%	.25%	.27%	.35%	.26%
Lease financing	.22	.25	.31	.34	.27
Total commercial	.28	.25	.28	.35	.26
Commercial Real Estate					
Commercial mortgages	.04	(.06)	.03	(.01)	.02
Construction and development	.02	(.02)	(.07)	(.08)	(.33)
Total commercial real estate	.04	(.05)	—	(.03)	(.07)
Residential Mortgages	—	.03	.06	.11	.21
Credit Card	3.83	3.90	3.76	3.30	3.61
Other Retail					
Retail leasing	.15	.15	.14	.09	.09
Home equity and second mortgages	(.02)	(.02)	(.03)	.01	.24
Other	.76	.79	.75	.71	.65
Total other retail	.45	.46	.44	.42	.45
Total loans	.50%	.48%	.48%	.47%	.47%

Analysis and Determination of the Allowance for Credit Losses Through December 31, 2019, the allowance for credit losses was established to reserve for probable and estimable losses incurred in the Company's loan and lease portfolio, including unfunded credit commitments. Effective January 1, 2020, the Company adopted new accounting guidance which changes previous impairment recognition to a model that is based on expected losses rather than incurred losses. The allowance for credit losses is increased through provisions charged to earnings and reduced by net charge-offs. Management evaluates the appropriateness of the allowance for credit losses on a quarterly basis. The evaluation of each element and the overall allowance is based on a continuing assessment of problem loans, recent loss experience and other factors, including external factors such as regulatory guidance and economic conditions. Because business processes and credit risks associated with unfunded credit commitments are essentially the same as for loans, the Company utilizes similar processes to estimate its liability for unfunded credit commitments, which is included in other liabilities in the Consolidated Balance Sheet. Both the allowance for loan losses and the liability for unfunded credit commitments are included in the Company's analysis of credit losses and reported reserve ratios.

At December 31, 2019, the allowance for credit losses was $4.5 billion (1.52 percent of period-end loans), compared with an allowance of $4.4 billion (1.55 percent of period-end loans) at December 31, 2018. The ratio of the allowance for credit losses to nonperforming loans was 649 percent at December 31, 2019, compared with 544 percent at December 31, 2018. The ratio of the allowance for credit losses to annual loan net charge-offs at December 31, 2019, was 309 percent, compared with 328 percent at December 31, 2018. Management determined the allowance for credit losses was appropriate at December 31, 2019.

The allowance recorded for loans in the commercial lending segment through December 31, 2019, was based on reviews of individual credit relationships and considered the migration analysis of commercial lending segment loans and actual loss experience. For each loan type, this historical loss experience was adjusted as necessary to consider any relevant changes in portfolio composition, lending policies, underwriting standards, risk management practices or economic conditions. The results of the analysis were evaluated quarterly to confirm the selected loss experience was appropriate for each commercial loan type. The allowance recorded for impaired loans greater than $5 million in the commercial lending segment was based on an individual loan analysis utilizing expected cash flows discounted using the original effective interest rate, the observable market price of the loan, or the fair value of the collateral, less selling costs, for collateral-dependent loans, rather than the migration analysis. The allowance recorded for all other commercial lending segment loans was determined on a homogenous pool basis and included consideration of product mix, risk characteristics of the portfolio, delinquency status, bankruptcy experience, portfolio growth and historical losses, adjusted for current trends. The allowance established for commercial lending segment loans was $2.3 billion at December 31, 2019 compared with $2.2 billion December 31, 2018, reflecting overall portfolio growth.

The allowance recorded for TDR loans and purchased impaired loans in the consumer lending segment through December 31, 2019, was determined on a homogenous pool basis utilizing expected cash flows discounted using the original effective interest rate of the pool, or the prior quarter effective rate, respectively. The allowance for collateral-dependent loans in the consumer lending segment was determined based on the fair value of the collateral less costs to sell. The allowance recorded for all other consumer lending segment loans was determined on a homogenous pool basis and included consideration of product mix, risk characteristics of the portfolio, bankruptcy experience, delinquency status, refreshed LTV ratios when possible, portfolio growth and historical losses, adjusted for current trends. Credit card and other retail loans 90 days or more past due are generally not placed on nonaccrual status because of the relatively short period of time to charge-off and, therefore, were excluded from nonperforming loans and measures that include nonperforming loans as part of the calculation.

TABLE 18 Summary of Allowance for Credit Losses

(Dollars in Millions)	2019	2018	2017	2016	2015
Balance at beginning of year	$4,441	$4,417	$4,357	$4,306	$4,375
Charge-Offs					
Commercial					
Commercial	380	328	387	388	289
Lease financing	19	22	27	29	25
Total commercial	399	350	414	417	314
Commercial real estate					
Commercial mortgages	17	6	28	12	20
Construction and development	4	3	2	10	2
Total commercial real estate	21	9	30	22	22
Residential mortgages	34	48	65	85	135
Credit card	1,028	970	887	759	726
Other retail					
Retail leasing	24	21	16	9	8
Home equity and second mortgages	19	25	31	40	73
Other	342	337	308	283	238
Total other retail	385	383	355	332	319
Total charge-offs	1,867	1,760	1,751	1,615	1,516
Recoveries					
Commercial					
Commercial	107	91	140	81	84
Lease financing	7	8	10	11	11
Total commercial	114	99	150	92	95
Commercial real estate					
Commercial mortgages	5	23	20	16	15
Construction and development	2	5	10	19	35
Total commercial real estate	7	28	30	35	50
Residential mortgages	31	31	28	25	26
Credit card	135	124	101	83	75
Other retail					
Retail leasing	11	9	6	4	3
Home equity and second mortgages	22	28	36	39	35
Other	93	87	70	68	60
Total other retail	126	124	112	111	98
Total recoveries	413	406	421	346	344
Net Charge-Offs					
Commercial					
Commercial	273	237	247	307	205
Lease financing	12	14	17	18	14
Total commercial	285	251	264	325	219
Commercial real estate					
Commercial mortgages	12	(17)	8	(4)	5
Construction and development	2	(2)	(8)	(9)	(33)
Total commercial real estate	14	(19)	–	(13)	(28)
Residential mortgages	3	17	37	60	109
Credit card	893	846	786	676	651
Other retail					
Retail leasing	13	12	10	5	5
Home equity and second mortgages	(3)	(3)	(5)	1	38
Other	249	250	238	215	178
Total other retail	259	259	243	221	221
Total net charge-offs	1,454	1,354	1,330	1,269	1,172
Provision for credit losses	1,504	1,379	1,390	1,324	1,132
Other changes	–	(1)	–	(4)	(29)
Balance at end of year	$4,491	$4,441	$4,417	$4,357	$4,306
Components					
Allowance for loan losses	$4,020	$3,973	$3,925	$3,813	$3,863
Liability for unfunded credit commitments	471	468	492	544	443
Total allowance for credit losses	$4,491	$4,441	$4,417	$4,357	$4,306
Allowance for Credit Losses as a Percentage of					
Period-end loans	1.52%	1.55%	1.58%	1.59%	1.65%
Nonperforming loans	649	544	438	318	361
Nonperforming and accruing loans 90 days or more past due	346	317	256	204	213
Nonperforming assets	542	449	368	272	283
Net charge-offs	309	328	332	343	367

TABLE 19 Elements of the Allowance for Credit Losses

At December 31 (Dollars in Millions)	Allowance Amount 2019	2018	2017	2016	2015	Allowance as a Percent of Loans 2019	2018	2017	2016	2015
Commercial										
Commercial	$1,413	$1,388	$1,298	$1,376	$1,231	1.44%	1.43%	1.41%	1.56%	1.48%
Lease financing	71	66	74	74	56	1.25	1.18	1.32	1.36	1.06
Total commercial	1,484	1,454	1,372	1,450	1,287	1.43	1.42	1.41	1.55	1.46
Commercial Real Estate										
Commercial mortgages	272	269	295	282	285	.93	.94	1.00	.89	.90
Construction and development	527	531	536	530	439	5.10	4.85	4.83	4.61	4.24
Total commercial real estate	799	800	831	812	724	2.01	2.02	2.05	1.88	1.72
Residential Mortgages	433	455	449	510	631	.61	.70	.75	.89	1.18
Credit Card	1,128	1,102	1,056	934	883	4.55	4.72	4.76	4.29	4.20
Other Retail										
Retail leasing	78	25	21	11	12	.92	.29	.26	.17	.23
Home equity and second mortgages	232	265	298	300	448	1.54	1.64	1.83	1.83	2.73
Other	337	340	359	306	283	1.00	1.07	1.09	.98	.96
Total other retail	647	630	678	617	743	1.13	1.12	1.18	1.15	1.45
Covered Loans	–	–	31	34	38	–	–	.99	.89	.83
Total allowance	$4,491	$4,441	$4,417	$4,357	$4,306	1.52%	1.55%	1.58%	1.59%	1.65%

When evaluating the appropriateness of the allowance for credit losses for any loans and lines in a junior lien position, the Company considered the delinquency and modification status of the first lien. At December 31, 2019, the Company serviced the first lien on 40 percent of the home equity loans and lines in a junior lien position. The Company also considered information received from its primary regulator on the status of the first liens that were serviced by other large servicers in the industry and the status of first lien mortgage accounts reported on customer credit bureau files. Regardless of whether or not the Company serviced the first lien, an assessment was made of economic conditions, problem loans, recent loss experience and other factors in determining the allowance for credit losses. Based on the available information, the Company estimated $273 million or 1.8 percent of its total home equity portfolio at December 31, 2019, represented non-delinquent junior liens where the first lien was delinquent or modified.

The Company used historical loss experience on the loans and lines in a junior lien position where the first lien was serviced by the Company, or could be identified in credit bureau data, to establish loss estimates for junior lien loans and lines the Company serviced that were current, but the first lien was delinquent or modified. Historically, the number of junior lien defaults has been a small percentage of the total portfolio (approximately 1 percent annually), while the long-term average loss rate on loans that default has been approximately 90 percent. In addition, the Company obtains updated credit scores on its home equity portfolio each quarter, and in some cases more frequently, and used this information to qualitatively supplement its loss estimation methods. Credit score distributions for the portfolio are monitored monthly and any changes in the distribution are one of the factors considered in assessing the Company's loss estimates. In its evaluation of the allowance for credit losses, the Company also considered the increased risk of loss associated with home equity lines that are contractually scheduled to convert from a revolving status to a fully amortizing payment and with residential lines and loans that have a balloon payoff provision.

The allowance established for consumer lending segment loans was $2.2 billion at December 31, 2019 and 2018, reflecting overall portfolio growth, partially offset by continued improvement in housing market conditions.

In addition, through December 31, 2019, the evaluation of the appropriate allowance for credit losses on purchased non-impaired loans acquired after January 1, 2009, in the various loan segments considered credit discounts recorded as a part of the initial determination of the fair value of the loans. For these loans, no allowance for credit losses was recorded at the purchase date. Credit discounts representing the principal losses expected over the life of the loans were a component of the initial fair value. Subsequent to the purchase date, the methods utilized to estimate the required allowance for credit losses for these loans was similar to originated loans; however, the Company recorded a provision for credit losses only when the required allowance exceeded any remaining credit discounts.

The evaluation of the appropriate allowance for credit losses for purchased impaired loans in the various loan segments through December 31, 2019, considered the expected cash flows to be collected from the borrower. These loans were initially recorded at fair value and, therefore, no allowance for credit losses was recorded at the purchase date.

Subsequent to the purchase date, the expected cash flows of purchased loans were subject to evaluation. Decreases in expected cash flows were recognized by recording an allowance for credit losses. If the expected cash flows on the purchased loans increased such that a previously recorded impairment allowance could have been reversed, the Company recorded a reduction in the allowance. Increases in expected cash flows of purchased loans, when there are no reversals of previous impairment allowances, were recognized over the remaining life of the loans. Refer to Note 1 of the Notes to Consolidated Financial Statements, for more information.

The Company's methodology for determining the appropriate allowance for credit losses for both loan segments also considered the imprecision inherent in the methodologies used. As a result, in addition to the amounts determined under the methodologies described above, management also considered the potential impact of other qualitative factors which include, but are not limited to, the following: economic factors; geographic and other concentration risks; delinquency and nonaccrual trends; current business conditions; changes in lending policy, underwriting standards and other relevant business practices; results of internal review; and the regulatory environment. The consideration of these items resulted in adjustments to allowance amounts included in the Company's allowance for credit losses for both loan segments. Table 19 shows the amount of the allowance for credit losses by loan class and underlying portfolio category.

Although the Company determined the amount of each element of the allowance separately and considers this process to be an important credit management tool, the entire allowance for credit losses is available for the entire loan portfolio. The actual amount of losses can vary significantly from the estimated amounts.

Residual Value Risk Management The Company manages its risk to changes in the residual value of leased vehicles, office and business equipment, and other assets through disciplined residual valuation setting at the inception of a lease, diversification of its leased assets, regular residual asset valuation reviews and monitoring of residual value gains or losses upon the disposition of assets. Lease originations are subject to the same well-defined underwriting standards referred to in the "Credit Risk Management" section, which includes an evaluation of the residual value risk. Retail lease residual value risk is mitigated further by effective end-of-term marketing of off-lease vehicles.

Included in the retail leasing portfolio was approximately $6.6 billion of retail leasing residuals at December 31, 2019 and 2018. The Company monitors concentrations of leases by manufacturer and vehicle type. As of December 31, 2019, vehicle lease residuals related to sport utility vehicles were 48.8 percent of the portfolio, while truck and crossover utility vehicle classes represented approximately 25.3 percent and 15.1 percent of the portfolio, respectively. At year-end 2019, the individual vehicle model with the largest residual value outstanding represented 12.2 percent of the aggregate residual value of all vehicles in the portfolio. At December 31, 2019, the weighted-average origination term of the portfolio was 41 months, compared with 40 months at December 31, 2018. At December 31, 2019, the commercial leasing portfolio had $481 million of residuals, compared with $495 million at December 31, 2018. At year-end 2019, lease residuals related to business and office equipment represented 33.9 percent of the total residual portfolio, while trucks and other transportation equipment represented 31.2 percent.

Operational Risk Management Operational risk is the risk of loss arising from inadequate or failed internal processes or systems, people, or adverse external events, including the risk of loss resulting from fraud, litigation and breaches in data security. The Company operates in many different businesses in diverse markets and relies on the ability of its employees and systems to process a high number of transactions. Operational risk is inherent in all business activities, and the management of this risk is important to the achievement of the Company's objectives. Business lines have direct and primary responsibility and accountability for identifying, controlling, and monitoring operational risks embedded in their business activities. The Company maintains a system of controls with the objective of providing proper transaction authorization and execution, proper system operations, proper oversight of third parties with whom it does business, safeguarding of assets from misuse or theft, and ensuring the reliability and security of financial and other data.

Business continuation and disaster recovery planning is also critical to effectively managing operational risks. Each business unit of the Company is required to develop, maintain and test these plans at least annually to ensure that recovery activities, if needed, can support mission critical functions, including technology, networks and data centers supporting customer applications and business operations.

While the Company believes it has designed effective processes to minimize operational risks, there is no absolute assurance that business disruption or operational losses would not occur from an external event or internal control breakdown. On an ongoing basis, management makes process changes and investments to enhance its systems of internal controls and business continuity and disaster recovery plans.

In the past, the Company has experienced attack attempts on its computer systems, including various denial-of-service attacks on customer-facing websites. The Company has not experienced any material losses relating to these attempts, as a result of its controls, processes and systems to protect its networks, computers, software and data from attack, damage or unauthorized access but future attacks could be more disruptive or damaging. Attack attempts on the Company's computer systems are evolving and increasing, and the Company continues to develop and enhance its controls and processes to protect against these attempts.

Compliance Risk Management The Company may suffer legal or regulatory sanctions, material financial loss, or damage to its reputation through failure to comply with laws, regulations, rules, standards of good practice, and codes of conduct, including those related to compliance with Bank Secrecy Act/anti-money laundering requirements, sanctions compliance requirements as administered by the Office of Foreign Assets Control, consumer protection and other requirements. The Company has controls and processes in place for the assessment, identification, monitoring, management and reporting of compliance risks and issues. Refer to "Supervision and Regulation" in the Company's Annual Report on Form 10-K for further discussion of the regulatory framework applicable to bank holding companies and their subsidiaries.

Interest Rate Risk Management In the banking industry, changes in interest rates are a significant risk that can impact earnings and the safety and soundness of an entity. The Company manages its exposure to changes in interest rates through asset and liability management activities within guidelines established by its Asset Liability Management Committee ("ALCO") and approved by the Board of Directors. The ALCO has the responsibility for approving and ensuring compliance with the ALCO management policies, including interest rate risk exposure. One way the Company measures and analyzes its interest rate risk is through net interest income simulation analysis.

Simulation analysis incorporates substantially all of the Company's assets and liabilities and off-balance sheet instruments, together with forecasted changes in the balance sheet and assumptions that reflect the current interest rate environment. Through this simulation, management estimates the impact on net interest income of various interest rate changes that differ in the direction, amount and speed of change over time, as well as the shape of the yield curve. This simulation includes assumptions about how the balance sheet is likely to be affected by changes in loan and deposit growth. Assumptions are made to project interest rates for new loans and deposits based on historical analysis, management's outlook and re-pricing strategies. These assumptions are reviewed and validated on a periodic basis with sensitivity analysis being provided for key variables of the simulation. The results are reviewed monthly by the ALCO and are used to guide asset/liability management strategies.

The Company manages its interest rate risk position by holding assets with desired interest rate risk characteristics on its balance sheet, implementing certain pricing strategies for loans and deposits and selecting derivatives and various funding and investment portfolio strategies.

Table 20 summarizes the projected impact to net interest income over the next 12 months of various potential interest rate changes. The sensitivity of the projected impact to net interest income over the next 12 months is dependent on balance sheet growth, product mix, deposit behavior, pricing and funding decisions. While the Company utilizes assumptions based on historical information and expected behaviors, actual outcomes could vary significantly. For example, if deposit outflows are more limited (stable) than the assumptions the Company used in preparing Table 20, the projected impact to net interest income would be an increase of 1.26 percent in the "Up 50 bps" and 1.93 percent in the "Up 200 bps" scenarios.

TABLE 20 Sensitivity of Net Interest Income

	December 31, 2019				December 31, 2018			
	Down 50 bps Immediate	Up 50 bps Immediate	Down 200 bps Gradual	Up 200 bps Gradual	Down 50 bps Immediate	Up 50 bps Immediate	Down 200 bps Gradual	Up 200 bps Gradual
Net interest income	(1.43)%	.83%	*	.21%	(1.43)%	1.02%	(3.90)%	1.45%

* Given the level of interest rates, downward rate scenario is not computed.

Use of Derivatives to Manage Interest Rate and Other Risks To manage the sensitivity of earnings and capital to interest rate, prepayment, credit, price and foreign currency fluctuations (asset and liability management positions), the Company enters into derivative transactions. The Company uses derivatives for asset and liability management purposes primarily in the following ways:

– To convert fixed-rate debt from fixed-rate payments to floating-rate payments;
– To convert the cash flows associated with floating-rate debt from floating-rate payments to fixed-rate payments;
– To mitigate changes in value of the Company's unfunded mortgage loan commitments, funded MLHFS and MSRs;
– To mitigate remeasurement volatility of foreign currency denominated balances; and
– To mitigate the volatility of the Company's net investment in foreign operations driven by fluctuations in foreign currency exchange rates.

In addition, the Company enters into interest rate and foreign exchange derivative contracts to support the business requirements of its customers (customer-related positions). The Company minimizes the market and liquidity risks of customer-related positions by either entering into similar offsetting positions with broker-dealers, or on a portfolio basis by entering into other derivative or non-derivative financial instruments that partially or fully offset the exposure from these customer-related positions. The Company may enter into derivative contracts that are either exchange-traded, centrally cleared through clearinghouses or over-the-counter. The Company does not utilize derivatives for speculative purposes.

The Company does not designate all of the derivatives that it enters into for risk management purposes as accounting hedges because of the inefficiency of applying the accounting requirements and may instead elect fair value accounting for the related hedged items. In particular, the Company enters into interest rate swaps, swaptions, forward commitments to buy to-be-announced securities ("TBAs"), U.S. Treasury and Eurodollar futures and options on U.S. Treasury futures to mitigate fluctuations in the value of its MSRs, but does not designate those derivatives as accounting hedges. The estimated net sensitivity to changes in interest rates of the fair value of the MSRs and the related derivative instruments at December 31, 2019, to an immediate 25, 50 and 100 bps downward movement in interest rates would be a decrease of approximately $1 million, $10 million and $50 million, respectively. An immediate upward movement in interest rates at December 31, 2019, of 25, 50 and 100 bps would result in a decrease of approximately $2 million, $10 million and $65 million, in the fair value of the MSRs and related derivative instruments, respectively. Refer to Note 9 of the Notes to Consolidated Financial Statements for additional information regarding MSRs.

Additionally, the Company uses forward commitments to sell TBAs and other commitments to sell residential mortgage loans at specified prices to economically hedge the interest rate risk in its residential mortgage loan production activities. At December 31, 2019, the Company had $6.9 billion of forward commitments to sell, hedging $4.6 billion of MLHFS and $3.0 billion of unfunded mortgage loan commitments. The forward commitments to sell and the unfunded mortgage loan commitments on loans intended to be sold are considered derivatives under the accounting guidance related to accounting for derivative instruments and hedging activities. The Company has elected the fair value option for the MLHFS.

Derivatives are subject to credit risk associated with counterparties to the contracts. Credit risk associated with derivatives is measured by the Company based on the probability of counterparty default. The Company manages the credit risk of its derivative positions by diversifying its positions among various counterparties, by entering into master netting arrangements, and, where possible, by requiring collateral arrangements. The Company may also transfer counterparty credit risk related to interest rate swaps to third parties through the use of risk participation agreements. In addition, certain interest rate swaps, interest rate forwards and credit contracts are required to be centrally cleared through clearinghouses to further mitigate counterparty credit risk.

For additional information on derivatives and hedging activities, refer to Notes 19 and 20 in the Notes to Consolidated Financial Statements.

LIBOR Transition In July 2017, the United Kingdom's Financial Conduct Authority announced that it would no longer require banks to submit rates for the London InterBank Offered Rate ("LIBOR") after 2021. The Company holds financial instruments that will be impacted by the discontinuance of LIBOR, including certain loans, investment securities, derivatives, borrowings and other financial instruments that use LIBOR as the benchmark rate. The Company also provides various services to customers in its capacity as trustee, which involve financial instruments that will be similarly impacted by the discontinuance of LIBOR. The Company anticipates these financial instruments will require transition to a new reference rate. This transition will occur over the next several years as many of these arrangements do not have an alternative rate referenced in their contracts or a clear path for the parties to agree upon an alternative reference rate. In order to facilitate the transition process, the Company has instituted a LIBOR Transition Office and commenced an enterprise-wide project to identify, assess and monitor risks associated with the expected discontinuance or unavailability of LIBOR, actively engage with industry working groups and regulators, achieve operational readiness and engage impacted customers. Refer to "Risk Factors" beginning on page 146, for further discussion on potential risks that could adversely affect the Company's financial results as a result of the LIBOR transition.

Market Risk Management In addition to interest rate risk, the Company is exposed to other forms of market risk, principally related to trading activities which support customers' strategies to manage their own foreign currency, interest rate risk and funding activities. For purposes of its internal capital adequacy assessment process, the Company considers risk arising from its trading activities, as well as the remeasurement volatility of foreign currency denominated balances included on its Consolidated Balance Sheet (collectively, "Covered Positions"), employing methodologies consistent with the requirements of regulatory rules for market risk. The Company's Market Risk Committee ("MRC"), within the framework of the ALCO, oversees market risk management. The MRC monitors and reviews the Company's Covered Positions and establishes policies for market risk management, including exposure limits for each portfolio. The Company uses a VaR approach to measure general market risk. Theoretically, VaR represents the statistical risk of loss the Company has to adverse market movements over a one-day time horizon. The Company uses the Historical Simulation method to calculate VaR for its Covered Positions measured at the ninety-ninth percentile using a one-year look-back period for distributions derived from past market data. The market factors used in the calculations include those pertinent to market risks inherent in the underlying trading portfolios, principally those that affect the Company's corporate bond trading business, foreign currency transaction business, client derivatives business, loan trading business and municipal securities business, as well as those inherent in the Company's foreign denominated balances and the derivatives used to mitigate the related measurement volatility. On average, the Company expects the one-day VaR to be exceeded by actual losses two to three times per year related to these positions. The Company monitors the accuracy of internal VaR models and modeling processes by back-testing model performance, regularly updating the historical data used by the VaR models and regular model validations to assess the accuracy of the models' input, processing, and reporting components. All models are required to be independently reviewed and approved prior to being placed in use. If the Company were to experience market losses in excess of the estimated VaR more often than expected, the VaR models and associated assumptions would be analyzed and adjusted.

The average, high, low and period-end one-day VaR amounts for the Company's Covered Positions were as follows:

Year Ended December 31 (Dollars in Millions)	2019	2018
Average	$1	$1
High	2	1
Low	1	1
Period-end	1	1

The Company did not experience any actual losses for its combined Covered Positions that exceeded VaR during 2019 and 2018. The Company stress tests its market risk measurements to provide management with perspectives on market events that may not be captured by its VaR models, including worst case historical market movement combinations that have not necessarily occurred on the same date.

The Company calculates Stressed VaR using the same underlying methodology and model as VaR, except that a historical continuous one-year look-back period is utilized that reflects a period of significant financial stress appropriate to the Company's Covered Positions. The period selected by the Company includes the significant market volatility of the last four months of 2008.

The average, high, low and period-end one-day Stressed VaR amounts for the Company's Covered Positions were as follows:

Year Ended December 31 (Dollars in Millions)	2019	2018
Average	$6	$5
High	9	8
Low	4	2
Period-end	5	6

Valuations of positions in client derivatives and foreign currency activities are based on discounted cash flow or other valuation techniques using market-based assumptions. These valuations are compared to third-party quotes or other market prices to determine if there are significant variances. Significant variances are approved by senior management in the Company's corporate functions. Valuation of positions in the corporate bond trading, loan trading and municipal securities businesses are based on trader marks. These trader marks are evaluated against third-party prices, with significant variances approved by senior management in the Company's corporate functions.

The Company also measures the market risk of its hedging activities related to residential MLHFS and MSRs using the Historical Simulation method. The VaRs are measured at the ninety-ninth percentile and employ factors pertinent to the market risks inherent in the valuation of the assets and hedges. A one-year look-back period is used to obtain past market data for the models.

The average, high and low VaR amounts for the residential MLHFS and related hedges and the MSRs and related hedges were as follows:

Year Ended December 31 (Dollars in Millions)	2019	2018
Residential Mortgage Loans Held For Sale and Related Hedges		
Average	$ 3	$1
High	8	2
Low	–	–
Mortgage Servicing Rights and Related Hedges		
Average	$ 7	$5
High	11	7
Low	4	4

Liquidity Risk Management The Company's liquidity risk management process is designed to identify, measure, and manage the Company's funding and liquidity risk to meet its daily funding needs and to address expected and unexpected changes in its funding requirements. The Company engages in various activities to manage its liquidity risk. These activities include diversifying its funding sources, stress testing, and holding readily-marketable assets which can be used as a source of liquidity if needed. In addition, the Company's profitable operations, sound credit quality and strong capital position have enabled it to develop a large and reliable base of core deposit funding within its market areas and in domestic and global capital markets.

The Company's Board of Directors approves the Company's liquidity policy. The Risk Management Committee of the Company's Board of Directors oversees the Company's liquidity risk management process and approves a contingency funding plan. The ALCO reviews the Company's liquidity policy and limits, and regularly assesses the Company's ability to meet funding requirements arising from adverse company-specific or market events.

The Company's liquidity policy requires it to maintain diversified wholesale funding sources to avoid maturity, entity and market concentrations. The Company operates a Cayman Islands branch for issuing Eurodollar time deposits. In addition, the Company has relationships with dealers to issue national market retail and institutional savings certificates and short-term and medium-term notes. The Company also maintains a significant correspondent banking network and relationships. Accordingly, the Company has access to national federal funds, funding through repurchase agreements and sources of stable certificates of deposit and commercial paper.

The Company regularly projects its funding needs under various stress scenarios and maintains a contingency funding plan consistent with the Company's access to diversified sources of contingent funding. The Company maintains a substantial level of total available liquidity in the form of on-balance sheet and off-balance sheet funding sources. These liquidity sources include cash at the Federal Reserve Bank and certain European central banks, unencumbered liquid assets, and capacity to borrow from the FHLB and at Federal Reserve Bank's Discount Window. Unencumbered liquid assets in the Company's investment securities portfolio provides asset liquidity through the Company's ability to sell the securities or pledge and borrow against them. At December 31, 2019, the fair value of unencumbered investment securities totaled $114.2 billion, compared with $100.2 billion at December 31, 2018. Refer to Note 4 of the Notes to Consolidated Financial Statements and "Balance Sheet Analysis" for further information on investment securities maturities and trends. Asset liquidity is further enhanced by the Company's practice of pledging loans to access secured borrowing facilities through the FHLB and Federal Reserve Bank. At December 31, 2019, the Company could have borrowed an additional $97.4 billion from the FHLB and Federal Reserve Bank based on collateral available for additional borrowings.

The Company's diversified deposit base provides a sizeable source of relatively stable and low-cost funding, while reducing the Company's reliance on the wholesale markets. Total deposits were $361.9 billion at December 31, 2019, compared with $345.5 billion at December 31, 2018. Refer to Table 14 and "Balance Sheet Analysis" for further information on the Company's deposits.

Additional funding is provided by long-term debt and short-term borrowings. Long-term debt was $40.2 billion at December 31, 2019, and is an important funding source because of its multi-year borrowing structure. Refer to Note 13 of the Notes to Consolidated Financial Statements for information on the terms and maturities of the Company's long-term debt issuances and "Balance Sheet Analysis" for discussion on long-term debt trends. Short-term borrowings were $23.7 billion at December 31, 2019, and supplement the Company's other funding sources. Refer to Note 12 of the Notes to Consolidated Financial Statements and "Balance Sheet Analysis" for information on the terms and trends of the Company's short-term borrowings.

The Company's ability to raise negotiated funding at competitive prices is influenced by rating agencies' views of the Company's credit quality, liquidity, capital and earnings. Table 21 details the rating agencies' most recent assessments.

In addition to assessing liquidity risk on a consolidated basis, the Company monitors the parent company's liquidity. The parent company's routine funding requirements consist primarily of operating expenses, dividends paid to shareholders, debt service, repurchases of common stock and funds used for

TABLE 21 Debt Ratings

	Moody's	Standard & Poor's	Fitch	Dominion Bond Rating Service
U.S. Bancorp				
Long-term issuer rating	A1	A+	AA-	AA
Short-term issuer rating		A-1	F1+	R-1 (middle)
Senior unsecured debt	A1	A+	AA-	AA
Subordinated debt	A1	A-	A+	AA (low)
Junior subordinated debt	A2	BBB		AA (low)
Preferred stock	A3	BBB	BBB	A
Commercial paper	P-1		F1+	
U.S. Bank National Association				
Long-term issuer rating	A1	AA-	AA-	AA (high)
Short-term issuer rating	P-1	A-1+	F1+	R-1 (high)
Long-term deposits	Aa1		AA	AA (high)
Short-term deposits	P-1		F1+	
Senior unsecured debt	A1	AA-	AA-	AA (high)
Subordinated debt	A1	A	A+	AA
Commercial paper	P-1	A-1+	F1+	
Counterparty risk assessment	Aa2(cr)/P-1(cr)			
Counterparty risk rating	Aa3/P-1			
Baseline credit assessment	aa3			

acquisitions. The parent company obtains funding to meet its obligations from dividends collected from its subsidiaries and the issuance of debt and capital securities. The Company establishes limits for the minimal number of months into the future where the parent company can meet existing and forecasted obligations with cash and securities held that can be readily monetized. The Company measures and manages this limit in both normal and adverse conditions. The Company maintains sufficient funding to meet expected capital and debt service obligations for 24 months without the support of dividends from subsidiaries and assuming access to the wholesale markets is maintained. The Company maintains sufficient liquidity to meet its capital and debt service obligations for 12 months under adverse conditions without the support of dividends from subsidiaries or access to the wholesale markets. The parent company is currently well in excess of required liquidity minimums.

Under United States Securities and Exchange Commission rules, the parent company is classified as a "well-known seasoned issuer," which allows it to file a registration statement that does not have a limit on issuance capacity. "Well-known seasoned issuers" generally include those companies with outstanding common securities with a market value of at least $700 million held by non-affiliated parties or those companies that have issued at least $1 billion in aggregate principal amount of non-convertible securities, other than common equity, in the last three years. However, the parent company's ability to issue debt and other securities under a registration statement filed with the United States Securities and Exchange Commission under these rules is limited by the debt issuance authority granted by the Company's Board of Directors and/or the ALCO policy.

At December 31, 2019, parent company long-term debt outstanding was $18.6 billion, compared with $16.3 billion at December 31, 2018. The increase was primarily due to $2.7 billion of medium-term note and $1.0 billion of subordinated note issuances, partially offset by $1.5 billion of medium-term note repayments. As of December 31, 2019, there was no parent company debt scheduled to mature in 2020. Future debt maturities may be met through medium-term note and capital security issuances and dividends from subsidiaries, as well as from parent company cash and cash equivalents.

Dividend payments to the Company by its subsidiary bank are subject to regulatory review and statutory limitations and, in some instances, regulatory approval. In general, dividends to the parent company from its banking subsidiary are limited by rules which compare dividends to net income for regulatorily-defined periods. For further information, see Note 24 of the Notes to Consolidated Financial Statements.

The Company is subject to a regulatory Liquidity Coverage Ratio ("LCR") requirement which requires banks to maintain an adequate level of unencumbered high quality liquid assets to meet estimated liquidity needs over a 30-day stressed period. At December 31, 2019, the Company was compliant with this requirement.

European Exposures The Company provides merchant processing and corporate trust services in Europe either directly or through banking affiliations in Europe. Revenue generated from sources in Europe represented approximately 2 percent of the Company's total net revenue for 2019. Operating cash for these businesses is deposited on a short-term basis typically with certain European central banks. For deposits placed at other European banks, exposure is mitigated by the Company placing deposits at multiple banks and managing the amounts on deposit at any bank based on institution-specific deposit limits. At December 31, 2019, the Company had an aggregate amount on

TABLE 22 Contractual Obligations

At December 31, 2019 (Dollars in Millions)	Payments Due By Period: One Year or Less	Over One Through Three Years	Over Three Through Five Years	Over Five Years	Total
Contractual Obligations[(a)]					
Long-term debt[(b)]	$ 3,772	$15,728	$ 8,462	$12,205	$40,167
Operating leases	296	493	312	391	1,492
Benefit obligations[(c)]	25	56	63	212	356
Time deposits	37,731	3,883	1,275	5	42,894
Contractual interest payments[(d)]	1,758	1,523	925	738	4,944
Equity investment commitments	2,048	829	28	66	2,971
Other[(e)]	196	110	27	100	433
Total	$45,826	$22,622	$11,092	$13,717	$93,257

(a) Unrecognized tax positions of $432 million at December 31, 2019, are excluded as the Company cannot make a reasonably reliable estimate of the period of cash settlement with the respective taxing authority.

(b) Includes obligations under finance leases.

(c) Amounts only include obligations related to the unfunded non-qualified pension plans.

(d) Includes accrued interest and future contractual interest obligations.

(e) Primarily includes purchase obligations for goods and services covered by noncancellable contracts including cancellation fees.

deposit with European banks of approximately $8.5 billion, predominately with the Central Bank of Ireland and Bank of England.

In addition, the Company provides financing to domestic multinational corporations that generate revenue from customers in European countries, transacts with various European banks as counterparties to certain derivative-related activities, and through a subsidiary, manages money market funds that hold certain investments in European sovereign debt. Any deterioration in economic conditions in Europe, including the potential negative impact of the United Kingdom's withdrawal from the European Union ("Brexit"), is not expected to have a significant effect on the Company related to these activities. The Company is focused on providing continuity of services, with minimal disruption resulting from Brexit, to customers with activities in European countries. The Company has made certain structural changes to its legal entities and operations in the United Kingdom and European Union, where needed, and migrated certain business activities to the appropriate jurisdictions to continue to provide such services and generate revenue.

Off-Balance Sheet Arrangements Off-balance sheet arrangements include any contractual arrangements to which an unconsolidated entity is a party, under which the Company has an obligation to provide credit or liquidity enhancements or market risk support. Off-balance sheet arrangements also include any obligation related to a variable interest held in an unconsolidated entity that provides financing, liquidity, credit enhancement or market risk support. The Company has not utilized private label asset securitizations as a source of funding.

Commitments to extend credit are legally binding and generally have fixed expiration dates or other termination clauses. Many of the Company's commitments to extend credit expire without being drawn and, therefore, total commitment amounts do not necessarily represent future liquidity requirements or the Company's exposure to credit loss. Commitments to extend credit also include consumer credit lines that are cancelable upon notification to the consumer. Total contractual amounts of commitments to extend credit at December 31, 2019 were $324.1 billion. The Company also issues and confirms various types of letters of credit, including standby and commercial. Total contractual amounts of letters of credit at December 31, 2019 were $10.6 billion. For more information on the Company's commitments to extend credit and letters of credit, refer to Note 22 in the Notes to Consolidated Financial Statements.

The Company's off-balance sheet arrangements with unconsolidated entities primarily consist of private investment funds or partnerships that make equity investments, provide debt financing or support community-based investments in tax-advantaged projects. In addition to providing investment returns, these arrangements in many cases assist the Company in complying with requirements of the Community Reinvestment Act. The investments in these entities generate a return primarily through the realization of federal and state income tax credits and other tax benefits, such as tax deductions from operating losses of the investments, over specified time periods. The entities in which the Company invests are generally considered variable interest entities ("VIEs"). The Company's recorded net investment in these entities as of December 31, 2019 was approximately $3.2 billion.

The Company also has non-controlling financial investments in private funds and partnerships considered VIEs. The Company's recorded investment in these entities was approximately $31 million at December 31, 2019, and the Company had unfunded commitments to invest an additional $24 million. For more information on the Company's interests in unconsolidated VIEs, refer to Note 7 in the Notes to Consolidated Financial Statements.

Guarantees are contingent commitments issued by the Company to customers or other third parties requiring the Company to perform if certain conditions exist or upon the occurrence or nonoccurrence of a specified event, such as a scheduled payment to be made under contract. The Company's primary guarantees include commitments from securities lending activities in which indemnifications are provided to customers; indemnification or buy-back provisions related to sales of loans and tax credit investments; and merchant charge-back guarantees through the Company's involvement in providing merchant processing services. For certain guarantees, the Company may have access to collateral to support the guarantee, or through the exercise of other recourse provisions, be able to offset some or all of any payments made under these guarantees.

The Company and certain of its subsidiaries, along with other Visa U.S.A. Inc. member banks, have a contingent guarantee obligation to indemnify Visa Inc. for potential losses arising from antitrust lawsuits challenging the practices of Visa U.S.A. Inc. and MasterCard International. The indemnification by the Company and other Visa U.S.A. Inc. member banks has no maximum amount. Refer to Note 22 in the Notes to Consolidated Financial Statements for further details regarding guarantees, other commitments, and contingent liabilities, including maximum potential future payments and current carrying amounts.

Capital Management The Company is committed to managing capital to maintain strong protection for depositors and creditors and for maximum shareholder benefit. The Company continually assesses its business risks and capital position. The Company also manages its capital to exceed regulatory capital requirements for banking organizations. To achieve its capital goals, the Company employs a variety of capital management tools, including dividends, common share repurchases, and the issuance of subordinated debt, non-cumulative perpetual preferred stock, common stock and other capital instruments.

On September 17, 2019, the Company announced its Board of Directors had approved a 13.5 percent increase in the Company's dividend rate per common share, from $0.37 per quarter to $0.42 per quarter.

The Company repurchased approximately 81 million shares of its common stock in 2019, compared with approximately 54 million shares in 2018. The average price paid for the shares repurchased in 2019 was $55.88 per share, compared with $52.57 per share in 2018. As of December 31, 2019, the approximate dollar value of shares that may yet be purchased by the Company under the current share repurchase program approved by the Board of Directors was $2.4 billion. For a more complete analysis of activities impacting shareholders' equity and capital management programs, refer to Note 14 of the Notes to Consolidated Financial Statements.

Total U.S. Bancorp shareholders' equity was $51.9 billion at December 31, 2019, compared with $51.0 billion at December 31, 2018. The increase was primarily the result of corporate earnings and changes in unrealized gains and losses on available-for-sale investment securities included in other comprehensive income (loss), partially offset by common share repurchases and dividends.

The regulatory capital requirements effective for the Company follow Basel III, which includes two comprehensive methodologies for calculating risk-weighted assets: a general standardized approach and more risk-sensitive advanced approaches. Prior to December 31, 2019, the Company's capital adequacy was evaluated against the methodology that was most restrictive. In November 2019, the Company's regulators issued final rules which tailor regulations to reduce certain compliance requirements for banking organizations with less risk. These rules reduced the Company's capital and liquidity requirements and no longer subject the Company to calculating its capital adequacy as a percentage of risk-weighted assets under advanced approaches effective December 31, 2019. Under Basel III, banking regulators define minimum capital requirements for banks and financial services holding companies. These requirements are expressed in the form of a minimum common equity tier 1 capital ratio, tier 1 capital ratio, total risk-based capital ratio, tier 1 leverage ratio and a tier 1 total leverage exposure, or supplementary leverage, ratio. The Company's minimum required level for these ratios at December 31, 2019, which include a capital conservation buffer of 2.5 percent for the common equity tier 1 capital, tier 1 capital and total capital ratios, was 7.0 percent, 8.5 percent, 10.5 percent, 4.0 percent, and 3.0 percent, respectively. The Company targets its regulatory capital levels, at both the bank and bank holding company level, to exceed the "well-capitalized" threshold for these ratios under the FDIC Improvement Act prompt corrective action provisions that are applicable to all banks. At December 31, 2019, the Company's minimum "well-capitalized" threshold for the common equity tier 1 capital ratio, tier 1 capital ratio, total risk-based capital ratio, tier 1 leverage ratio, and tier 1 total leverage exposure ratio was 6.5 percent, 8.0 percent, 10.0 percent, 5.0 percent, and 3.0 percent, respectively. The most recent notification from the Office of the Comptroller of the Currency categorized the Company's bank subsidiary as "well-capitalized". There are no conditions or events since that notification that management believes have changed the risk-based category of its covered subsidiary bank.

In addition, as a result of the November 2019 rule changes, the Company received approval from the Board of Governors of the Federal Reserve System in late 2019 to increase the authorization amount of its common stock repurchase program effective through June 30, 2020, which enabled it to reduce its common equity tier 1 capital ratio from 9.6 percent at September 30, 2019 to 9.1 percent at December 31, 2019.

As an approved mortgage seller and servicer, U.S. Bank National Association, through its mortgage banking division, is required to maintain various levels of shareholder's equity, as specified by various agencies, including the United States Department of Housing and Urban Development, Government National Mortgage Association, Federal Home Loan Mortgage Corporation and the Federal National Mortgage Association. At December 31, 2019, U.S. Bank National Association met these requirements.

Table 23 provides a summary of statutory regulatory capital ratios in effect for the Company at December 31, 2019 and 2018. All regulatory ratios exceeded regulatory "well-capitalized" requirements.

TABLE 23 Regulatory Capital Ratios

At December 31 (Dollars in Millions)	2019	2018
Basel III standardized approach:		
Common equity tier 1 capital	$ 35,713	$ 34,724
Tier 1 capital	41,721	40,741
Total risk-based capital	49,744	48,178
Risk-weighted assets	391,269	381,661
Common equity tier 1 capital as a percent of risk-weighted assets	9.1%	9.1%
Tier 1 capital as a percent of risk-weighted assets	10.7	10.7
Total risk-based capital as a percent of risk-weighted assets	12.7	12.6
Tier 1 capital as a percent of adjusted quarterly average assets (leverage ratio)	8.8	9.0
Basel III advanced approaches:(a)		
Common equity tier 1 capital		$ 34,724
Tier 1 capital		40,741
Total risk-based capital		45,136
Risk-weighted assets		295,002
Common equity tier 1 capital as a percent of risk-weighted assets		11.8%
Tier 1 capital as a percent of risk-weighted assets		13.8
Total risk-based capital as a percent of risk-weighted assets		15.3
Tier 1 capital as a percent of total on- and off-balance sheet leverage exposure (total leverage exposure ratio)	7.0%	7.2

(a) Effective December 31, 2019, the Company is no longer subject to calculating its capital adequacy as a percentage of risk-weighted assets under advanced approaches.

The Company believes certain other capital ratios are useful in evaluating its capital adequacy. The Company's tangible common equity, as a percent of tangible assets and as a percent of risk-weighted assets calculated under the standardized approach, was 7.5 percent and 9.3 percent, respectively, at December 31, 2019, compared with 7.8 percent and 9.4 percent, respectively, at December 31, 2018. Refer to "Non-GAAP Financial Measures" beginning on page 62 for further information on these other capital ratios.

Fourth Quarter Summary

The Company reported net income attributable to U.S. Bancorp of $1.5 billion for the fourth quarter of 2019, or $0.90 per diluted common share, compared with $1.9 billion, or $1.10 per diluted common share, for the fourth quarter of 2018. Return on average assets and return on average common equity were 1.21 percent and 11.8 percent, respectively, for the fourth quarter of 2019, compared with 1.59 percent and 15.8 percent, respectively, for the fourth quarter of 2018. The results for the fourth quarter of 2019 included the impact of the severance and asset impairment restructuring charges, and the increased derivative liability related to Visa shares previously sold by the Company. Combined, these items decreased fourth quarter 2019 diluted earnings per common share by $0.18.

Total net revenue for the fourth quarter of 2019, was $162 million (2.8 percent) lower than the fourth quarter of 2018, reflecting a 2.9 percent decrease in net interest income (3.0 percent on a taxable-equivalent basis) and a 2.5 percent decrease in noninterest income. The decrease in net interest income from the fourth quarter of 2018 was mainly a result of the impact of the yield curve and changes in deposit and funding mix, partially offset by higher yields on the reinvestment of securities in addition to loan growth. The noninterest income decrease was driven by lower other noninterest income and deposit service charges, partially offset by growth in payment services revenue, trust and investment management fees and mortgage banking revenue.

Noninterest expense in the fourth quarter of 2019 was $121 million (3.7 percent) higher than the fourth quarter of 2018, primarily due to increases in personnel expense driven by stronger fee revenue production in mortgage activities, technology and communications expense in support of business growth, net occupancy and equipment expense due to capital expenditures in support of business growth, and other noninterest expense.

Fourth quarter 2019 net interest income, on a taxable-equivalent basis, was $3.2 billion, compared with $3.3 billion in the fourth quarter of 2018. The $100 million (3.0 percent) decrease was principally driven by the impact of lower interest rates and a flatter yield curve in addition to changes in deposit and funding mix, partially offset by higher yields on reinvestment of securities and loan growth. Average earning assets were $19.3 billion (4.6 percent) higher in the fourth quarter of 2019, compared with the fourth quarter of 2018, reflecting increases of $11.2 billion (3.9 percent) in average loans and $7.5 billion (6.6 percent) in average investment securities. The net interest margin, on a taxable-equivalent basis, in the fourth quarter of 2019 was 2.92 percent, compared with 3.15 percent in the fourth quarter of 2018. The decrease in net interest margin was primarily due to the impact of declining interest rates on the yield curve in addition to changes in deposit and funding mix.

TABLE 24 Fourth Quarter Results

(Dollars and Shares in Millions, Except Per Share Data)	Three Months Ended December 31 2019	2018
Condensed Income Statement		
Net interest income	$3,207	$3,303
Taxable-equivalent adjustment[(a)]	24	28
Net interest income (taxable-equivalent basis)[(b)]	3,231	3,331
Noninterest income	2,410	2,493
Securities gains (losses), net	26	5
Total net revenue	5,667	5,829
Noninterest expense	3,401	3,280
Provision for credit losses	395	368
Income before taxes	1,871	2,181
Income taxes and taxable-equivalent adjustment	378	319
Net income	1,493	1,862
Net (income) loss attributable to noncontrolling interests	(7)	(6)
Net income attributable to U.S. Bancorp	$1,486	$1,856
Net income applicable to U.S. Bancorp common shareholders	$1,408	$1,777
Per Common Share		
Earnings per share	$ .91	$ 1.10
Diluted earnings per share	$ .90	$ 1.10
Dividends declared per share	$ .42	$ .37
Average common shares outstanding	1,556	1,615
Average diluted common shares outstanding	1,558	1,618
Financial Ratios		
Return on average assets	1.21%	1.59%
Return on average common equity	11.8	15.8
Net interest margin (taxable-equivalent basis)[(a)]	2.92	3.15
Efficiency ratio[(b)]	60.3	56.3

(a) Based on a federal income tax rate of 21 percent for those assets and liabilities whose income or expense is not included for federal income tax purposes.
(b) See Non-GAAP Financial Measures beginning on page 62.

Noninterest income in the fourth quarter of 2019 was $2.4 billion, representing a decrease of $62 million (2.5 percent) from the fourth quarter of 2018. The decrease reflected lower other noninterest income and deposit service charges, partially offset by growth in payment services revenue, trust and investment management fees and mortgage banking revenue. Other noninterest income decreased $172 million (55.5 percent) in the fourth quarter of 2019, compared with the same period of the prior year, reflecting the net impact in the fourth quarter of 2019 of the $140 million charge for the increased derivative liability related to Visa shares previously sold by the Company, partially offset by a gain on the sale of a loan portfolio, and the net impact in the fourth quarter of 2018 of the $340 million gain recorded from the sale of the Company's ATM servicing business, partially offset by $264 million of asset impairment charges related to the sale of a majority of the Company's covered loans and certain other assets. Deposit service charges decreased $22 million (8.7 percent) primarily due to the sale of the Company's ATM servicing business in the fourth quarter of 2018. The increase in payment services revenue reflected higher merchant processing services revenue of $20 million (5.1 percent), driven by higher sales volumes and merchant fees, partially offset by slightly lower credit and debit card revenue of $4 million (1.0 percent) and corporate payment products revenue of $5 million (3.1 percent). The decline in corporate payment products revenue was driven by lower commercial business sales volumes. Trust and investment management fees increased $29 million (7.1 percent) due to business growth and favorable market conditions, while mortgage banking revenue increased $73 million (42.7 percent) due to higher mortgage production and gain on sale margins.

Noninterest expense in the fourth quarter of 2019 was $3.4 billion, compared with $3.3 billion in the same period of 2018, representing an increase of $121 million (3.7 percent). The increase was primarily due to higher personnel expense, technology and communications expense, net occupancy and equipment expense, and other noninterest expense. Compensation expense in the fourth quarter of 2019 increased $29 million (1.8 percent) over the same period of the prior year, driven by the impact of hiring to support business growth, merit increases and higher variable compensation related to business production within mortgage banking, while employee benefits expense increased $7 million (2.3 percent) primarily due to higher medical costs. Technology and communications expense increased $37 million (14.6 percent) and net occupancy and equipment expense increased $20 million (7.5 percent), primarily to support business growth. Other noninterest expense increased $26 million (5.0 percent) primarily due to the net impacts of severance charges and other accruals of $200 million in the fourth quarter of 2019, partially offset by severance charges and accruals for legal matters of $174 million in the fourth quarter of 2018.

The provision for credit losses for the fourth quarter of 2019 was $395 million, an increase of $27 million (7.3 percent) from the same period of 2018. The provision for credit losses was $10 million higher than net charge-offs in the fourth quarter of 2019 and $15 million higher than net charge-offs in the fourth quarter of 2018. The increase in the allowance for credit losses during the fourth quarter of 2019 reflected loan portfolio growth. Net charge-offs were $385 million in the fourth quarter of 2019, compared with $353 million in the fourth quarter of 2018. The net charge-off ratio was 0.52 percent in the fourth quarter of 2019, compared with 0.49 percent in the fourth quarter of 2018.

The provision for income taxes was $354 million (an effective rate of 19.2 percent) for the fourth quarter of 2019, compared with $291 million (an effective rate of 13.5 percent) for the same period of 2018. The fourth quarter of 2018 provision for income taxes reflected the favorable impact of deferred tax assets and liabilities adjustments related to tax reform legislation enacted in late 2017.

Line of Business Financial Review

The Company's major lines of business are Corporate and Commercial Banking, Consumer and Business Banking, Wealth Management and Investment Services, Payment Services, and Treasury and Corporate Support. These operating segments are components of the Company about which financial information is prepared and is evaluated regularly by management in deciding how to allocate resources and assess performance.

Basis for Financial Presentation Business line results are derived from the Company's business unit profitability reporting systems by specifically attributing managed balance sheet assets, deposits and other liabilities and their related income or expense. Refer to Note 23 of the Notes to Consolidated Financial Statements for further information on the business lines' basis for financial presentation.

Designations, assignments and allocations change from time to time as management systems are enhanced, methods of evaluating performance or product lines change or business segments are realigned to better respond to the Company's diverse customer base. During 2019, certain organization and methodology changes were made and, accordingly, 2018 results were restated and presented on a comparable basis.

Corporate and Commercial Banking Corporate and Commercial Banking offers lending, equipment finance and small-ticket leasing, depository services, treasury management, capital markets services, international trade services and other financial services to middle market, large corporate, commercial real estate, financial institution, non-profit and public sector clients. Corporate and Commercial Banking contributed $1.5 billion of the Company's net income in 2019, or a decrease of $52 million (3.3 percent), compared with 2018.

Net revenue decreased $41 million (1.1 percent) in 2019, compared with 2018. Net interest income, on a taxable-equivalent basis, decreased $65 million (2.2 percent) in 2019, compared with 2018, primarily due to lower noninterest-bearing deposit balances from 2018 and lower rates on loans, reflecting a competitive marketplace, partially offset by the impact of higher rates on the margin benefit from deposits and loan and interest-bearing deposit growth. Noninterest-bearing deposits are declining as customers deploy balances to support business growth. Noninterest income increased $24 million (2.8 percent) in 2019, compared with 2018, primarily due to higher trading revenue and corporate bond underwriting fees, partially offset by lower loan syndications revenue.

Noninterest expense increased $16 million (1.0 percent) in 2019, compared with 2018, reflecting higher net shared services expense driven by technology development and investment in infrastructure, higher salary expense driven by merit increases, and increases in production incentives associated with higher capital markets revenue. These increases were partially offset by lower FDIC assessment costs. The provision for credit losses increased $13 million (20.0 percent) in 2019, compared with 2018, due to higher net charge-offs, partially offset by a favorable change in the reserve allocation.

Consumer and Business Banking Consumer and Business Banking delivers products and services through banking offices, telephone servicing and sales, on-line services, direct mail, ATM processing and mobile devices. It encompasses community banking, metropolitan banking and indirect lending, as well as mortgage banking. Consumer and Business Banking contributed $2.3 billion of the Company's net income in 2019, or an increase of $38 million (1.7 percent), compared with 2018.

Net revenue increased $176 million (2.1 percent) in 2019, compared with 2018. Net interest income, on a taxable-equivalent basis, increased $105 million (1.7 percent) in 2019, compared with 2018, primarily due to the impact of higher rates on the margin benefit from deposits, as well as growth in both interest-bearing deposit balances and loan balances, partially offset by lower rates on loans. Noninterest income increased $71 million (3.1 percent) in 2019, compared with 2018, primarily due to higher mortgage banking revenue driven by higher mortgage production and gain on sale margins, partially offset by changes in MSRs valuations, net of hedging activities, as well as higher transition services agreement revenue associated with the sale of the Company's ATM third-party servicing business during 2018, partially offset by reductions in ATM processing services revenue due to the sale.

Noninterest expense increased $46 million (0.9 percent) in 2019, compared with 2018, primarily due to higher net shared services expense and higher production incentives, partially offset by lower FDIC assessment costs and lower mortgage banking costs. The increase in net shared services expense reflected the impact of technology development and investment in infrastructure supporting business growth, as well as higher costs to manage the business, while production incentives were higher in support of business growth. The provision for credit losses increased $78 million (33.6 percent) in 2019, compared with 2018, reflecting an unfavorable change in the reserve allocation as well as higher net charge-offs.

Wealth Management and Investment Services Wealth Management and Investment Services provides private banking, financial advisory services, investment management, retail brokerage services, insurance, trust, custody and fund servicing through four businesses: Wealth Management, Global Corporate Trust & Custody, U.S. Bancorp Asset Management and Fund Services. Wealth Management and Investment Services contributed $895 million of the Company's net income in 2019, or an increase of $81 million (10.0 percent), compared with 2018.

Net revenue increased $77 million (2.7 percent) in 2019, compared with 2018. Net interest income, on a taxable-equivalent basis, increased $26 million (2.3 percent) in 2019, compared with 2018, primarily due to the impact of higher deposit balances and the impact of higher rates on the margin benefit from deposits. Noninterest income increased $51 million (2.9 percent) in 2019, compared with 2018, principally due to favorable market conditions and business growth.

Noninterest expense decreased $29 million (1.6 percent) in 2019, compared with 2018, reflecting lower costs related to FDIC assessment and litigation settlements. These decreases were partially offset by higher compensation expense, reflecting the impact of merit increases, increased staffing, and higher medical costs, as well as increased net shared service expense due to technology development.

Payment Services Payment Services includes consumer and business credit cards, stored-value cards, debit cards, corporate, government and purchasing card services, consumer lines of credit and merchant processing. Payment Services contributed $1.5 billion of the Company's net income in 2019, or an increase of $25 million (1.7 percent), compared with 2018.

Net revenue increased $158 million (2.6 percent) in 2019, compared with 2018. Net interest income, on a taxable-equivalent basis, increased $50 million (2.0 percent) in 2019, compared with 2018, primarily due to growth in average loans as well as loan fees, partially offset by compression on loan rates. Noninterest income increased $108 million (3.0 percent) in 2019, compared with 2018, primarily due to higher merchant processing services revenue, corporate payment products revenue and credit and debit card revenue, all driven by higher sales volumes.

Noninterest expense increased $98 million (3.3 percent) in 2019, compared with 2018, principally due to higher net shared services expense to support business growth, technology development and investment in infrastructure, in addition to increases in personnel expense in support of business development and merit increases. The provision for credit losses increased $27 million (2.5 percent) in 2019, compared with 2018, reflecting higher net charge-offs, partially offset by a favorable change in the reserve allocation.

TABLE 25 Line of Business Financial Performance

Year Ended December 31 (Dollars in Millions)	Corporate and Commercial Banking 2019	Corporate and Commercial Banking 2018	Percent Change	Consumer and Business Banking 2019	Consumer and Business Banking 2018	Percent Change
Condensed Income Statement						
Net interest income (taxable-equivalent basis)	$ 2,871	$ 2,936	(2.2)%	$ 6,261	$ 6,156	1.7%
Noninterest income	867	843	2.8	2,387	2,316	3.1
Securities gains (losses), net	—	—	—	—	—	—
Total net revenue	3,738	3,779	(1.1)	8,648	8,472	2.1
Noninterest expense	1,607	1,591	1.0	5,285	5,232	1.0
Other intangibles	4	4	—	20	27	(25.9)
Total noninterest expense	1,611	1,595	1.0	5,305	5,259	.9
Income before provision and income taxes	2,127	2,184	(2.6)	3,343	3,213	4.0
Provision for credit losses	78	65	20.0	310	232	33.6
Income before income taxes	2,049	2,119	(3.3)	3,033	2,981	1.7
Income taxes and taxable-equivalent adjustment	513	531	(3.4)	759	745	1.9
Net income	1,536	1,588	(3.3)	2,274	2,236	1.7
Net (income) loss attributable to noncontrolling interests	—	—	—	—	—	—
Net income attributable to U.S. Bancorp	$ 1,536	$ 1,588	(3.3)	$ 2,274	$ 2,236	1.7
Average Balance Sheet						
Commercial	$ 78,141	$ 75,009	4.2%	$ 9,601	$ 9,857	(2.6)%
Commercial real estate	18,461	18,838	(2.0)	16,107	16,303	(1.2)
Residential mortgages	5	6	(16.7)	63,867	58,549	9.1
Credit card	—	—	—	—	—	—
Other retail	1	1	—	55,020	53,997	1.9
Total loans, excluding covered loans	96,608	93,854	2.9	144,595	138,706	4.2
Covered loans	—	—	—	—	2,169	*
Total loans	96,608	93,854	2.9	144,595	140,875	2.6
Goodwill	1,647	1,647	—	3,475	3,604	(3.6)
Other intangible assets	8	11	(27.3)	2,617	2,953	(11.4)
Assets	106,716	102,801	3.8	158,884	155,267	2.3
Noninterest-bearing deposits	29,152	32,938	(11.5)	27,876	27,691	.7
Interest checking	11,972	10,043	19.2	51,323	50,137	2.4
Savings products	43,154	41,904	3.0	62,322	61,475	1.4
Time deposits	17,654	17,966	(1.7)	15,644	13,322	17.4
Total deposits	101,932	102,851	(.9)	157,165	152,625	3.0
Total U.S. Bancorp shareholders' equity	10,399	10,463	(.6)	11,713	11,812	(.8)

* *Not meaningful*

Wealth Management and Investment Services			Payment Services			Treasury and Corporate Support			Consolidated Company		
2019	2018	Percent Change	2019	2018	Percent Change	2019	2018	Percent Change	2019	2018	Percent Change
$ 1,157	$ 1,131	2.3%	$ 2,493	$ 2,443	2.0%	$ 373	$ 369	1.1%	$ 13,155	$ 13,035	.9%
1,799	1,748	2.9	3,707	3,599	3.0	998	1,066	(6.4)	9,758	9,572	1.9
—	—	—	—	—	—	73	30	*	73	30	*
2,956	2,879	2.7	6,200	6,042	2.6	1,444	1,465	(1.4)	22,986	22,637	1.5
1,752	1,778	(1.5)	2,940	2,859	2.8	1,033	843	22.5	12,617	12,303	2.6
13	16	(18.8)	131	114	14.9	—	—	—	168	161	4.3
1,765	1,794	(1.6)	3,071	2,973	3.3	1,033	843	22.5	12,785	12,464	2.6
1,191	1,085	9.8	3,129	3,069	2.0	411	622	(33.9)	10,201	10,173	.3
(3)	(2)	(50.0)	1,108	1,081	2.5	11	3	*	1,504	1,379	9.1
1,194	1,087	9.8	2,021	1,988	1.7	400	619	(35.4)	8,697	8,794	(1.1)
299	273	9.5	505	497	1.6	(325)	(376)	13.6	1,751	1,670	4.9
895	814	10.0	1,516	1,491	1.7	725	995	(27.1)	6,946	7,124	(2.5)
—	—	—	—	—	—	(32)	(28)	(14.3)	(32)	(28)	(14.3)
$ 895	$ 814	10.0	$ 1,516	$ 1,491	1.7	$ 693	$ 967	(28.3)	$ 6,914	$ 7,096	(2.6)
$ 4,023	$ 3,778	6.5%	$ 9,905	$ 9,026	9.7%	$ 1,528	$ 1,184	29.1%	$ 103,198	$ 98,854	4.4%
509	520	(2.1)	—	—	—	4,309	4,316	(.2)	39,386	39,977	(1.5)
3,875	3,333	16.3	—	—	—	—	5	*	67,747	61,893	9.5
—	—	—	23,309	21,672	7.6	—	—	—	23,309	21,672	7.6
1,673	1,733	(3.5)	352	404	(12.9)	—	1	*	57,046	56,136	1.6
10,080	9,364	7.6	33,566	31,102	7.9	5,837	5,506	6.0	290,686	278,532	4.4
—	—	—	—	—	—	—	—	—	—	2,169	*
10,080	9,364	7.6	33,566	31,102	7.9	5,837	5,506	6.0	290,686	280,701	3.6
1,617	1,618	(.1)	2,839	2,570	10.5	—	—	—	9,578	9,439	1.5
49	63	(22.2)	538	406	32.5	—	—	—	3,212	3,433	(6.4)
13,330	12,437	7.2	39,743	36,912	7.7	156,980	149,597	4.9	475,653	457,014	4.1
13,195	14,006	(5.8)	1,205	1,099	9.6	2,435	2,462	(1.1)	73,863	78,196	(5.5)
9,056	9,928	(8.8)	—	—	—	202	46	*	72,553	70,154	3.4
49,545	42,215	17.4	113	107	5.6	845	744	13.6	155,979	146,445	6.5
3,430	3,857	(11.1)	2	3	(33.3)	7,687	3,519	*	44,417	38,667	14.9
75,226	70,006	7.5	1,320	1,209	9.2	11,169	6,771	65.0	346,812	333,462	4.0
2,525	2,476	2.0	7,084	6,629	6.9	20,902	18,383	13.7	52,623	49,763	5.7

Treasury and Corporate Support Treasury and Corporate Support includes the Company's investment portfolios, funding, capital management, interest rate risk management, income taxes not allocated to the business lines, including most investments in tax-advantaged projects, and the residual aggregate of those expenses associated with corporate activities that are managed on a consolidated basis. Treasury and Corporate Support recorded net income of $693 million in 2019, compared with $967 million in 2018.

Net revenue decreased $21 million (1.4 percent) in 2019, compared with 2018. Net interest income, on a taxable-equivalent basis, increased $4 million (1.1 percent) in 2019, compared with 2018, primarily due to growth in the investment portfolio, partially offset by changes in funding mix. Noninterest income decreased $25 million (2.3 percent) in 2019, compared with 2018, primarily due to a 2019 charge for an increased derivative liability related to Visa shares previously sold by the Company, and the 2018 net impact of the gain recorded from the sale of the ATM third-party servicing business and certain asset impairment charges. These decreases were partially offset by a 2019 gain on the sale of a loan portfolio and higher income from equity investments and gains on the sale of securities.

Noninterest expense increased $190 million (22.5 percent) in 2019, compared with 2018, principally due to higher compensation expense, reflecting the impact of increased staffing and merit increases, and higher implementation costs of capital investments to support business growth. Noninterest expense further increased due to the net impact of severance charges and asset impairment accruals recorded in 2019, and severance charges and legal matter accruals recorded in 2018. These increases were partially offset by lower net shared services expense and lower costs related to tax-advantaged projects. The provision for credit losses was $8 million higher in 2019, compared with 2018, due to an unfavorable change in the reserve allocation and higher net charge-offs.

Income taxes are assessed to each line of business at a managerial tax rate of 25.0 percent with the residual tax expense or benefit to arrive at the consolidated effective tax rate included in Treasury and Corporate Support.

Non-GAAP Financial Measures

In addition to capital ratios defined by banking regulators, the Company considers various other measures when evaluating capital utilization and adequacy, including:

– Tangible common equity to tangible assets, and
– Tangible common equity to risk-weighted assets.

These capital measures are viewed by management as useful additional methods of evaluating the Company's utilization of its capital held and the level of capital available to withstand unexpected negative market or economic conditions. Additionally, presentation of these measures allows investors, analysts and banking regulators to assess the Company's capital position relative to other financial services companies. These capital measures are not defined in generally accepted accounting principles ("GAAP"), or are not defined in banking regulations. As a result, these capital measures disclosed by the Company may be considered non-GAAP financial measures. Management believes this information helps investors assess trends in the Company's capital adequacy.

The Company also discloses net interest income and related ratios and analysis on a taxable-equivalent basis, which may also be considered non-GAAP financial measures. The Company believes this presentation to be the preferred industry measurement of net interest income as it provides a relevant comparison of net interest income arising from taxable and tax-exempt sources. In addition, certain performance measures, including the efficiency ratio and net interest margin utilize net interest income on a taxable-equivalent basis.

There may be limits in the usefulness of these measures to investors. As a result, the Company encourages readers to consider the consolidated financial statements and other financial information contained in this report in their entirety, and not to rely on any single financial measure.

The following table shows the Company's calculation of these non-GAAP financial measures:

At December 31 (Dollars in Millions)	2019	2018	2017	2016	2015
Total equity	$ 52,483	$ 51,657	$ 49,666	$ 47,933	$ 46,817
Preferred stock	(5,984)	(5,984)	(5,419)	(5,501)	(5,501)
Noncontrolling interests	(630)	(628)	(626)	(635)	(686)
Goodwill (net of deferred tax liability)(1)	(8,788)	(8,549)	(8,613)	(8,203)	(8,295)
Intangible assets, other than mortgage servicing rights	(677)	(601)	(583)	(712)	(838)
Tangible common equity(a)	36,404	35,895	34,425	32,882	31,497
Total assets	495,426	467,374	462,040	445,964	421,853
Goodwill (net of deferred tax liability)(1)	(8,788)	(8,549)	(8,613)	(8,203)	(8,295)
Intangible assets, other than mortgage servicing rights	(677)	(601)	(583)	(712)	(838)
Tangible assets(b)	485,961	458,224	452,844	437,049	412,720
Risk-weighted assets, determined in accordance with the Basel III standardized approach(c)	391,269	381,661	367,771	358,237	341,360
Ratios					
Tangible common equity to tangible assets(a)/(b)	7.5%	7.8%	7.6%	7.5%	7.6%
Tangible common equity to risk-weighted assets(a)/(c)	9.3	9.4	9.4	9.2	9.2

	Three Months Ended December 31		Year Ended December 31				
	2019	2018	2019	2018	2017	2016	2015
Net interest income	$3,207	$3,303	$13,052	$12,919	$12,380	$11,666	$11,151
Taxable-equivalent adjustment(2)	24	28	103	116	205	203	213
Net interest income, on a taxable-equivalent basis	3,231	3,331	13,155	13,035	12,585	11,869	11,364
Net interest income, on a taxable-equivalent basis (as calculated above)	3,231	3,331	13,155	13,035	12,585	11,869	11,364
Noninterest income	2,436	2,498	9,831	9,602	9,317	9,290	8,818
Less: Securities gains (losses), net	26	5	73	30	57	22	—
Total net revenue, excluding net securities gains (losses)(d)	5,641	5,824	22,913	22,607	21,845	21,137	20,182
Noninterest expense(e)	3,401	3,280	12,785	12,464	12,790	11,527	10,807
Efficiency ratio(e)/(d)	60.3%	56.3%	55.8%	55.1%	58.5%	54.5%	53.5%

(1) Includes goodwill related to certain investments in unconsolidated financial institutions per prescribed regulatory requirements.

(2) Based on federal income tax rates of 21 percent for 2019 and 2018 and 35 percent for 2017, 2016 and 2015, for those assets and liabilities whose income or expense is not included for federal income tax purposes.

Accounting Changes

Note 2 of the Notes to Consolidated Financial Statements discusses accounting standards recently issued but not yet required to be adopted and the expected impact of these changes in accounting standards. To the extent the adoption of new accounting standards materially affects the Company's financial condition or results of operations, the impacts are discussed in the applicable section(s) of the Management's Discussion and Analysis and the Notes to Consolidated Financial Statements.

Critical Accounting Policies

The accounting and reporting policies of the Company comply with accounting principles generally accepted in the United States and conform to general practices within the banking industry. The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions. The Company's financial position and results of operations can be affected by these estimates and assumptions, which are integral to understanding the Company's financial statements. Critical accounting policies are those policies management believes are the most important to the portrayal of the Company's financial condition and results, and require management to make estimates that are difficult, subjective or complex. Most accounting policies are not considered by management to be critical accounting policies. Several factors are considered in determining whether or not a policy is critical in the preparation of financial statements. These factors include, among other things, whether the estimates are significant to the financial statements, the nature of the estimates, the ability to readily validate the estimates with other information (including third-party sources or available prices), sensitivity of the estimates to changes in economic conditions and whether alternative accounting methods may be utilized under GAAP. Management has discussed the development and the selection of critical accounting policies with the Company's Audit Committee.

Significant accounting policies are discussed in Note 1 of the Notes to Consolidated Financial Statements. Those policies considered to be critical accounting policies are described below.

Allowance for Credit Losses Management's evaluation of the appropriate allowance for credit losses is often the most critical of all the accounting estimates for a banking institution. It is an inherently subjective process impacted by many factors as discussed throughout the Management's Discussion and Analysis section of the Annual Report. Through December 31, 2019, the allowance for credit losses was established to provide for probable and estimable losses incurred in the Company's credit portfolio. Effective January 1, 2020, the Company adopted new accounting guidance which changes previous impairment recognition to a model that is based on expected losses rather than incurred losses. Refer to Note 2 of the Notes to Consolidated Financial Statements for discussion on the effect of the adoption of this guidance on the Company's financial statements.

The methods utilized to estimate the allowance for credit losses, key assumptions and quantitative and qualitative information considered by management in determining the appropriate allowance for credit losses at December 31, 2019 are discussed in the "Credit Risk Management" section. Although methodologies utilized to determine each element of the allowance reflect management's assessment of credit risk as identified through assessments completed of individual credits and of homogenous pools affected by material credit events, degrees of imprecision exist in these measurement tools due in part to subjective judgments involved and an inherent lag in the data available to quantify current conditions and events that affect credit loss reserve estimates. As discussed in the "Analysis and Determination of Allowance for Credit Losses" section, management considered the effect of changes in economic conditions, risk management practices, and other factors that contributed to imprecision of loss estimates in determining the allowance for credit losses. If not considered, incurred losses in the credit portfolio related to imprecision and other subjective factors could have a dramatic adverse impact on the liquidity and financial viability of a banking institution.

Given the many subjective factors affecting the credit portfolio, changes in the allowance for credit losses may not directly coincide with changes in the risk ratings of the credit portfolio reflected in the risk rating process. This is in part due to the timing of the risk rating process in relation to changes in the business cycle, the exposure and mix of loans within risk rating categories, levels of nonperforming loans and the timing of charge-offs and recoveries. The allowance for credit losses on commercial lending segment loans measures the incurred loss content on the remaining portfolio exposure, while nonperforming loans and net charge-offs are measures of specific impairment events that have already been confirmed. Therefore, the degree of change in the commercial lending allowance may differ from the level of changes in nonperforming loans and net charge-offs. Management maintains an appropriate allowance for credit losses by updating aggregate allowance rates to reflect changes in economic uncertainty or business cycle conditions.

Some factors considered in determining the appropriate allowance for credit losses are quantifiable while other factors require qualitative judgment. Management conducts an analysis with respect to the accuracy of risk ratings and the volatility of inherent losses, and utilizes this analysis along with qualitative factors that can affect the precision of credit loss estimates, including economic conditions, such as changes in unemployment or bankruptcy rates, and concentration risks, such as risks associated with specific industries, collateral valuations, and loans to highly leveraged enterprises, in determining the overall level of the allowance for credit losses. The Company's determination of the allowance for commercial lending segment loans is sensitive to the assigned credit risk ratings and inherent loss rates at December 31, 2019. If 10 percent of period ending loan balances (including unfunded commitments) within each risk category of this segment of the loan portfolio experienced downgrades of two risk categories, the allowance for credit losses would have increased by approximately $223 million at December 31, 2019. The Company believes the allowance for credit losses appropriately considers the imprecision in estimating credit losses based on credit risk ratings and inherent loss rates but actual losses may differ from those estimates. If inherent loss or estimated loss rates for commercial lending segment loans increased by 10 percent, the allowance for credit losses would have increased by approximately $177 million at December 31, 2019. The Company's determination of the allowance for consumer lending segment loans is sensitive to changes in estimated loss rates and estimated impairments on restructured loans. In the event that estimated losses for this segment of the loan portfolio increased by 10 percent, the allowance for credit losses would have increased by approximately $174 million at December 31, 2019. Because several quantitative and qualitative factors are considered in determining the allowance for credit losses, these sensitivity analyses do not necessarily reflect the nature and extent of future changes in the allowance for credit losses. They are intended to provide insights into the impact of adverse changes in risk rating and inherent losses and do not imply any expectation of future deterioration in the risk rating or loss rates. Given current processes employed by the Company, management believes the risk ratings and inherent loss rates currently assigned are appropriate. It is possible that others, given the same information, may at any point in time reach different reasonable conclusions that could be significant to the Company's financial statements. Refer to the "Analysis and Determination of the Allowance for Credit Losses" section for further information.

Fair Value Estimates A portion of the Company's assets and liabilities are carried at fair value on the Consolidated Balance Sheet, with changes in fair value recorded either through earnings or other comprehensive income (loss) in accordance with applicable accounting principles generally accepted in the United States. These include all of the Company's available-for-sale investment securities, derivatives and other trading instruments, MSRs and MLHFS. The estimation of fair value also affects other loans held for sale, which are recorded at the lower-of-cost-or-fair value. The determination of fair value is important for certain other assets that are periodically evaluated for impairment using fair value estimates, including goodwill and other intangible assets, impaired loans, OREO and other repossessed assets.

Fair value is generally defined as the exit price at which an asset or liability could be exchanged in a current transaction between willing, unrelated parties, other than in a forced or liquidation sale. Fair value is based on quoted market prices in an active market, or if market prices are not available, is estimated using models employing techniques such as matrix pricing or discounting expected cash flows. The significant assumptions used in the models, which include assumptions for interest rates, discount rates, prepayments and credit losses, are independently verified against observable market data where possible. Where observable market data is not available, the estimate of fair value becomes more subjective and involves a high degree of judgment. In this circumstance, fair value is estimated based on management's judgment regarding the value that market participants would assign to the asset or liability. This valuation process takes into consideration factors such as market illiquidity. Imprecision in estimating these factors can impact the amount recorded on the balance sheet for a particular asset or liability with related impacts to earnings or other comprehensive income (loss).

When available, trading and available-for-sale securities are valued based on quoted market prices. However, certain securities are traded less actively and, therefore, quoted market prices may not be available. The determination of fair value may require benchmarking to similar instruments or performing a discounted cash flow analysis using estimates of future cash flows and prepayment, interest and default rates. For more information on investment securities, refer to Note 4 of the Notes to Consolidated Financial Statements.

As few derivative contracts are listed on an exchange, the majority of the Company's derivative positions are valued using valuation techniques that use readily observable market inputs. Certain derivatives, however, must be valued using techniques that include unobservable inputs. For these instruments, the significant assumptions must be estimated and, therefore, are subject to judgment. Note 19 of the Notes to Consolidated Financial Statements provides a summary of the Company's derivative positions.

Refer to Note 21 of the Notes to Consolidated Financial Statements for additional information regarding estimations of fair value.

Mortgage Servicing Rights MSRs are capitalized as separate assets when loans are sold and servicing is retained, or may be purchased from others. The Company records MSRs at fair value. Because MSRs do not trade in an active market with readily observable prices, the Company determines the fair value by estimating the present value of the asset's future cash flows utilizing market-based prepayment rates, option adjusted spread, and other assumptions validated through comparison to trade information, industry surveys and independent third-party valuations. Changes in the fair value of MSRs are recorded in earnings during the period in which they occur. Risks inherent in the valuation of MSRs include higher than expected prepayment rates and/or delayed receipt of cash flows. The Company utilizes derivatives, including interest rate swaps, swaptions, forward commitments to buy TBAs, U.S. Treasury and Eurodollar futures and options on U.S. Treasury futures, to mitigate the valuation risk. Refer to Notes 9 and 21 of the Notes to Consolidated Financial Statements for additional information on the assumptions used in determining the fair value of MSRs and an analysis of the sensitivity to changes in interest rates of the fair value of the MSRs portfolio and the related derivative instruments used to mitigate the valuation risk.

Income Taxes The Company estimates income tax expense based on amounts expected to be owed to the various tax jurisdictions in which it operates, including federal, state and local domestic jurisdictions, and an insignificant amount to foreign jurisdictions. The estimated income tax expense is reported in the Consolidated Statement of Income. Accrued taxes are reported in other assets or other liabilities on the Consolidated Balance Sheet and represent the net estimated amount due to or to be received from taxing jurisdictions either currently or deferred to future periods. Deferred taxes arise from differences between assets and liabilities measured for financial reporting purposes versus income tax reporting purposes. Deferred tax assets are recognized if, in management's judgment, their realizability is determined to be more likely than not. Uncertain tax positions that meet the more likely than not recognition threshold are measured to determine the amount of benefit to recognize. An uncertain tax position is measured at the largest amount of benefit management believes is more likely than not to be realized upon settlement. In estimating accrued taxes, the Company assesses the relative merits and risks of the appropriate tax treatment considering statutory, judicial and regulatory guidance in the context of the tax position. Because of the complexity of tax laws and regulations, interpretation can be difficult and subject to legal judgment given specific facts and circumstances. It is possible that others, given the same information, may at any point in time reach different reasonable conclusions regarding the estimated amounts of accrued taxes.

Changes in the estimate of accrued taxes occur periodically due to changes in tax rates, interpretations of tax laws, the status of examinations being conducted by various taxing authorities, and newly enacted statutory, judicial and regulatory guidance that impacts the relative merits and risks of tax positions. These changes, when they occur, affect accrued taxes and can be significant to the operating results of the Company. Refer to Note 18 of the Notes to Consolidated Financial Statements for additional information regarding income taxes.

Controls and Procedures

Under the supervision and with the participation of the Company's management, including its principal executive officer and principal financial officer, the Company has evaluated the effectiveness of the design and operation of its disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 (the "Exchange Act")). Based upon this evaluation, the principal executive officer and principal financial officer have concluded that, as of the end of the period covered by this report, the Company's disclosure controls and procedures were effective.

During the most recently completed fiscal quarter, there was no change made in the Company's internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

The annual report of the Company's management on internal control over financial reporting is provided on page 67. The audit report of Ernst & Young LLP, the Company's independent accountants, regarding the Company's internal control over financial reporting is provided on page 70.

Report of Management

Responsibility for the financial statements and other information presented throughout this Annual Report rests with the management of U.S. Bancorp. The Company believes the consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States and present the substance of transactions based on the circumstances and management's best estimates and judgment.

In meeting its responsibilities for the reliability of the financial statements, management is responsible for establishing and maintaining an adequate system of internal control over financial reporting as defined by Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934. The Company's system of internal control is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of publicly filed financial statements in accordance with accounting principles generally accepted in the United States.

To test compliance, the Company carries out an extensive audit program. This program includes a review for compliance with written policies and procedures and a comprehensive review of the adequacy and effectiveness of the system of internal control. Although control procedures are designed and tested, it must be recognized that there are limits inherent in all systems of internal control and, therefore, errors and irregularities may nevertheless occur. Also, estimates and judgments are required to assess and balance the relative cost and expected benefits of the controls. Projection of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

The Board of Directors of the Company has an Audit Committee composed of directors who are independent of U.S. Bancorp. The Audit Committee meets periodically with management, the internal auditors and the independent accountants to consider audit results and to discuss internal accounting control, auditing and financial reporting matters.

Management assessed the effectiveness of the Company's system of internal control over financial reporting as of December 31, 2019. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in its Internal Control-Integrated Framework (2013 framework). Based on our assessment and those criteria, management believes the Company designed and maintained effective internal control over financial reporting as of December 31, 2019.

The Company's independent registered accountants, Ernst & Young LLP, have been engaged to render an independent professional opinion on the financial statements and issue an attestation report on the Company's internal control over financial reporting. Their opinion on the financial statements appearing on pages 68 and 69 and their attestation on internal control over financial reporting appearing on page 70 are based on procedures conducted in accordance with auditing standards of the Public Company Accounting Oversight Board (United States).

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of U.S. Bancorp

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of U.S. Bancorp (the Company) as of December 31, 2019 and 2018, the related consolidated statements of income, comprehensive income, shareholders' equity and cash flows for each of the three years in the period ended December 31, 2019, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated February 20, 2020 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Allowance for Credit Losses

Description of the Matter	The Company's loan and lease portfolio totaled $296.1 billion as of December 31, 2019 and the associated allowance for credit losses (ACL), comprised of allowance for loan losses and a liability for unfunded credit commitments, was $4.5 billion. As discussed in Notes 1 and 5 to the consolidated financial statements, the ACL is established for probable and estimable losses incurred in the Company's loan and lease portfolio by primarily using migration analysis for commercial loans and unfunded credit commitments and historical losses for consumer loans (the quantitative models), adjusted for qualitative factors. Auditing management's estimate of the ACL involved a high degree of subjectivity in evaluating the completeness of the qualitative factors that management identifies and assesses, including, but not limited to, economic conditions; concentration risks; credit quality trends; business conditions and the regulatory environment, as well as the measurement of each qualitative factor.
How We Addressed the Matter in Our Audit	Our audit procedures related to the qualitative component of the ACL included the following procedures, among others. We obtained an understanding, evaluated the design and tested the operating effectiveness of the Company's process for establishing the ACL, including controls over the ACL methodology and governance process. We tested management's validation of incurred loss models to determine whether the risks inherent in the Company's loan and lease portfolio are captured. We assessed and tested the review and approval processes management has in place for adjustments applied to the quantitative models to reflect management's consideration of qualitative factors.

With respect to the completeness of qualitative factors identified and incorporated into measuring the ACL, we evaluated the potential impact of imprecision in the quantitative models (and hence the need to consider a qualitative adjustment to the reserve); changes and adjustments to the models; sufficiency, availability and relevance of historical loss data used in the models; and assumptions and risk factors used in the models.

Regarding measurement of the qualitative factors, we evaluated and tested external market data as well as internal data used in the Company’s calculation by agreeing significant inputs and underlying data used in the determination of the qualitative adjustments to internal and external sources. We searched for and evaluated information that corroborates or contradicts the Company’s identification and measurement of qualitative factors as of the consolidated balance sheet date.

We evaluated the overall ACL amount, including adjustments for qualitative factors, and whether the amount appropriately reflects losses incurred in the loan and lease portfolio as of the consolidated balance sheet date. We reviewed subsequent events and transactions and considered whether they corroborate or contradict the Company’s measurement of the ACL as of the consolidated balance sheet date.

Ernst & Young LLP

We have served as the Company’s auditor since 2003.

Minneapolis, Minnesota
February 20, 2020

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of U.S. Bancorp

Opinion on Internal Control over Financial Reporting

We have audited U.S. Bancorp's internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, U.S. Bancorp (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2019 and 2018, the related consolidated statements of income, comprehensive income, shareholders' equity and cash flows for each of the three years in the period ended December 31, 2019, and the related notes of the Company and our report dated February 20, 2020 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Report of Management. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Ernst + Young LLP

Minneapolis, Minnesota
February 20, 2020

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U.S. Bancorp
Consolidated Balance Sheet

At December 31 (Dollars in Millions)	2019	2018
Assets		
Cash and due from banks	$ 22,405	$ 21,453
Investment securities		
Held-to-maturity (2018 fair value $44,964)	–	46,050
Available-for-sale ($269 and $2,057 pledged as collateral, respectively)[a]	122,613	66,115
Loans held for sale (including $5,533 and $2,035 of mortgage loans carried at fair value, respectively)	5,578	2,056
Loans		
Commercial	103,863	102,444
Commercial real estate	39,746	39,539
Residential mortgages	70,586	65,034
Credit card	24,789	23,363
Other retail	57,118	56,430
Total loans	296,102	286,810
Less allowance for loan losses	(4,020)	(3,973)
Net loans	292,082	282,837
Premises and equipment	3,702	2,457
Goodwill	9,655	9,369
Other intangible assets	3,223	3,392
Other assets (including $951 and $843 of trading securities at fair value pledged as collateral, respectively)[a]	36,168	33,645
Total assets	$495,426	$467,374
Liabilities and Shareholders' Equity		
Deposits		
Noninterest-bearing	$ 75,590	$ 81,811
Interest-bearing[b]	286,326	263,664
Total deposits	361,916	345,475
Short-term borrowings	23,723	14,139
Long-term debt	40,167	41,340
Other liabilities	17,137	14,763
Total liabilities	442,943	415,717
Shareholders' equity		
Preferred stock	5,984	5,984
Common stock, par value $0.01 a share — authorized: 4,000,000,000 shares; issued: 2019 and 2018 — 2,125,725,742 shares	21	21
Capital surplus	8,475	8,469
Retained earnings	63,186	59,065
Less cost of common stock in treasury: 2019 — 591,570,506 shares; 2018 — 517,391,021 shares	(24,440)	(20,188)
Accumulated other comprehensive income (loss)	(1,373)	(2,322)
Total U.S. Bancorp shareholders' equity	51,853	51,029
Noncontrolling interests	630	628
Total equity	52,483	51,657
Total liabilities and equity	$495,426	$467,374

(a) Includes only collateral pledged by the Company where counterparties have the right to sell or pledge the collateral.

(b) Includes time deposits greater than $250,000 balances of $7.8 billion and $15.3 billion at December 31, 2019 and 2018, respectively.

See Notes to Consolidated Financial Statements.

U.S. Bancorp
Consolidated Statement of Income

Year Ended December 31 (Dollars and Shares in Millions, Except Per Share Data)	2019	2018	2017
Interest Income			
Loans	$14,099	$13,120	$11,788
Loans held for sale	162	165	144
Investment securities	2,893	2,616	2,232
Other interest income	340	272	182
Total interest income	17,494	16,173	14,346
Interest Expense			
Deposits	2,855	1,869	1,041
Short-term borrowings	360	378	141
Long-term debt	1,227	1,007	784
Total interest expense	4,442	3,254	1,966
Net interest income	13,052	12,919	12,380
Provision for credit losses	1,504	1,379	1,390
Net interest income after provision for credit losses	11,548	11,540	10,990
Noninterest Income			
Credit and debit card revenue	1,413	1,401	1,289
Corporate payment products revenue	664	644	575
Merchant processing services	1,601	1,531	1,486
Trust and investment management fees	1,673	1,619	1,522
Deposit service charges	909	1,070	1,035
Treasury management fees	578	594	618
Commercial products revenue	934	895	954
Mortgage banking revenue	874	720	834
Investment products fees	186	188	173
Realized securities gains (losses), net	73	30	57
Other	926	910	774
Total noninterest income	9,831	9,602	9,317
Noninterest Expense			
Compensation	6,325	6,162	5,746
Employee benefits	1,286	1,231	1,134
Net occupancy and equipment	1,123	1,063	1,019
Professional services	454	407	419
Marketing and business development	426	429	542
Technology and communications	1,095	978	903
Postage, printing and supplies	290	324	323
Other intangibles	168	161	175
Other	1,618	1,709	2,529
Total noninterest expense	12,785	12,464	12,790
Income before income taxes	8,594	8,678	7,517
Applicable income taxes	1,648	1,554	1,264
Net income	6,946	7,124	6,253
Net (income) loss attributable to noncontrolling interests	(32)	(28)	(35)
Net income attributable to U.S. Bancorp	$ 6,914	$ 7,096	$ 6,218
Net income applicable to U.S. Bancorp common shareholders	$ 6,583	$ 6,784	$ 5,913
Earnings per common share	$ 4.16	$ 4.15	$ 3.53
Diluted earnings per common share	$ 4.16	$ 4.14	$ 3.51
Average common shares outstanding	1,581	1,634	1,677
Average diluted common shares outstanding	1,583	1,638	1,683

See Notes to Consolidated Financial Statements.

U.S. Bancorp
Consolidated Statement of Comprehensive Income

Year Ended December 31 (Dollars in Millions)	2019	2018	2017
Net income	$6,946	$7,124	$6,253
Other Comprehensive Income (Loss)			
Changes in unrealized gains and losses on investment securities available-for-sale	1,693	(656)	178
Unrealized gains and losses on held-to-maturity investment securities transferred to available-for-sale	141	–	–
Changes in unrealized gains and losses on derivative hedges	(229)	39	(5)
Foreign currency translation	26	3	(2)
Changes in unrealized gains and losses on retirement plans	(380)	(302)	(41)
Reclassification to earnings of realized gains and losses	20	93	77
Income taxes related to other comprehensive income (loss)	(322)	205	(76)
Total other comprehensive income (loss)	949	(618)	131
Comprehensive income	7,895	6,506	6,384
Comprehensive (income) loss attributable to noncontrolling interests	(32)	(28)	(35)
Comprehensive income attributable to U.S. Bancorp	$7,863	$6,478	$6,349

See Notes to Consolidated Financial Statements.

U.S. Bancorp
Consolidated Statement of Shareholders' Equity

	U.S. Bancorp Shareholders									
(Dollars and Shares in Millions, Except Per Share Data)	Common Shares Outstanding	Preferred Stock	Common Stock	Capital Surplus	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Total U.S. Bancorp Shareholders' Equity	Noncontrolling Interests	Total Equity
Balance December 31, 2016	1,697	$ 5,501	$21	$8,440	$50,151	$(15,280)	$(1,535)	$47,298	$635	$47,933
Net income (loss)					6,218			6,218	35	6,253
Other comprehensive income (loss)							131	131		131
Preferred stock dividends[(a)]					(267)			(267)		(267)
Common stock dividends ($1.16 per share)					(1,950)			(1,950)		(1,950)
Issuance of preferred stock		993						993		993
Redemption of preferred stock		(1,075)			(10)			(1,085)		(1,085)
Issuance of common and treasury stock	8			(138)		300		162		162
Purchase of treasury stock	(49)					(2,622)		(2,622)		(2,622)
Distributions to noncontrolling interests								–	(47)	(47)
Net other changes in noncontrolling interests								–	3	3
Stock option and restricted stock grants				162				162		162
Balance December 31, 2017	1,656	$ 5,419	$21	$8,464	$54,142	$(17,602)	$(1,404)	$49,040	$626	$49,666
Changes in accounting principle[(b)]					299		(300)	(1)		(1)
Net income (loss)					7,096			7,096	28	7,124
Other comprehensive income (loss)							(618)	(618)		(618)
Preferred stock dividends[(c)]					(282)			(282)		(282)
Common stock dividends ($1.34 per share)					(2,190)			(2,190)		(2,190)
Issuance of preferred stock		565						565		565
Issuance of common and treasury stock	6			(167)		258		91		91
Purchase of treasury stock	(54)					(2,844)		(2,844)		(2,844)
Distributions to noncontrolling interests								–	(31)	(31)
Net other changes in noncontrolling interests								–	5	5
Stock option and restricted stock grants				172				172		172
Balance December 31, 2018	1,608	$ 5,984	$21	$8,469	$59,065	$(20,188)	$(2,322)	$51,029	$628	$51,657
Changes in accounting principle					2			2		2
Net income (loss)					6,914			6,914	32	6,946
Other comprehensive income (loss)							949	949		949
Preferred stock dividends[(d)]					(302)			(302)		(302)
Common stock dividends ($1.58 per share)					(2,493)			(2,493)		(2,493)
Issuance of common and treasury stock	7			(174)		263		89		89
Purchase of treasury stock	(81)					(4,515)		(4,515)		(4,515)
Distributions to noncontrolling interests								–	(31)	(31)
Net other changes in noncontrolling interests								–	1	1
Stock option and restricted stock grants				180				180		180
Balance December 31, 2019	1,534	$ 5,984	$21	$8,475	$63,186	$(24,440)	$(1,373)	$51,853	$630	$52,483

(a) Reflects dividends declared per share on the Company's Series A, Series B, Series F, Series G, Series H, Series I and Series J Non-Cumulative Perpetual Preferred Stock of $3,548.61, $887.15, $1,625.00, $375.00, $1,287.52, $1,281.25 and $890.69, respectively.

(b) Reflects the adoption of new accounting guidance on January 1, 2018 to reclassify the impact of the reduced federal statutory tax rate for corporations included in 2017 tax reform legislation from accumulated other comprehensive income to retained earnings.

(c) Reflects dividends declared per share on the Company's Series A, Series B, Series F, Series H, Series I, Series J and Series K Non-Cumulative Perpetual Preferred Stock of $3,548.61, $887.15, $1,625.00, $1,287.52, $1,281.25, $1,325.00 and $576.74, respectively.

(d) Reflects dividends declared per share on the Company's Series A, Series B, Series F, Series H, Series I, Series J and Series K Non-Cumulative Perpetual Preferred Stock of $3,654.95, $887.15, $1,625.00, $1,287.52, $1,281.25, $1,325.00 and $1,375.00, respectively.

See Notes to Consolidated Financial Statements.

U.S. Bancorp
Consolidated Statement of Cash Flows

Year Ended December 31 (Dollars in Millions)	2019	2018	2017
Operating Activities			
Net income attributable to U.S. Bancorp	$ 6,914	$ 7,096	$ 6,218
Adjustments to reconcile net income to net cash provided by operating activities			
Provision for credit losses	1,504	1,379	1,390
Depreciation and amortization of premises and equipment	334	306	293
Amortization of intangibles	168	161	175
(Gain) loss on sale of loans held for sale	(762)	(394)	(772)
(Gain) loss on sale of securities and other assets	(469)	(510)	(502)
Loans originated for sale in the secondary market, net of repayments	(36,561)	(29,214)	(35,743)
Proceeds from sales of loans held for sale	33,303	30,730	37,462
Other, net	458	1,010	(2,049)
Net cash provided by operating activities	4,889	10,564	6,472
Investing Activities			
Proceeds from sales of available-for-sale investment securities	11,252	1,400	3,084
Proceeds from maturities of held-to-maturity investment securities	9,137	6,619	8,306
Proceeds from maturities of available-for-sale investment securities	11,454	11,411	13,042
Purchases of held-to-maturity investment securities	(6,701)	(9,793)	(9,712)
Purchases of available-for-sale investment securities	(33,814)	(10,077)	(17,860)
Net increase in loans outstanding	(9,871)	(9,234)	(8,054)
Proceeds from sales of loans	2,899	4,862	2,458
Purchases of loans	(3,805)	(3,694)	(3,040)
Net increase (decrease) in securities purchased under agreements to resell	(816)	(182)	54
Other, net	(1,295)	(289)	(404)
Net cash used in investing activities	(21,560)	(8,977)	(12,126)
Financing Activities			
Net increase (decrease) in deposits	16,441	(1,740)	12,625
Net increase (decrease) in short-term borrowings	9,584	(2,512)	2,688
Proceeds from issuance of long-term debt	9,899	12,078	9,434
Principal payments or redemption of long-term debt	(11,119)	(2,928)	(10,517)
Proceeds from issuance of preferred stock	–	565	993
Proceeds from issuance of common stock	88	86	159
Repurchase of preferred stock	–	–	(1,085)
Repurchase of common stock	(4,525)	(2,822)	(2,631)
Cash dividends paid on preferred stock	(302)	(274)	(284)
Cash dividends paid on common stock	(2,443)	(2,092)	(1,928)
Net cash provided by financing activities	17,623	361	9,454
Change in cash and due from banks	952	1,948	3,800
Cash and due from banks at beginning of period	21,453	19,505	15,705
Cash and due from banks at end of period	$ 22,405	$ 21,453	$ 19,505
Supplemental Cash Flow Disclosures			
Cash paid for income taxes	$ 941	$ 365	$ 555
Cash paid for interest	4,404	3,056	2,086
Noncash transfer of held-to-maturity investment securities to available-for-sale	43,596	–	–
Net noncash transfers to foreclosed property	60	115	163

See Notes to Consolidated Financial Statements.

Notes to Consolidated Financial Statements

NOTE 1 Significant Accounting Policies

U.S. Bancorp is a multi-state financial services holding company headquartered in Minneapolis, Minnesota. U.S. Bancorp and its subsidiaries (the "Company") provide a full range of financial services, including lending and depository services through banking offices principally in the Midwest and West regions of the United States. The Company also engages in credit card, merchant, and ATM processing, mortgage banking, cash management, capital markets, insurance, trust and investment management, brokerage, and leasing activities, principally in domestic markets.

Basis of Presentation The consolidated financial statements include the accounts of the Company and its subsidiaries and all variable interest entities ("VIEs") for which the Company has both the power to direct the activities of the VIE that most significantly impact the VIE's economic performance, and the obligation to absorb losses or right to receive benefits of the VIE that could potentially be significant to the VIE. Consolidation eliminates intercompany accounts and transactions. Certain items in prior periods have been reclassified to conform to the current presentation.

Uses of Estimates The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual experience could differ from those estimates.

Securities

Realized gains or losses on securities are determined on a trade date basis based on the specific amortized cost of the investments sold.

Trading Securities Securities held for resale are classified as trading securities and are included in other assets and reported at fair value. Changes in fair value and realized gains or losses are reported in noninterest income.

Available-for-sale Securities Debt securities that are not trading securities but may be sold before maturity in response to changes in the Company's interest rate risk profile, funding needs, demand for collateralized deposits by public entities or other reasons, are carried at fair value with unrealized net gains or losses reported within other comprehensive income (loss). Declines in fair value for credit-related other-than-temporary impairment, if any, are reported in noninterest income.

Held-to-maturity Securities Debt securities for which the Company has the positive intent and ability to hold to maturity are reported at historical cost adjusted for amortization of premiums and accretion of discounts. Declines in fair value for credit-related other-than-temporary impairment, if any, are reported in noninterest income.

Securities Purchased Under Agreements to Resell and Securities Sold Under Agreements to Repurchase Securities purchased under agreements to resell and securities sold under agreements to repurchase are accounted for as collateralized financing transactions with a receivable or payable recorded at the amounts at which the securities were acquired or sold, plus accrued interest. Collateral requirements are continually monitored and additional collateral is received or provided as required. The Company records a receivable or payable for cash collateral paid or received.

Equity Investments

Equity investments in entities where the Company has a significant influence (generally between 20 percent and 50 percent ownership), but does not control the entity, are accounted for using the equity method. Investments in limited partnerships and similarly structured limited liability companies where the Company's ownership interest is greater than 5 percent are accounted for using the equity method. Equity investments not using the equity method are accounted for at fair value with changes in fair value and realized gains or losses reported in noninterest income, unless fair value is not readily determinable, in which case the investment is carried at cost subject to adjustments for any observable market transactions on the same or similar instruments of the investee. Most of the Company's equity investments do not have readily determinable fair values. All equity investments are evaluated for impairment at least annually and more frequently if certain criteria are met.

Loans

The Company offers a broad array of lending products and categorizes its loan portfolio into two segments, which is the level at which it develops and documents a systematic methodology to determine the allowance for credit losses. The Company's two loan portfolio segments are commercial lending and consumer lending. Previously, the Company categorized loans covered under loss sharing or similar credit protection agreements with the Federal Deposit Insurance Corporation ("FDIC"), along with the related indemnification asset, in a separate covered loans segment. During 2018 the majority of these loans were sold and the loss share coverage expired. Any remaining balances were reclassified to the loan segment they would have otherwise been included in had the loss share coverage not been in place. The Company further disaggregates its loan portfolio segments into various classes based on their underlying risk characteristics. The two classes within the commercial lending segment are commercial loans and commercial real estate loans. The three classes within the consumer lending segment are residential mortgages, credit card loans and other retail loans.

The Company's accounting methods for loans differ depending on whether the loans are originated or purchased, and for purchased loans, whether the loans were acquired at a discount related to evidence of credit deterioration since date of origination.

Originated Loans Held for Investment Loans the Company originates as held for investment are reported at the principal amount outstanding, net of unearned interest income and deferred fees and costs, and any direct principal charge-offs. Interest income is accrued on the unpaid principal balances as earned. Loan and commitment fees and certain direct loan origination costs are deferred and recognized over the life of the loan and/or commitment period as yield adjustments.

Purchased Loans All purchased loans (non-impaired and impaired) acquired after January 1, 2009 are initially measured at fair value as of the acquisition date in accordance with applicable authoritative accounting guidance. Credit discounts are included in the determination of fair value. An allowance for credit losses is not recorded at the acquisition date for loans purchased after January 1, 2009. In accordance with applicable authoritative accounting guidance, purchased non-impaired loans acquired in a business combination prior to January 1, 2009 were generally recorded at the predecessor's carrying value including an allowance for credit losses.

In determining the acquisition date fair value of purchased impaired loans, and in subsequent accounting, the Company generally aggregates purchased consumer loans and certain smaller balance commercial loans into pools of loans with common risk characteristics, while accounting for larger balance commercial loans individually. Expected cash flows at the purchase date in excess of the fair value of loans are recorded as interest income over the life of the loans if the timing and amount of the future cash flows is reasonably estimable. Subsequent to the purchase date, increases in cash flows over those expected at the purchase date are recognized as interest income prospectively. The present value of any decreases in expected cash flows, other than from decreases in variable interest rates, after the purchase date is recognized by recording an allowance for credit losses. Revolving loans, including lines of credit and credit cards loans, and leases are excluded from purchased impaired loans accounting.

For purchased loans acquired after January 1, 2009 that are not deemed impaired at acquisition, credit discounts representing the principal losses expected over the life of the loan are a component of the initial fair value. Subsequent to the purchase date, the methods utilized to estimate the required allowance for credit losses for these loans is similar to originated loans; however, the Company records a provision for credit losses only when the required allowance exceeds any remaining credit discounts. The remaining differences between the purchase price and the unpaid principal balance at the date of acquisition are recorded in interest income over the life of the loans.

Commitments to Extend Credit Unfunded commitments for residential mortgage loans intended to be held for sale are considered derivatives and recorded in other assets and other liabilities on the Consolidated Balance Sheet at fair value with changes in fair value recorded in noninterest income. All other unfunded loan commitments are not considered derivatives and are not reported on the Consolidated Balance Sheet. For loans purchased after January 1, 2009, the fair value of the unfunded credit commitments is generally considered in the determination of the fair value of the loans recorded at the date of acquisition. Reserves for credit exposure on all other unfunded credit commitments are recorded in other liabilities.

Allowance for Credit Losses The allowance for credit losses is established for probable and estimable losses incurred in the Company's loan and lease portfolio, including unfunded credit commitments. The allowance for credit losses is increased through provisions charged to earnings and reduced by net charge-offs. Management evaluates the appropriateness of the allowance for incurred losses on a quarterly basis.

The allowance recorded for loans in the commercial lending segment is based on reviews of individual credit relationships and considers the migration analysis of commercial lending segment loans and actual loss experience. For each loan type, this historical loss experience is adjusted as necessary to consider any relevant changes in portfolio composition, lending policies, underwriting standards, risk management practices or economic conditions. The results of the analysis are evaluated quarterly to confirm the selected loss experience is appropriate for each commercial loan type. The allowance recorded for impaired loans greater than $5 million in the commercial lending segment is based on an individual loan analysis utilizing expected cash flows discounted using the original effective interest rate, the observable market price of the loan, or the fair value of the collateral, less selling costs, for collateral-dependent loans, rather than the migration analysis. The allowance recorded for all other commercial lending segment loans is determined on a homogenous pool basis and includes consideration of product mix, risk characteristics of the portfolio, delinquency status, bankruptcy experience, portfolio growth and historical losses, adjusted for current trends. The Company also considers the impacts of any loan modifications made to commercial lending segment loans and any subsequent payment defaults to its expectations of cash flows, principal balance, and current expectations about the borrower's ability to pay in determining the allowance for credit losses.

The allowance recorded for Troubled Debt Restructuring ("TDR") loans and purchased impaired loans in the consumer lending segment is determined on a homogenous pool basis utilizing expected cash flows discounted using the original effective interest rate of the pool, or the prior quarter effective rate, respectively. The allowance for collateral-dependent loans in the consumer lending segment is determined based on the fair value of the collateral less costs to sell. The allowance recorded for all other consumer lending segment loans is determined on a homogenous pool basis and includes consideration of product mix, risk characteristics of the portfolio, bankruptcy experience, delinquency status, refreshed loan-to-value ratios when possible, portfolio growth and historical losses, adjusted for current trends. The Company also considers any modifications made to consumer lending segment loans including the impacts of any subsequent payment defaults since modification in determining the allowance for credit losses, such as the borrower's ability to pay under the restructured terms, and the timing and amount of payments.

In addition, subsequent payment defaults on loan modifications considered TDRs are considered in the underlying factors used in the determination of the appropriateness of the allowance for credit losses. For each loan segment, the Company estimates future loan charge-offs through a variety of analysis, trends and underlying assumptions. With respect to the commercial lending segment, TDRs may be collectively evaluated for impairment where observed performance history, including defaults, is a primary driver of the loss allocation. For commercial TDRs individually evaluated for impairment, attributes of the borrower are the primary factors in determining the allowance for credit losses. However, historical loss experience is also incorporated into the allowance methodology applied to this category of loans. With respect to the consumer lending segment, performance of the portfolio, including defaults on TDRs, is considered when estimating future cash flows.

The Company's methodology for determining the appropriate allowance for credit losses for each loan segment also considers the imprecision inherent in the methodologies used. As a result, in addition to the amounts determined under the methodologies described above, management also considers the potential impact of other qualitative factors which include, but are not limited to, economic factors; geographic and other concentration risks; delinquency and nonaccrual trends; current business conditions; changes in lending policy, underwriting standards and other relevant business practices; results of internal review; and the regulatory environment. The consideration of these items results in adjustments to allowance amounts included in the Company's allowance for credit losses for each of the above loan segments.

The Company also assesses the credit risk associated with off-balance sheet loan commitments, letters of credit, and derivatives. Credit risk associated with derivatives is reflected in the fair values recorded for those positions. The liability for off-balance sheet credit exposure related to loan commitments and other credit guarantees is included in other liabilities. Because business processes and credit risks associated with unfunded credit commitments are essentially the same as for loans, the Company utilizes similar processes to estimate its liability for unfunded credit commitments.

Credit Quality The credit quality of the Company's loan portfolios is assessed as a function of net credit losses, levels of nonperforming assets and delinquencies, and credit quality ratings as defined by the Company.

For all loan classes, loans are considered past due based on the number of days delinquent except for monthly amortizing loans which are classified delinquent based upon the number of contractually required payments not made (for example, two missed payments is considered 30 days delinquent). When a loan is placed on nonaccrual status, unpaid accrued interest is reversed, reducing interest income in the current period.

Commercial lending segment loans are generally placed on nonaccrual status when the collection of principal and interest has become 90 days past due or is otherwise considered doubtful. Commercial lending segment loans are generally fully or partially charged down to the fair value of the collateral securing the loan, less costs to sell, when the loan is placed on nonaccrual.

Consumer lending segment loans are generally charged-off at a specific number of days or payments past due. Residential mortgages and other retail loans secured by 1-4 family properties are generally charged down to the fair value of the collateral securing the loan, less costs to sell, at 180 days past due. Residential mortgage loans and lines in a first lien position are placed on nonaccrual status in instances where a partial charge-off occurs unless the loan is well secured and in the process of collection. Residential mortgage loans and lines in a junior lien position secured by 1-4 family properties are placed on nonaccrual status at 120 days past due or when they are behind a first lien that has become 180 days or greater past due or placed on nonaccrual status. Any secured consumer lending segment loan whose borrower has had debt discharged through bankruptcy, for which the loan amount exceeds the fair value of the collateral, is charged down to the fair value of the related collateral and the remaining balance is placed on nonaccrual status. Credit card loans continue to accrue interest until the account is charged-off. Credit cards are charged-off at 180 days past due. Other retail loans not secured by 1-4 family properties are charged-off at 120 days past due; and revolving consumer lines are charged-off at 180 days past due. Similar to credit cards, other retail loans are generally not placed on nonaccrual status because of the relative short period of time to charge-off. Certain retail customers having financial difficulties may have the terms of their credit card and other loan agreements modified to require only principal payments and, as such, are reported as nonaccrual.

For all loan classes, interest payments received on nonaccrual loans are generally recorded as a reduction to a loan's carrying amount while a loan is on nonaccrual and are recognized as interest income upon payoff of the loan. However, interest income may be recognized for interest payments if the remaining carrying amount of the loan is believed to be collectible. In certain circumstances, loans in any class may be restored to accrual status, such as when a loan has demonstrated sustained repayment performance or no amounts are past due and prospects for future payment are no longer in doubt; or when the loan becomes well secured and is in the process of collection. Loans where there has been a partial charge-off may be returned to accrual status if all principal and interest (including amounts previously charged-off) is expected to be collected and the loan is current. Generally, purchased impaired loans are considered accruing loans. However, the timing and amount of future cash flows for some loans is not reasonably estimable, and those loans are classified as nonaccrual loans with interest income not recognized until the timing and amount of the future cash flows can be reasonably estimated.

The Company classifies its loan portfolios using internal credit quality ratings on a quarterly basis. These ratings include pass, special mention and classified, and are an important part of the Company's overall credit risk management process and evaluation of the allowance for credit losses. Loans with a pass rating represent those loans not classified on the Company's rating scale for problem credits, as minimal credit risk has been identified. Special mention loans are those loans that have a potential weakness deserving management's close attention. Classified loans are those loans where a well-defined weakness has been identified that may put full collection of contractual cash flows at risk. It is possible that others, given the same information, may reach different reasonable conclusions regarding the credit quality rating classification of specific loans.

Troubled Debt Restructurings In certain circumstances, the Company may modify the terms of a loan to maximize the collection of amounts due when a borrower is experiencing financial difficulties or is expected to experience difficulties in the near-term. Concessionary modifications are classified as TDRs unless the modification results in only an insignificant delay in payments to be received. The Company recognizes interest on TDRs if the borrower complies with the revised terms and conditions as agreed upon with the Company and has demonstrated repayment performance at a level commensurate with the modified terms over several payment cycles, which is generally six months or greater. To the extent a previous restructuring was insignificant, the Company considers the cumulative effect of past restructurings related to the receivable when determining whether a current restructuring is a TDR. Loans classified as TDRs are considered impaired loans for reporting and measurement purposes.

The Company has implemented certain restructuring programs that may result in TDRs. However, many of the Company's TDRs are also determined on a case-by-case basis in connection with ongoing loan collection processes.

For the commercial lending segment, modifications generally result in the Company working with borrowers on a case-by-case basis. Commercial and commercial real estate modifications generally include extensions of the maturity date and may be accompanied by an increase or decrease to the interest rate, which may not be deemed a market interest rate. In addition, the Company may work with the borrower in identifying other changes that mitigate loss to the Company, which may include additional collateral or guarantees to support the loan. To a lesser extent, the Company may waive contractual principal. The Company classifies all of the above concessions as TDRs to the extent the Company determines that the borrower is experiencing financial difficulty.

Modifications for the consumer lending segment are generally part of programs the Company has initiated. The Company modifies residential mortgage loans under Federal Housing Administration, United States Department of Veterans Affairs, or its own internal programs. Under these programs, the Company offers qualifying homeowners the opportunity to permanently modify their loan and achieve more affordable monthly payments by providing loan concessions. These concessions may include adjustments to interest rates, conversion of adjustable rates to fixed rates, extension of maturity dates or deferrals of payments, capitalization of accrued interest and/or outstanding advances, or in limited situations, partial forgiveness of loan principal. In most instances, participation in residential mortgage loan restructuring programs requires the customer to complete a short-term trial period. A permanent loan modification is contingent on the customer successfully completing the trial period arrangement, and the loan documents are not modified until that time. The Company reports loans in a trial period arrangement as TDRs and continues to report them as TDRs after the trial period.

Credit card and other retail loan TDRs are generally part of distinct restructuring programs providing customers experiencing financial difficulty with modifications whereby balances may be amortized up to 60 months, and generally include waiver of fees and reduced interest rates.

In addition, the Company considers secured loans to consumer borrowers that have debt discharged through bankruptcy where the borrower has not reaffirmed the debt to be TDRs.

Acquired loans restructured after acquisition are not considered TDRs for accounting and disclosure purposes if the loans evidenced credit deterioration as of the acquisition date and are accounted for in pools.

Impaired Loans For all loan classes, a loan is considered to be impaired when, based on current events or information, it is probable the Company will be unable to collect all amounts due per the contractual terms of the loan agreement. Impaired loans include all nonaccrual and TDR loans. For all loan classes, interest income on TDR loans is recognized under the modified terms and conditions if the borrower has demonstrated repayment performance at a level commensurate with the modified terms over several payment cycles. Interest income is generally not recognized on other impaired loans until the loan is paid off. However, interest income may be recognized for interest payments if the remaining carrying amount of the loan is believed to be collectible.

Factors used by the Company in determining whether all principal and interest payments due on commercial and commercial real estate loans will be collected and, therefore, whether those loans are impaired include, but are not limited to, the financial condition of the borrower, collateral and/or guarantees on the loan, and the borrower's estimated future ability to pay based on industry, geographic location and certain financial ratios. The evaluation of impairment on residential mortgages, credit card loans and other retail loans is primarily driven by delinquency status of individual loans or whether a loan has been modified, and considers any government guarantee where applicable.

Leases The Company, as a lessor, originates retail and commercial leases either directly to the consumer or indirectly through dealer networks. Retail leases, primarily automobiles, have 3 to 5 year terms. Commercial leases may include high dollar assets such as aircraft or lower cost items such as office equipment. At lease inception, retail lease customers are provided with an end-of-term purchase option, which is based on the expected fair value of the automobile at the expiration of the lease. Automobile leases do not typically contain options to extend or terminate the lease. Equipment leases may contain various types of purchase options. Some option amounts are a stated value, while others are determined using the fair market value at the time of option exercise.

Residual values on leased assets are reviewed regularly for impairment. Residual valuations for retail leases are based on independent assessments of expected used automobile sale prices at the end of the lease term. Impairment tests are conducted based on these valuations considering the probability of the lessee returning the asset to the Company, re-marketing efforts, insurance coverage and ancillary fees and costs. Valuations for commercial leases are based upon external or internal management appraisals. The Company manages its risk to changes in the residual value of leased vehicles, office and business equipment, and other assets through disciplined residual valuation setting at the inception of a lease, diversification of its leased assets, regular residual asset valuation reviews and monitoring of residual value gains or losses upon the disposition of assets. Retail lease residual value risk is mitigated further by the purchase of residual value insurance coverage and effective end-of-term marketing of off-lease vehicles.

The Company, as lessee, leases certain assets for use in its operations. Leased assets primarily include retail branches, operations centers and other corporate locations, and, to a lesser extent, office and computer equipment. For each lease with an original term greater than 12 months, the Company records a lease liability and a corresponding right of use ("ROU") asset. The Company accounts for the lease and non-lease components in the majority of its lease contracts as a single lease component, with the determination of the lease liability at lease inception based on the present value of the consideration to be paid under the contract. The discount rate used by the Company is determined at commencement of the lease using a secured rate for a similar term as the period of the lease. The Company's leases do not include significant variable lease payments.

Certain of the Company's real estate leases include options to extend. Lease extension options are generally exercisable at market rates. Such option periods do not provide a significant incentive, and their exercise is not reasonably certain. Accordingly, the Company does not recognize payments occurring during option periods in the calculation of its ROU assets and lease liabilities.

Other Real Estate Other real estate owned ("OREO") is included in other assets, and is property acquired through foreclosure or other proceedings on defaulted loans. OREO is initially recorded at fair value, less estimated selling costs. The fair value of OREO is evaluated regularly and any decreases in value along with holding costs, such as taxes and insurance, are reported in noninterest expense.

Loans Held For Sale

Loans held for sale ("LHFS") represent mortgage loans intended to be sold in the secondary market and other loans that management has an active plan to sell. LHFS are carried at the lower-of-cost-or-fair value as determined on an aggregate basis by type of loan with the exception of loans for which the Company has elected fair value accounting, which are carried at fair value. The credit component of any writedowns upon the transfer of loans to LHFS is reflected in loan charge-offs.

Where an election is made to carry the LHFS at fair value, any change in fair value is recognized in noninterest income. Where an election is made to carry LHFS at lower-of-cost-or-fair value, any further decreases are recognized in noninterest income and increases in fair value above the loan cost basis are not recognized until the loans are sold. Fair value elections are made at the time of origination or purchase based on the Company's fair value election policy. The Company has elected fair value accounting for substantially all its mortgage loans held for sale ("MLHFS").

Derivative Financial Instruments

In the ordinary course of business, the Company enters into derivative transactions to manage various risks and to accommodate the business requirements of its customers. Derivative instruments are reported in other assets or other liabilities at fair value. Changes in a derivative's fair value are recognized currently in earnings unless specific hedge accounting criteria are met.

All derivative instruments that qualify and are designated for hedge accounting are recorded at fair value and classified as either a hedge of the fair value of a recognized asset or liability ("fair value hedge"); a hedge of a forecasted transaction or the variability of cash flows to be received or paid related to a recognized asset or liability ("cash flow hedge"); or a hedge of the volatility of a net investment in foreign operations driven by changes in foreign currency exchange rates ("net investment hedge"). Changes in the fair value of a derivative that is highly effective and designated as a fair value hedge, and the offsetting changes in the fair value of the hedged item, are recorded in earnings. Changes in the fair value of a derivative that is highly effective and designated as a cash flow hedge are recorded in other comprehensive income (loss) until cash flows of the hedged item are realized. Changes in the fair value of net investment hedges that are highly effective are recorded in other comprehensive income (loss). The Company performs an assessment, at inception and, at a minimum, quarterly thereafter, to determine the effectiveness of the derivative in offsetting changes in the value or cash flows of the hedged item(s).

If a derivative designated as a cash flow hedge is terminated or ceases to be highly effective, the gain or loss in other comprehensive income (loss) is amortized to earnings over the period the forecasted hedged transactions impact earnings. If a hedged forecasted transaction is no longer probable, hedge accounting is ceased and any gain or loss included in other comprehensive income (loss) is reported in earnings immediately, unless the forecasted transaction is at least reasonably possible of occurring, whereby the amounts remain within other comprehensive income (loss).

Revenue Recognition

In the ordinary course of business, the Company recognizes income derived from various revenue generating activities. Certain revenues are generated from contracts where they are recognized when, or as services or products are transferred to customers for amounts the Company expects to be entitled. Revenue generating activities related to financial assets and liabilities are also recognized; including mortgage servicing fees, loan commitment fees, foreign currency remeasurements, and gains and losses on securities, equity investments and unconsolidated subsidiaries. Certain specific policies include the following:

Credit and Debit Card Revenue Credit and debit card revenue includes interchange from credit and debit cards processed through card association networks, annual fees, and other transaction and account management fees. Interchange rates are generally set by the credit card associations and based on purchase volumes and other factors. The Company records interchange as services are provided. Transaction and account management fees are recognized as services are provided, except for annual fees which are recognized over the applicable period. Costs for rewards programs and certain payments to partners and credit card associations are also recorded within credit and debit card revenue when services are provided. The Company predominately records credit and debit card revenue within the Payment Services line of business.

Corporate Payment Products Revenue Corporate payment products revenue primarily includes interchange from commercial card products processed through card association networks and revenue from proprietary network transactions. The Company records corporate payment products revenue as services are provided. Certain payments to credit card associations and customers are also recorded within corporate payment products revenue as services are provided. Corporate payment products revenue is recorded within the Payment Services line of business.

Merchant Processing Services Merchant processing services revenue consists principally of merchant discount and other transaction and account management fees charged to merchants for the electronic processing of card association network transactions, less interchange paid to the card-issuing bank, card association assessments, and revenue sharing amounts. All of these are recognized at the time the merchant's services are performed. The Company may enter into revenue sharing agreements with referral partners or in connection with purchases of merchant contracts from sellers. The revenue sharing amounts are determined primarily on sales volume processed or revenue generated for a particular group of merchants. Merchant processing revenue also includes revenues related to point-of-sale equipment recorded as sales when the equipment is shipped or as earned for equipment rentals. The Company records merchant processing services revenue within the Payment Services line of business.

Trust and Investment Management Fees Trust and investment management fees are recognized over the period in which services are performed and are based on a percentage of the fair value of the assets under management or administration, fixed based on account type, or transaction-based fees. Services provided to clients include trustee, transfer agent, custodian, fiscal agent, escrow, fund accounting and administration services. Services provided to mutual funds may include selling, distribution and marketing services. Trust and investment management fees are predominately recorded within the Wealth Management and Investment Services line of business.

Deposit Service Charges Deposit service charges include service charges on deposit accounts received under depository agreements with customers to provide access to deposited funds, serve as a custodian of funds, and when applicable, pay interest on deposits. Checking or savings accounts may contain fees for various services used on a day to day basis by a customer. Fees are recognized as services are delivered to and consumed by the customer, or as penalty fees are charged. Deposit service charges also include revenue generated from ATM transaction processing and settlement services which is recognized at the time the services are performed. Certain payments to partners and card associations related to ATM processing services are also recorded within deposit service charges as services are provided. Deposit service charges are reported primarily within the Consumer and Business Banking line of business.

Treasury Management Fees Treasury management fees include fees for a broad range of products and services that enables customers to manage their cash more efficiently. These products and services include cash and investment management, receivables management, disbursement services, funds transfer services, and information reporting. Revenue is recognized as products and services are provided to customers. The Company reflects a discount calculated on monthly average collected customer balances. Total treasury management fees are reported primarily within the Corporate and Commercial Banking and Consumer and Business Banking lines of business.

Commercial Products Revenue Commercial products revenue primarily includes revenue related to ancillary services provided to Corporate and Commercial Banking and Consumer and Business Banking customers, including standby letter of credit fees, non-yield related loan fees, capital markets related revenue, sales of direct financing leases, and loan and syndication fees. Sales of direct financing leases are recognized at the point of sale. In addition, the Company may lead or participate with a group of underwriters in raising investment capital on behalf of securities issuers and charge underwriting fees. These fees are recognized at securities issuance. The Company, in its role as lead underwriter, arranges deal structuring and use of outside vendors for the underwriting group. The Company recognizes only those fees and expenses related to its underwriting commitment.

Mortgage Banking Revenue Mortgage banking revenue includes revenue derived from mortgages originated and subsequently sold, generally with servicing retained. The primary components include: gains and losses on mortgage sales; servicing revenue; changes in fair value for mortgage loans originated with the intent to sell and measured at fair value under the fair value option; changes in fair value for derivative commitments to purchase and originate mortgage loans; changes in the fair value of mortgage servicing rights ("MSRs"); and the impact of risk management activities associated with the mortgage origination pipeline, funded loans and MSRs. Net interest income from mortgage loans is recorded in interest income. Refer to Other Significant Policies in Note 1, as well as Note 9 and Note 21 for a further discussion of MSRs. Mortgage banking revenue is reported within the Consumer and Business Banking line of business.

Investment Products Fees Investment products fees include commissions related to the execution of requested security trades, distribution fees from sale of mutual funds, and investment advisory fees. Commissions and investment advisory fees are recognized as services are delivered to and utilized by the customer. Distribution fees are received over time, are dependent on the consumer maintaining their mutual fund asset position and the value of such position. These revenues are estimated and recognized at the point a significant reversal of revenue becomes remote. Investment products fees are predominately reported within the Wealth Management and Investment Services line of business.

Other Noninterest Income Other noninterest income is primarily related to financial assets including income on unconsolidated subsidiaries and equity method investments, gains on sale of other investments and corporate owned life insurance proceeds. The Company reports other noninterest income across all lines of business.

Other Significant Policies

Goodwill and Other Intangible Assets Goodwill is recorded on acquired businesses if the purchase price exceeds the fair value of the net assets acquired. Other intangible assets are recorded at their fair value upon completion of a business acquisition or certain other transactions, and generally represent the value of customer contracts or relationships. Goodwill is not amortized but is subject, at a minimum, to annual tests for impairment at a reporting unit level. In certain situations, an interim impairment test may be required if events occur or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount. Other intangible assets are amortized over their estimated useful lives, using straight-line and accelerated methods and are subject to impairment if events or circumstances indicate a possible inability to realize the carrying amount. Determining the amount of goodwill impairment, if any, includes assessing the current implied fair value of the reporting unit as if it were being acquired in a business combination and comparing it to the carrying amount of the reporting unit's goodwill. Determining the amount of other intangible asset impairment, if any, includes assessing the present value of the estimated future cash flows associated with the intangible asset and comparing it to the carrying amount of the asset.

Income Taxes Deferred taxes are recorded to reflect the tax consequences on future years of differences between the tax basis of assets and liabilities and their financial reporting carrying amounts. The Company uses the deferral method of accounting on investments that generate investment tax credits. Under this method, the investment tax credits are recognized as a reduction to the related asset. For certain investments in qualified affordable housing projects, the Company presents the expense in tax expense rather than noninterest expense.

Mortgage Servicing Rights MSRs are capitalized as separate assets when loans are sold and servicing is retained or if they are purchased from others. MSRs are recorded at fair value. The Company determines the fair value by estimating the present value of the asset's future cash flows utilizing market-based prepayment rates, option adjusted spread, and other assumptions validated through comparison to trade information, industry surveys and independent third-party valuations. Changes in the fair value of MSRs are recorded in earnings as mortgage banking revenue during the period in which they occur.

Pensions For purposes of its pension plans, the Company utilizes its fiscal year-end as the measurement date. At the measurement date, plan assets are determined based on fair value, generally representing observable market prices or the net asset value provided by the funds' trustee or administrator. The actuarial cost method used to compute the pension liabilities and related expense is the projected unit credit method. The projected benefit obligation is principally determined based on the present value of projected benefit distributions at an assumed discount rate. The discount rate utilized is based on the investment yield of high quality corporate bonds available in the marketplace with maturities equal to projected cash flows of future benefit payments as of the measurement date. Periodic pension expense (or income) includes service costs, interest costs based on the assumed discount rate, the expected return on plan assets based on an actuarially derived market-related value and amortization of actuarial gains and losses. Service cost is included in employee benefits expense on the Consolidated Statement of Income, with all other components of periodic pension expense included in other noninterest expense on the Consolidated Statement of Income. Pension accounting reflects the long-term nature of benefit obligations and the investment horizon of plan assets, and can have the effect of reducing earnings volatility related to short-term changes in interest rates and market valuations. Actuarial gains and losses include the impact of plan amendments and various unrecognized gains and losses which are deferred and amortized over the future service periods of active employees. The market-related value utilized to determine the expected return on plan assets is based on fair value adjusted for the difference between expected returns and actual performance of plan assets. The unrealized difference between actual experience and expected returns is included in expense over a period of approximately fifteen years. The overfunded or underfunded status of the plans is recorded as an asset or liability on the Consolidated Balance Sheet, with changes in that status recognized through other comprehensive income (loss).

Premises and Equipment Premises and equipment are stated at cost less accumulated depreciation and depreciated primarily on a straight-line basis over the estimated life of the assets. Estimated useful lives range up to 40 years for newly constructed buildings and from 3 to 25 years for furniture and equipment.

The Company, as lessee, records an ROU asset for each lease with an original term greater than 12 months. ROU assets are included in premises and equipment, with the corresponding lease liabilities included in long-term debt and other liabilities.

Stock-Based Compensation The Company grants stock-based awards, which may include restricted stock, restricted stock units and options to purchase common stock of the Company. Stock option grants are for a fixed number of shares to employees and directors with an exercise price equal to the fair value of the shares at the date of grant. Restricted stock and restricted stock unit grants are awarded at no cost to the recipient. Stock-based compensation for awards is recognized in the Company's results of operations over the vesting period. The Company immediately recognizes compensation cost of awards to employees that meet retirement status, despite their continued active employment. The amortization of stock-based compensation reflects estimated forfeitures adjusted for actual forfeiture experience. As compensation expense is recognized, a deferred tax asset is recorded that represents an estimate of the future tax deduction from exercise or release of restrictions. At the time stock-based awards are exercised, cancelled, expire, or restrictions are released, the Company may be required to recognize an adjustment to tax expense, depending on the market price of the Company's common stock at that time.

Per Share Calculations Earnings per common share is calculated using the two-class method under which earnings are allocated to common shareholders and holders of participating securities. Unvested stock-based compensation awards that contain nonforfeitable rights to dividends or dividend equivalents are considered participating securities under the two-class method. Net income applicable to U.S. Bancorp common shareholders is then divided by the weighted-average number of common shares outstanding to determine earnings per common share. Diluted earnings per common share is calculated by adjusting income and outstanding shares, assuming conversion of all potentially dilutive securities.

NOTE 2 Accounting Changes

Accounting for Leases Effective January 1, 2019, the Company adopted accounting guidance, issued by the Financial Accounting Standards Board ("FASB") in February 2016, related to the accounting for leases. This guidance requires lessees to recognize all leases on the Consolidated Balance Sheet as lease assets and lease liabilities based primarily on the present value of future lease payments. The Company recognized approximately $1.3 billion of lease assets and related liabilities on its Consolidated Balance Sheet at the adoption date. In addition, lessors are now required to consider lease residual exposures of sales-type and direct financing leases when determining the allowance for credit losses. The adoption of this guidance was not material to the Company's Consolidated Statement of Income.

Financial Instruments—Credit Losses Effective January 1, 2020, the Company adopted accounting guidance, issued by the FASB in June 2016, related to the impairment of financial instruments. This guidance changes impairment recognition to a model that is based on expected losses rather than incurred losses, which is intended to result in more timely recognition of credit losses. This guidance is also intended to reduce the complexity of accounting guidance by decreasing the number of credit impairment models that entities use to account for debt instruments. In addition, the guidance requires additional credit quality disclosures for loans. Upon adoption, the Company increased its allowance for credit losses by approximately $1.5 billion and reduced retained earnings net of deferred tax balances.

When determining expected losses, the Company uses multiple economic scenarios and a three-year reasonable and supportable forecast period, which incorporates historical loss experience in years two and three. After the forecast period, the Company fully reverts to long-term historical loss experience, adjusted for prepayments, to estimate losses over the remaining life.

The increase in the allowance was primarily related to the commercial, credit card, installment and other retail loan portfolios where the allowance for loan losses had not previously considered the full term of the loans.

The adoption of this guidance did not have a material impact on the Company's available-for-sale securities as most of this portfolio consists of U.S. Treasury and residential agency mortgage-backed securities that inherently have an immaterial risk of loss.

NOTE 3 Restrictions on Cash and Due from Banks

Banking regulators require bank subsidiaries to maintain minimum average reserve balances, either in the form of vault cash or reserve balances held with central banks or other financial institutions. The amount of required reserve balances were approximately $3.2 billion and $3.1 billion at December 31, 2019 and 2018, respectively, and primarily represent those required to be held at the Federal Reserve Bank. In addition to vault cash, the Company held balances at the Federal Reserve Bank and other financial institutions of $8.0 billion and $7.5 billion at December 31, 2019 and 2018, respectively, to meet these requirements. These balances are included in cash and due from banks on the Consolidated Balance Sheet.

NOTE 4 Investment Securities

The Company's held-to-maturity investment securities are carried at historical cost, adjusted for amortization of premiums and accretion of discounts and credit-related other-than-temporary impairment. The Company's available-for-sale investment securities are carried at fair value with unrealized net gains or losses reported within accumulated other comprehensive income (loss) in shareholders' equity.

The amortized cost, other-than-temporary impairment recorded in other comprehensive income (loss), gross unrealized holding gains and losses, and fair value of held-to-maturity and available-for-sale investment securities at December 31 were as follows:

	2019					2018				
			Unrealized Losses					Unrealized Losses		
(Dollars in Millions)	Amortized Cost	Unrealized Gains	Other-than-Temporary[a]	Other[b]	Fair Value	Amortized Cost	Unrealized Gains	Other-than-Temporary[a]	Other[b]	Fair Value
Held-to-maturity										
U.S. Treasury and agencies	$ –	$ –	$–	$ –	$ –	$ 5,102	$ 2	$–	$ (143)	$ 4,961
Residential agency mortgage-backed securities	–	–	–	–	–	40,920	45	–	(994)	39,971
Asset-backed securities										
Collateralized debt obligations/ Collateralized loan obligations	–	–	–	–	–	–	1	–	–	1
Other	–	–	–	–	–	5	2	–	–	7
Obligations of state and political subdivisions	–	–	–	–	–	6	1	–	–	7
Obligations of foreign governments	–	–	–	–	–	9	–	–	–	9
Other	–	–	–	–	–	8	–	–	–	8
Total held-to-maturity	$ –	$ –	$–	$ –	$ –	$46,050	$ 51	$–	$(1,137)	$44,964
Available-for-sale										
U.S. Treasury and agencies	$ 19,845	$ 61	$–	$ (67)	$ 19,839	$19,604	$ 11	$–	$ (358)	$19,257
Mortgage-backed securities										
Residential agency	93,903	557	–	(349)	94,111	40,542	120	–	(910)	39,752
Commercial agency	1,482	–	–	(29)	1,453	2	–	–	–	2
Asset-backed securities										
Collateralized debt obligations/ Collateralized loan obligations	–	1	–	–	1	–	–	–	–	–
Other	375	7	–	–	382	397	6	–	–	403
Obligations of state and political subdivisions	6,499	318	–	(3)	6,814	6,836	37	–	(172)	6,701
Obligations of foreign governments	9	–	–	–	9	–	–	–	–	–
Corporate debt securities	4	–	–	–	4	–	–	–	–	–
Total available-for-sale	$122,117	$944	$–	$(448)	$122,613	$67,381	$174	$–	$(1,440)	$66,115

(a) Represents impairment not related to credit for those investment securities that have been determined to be other-than-temporarily impaired.
(b) Represents unrealized losses on investment securities that have not been determined to be other-than-temporarily impaired.

On December 31, 2019, the Company transferred all $43.6 billion of its held-to-maturity investment securities outstanding to the available-for-sale category to reflect its new intent for these securities, as a result of changes to regulatory capital requirements promulgated in 2019. In addition, the Company recognized $141 million of net unrealized gains on its Consolidated Balance Sheet as a result of the transfer.

Investment securities with a fair value of $8.4 billion at December 31, 2019, and $10.9 billion at December 31, 2018, were pledged to secure public, private and trust deposits, repurchase agreements and for other purposes required by contractual obligation or law. Included in these amounts were securities where the Company and certain counterparties have agreements granting the counterparties the right to sell or pledge the securities. Investment securities securing these types of arrangements had a fair value of $269 million at December 31, 2019, and $2.1 billion at December 31, 2018.

The following table provides information about the amount of interest income from taxable and non-taxable investment securities:

Year Ended December 31 (Dollars in Millions)	2019	2018	2017
Taxable	$2,680	$2,396	$2,043
Non-taxable	213	220	189
Total interest income from investment securities	$2,893	$2,616	$2,232

The following table provides information about the amount of gross gains and losses realized through the sales of available-for-sale investment securities:

Year Ended December 31 (Dollars in Millions)	2019	2018	2017
Realized gains	$ 99	$30	$ 75
Realized losses	(26)	–	(18)
Net realized gains (losses)	$ 73	$30	$ 57
Income tax (benefit) on net realized gains (losses)	$ 18	$ 7	$ 22

The Company conducts a regular assessment of its investment securities with unrealized losses to determine whether investment securities are other-than-temporarily impaired considering, among other factors, the nature of the investment securities, the credit ratings or financial condition of the issuer, the extent and duration of the unrealized loss, expected cash flows of underlying collateral, the existence of any government or agency guarantees, market conditions and whether the Company intends to sell or it is more likely than not the Company will be required to sell the investment securities. The Company determines other-than-temporary impairment recorded in earnings for investment securities not intended to be sold by estimating the future cash flows of each individual investment security, using market information where available, and discounting the cash flows at the original effective rate of the investment security. Other-than-temporary impairment recorded in other comprehensive income (loss) is measured as the difference between that discounted amount and the fair value of each investment security. The total amount of other-than-temporary impairment recorded was immaterial for the years ended December 31, 2019, 2018 and 2017.

At December 31, 2019, certain investment securities had a fair value below amortized cost. The following table shows the gross unrealized losses and fair value of the Company's available-for-sale investment securities with unrealized losses, aggregated by investment category and length of time the individual investment securities have been in continuous unrealized loss positions, at December 31, 2019:

	Less Than 12 Months		12 Months or Greater		Total	
(Dollars in Millions)	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
U.S. Treasury and agencies	$ 3,869	$ (40)	$ 6,265	$ (27)	$10,134	$ (67)
Residential agency mortgage-backed securities	16,292	(46)	24,346	(303)	40,638	(349)
Commercial agency mortgage-backed securities	1,453	(29)	–	–	1,453	(29)
Other asset-backed securities	–	–	2	–	2	–
Obligations of state and political subdivisions	365	(3)	–	–	365	(3)
Corporate debt securities	4	–	–	–	4	–
Total investment securities	$21,983	$(118)	$30,613	$(330)	$52,596	$(448)

The Company does not consider these unrealized losses to be credit-related. These unrealized losses primarily relate to changes in interest rates and market spreads subsequent to purchase. A substantial portion of investment securities that have unrealized losses are either U.S. Treasury and agencies, agency mortgage-backed or state and political securities. In general, the issuers of the investment securities are contractually prohibited from prepayment at less than par, and the Company did not pay significant purchase premiums for these investment securities. At December 31, 2019, the Company had no plans to sell investment securities with unrealized losses, and believes it is more likely than not it would not be required to sell such investment securities before recovery of their amortized cost.

The following table provides information about the amortized cost, fair value and yield by maturity date of the available-for-sale investment securities outstanding at December 31, 2019:

(Dollars in Millions)	Amortized Cost	Fair Value	Weighted-Average Maturity in Years	Weighted-Average Yield[e]
U.S. Treasury and Agencies				
Maturing in one year or less	$ 4,243	$ 4,242	.6	1.61%
Maturing after one year through five years	12,881	12,901	2.4	1.65
Maturing after five years through ten years	2,721	2,696	7.5	1.95
Maturing after ten years	–	–	–	–
Total	$ 19,845	$ 19,839	2.7	1.68%
Mortgage-Backed Securities[a]				
Maturing in one year or less	$ 197	$ 197	.7	2.28%
Maturing after one year through five years	66,940	67,102	3.6	2.30
Maturing after five years through ten years	27,339	27,349	6.0	2.58
Maturing after ten years	909	916	11.4	2.76
Total	$ 95,385	$ 95,564	4.4	2.39%
Asset-Backed Securities[a]				
Maturing in one year or less	$ –	$ –	–	—%
Maturing after one year through five years	374	381	3.1	3.09
Maturing after five years through ten years	1	1	6.1	2.56
Maturing after ten years	–	1	15.3	2.41
Total	$ 375	$ 383	3.1	3.09%
Obligations of State and Political Subdivisions[b][c]				
Maturing in one year or less	$ 66	$ 66	.1	5.81%
Maturing after one year through five years	695	722	3.0	4.50
Maturing after five years through ten years	5,720	6,004	7.1	4.24
Maturing after ten years	18	22	14.0	6.15
Total	$ 6,499	$ 6,814	6.6	4.29%
Other				
Maturing in one year or less	$ 13	$ 13	.3	2.66%
Maturing after one year through five years	–	–	–	–
Maturing after five years through ten years	–	–	–	–
Maturing after ten years	–	–	–	–
Total	$ 13	$ 13	.3	2.66%
Total investment securities[d]	$122,117	$122,613	4.2	2.38%

(a) Information related to asset and mortgage-backed securities included above is presented based upon weighted-average maturities that take into account anticipated future prepayments.

(b) Information related to obligations of state and political subdivisions is presented based upon yield to first optional call date if the security is purchased at a premium, and yield to maturity if the security is purchased at par or a discount.

(c) Maturity calculations for obligations of state and political subdivisions are based on the first optional call date for securities with a fair value above par and the contractual maturity date for securities with a fair value equal to or below par.

(d) The weighted-average maturity of total available-for-sale and held-to-maturity investment securities was 5.3 years at December 31, 2018, with a corresponding weighted-average yield of 2.52 percent.

(e) Weighted-average yields for obligations of state and political subdivisions are presented on a fully-taxable equivalent basis based on a federal income tax rate of 21 percent. Yields on investment securities are computed based on amortized cost balances, excluding any premiums or discounts recorded related to the transfer of investment securities at fair value from available-for-sale to held-to-maturity.

NOTE 5 Loans and Allowance for Credit Losses

The composition of the loan portfolio at December 31, disaggregated by class and underlying specific portfolio type, was as follows:

(Dollars in Millions)	2019	2018
Commercial		
Commercial	$ 98,168	$ 96,849
Lease financing	5,695	5,595
Total commercial	103,863	102,444
Commercial Real Estate		
Commercial mortgages	29,404	28,596
Construction and development	10,342	10,943
Total commercial real estate	39,746	39,539
Residential Mortgages		
Residential mortgages	59,865	53,034
Home equity loans, first liens	10,721	12,000
Total residential mortgages	70,586	65,034
Credit Card	24,789	23,363
Other Retail		
Retail leasing	8,490	8,546
Home equity and second mortgages	15,036	16,122
Revolving credit	2,899	3,088
Installment	11,038	9,676
Automobile	19,435	18,719
Student	220	279
Total other retail	57,118	56,430
Total loans	$296,102	$286,810

The Company had loans of $96.2 billion at December 31, 2019, and $88.7 billion at December 31, 2018, pledged at the Federal Home Loan Bank, and loans of $76.3 billion at December 31, 2019, and $70.1 billion at December 31, 2018, pledged at the Federal Reserve Bank.

The Company offers a broad array of lending products to consumer and commercial customers, in various industries, across several geographical locations, predominately in the states in which it has Consumer and Business Banking offices. Collateral for commercial and commercial real estate loans may include marketable securities, accounts receivable, inventory, equipment, real estate, or the related property.

Originated loans are reported at the principal amount outstanding, net of unearned interest and deferred fees and costs, and any partial charge-offs recorded. Net unearned interest and deferred fees and costs amounted to $781 million at December 31, 2019 and $872 million at December 31, 2018. All purchased loans are recorded at fair value at the date of purchase. The Company evaluates purchased loans for impairment at the date of purchase in accordance with applicable authoritative accounting guidance. Purchased loans with evidence of credit deterioration since origination for which it is probable that all contractually required payments will not be collected are considered “purchased impaired loans.” All other purchased loans are considered “purchased nonimpaired loans.”

Allowance for Credit Losses The allowance for credit losses is established for probable and estimable losses incurred in the Company's loan and lease portfolio, including unfunded credit commitments. The allowance for credit losses is increased through provisions charged to earnings and reduced by net charge-offs.

Activity in the allowance for credit losses by portfolio class was as follows:

(Dollars in Millions)	Commercial	Commercial Real Estate	Residential Mortgages	Credit Card	Other Retail	Covered Loans	Total Loans
Balance at December 31, 2018							
Balance at beginning of period	$1,454	$800	$455	$1,102	$ 630	$ –	$4,441
Add							
Provision for credit losses	315	13	(19)	919	276	–	1,504
Deduct							
Loans charged-off	399	21	34	1,028	385	–	1,867
Less recoveries of loans charged-off	(114)	(7)	(31)	(135)	(126)	–	(413)
Net loans charged-off	285	14	3	893	259	–	1,454
Balance at December 31, 2019	$1,484	$799	$433	$1,128	$ 647	$ –	$4,491
Balance at December 31, 2017							
Balance at beginning of period	$1,372	$831	$449	$1,056	$ 678	$ 31	$4,417
Add							
Provision for credit losses	333	(50)	23	892	211	(30)	1,379
Deduct							
Loans charged-off	350	9	48	970	383	–	1,760
Less recoveries of loans charged-off	(99)	(28)	(31)	(124)	(124)	–	(406)
Net loans charged-off	251	(19)	17	846	259	–	1,354
Other changes[a]	–	–	–	–	–	(1)	(1)
Balance at December 31, 2018	$1,454	$800	$455	$1,102	$ 630	$ –	$4,441
Balance at December 31, 2016							
Balance at beginning of period	$1,450	$812	$510	$ 934	$ 617	$ 34	$4,357
Add							
Provision for credit losses	186	19	(24)	908	304	(3)	1,390
Deduct							
Loans charged-off	414	30	65	887	355	–	1,751
Less recoveries of loans charged-off	(150)	(30)	(28)	(101)	(112)	–	(421)
Net loans charged-off	264	–	37	786	243	–	1,330
Balance at December 31, 2017	$1,372	$831	$449	$1,056	$ 678	$ 31	$4,417

(a) Includes net changes in credit losses to be reimbursed by the FDIC and reductions in the allowance for covered loans where the reversal of a previously recorded allowance was offset by an associated decrease in the indemnification asset, and the impact of any loan sales.

Additional detail of the allowance for credit losses by portfolio class was as follows:

(Dollars in Millions)	Commercial	Commercial Real Estate	Residential Mortgages	Credit Card	Other Retail	Total Loans
Allowance Balance at December 31, 2019 Related to						
Loans individually evaluated for impairment[a]	$ 16	$ 3	$ –	$ –	$ –	$ 19
TDRs collectively evaluated for impairment	20	3	109	81	10	223
Other loans collectively evaluated for impairment	1,448	793	309	1,047	637	4,234
Loans acquired with deteriorated credit quality	–	–	15	–	–	15
Total allowance for credit losses	$1,484	$799	$433	$1,128	$647	$4,491
Allowance Balance at December 31, 2018 Related to						
Loans individually evaluated for impairment[a]	$ 16	$ 8	$ –	$ –	$ –	$ 24
TDRs collectively evaluated for impairment	15	3	126	69	12	225
Other loans collectively evaluated for impairment	1,423	788	314	1,033	618	4,176
Loans acquired with deteriorated credit quality	–	1	15	–	–	16
Total allowance for credit losses	$1,454	$800	$455	$1,102	$630	$4,441

(a) Represents the allowance for credit losses related to loans greater than $5 million classified as nonperforming or TDRs.

Additional detail of loan balances by portfolio class was as follows:

(Dollars in Millions)	Commercial	Commercial Real Estate	Residential Mortgages	Credit Card	Other Retail	Total Loans
December 31, 2019						
Loans individually evaluated for impairment[(a)]	$ 253	$ 61	$ –	$ –	$ –	$ 314
TDRs collectively evaluated for impairment	163	138	3,044	263	185	3,793
Other loans collectively evaluated for impairment	103,447	39,513	67,315	24,526	56,933	291,734
Loans acquired with deteriorated credit quality	–	34	227	–	–	261
Total loans	$103,863	$39,746	$70,586	$24,789	$57,118	$296,102
December 31, 2018						
Loans individually evaluated for impairment[(a)]	$ 262	$ 86	$ –	$ –	$ –	$ 348
TDRs collectively evaluated for impairment	151	129	3,252	245	183	3,960
Other loans collectively evaluated for impairment	102,031	39,297	61,465	23,118	56,247	282,158
Loans acquired with deteriorated credit quality	–	27	317	–	–	344
Total loans	$102,444	$39,539	$65,034	$23,363	$56,430	$286,810

(a) Represents loans greater than $5 million classified as nonperforming or TDRs.

Credit Quality The credit quality of the Company's loan portfolios is assessed as a function of net credit losses, levels of nonperforming assets and delinquencies, and credit quality ratings as defined by the Company. These credit quality ratings are an important part of the Company's overall credit risk management and evaluation of its allowance for credit losses.

The following table provides a summary of loans by portfolio class, including the delinquency status of those that continue to accrue interest, and those that are nonperforming:

	Accruing				
(Dollars in Millions)	Current	30-89 Days Past Due	90 Days or More Past Due	Nonperforming	Total
December 31, 2019					
Commercial	$103,273	$ 307	$ 79	$204	$103,863
Commercial real estate	39,627	34	3	82	39,746
Residential mortgages[(a)]	70,071	154	120	241	70,586
Credit card	24,162	321	306	–	24,789
Other retail	56,463	393	97	165	57,118
Total loans	$293,596	$1,209	$605	$692	$296,102
December 31, 2018					
Commercial	$101,844	$ 322	$ 69	$209	$102,444
Commercial real estate	39,354	70	–	115	39,539
Residential mortgages[(a)]	64,443	181	114	296	65,034
Credit card	22,746	324	293	–	23,363
Other retail	55,722	403	108	197	56,430
Total loans	$284,109	$1,300	$584	$817	$286,810

(a) At December 31, 2019, $428 million of loans 30–89 days past due and $1.7 billion of loans 90 days or more past due purchased from Government National Mortgage Association ("GNMA") mortgage pools whose repayments are insured by the Federal Housing Administration or guaranteed by the United States Department of Veterans Affairs, were classified as current, compared with $430 million and $1.7 billion at December 31, 2018, respectively.

At December 31, 2019, total nonperforming assets held by the Company were $829 million, compared with $989 million at December 31, 2018. Total nonperforming assets included $692 million of nonperforming loans, $78 million of OREO and $59 million of other nonperforming assets owned by the Company at December 31, 2019, compared with $817 million, $111 million and $61 million, respectively, at December 31, 2018.

At December 31, 2019, the amount of foreclosed residential real estate held by the Company, and included in OREO, was $74 million, compared with $106 million at December 31, 2018. These amounts exclude $155 million and $235 million at December 31, 2019 and 2018, respectively, of foreclosed residential real estate related to mortgage loans whose payments are primarily insured by the Federal Housing Administration or guaranteed by the United States Department of Veterans Affairs. In addition, the amount of residential mortgage loans secured by residential real estate in the process of foreclosure was $1.5 billion at December 31, 2019 and 2018, of which $1.2 billion at December 31, 2019 and 2018, related to loans purchased from Government National Mortgage Association ("GNMA") mortgage pools whose repayments are insured by the Federal Housing Administration or guaranteed by the United States Department of Veterans Affairs.

The following table provides a summary of loans by portfolio class and the Company's internal credit quality rating:

(Dollars in Millions)	Pass	Criticized: Special Mention	Criticized: Classified[(a)]	Criticized: Total Criticized	Total
December 31, 2019					
Commercial	$101,850	$1,147	$ 866	$2,013	$103,863
Commercial real estate	38,872	484	390	874	39,746
Residential mortgages[(b)]	70,174	2	410	412	70,586
Credit card	24,483	–	306	306	24,789
Other retail	56,825	10	283	293	57,118
Total loans	$292,204	$1,643	$2,255	$3,898	$296,102
Total outstanding commitments	$619,224	$2,451	$2,873	$5,324	$624,548
December 31, 2018					
Commercial	$100,014	$1,149	$1,281	$2,430	$102,444
Commercial real estate	38,473	584	482	1,066	39,539
Residential mortgages[(b)]	64,570	1	463	464	65,034
Credit card	23,070	–	293	293	23,363
Other retail	56,101	6	323	329	56,430
Total loans	$282,228	$1,740	$2,842	$4,582	$286,810
Total outstanding commitments	$600,407	$2,801	$3,448	$6,249	$606,656

(a) Classified rating on consumer loans primarily based on delinquency status.

(b) At December 31, 2019, $1.7 billion of GNMA loans 90 days or more past due and $1.6 billion of restructured GNMA loans whose repayments are insured by the Federal Housing Administration or guaranteed by the United States Department of Veterans Affairs were classified with a pass rating, unchanged from December 31, 2018.

For all loan classes, a loan is considered to be impaired when, based on current events or information, it is probable the Company will be unable to collect all amounts due per the contractual terms of the loan agreement. A summary of impaired loans, which include all nonaccrual and TDR loans, by portfolio class was as follows:

(Dollars in Millions)	Period-end Recorded Investment[(a)]	Unpaid Principal Balance	Valuation Allowance	Commitments to Lend Additional Funds
December 31, 2019				
Commercial	$ 483	$1,048	$ 39	$158
Commercial real estate	242	603	7	–
Residential mortgages	1,515	1,827	71	–
Credit card	263	263	81	–
Other retail	318	417	12	2
Total loans, excluding loans purchased from GNMA mortgage pools	2,821	4,158	210	160
Loans purchased from GNMA mortgage pools	1,622	1,622	39	–
Total	$4,443	$5,780	$249	$160
December 31, 2018				
Commercial	$ 467	$1,006	$ 32	$106
Commercial real estate	279	511	12	2
Residential mortgages	1,709	1,879	86	–
Credit card	245	245	69	–
Other retail	335	418	14	5
Total loans, excluding loans purchased from GNMA mortgage pools	3,035	4,059	213	113
Loans purchased from GNMA mortgage pools	1,639	1,639	41	–
Total	$4,674	$5,698	$254	$113

(a) Substantially all loans classified as impaired at December 31, 2019 and 2018, had an associated allowance for credit losses. The total amount of interest income recognized during 2019 on loans classified as impaired at December 31, 2019, excluding those acquired with deteriorated credit quality, was $194 million, compared to what would have been recognized at the original contractual terms of the loans of $246 million.

Additional information on impaired loans follows for the years ended December 31 follows:

(Dollars in Millions)	Average Recorded Investment	Interest Income Recognized
2019		
Commercial	$ 520	$ 9
Commercial real estate	248	11
Residential mortgages	1,622	92
Credit card	257	–
Other retail	323	12
Total loans, excluding loans purchased from GNMA mortgage pools	2,970	124
Loans purchased from GNMA mortgage pools	1,638	70
Total	$4,608	$194
2018		
Commercial	$ 497	$ 8
Commercial real estate	273	13
Residential mortgages	1,817	76
Credit card	236	3
Other retail	309	16
Covered Loans	25	1
Total loans, excluding loans purchased from GNMA mortgage pools	3,157	117
Loans purchased from GNMA mortgage pools	1,640	47
Total	$4,797	$164
2017		
Commercial	$ 683	$ 7
Commercial real estate	273	11
Residential mortgages	2,135	103
Credit card	229	3
Other retail	287	14
Covered Loans	37	1
Total loans, excluding loans purchased from GNMA mortgage pools	3,644	139
Loans purchased from GNMA mortgage pools	1,672	65
Total	$5,316	$204

Troubled Debt Restructurings In certain circumstances, the Company may modify the terms of a loan to maximize the collection of amounts due when a borrower is experiencing financial difficulties or is expected to experience difficulties in the near-term. The following table provides a summary of loans modified as TDRs for the years ended December 31, by portfolio class:

(Dollars in Millions)	Number of Loans	Pre-Modification Outstanding Loan Balance	Post-Modification Outstanding Loan Balance
2019			
Commercial	3,445	$ 376	$ 359
Commercial real estate	136	129	125
Residential mortgages	417	55	54
Credit card	34,247	185	186
Other retail	2,952	63	61
Total loans, excluding loans purchased from GNMA mortgage pools	41,197	808	785
Loans purchased from GNMA mortgage pools	6,257	856	827
Total loans	47,454	$1,664	$1,612
2018			
Commercial	2,824	$ 336	$ 311
Commercial real estate	127	168	169
Residential mortgages	526	73	69
Credit card	33,318	169	171
Other retail	2,462	58	55
Covered Loans	3	1	1
Total loans, excluding loans purchased from GNMA mortgage pools	39,260	805	776
Loans purchased from GNMA mortgage pools	6,268	821	803
Total loans	45,528	$1,626	$1,579
2017			
Commercial	2,758	$ 380	$ 328
Commercial real estate	128	82	78
Residential mortgages	800	90	88
Credit card	33,615	161	162
Other retail	3,881	79	68
Covered Loans	11	2	2
Total loans, excluding loans purchased from GNMA mortgage pools	41,193	794	726
Loans purchased from GNMA mortgage pools	6,791	881	867
Total loans	47,984	$1,675	$1,593

Residential mortgages, home equity and second mortgages, and loans purchased from GNMA mortgage pools in the table above include trial period arrangements offered to customers during the periods presented. The post-modification balances for these loans reflect the current outstanding balance until a permanent modification is made. In addition, the post-modification balances typically include capitalization of unpaid accrued interest and/or fees under the various modification programs. For those loans modified as TDRs during the fourth quarter of 2019, at December 31, 2019, 41 residential mortgages, 17 home equity and second mortgage loans and 990 loans purchased from GNMA mortgage pools with outstanding balances of $6 million, $1 million and $136 million, respectively, were in a trial period and have estimated post-modification balances of $6 million, $1 million and $135 million, respectively, assuming permanent modification occurs at the end of the trial period.

The following table provides a summary of TDR loans that defaulted (fully or partially charged-off or became 90 days or more past due) for the years ended December 31, that were modified as TDRs within 12 months previous to default:

(Dollars in Millions)	Number of Loans	Amount Defaulted
2019		
Commercial	1,040	$ 46
Commercial real estate	36	24
Residential mortgages	137	15
Credit card	8,273	40
Other retail	380	10
Total loans, excluding loans purchased from GNMA mortgage pools	9,866	135
Loans purchased from GNMA mortgage pools	997	131
Total loans	10,863	$266
2018		
Commercial	836	$ 71
Commercial real estate	39	15
Residential mortgages	191	18
Credit card	8,012	35
Other retail	334	5
Covered loans	1	–
Total loans, excluding loans purchased from GNMA mortgage pools	9,413	144
Loans purchased from GNMA mortgage pools	1,447	187
Total loans	10,860	$331
2017		
Commercial	724	$ 53
Commercial real estate	36	9
Residential mortgages	374	41
Credit card	8,372	36
Other retail	415	5
Covered loans	4	–
Total loans, excluding loans purchased from GNMA mortgage pools	9,925	144
Loans purchased from GNMA mortgage pools	1,369	177
Total loans	11,294	$321

In addition to the defaults in the table above, the Company had a total of 826 residential mortgage loans, home equity and second mortgage loans and loans purchased from GNMA mortgage pools for the year ended December 31, 2019, where borrowers did not successfully complete the trial period arrangement and, therefore, are no longer eligible for a permanent modification under the applicable modification program. These loans had aggregate outstanding balances of $111 million for the year ended December 31, 2019.

NOTE 6 Leases

The Company, as a lessor, originates retail and commercial leases either directly to the consumer or indirectly through dealer networks. Retail leases consist primarily of automobiles, while commercial leases may include high dollar assets such as aircraft or lower cost items such as office equipment.

The components of the net investment in sales-type and direct financing leases, at December 31, were as follows:

(Dollars in Millions)	2019	2018
Lease receivables	$12,324	$12,207
Unguaranteed residual values accruing to the lessor's benefit	1,834	1,877
Total net investment in sales-type and direct financing leases	$14,158	$14,084

The Company, as a lessor, recorded $996 million of revenue on its Consolidated Statement of Income for the year ended December 31, 2019, primarily consisting of interest income on sales-type and direct financing leases.

The contractual future lease payments to be received by the Company, at December 31, 2019, were as follows:

(Dollars in Millions)	Sales-type and direct financing leases	Operating leases
2020	$ 4,755	$176
2021	3,729	142
2022	2,766	103
2023	1,248	69
2024	382	50
Thereafter	483	52
Total lease payments	13,363	$592
Amounts representing interest	(1,039)	
Lease receivables	$12,324	

The Company, as lessee, leases certain assets for use in its operations. Leased assets primarily include retail branches, operations centers and other corporate locations, and, to a lesser extent, office and computer equipment. For each lease with an original term greater than 12 months, the Company records a lease liability and a corresponding right of use ("ROU") asset. At December 31, 2019, the Company's ROU assets included in premises and equipment and lease liabilities included in long-term debt and other liabilities, were $1.3 billion and $1.4 billion, respectively.

Total costs incurred by the Company, as a lessee, were $394 million for the year ended December 31, 2019, and principally related to contractual lease payments on operating leases. The Company's leases do not impose significant covenants or other restrictions on the Company.

The following table presents amounts relevant to the Company's assets leased for use in its operations for the year ended December 31, 2019:

(Dollars in Millions)	
Cash paid for amounts included in the measurement of lease liabilities	
Operating cash flows from operating leases	$302
Operating cash flows from finance leases	7
Financing cash flows from finance leases	10
Right of use assets obtained in exchange for new operating lease liabilities	134
Right of use assets obtained in exchange for new finance lease liabilities	10

The following table presents the weighted-average remaining lease terms and discount rates of the Company's assets leased for use in its operations at December 31, 2019:

Weighted-average remaining lease term of operating leases (in years)	7.4
Weighted-average remaining lease term of finance leases (in years)	10.7
Weighted-average discount rate of operating leases	3.2%
Weighted-average discount rate of finance leases	14.3%

The contractual future lease obligations of the Company at December 31, 2019, were as follows:

(Dollars in Millions)	Operating leases	Finance leases
2020	$ 296	$ 17
2021	267	15
2022	226	13
2023	180	12
2024	132	10
Thereafter	391	38
Total lease payments	1,492	105
Amounts representing interest	(150)	(31)
Lease liabilities	$1,342	$ 74

NOTE 7 Accounting for Transfers and Servicing of Financial Assets and Variable Interest Entities

The Company transfers financial assets in the normal course of business. The majority of the Company's financial asset transfers are residential mortgage loan sales primarily to government-sponsored enterprises ("GSEs"), transfers of tax-advantaged investments, commercial loan sales through participation agreements, and other individual or portfolio loan and securities sales. In accordance with the accounting guidance for asset transfers, the Company considers any ongoing involvement with transferred assets in determining whether the assets can be derecognized from the balance sheet. Guarantees provided to certain third parties in connection with the transfer of assets are further discussed in Note 22.

For loans sold under participation agreements, the Company also considers whether the terms of the loan participation agreement meet the accounting definition of a participating interest. With the exception of servicing and certain performance-based guarantees, the Company's continuing involvement with financial assets sold is minimal and generally limited to market customary representation and warranty clauses. Any gain or loss on sale depends on the previous carrying amount of the transferred financial assets, the consideration received, and any liabilities incurred in exchange for the transferred assets. Upon transfer, any servicing assets and other interests that continue to be held by the Company are initially recognized at fair value. For further information on MSRs, refer to Note 9. On a limited basis, the Company may acquire and package high-grade corporate bonds for select corporate customers, in which the Company generally has no continuing involvement with these transactions. Additionally, the Company is an authorized GNMA issuer and issues GNMA securities on a regular basis. The Company has no other asset securitizations or similar asset-backed financing arrangements that are off-balance sheet.

The Company also provides financial support primarily through the use of waivers of trust and investment management fees associated with various unconsolidated registered money market funds it manages. The Company provided $30 million, $25 million, and $23 million of support to the funds during the years ended December 31, 2019, 2018 and 2017, respectively.

The Company is involved in various entities that are considered to be VIEs. The Company's investments in VIEs are primarily related to investments promoting affordable housing, community development and renewable energy sources. Some of these tax-advantaged investments support the Company's regulatory compliance with the Community Reinvestment Act. The Company's investments in these entities generate a return primarily through the realization of federal and state income tax credits, and other tax benefits, such as tax deductions from operating losses of the investments, over specified time periods. These tax credits are recognized as a reduction of tax expense or, for investments qualifying as investment tax credits, as a reduction to the related investment asset. The Company recognized federal and state income tax credits related to its affordable housing and other tax-advantaged investments in tax expense of $615 million, $689 million and $711 million for the years ended December 31, 2019, 2018 and 2017, respectively. The Company also recognized $506 million, $639 million and $1.5 billion of investment tax credits for the years ended December 31, 2019, 2018 and 2017, respectively. The Company recognized $557 million, $604 million and $741 million of expenses related to all of these investments for the years ended December 31, 2019, 2018 and 2017, respectively, of which $318 million, $275 million and $317 million, respectively, were included in tax expense and the remaining amounts were included in noninterest expense.

The Company is not required to consolidate VIEs in which it has concluded it does not have a controlling financial interest, and thus is not the primary beneficiary. In such cases, the Company does not have both the power to direct the entities' most significant activities and the obligation to absorb losses or the right to receive benefits that could potentially be significant to the VIEs.

The Company's investments in these unconsolidated VIEs are carried in other assets on the Consolidated Balance Sheet. The Company's unfunded capital and other commitments related to these unconsolidated VIEs are generally carried in other liabilities on the Consolidated Balance Sheet. The Company's maximum exposure to loss from these unconsolidated VIEs include the investment recorded on the Company's Consolidated Balance Sheet, net of unfunded capital commitments, and previously recorded tax credits which remain subject to recapture by taxing authorities based on compliance features required to be met at the project level. While the Company believes potential losses from these investments are remote, the maximum exposure was determined by assuming a scenario where the community-based business and housing projects completely fail and do not meet certain government compliance requirements resulting in recapture of the related tax credits.

The following table provides a summary of investments in community development and tax-advantaged VIEs that the Company has not consolidated:

At December 31 (Dollars in Millions)	2019	2018
Investment carrying amount	$ 6,148	$ 5,823
Unfunded capital and other commitments	2,938	2,778
Maximum exposure to loss	12,118	12,360

The Company also has noncontrolling financial investments in private investment funds and partnerships considered to be VIEs, which are not consolidated. The Company's recorded investment in these entities, carried in other assets on the Consolidated Balance Sheet, was approximately $31 million at December 31, 2019 and $27 million at December 31, 2018. The maximum exposure to loss related to these VIEs was $55 million at December 31, 2019 and $52 million at December 31, 2018, representing the Company's investment balance and its unfunded commitments to invest additional amounts.

The Company's individual net investments in unconsolidated VIEs, which exclude any unfunded capital commitments, ranged from less than $1 million to $87 million at December 31, 2019, compared with less than $1 million to $95 million at December 31, 2018.

The Company is required to consolidate VIEs in which it has concluded it has a controlling financial interest. The Company sponsors entities to which it transfers its interests in tax-advantaged investments to third parties. At December 31, 2019, approximately $4.0 billion of the Company's assets and $3.2 billion of its liabilities included on the Consolidated Balance Sheet were related to community development and tax-advantaged investment VIEs which the Company has consolidated, primarily related to these transfers. These amounts compared to $3.9 billion and $2.7 billion, respectively, at December 31, 2018. The majority of the assets of these consolidated VIEs are reported in other assets, and the liabilities are reported in long-term debt and other liabilities. The assets of a particular VIE are the primary source of funds to settle its obligations. The creditors of the VIEs do not have recourse to the general credit of the Company. The Company's exposure to the consolidated VIEs is generally limited to the carrying value of its variable interests plus any related tax credits previously recognized or transferred to others with a guarantee.

The Company also sponsors a conduit to which it previously transferred high-grade investment securities. The Company consolidates the conduit because of its ability to manage the activities of the conduit. At December 31, 2019, $12 million of the available-for-sale investment securities on the Company's Consolidated Balance Sheet were related to the conduit, compared with $14 million of the held-to-maturity investment securities at December 31, 2018.

In addition, the Company sponsors a municipal bond securities tender option bond program. The Company controls the activities of the program's entities, is entitled to the residual returns and provides liquidity and remarketing arrangements to the program. As a result, the Company has consolidated the program's entities. At December 31, 2019, $3.0 billion of available-for-sale investment securities and $2.7 billion of short-term borrowings on the Consolidated Balance Sheet were related to the tender option bond program, compared with $2.4 billion of available-for-sale investment securities and $2.3 billion of short-term borrowings at December 31, 2018.

NOTE 8 Premises and Equipment

Premises and equipment at December 31 consisted of the following:

(Dollars in Millions)	2019	2018
Land	$ 504	$ 515
Buildings and improvements	3,513	3,481
Furniture, fixtures and equipment	3,366	3,110
Right of use assets on operating leases	1,141	–
Right of use assets on finance leases	111	121
Construction in progress	21	20
	8,656	7,247
Less accumulated depreciation and amortization	(4,954)	(4,790)
Total	$ 3,702	$ 2,457

NOTE 9 Mortgage Servicing Rights

The Company capitalizes MSRs as separate assets when loans are sold and servicing is retained. MSRs may also be purchased from others. The Company carries MSRs at fair value, with changes in the fair value recorded in earnings during the period in which they occur. The Company serviced $226.0 billion of residential mortgage loans for others at December 31, 2019, and $231.5 billion at December 31, 2018, including subserviced mortgages with no corresponding MSR asset. Included in mortgage banking revenue are the MSR fair value changes arising from market rate and model assumption changes, net of the value change in derivatives used to economically hedge MSRs. These changes resulted in a net loss of $24 million and net gains of $47 million and $15 million for the years ended December 31, 2019, 2018 and 2017, respectively. Loan servicing and ancillary fees, not including valuation changes, included in mortgage banking revenue were $734 million, $746 million and $746 million for the years ended December 31, 2019, 2018 and 2017, respectively.

Changes in fair value of capitalized MSRs for the years ended December 31, are summarized as follows:

(Dollars in Millions)	2019	2018	2017
Balance at beginning of period	$2,791	$2,645	$2,591
Rights purchased	20	8	13
Rights capitalized	559	397	445
Rights sold[(a)]	5	(27)	–
Changes in fair value of MSRs			
Due to fluctuations in market interest rates[(b)]	(390)	98	(23)
Due to revised assumptions or models[(c)]	23	56	18
Other changes in fair value[(d)]	(462)	(386)	(399)
Balance at end of period	$2,546	$2,791	$2,645

(a) MSRs sold in 2019 include those having a negative fair value, resulting from the related loans being severely delinquent.

(b) Includes changes in MSR value associated with changes in market interest rates, including estimated prepayment rates and anticipated earnings on escrow deposits.

(c) Includes changes in MSR value not caused by changes in market interest rates, such as changes in cost to service, ancillary income and option adjusted spread, as well as the impact of any model changes.

(d) Primarily represents changes due to realization of expected cash flows over time (decay).

The estimated sensitivity to changes in interest rates of the fair value of the MSR portfolio and the related derivative instruments as of December 31 follows:

	2019						2018					
(Dollars in Millions)	Down 100 bps	Down 50 bps	Down 25 bps	Up 25 bps	Up 50 bps	Up 100 bps	Down 100 bps	Down 50 bps	Down 25 bps	Up 25 bps	Up 50 bps	Up 100 bps
MSR portfolio	$(663)	$(316)	$(153)	$ 141	$ 269	$ 485	$(501)	$(223)	$(105)	$ 92	$ 171	$ 295
Derivative instrument hedges	613	306	152	(143)	(279)	(550)	455	215	104	(94)	(177)	(321)
Net sensitivity	$ (50)	$ (10)	$ (1)	$ (2)	$ (10)	$ (65)	$ (46)	$ (8)	$ (1)	$ (2)	$ (6)	$ (26)

The fair value of MSRs and their sensitivity to changes in interest rates is influenced by the mix of the servicing portfolio and characteristics of each segment of the portfolio. The Company's servicing portfolio consists of the distinct portfolios of government-insured mortgages, conventional mortgages and Housing Finance Agency ("HFA") mortgages. The servicing portfolios are predominantly comprised of fixed-rate agency loans with limited adjustable-rate or jumbo mortgage loans. The HFA servicing portfolio is comprised of loans originated under state and local housing authority program guidelines which assist purchases by first-time or low- to moderate-income homebuyers through a favorable rate subsidy, down payment and/or closing cost assistance on government- and conventional-insured mortgages.

A summary of the Company's MSRs and related characteristics by portfolio as of December 31 follows:

	2019				2018			
(Dollars in Millions)	HFA	Government	Conventional[(d)]	Total	HFA	Government	Conventional[(d)]	Total
Servicing portfolio[(a)]	$44,906	$35,302	$143,310	$223,518	$44,384	$35,990	$148,910	$229,284
Fair value	$ 486	$ 451	$ 1,609	$ 2,546	$ 526	$ 465	$ 1,800	$ 2,791
Value (bps)[(b)]	108	128	112	114	119	129	121	122
Weighted-average servicing fees (bps)	34	39	28	31	34	36	27	30
Multiple (value/servicing fees)	3.15	3.29	4.00	3.67	3.45	3.63	4.52	4.11
Weighted-average note rate	4.65%	3.99%	4.07%	4.17%	4.59%	3.97%	4.06%	4.15%
Weighted-average age (in years)	3.7	4.9	4.8	4.6	3.3	4.7	4.5	4.3
Weighted-average expected prepayment (constant prepayment rate)	12.2%	13.7%	12.2%	12.4%	9.8%	11.0%	9.1%	9.5%
Weighted-average expected life (in years)	6.5	5.7	5.9	6.0	7.7	6.7	7.1	7.2
Weighted-average option adjusted spread[(c)]	8.4%	7.9%	6.9%	7.3%	8.6%	8.3%	7.2%	7.6%

(a) Represents principal balance of mortgages having corresponding MSR asset.
(b) Calculated as fair value divided by the servicing portfolio.
(c) Option adjusted spread is the incremental spread added to the risk-free rate to reflect optionality and other risk inherent in the MSRs.
(d) Represents loans sold primarily to GSEs.

NOTE 10 Intangible Assets

Intangible assets consisted of the following:

			Balance	
At December 31 (Dollars in Millions)	Estimated Life[(a)]	Amortization Method[(b)]	2019	2018
Goodwill		(c)	$ 9,655	$ 9,369
Merchant processing contracts	6 years/7 years	SL/AC	225	155
Core deposit benefits	22 years/5 years	SL/AC	82	104
Mortgage servicing rights		(c)	2,546	2,791
Trust relationships	10 years/7 years	SL/AC	27	34
Other identified intangibles	6 years/4 years	SL/AC	343	308
Total			$12,878	$12,761

(a) Estimated life represents the amortization period for assets subject to the straight line method and the weighted-average or life of the underlying cash flows amortization period for intangibles subject to accelerated methods. If more than one amortization method is used for a category, the estimated life for each method is calculated and reported separately.
(b) Amortization methods: SL = straight line method
AC = accelerated methods generally based on cash flows
(c) Goodwill is evaluated for impairment, but not amortized. Mortgage servicing rights are recorded at fair value, and are not amortized.

Aggregate amortization expense consisted of the following:

Year Ended December 31 (Dollars in Millions)	2019	2018	2017
Merchant processing contracts	$ 45	$ 24	$ 24
Core deposit benefits	22	26	30
Trust relationships	10	11	14
Other identified intangibles	91	100	107
Total	$168	$161	$175

The estimated amortization expense for the next five years is as follows:

(Dollars in Millions)	
2020	$155
2021	130
2022	109
2023	76
2024	60

The following table reflects the changes in the carrying value of goodwill for the years ended December 31, 2019, 2018 and 2017:

(Dollars in Millions)	Corporate and Commercial Banking	Consumer and Business Banking	Wealth Management and Investment Services	Payment Services	Treasury and Corporate Support	Consolidated Company
Balance at December 31, 2016	$1,647	$3,681	$1,566	$2,450	$–	$9,344
Goodwill acquired	–	–	–	62	–	62
Foreign exchange translation and other	–	–	3	25	–	28
Balance at December 31, 2017	$1,647	$3,681	$1,569	$2,537	$–	$9,434
Goodwill acquired	–	–	–	105	–	105
Disposal	–	(155)	–	–	–	(155)
Foreign exchange translation and other	–	(51)	49	(13)	–	(15)
Balance at December 31, 2018	$1,647	$3,475	$1,618	$2,629	$–	$9,369
Goodwill acquired	–	–	–	285	–	285
Foreign exchange translation and other	–	–	(1)	2	–	1
Balance at December 31, 2019	$1,647	$3,475	$1,617	$2,916	$–	$9,655

NOTE 11 Deposits

The composition of deposits at December 31 was as follows:

(Dollars in Millions)	2019	2018
Noninterest-bearing deposits	$ 75,590	$ 81,811
Interest-bearing deposits		
Interest checking	75,949	73,994
Money market savings	120,082	100,396
Savings accounts	47,401	44,720
Time deposits	42,894	44,554
Total interest-bearing deposits	286,326	263,664
Total deposits	$361,916	$345,475

The maturities of time deposits outstanding at December 31, 2019 were as follows:

(Dollars in Millions)	
2020	$37,731
2021	2,700
2022	1,183
2023	673
2024	602
Thereafter	5
Total	$42,894

NOTE 12 Short-Term Borrowings[(a)]

The following table is a summary of short-term borrowings for the last three years:

(Dollars in Millions)	2019 Amount	2019 Rate	2018 Amount	2018 Rate	2017 Amount	2017 Rate
At year-end						
Federal funds purchased	$ 828	1.45%	$ 458	2.05%	$ 252	.77%
Securities sold under agreements to repurchase	1,165	1.41	2,582	2.20	803	.61
Commercial paper	7,576	1.07	6,940	1.35	8,303	.68
Other short-term borrowings	14,154	1.94	4,159	2.68	7,293	2.13
Total	$23,723	1.62%	$14,139	1.92%	$16,651	1.31%
Average for the year						
Federal funds purchased	$ 1,457	1.94%	$ 1,070	1.70%	$ 528	.86%
Securities sold under agreements to repurchase	1,770	2.00	2,279	1.87	917	.44
Commercial paper	8,186	1.45	6,929	.94	8,236	.49
Other short-term borrowings	6,724	2.78	11,512	2.27	5,341	1.90
Total	$18,137	2.04%	$21,790	1.78%	$15,022	1.00%
Maximum month-end balance						
Federal funds purchased	$ 3,629		$ 4,532		$ 600	
Securities sold under agreements to repurchase	2,755		3,225		927	
Commercial paper	9,431		7,846		9,950	
Other short-term borrowings	14,154		16,588		7,293	

(a) Interest and rates are presented on a fully taxable-equivalent basis utilizing a tax rate of 21 percent for 2019 and 2018 and 35 percent for 2017.

NOTE 13 Long-Term Debt

Long-term debt (debt with original maturities of more than one year) at December 31 consisted of the following:

(Dollars in Millions)	Rate Type	Rate[(a)]	Maturity Date	2019	2018
U.S. Bancorp (Parent Company)					
Subordinated notes	Fixed	2.950%	2022	$ 1,300	$ 1,300
	Fixed	3.600%	2024	1,000	1,000
	Fixed	7.500%	2026	199	199
	Fixed	3.100%	2026	1,000	1,000
	Fixed	3.000%	2029	1,000	–
Medium-term notes	Fixed	.850% - 4.125%	2021 - 2028	13,820	12,345
	Floating	2.576%	2022	250	500
Other[(b)]				33	(53)
Subtotal				18,602	16,291
Subsidiaries					
Federal Home Loan Bank advances	Fixed	1.250% - 8.250%	2020 - 2026	1,106	307
	Floating	2.165% - 2.461%	2022 - 2026	3,272	4,272
Bank notes	Fixed	1.950% - 3.450%	2020 - 2025	9,550	11,600
	Floating	.600% - 2.350%	2020 - 2059	6,789	7,864
Other[(c)]				848	1,006
Subtotal				21,565	25,049
Total				$40,167	$41,340

(a) Weighted-average interest rates of medium-term notes, Federal Home Loan Bank advances and bank notes were 2.87 percent, 2.42 percent and 2.54 percent, respectively.

(b) Includes debt issuance fees and unrealized gains and losses and deferred amounts relating to derivative instruments.

(c) Includes consolidated community development and tax-advantaged investment VIEs, finance lease obligations, debt issuance fees, and unrealized gains and losses and deferred amounts relating to derivative instruments.

The Company has arrangements with the Federal Home Loan Bank and Federal Reserve Bank whereby the Company could have borrowed an additional $97.4 billion and $98.8 billion at December 31, 2019 and 2018, respectively, based on collateral available.

Maturities of long-term debt outstanding at December 31, 2019, were:

(Dollars in Millions)	Parent Company	Consolidated
2020	$ –	$ 3,772
2021	2,696	9,430
2022	3,790	6,298
2023	–	2,799
2024	5,657	5,663
Thereafter	6,459	12,205
Total	$18,602	$40,167

NOTE 14 Shareholders' Equity

At December 31, 2019 and 2018, the Company had authority to issue 4 billion shares of common stock and 50 million shares of preferred stock. The Company had 1.5 billion and 1.6 billion shares of common stock outstanding at December 31, 2019 and 2018, respectively. The Company had 45 million shares reserved for future issuances, primarily under its stock incentive plans at December 31, 2019.

The number of shares issued and outstanding and the carrying amount of each outstanding series of the Company's preferred stock were as follows:

	2019				2018			
At December 31 (Dollars in Millions)	Shares Issued and Outstanding	Liquidation Preference	Discount	Carrying Amount	Shares Issued and Outstanding	Liquidation Preference	Discount	Carrying Amount
Series A	12,510	$1,251	$145	$1,106	12,510	$1,251	$145	$1,106
Series B	40,000	1,000	–	1,000	40,000	1,000	–	1,000
Series F	44,000	1,100	12	1,088	44,000	1,100	12	1,088
Series H	20,000	500	13	487	20,000	500	13	487
Series I	30,000	750	5	745	30,000	750	5	745
Series J	40,000	1,000	7	993	40,000	1,000	7	993
Series K	23,000	575	10	565	23,000	575	10	565
Total preferred stock[(a)]	209,510	$6,176	$192	$5,984	209,510	$6,176	$192	$5,984

(a) The par value of all shares issued and outstanding at December 31, 2019 and 2018, was $1.00 per share.

During 2018, the Company issued depositary shares representing an ownership interest in 23,000 shares of Series K Non-Cumulative Perpetual Preferred Stock with a liquidation preference of $25,000 per share (the "Series K Preferred Stock"). The Series K Preferred Stock has no stated maturity and will not be subject to any sinking fund or other obligation of the Company. Dividends, if declared, will accrue and be payable quarterly, in arrears, at a rate per annum equal to 5.50 percent. The Series K Preferred Stock is redeemable at the Company's option, in whole or in part, on or after October 15, 2023. The Series K Preferred Stock is redeemable at the Company's option, in whole, but not in part, prior to October 15, 2023 within 90 days following an official administrative or judicial decision, amendment to, or change in the laws or regulations that would not allow the Company to treat the full liquidation value of the Series K Preferred Stock as Tier 1 capital for purposes of the capital adequacy guidelines of the Federal Reserve Board.

During 2017, the Company issued depositary shares representing an ownership interest in 40,000 shares of Series J Non-Cumulative Perpetual Preferred Stock with a liquidation preference of $25,000 per share (the "Series J Preferred Stock"). The Series J Preferred Stock has no stated maturity and will not be subject to any sinking fund or other obligation of the Company. Dividends, if declared, will accrue and be payable semiannually, in arrears, at a rate per annum equal to 5.300 percent from the date of issuance to, but excluding, April 15, 2027, and thereafter will accrue and be payable quarterly at a floating rate per annum equal to the three-month London Interbank Offered Rate ("LIBOR") plus 2.914 percent. The Series J Preferred Stock is redeemable at the Company's option, in whole or in part, on or after April 15, 2027. The Series J Preferred Stock is redeemable at the Company's option, in whole, but not in part, prior to April 15, 2027 within 90 days following an official administrative or judicial decision, amendment to, or change in the laws or regulations that would not allow the Company to treat the full liquidation value of the Series J Preferred Stock as Tier 1 capital for purposes of the capital adequacy guidelines of the Federal Reserve Board.

During 2015, the Company issued depositary shares representing an ownership interest in 30,000 shares of Series I Non-Cumulative Perpetual Preferred Stock with a liquidation preference of $25,000 per share (the "Series I Preferred Stock"). The Series I Preferred Stock has no stated maturity and will not be subject to any sinking fund or other obligation of the Company. Dividends, if declared, will accrue and be payable semiannually, in arrears, at a rate per annum equal to 5.125 percent from the date of issuance to, but excluding, January 15, 2021, and thereafter will accrue and be payable quarterly at a floating rate per annum equal to three-month LIBOR plus 3.486 percent. The Series I Preferred Stock is redeemable at the Company's option, in whole or in part, on or after January 15, 2021. The Series I Preferred Stock is redeemable at the Company's option, in whole, but not in part, prior to January 15, 2021 within 90 days following an official administrative or judicial decision, amendment to, or change in the laws or regulations that would not allow the Company to treat the full liquidation value of the Series I Preferred Stock as Tier 1 capital for purposes of the capital adequacy guidelines of the Federal Reserve Board.

During 2013, the Company issued depositary shares representing an ownership interest in 20,000 shares of Series H Non-Cumulative Perpetual Preferred Stock with a liquidation preference of $25,000 per share (the "Series H Preferred Stock"). The Series H Preferred Stock has no stated maturity and will not be subject to any sinking fund or other obligation of the Company. Dividends, if declared, will accrue and be payable quarterly, in arrears, at a rate per annum equal to 5.15 percent. The Series H Preferred Stock is redeemable at the Company's option, subject to the prior approval of the Federal Reserve Board.

During 2012, the Company issued depositary shares representing an ownership interest in 44,000 shares of Series F Non-Cumulative Perpetual Preferred Stock with a liquidation preference of $25,000 per share (the "Series F Preferred Stock"). The Series F Preferred Stock has no stated maturity and will not be subject to any sinking fund or other obligation of the Company. Dividends, if declared, will accrue and be payable quarterly, in arrears, at a rate per annum equal to 6.50 percent from the date of issuance to, but excluding, January 15, 2022, and thereafter at a floating rate per annum equal to three-month LIBOR plus 4.468 percent. The Series F Preferred Stock is redeemable at the Company's option, in whole or in part, on or after January 15, 2022. The Series F Preferred Stock is redeemable at the Company's option, in whole, but not in part, prior to January 15, 2022 within 90 days following an official administrative or judicial decision, amendment to, or change in the laws or regulations that would not allow the Company to treat the full liquidation value of the Series F Preferred Stock as Tier 1 capital for purposes of the capital adequacy guidelines of the Federal Reserve Board.

During 2010, the Company issued depositary shares representing an ownership interest in 5,746 shares of Series A Non-Cumulative Perpetual Preferred Stock (the "Series A Preferred Stock") to investors, in exchange for their portion of USB Capital IX Income Trust Securities. During 2011, the Company issued depositary shares representing an ownership interest in 6,764 shares of Series A Preferred Stock to USB Capital IX, thereby settling the stock purchase contract established between the Company and USB Capital IX as part of the 2006 issuance of USB Capital IX Income Trust Securities. The preferred shares were issued to USB Capital IX for the purchase price specified in the stock forward purchase contract. The Series A Preferred Stock has a liquidation preference of $100,000 per share, no stated maturity and will not be subject to any sinking fund or other obligation of the Company. Dividends, if declared, will accrue and be payable quarterly, in arrears, at a rate per annum equal to the greater of three-month LIBOR plus 1.02 percent or 3.50 percent. The Series A Preferred Stock is redeemable at the Company's option, subject to prior approval by the Federal Reserve Board.

During 2006, the Company issued depositary shares representing an ownership interest in 40,000 shares of Series B Non-Cumulative Perpetual Preferred Stock with a liquidation preference of $25,000 per share (the "Series B Preferred Stock"). The Series B Preferred Stock has no stated maturity and will not be subject to any sinking fund or other obligation of the Company. Dividends, if declared, will accrue and be payable quarterly, in arrears, at a rate per annum equal to the greater of three-month LIBOR plus .60 percent, or 3.50 percent. The Series B Preferred Stock is redeemable at the Company's option, subject to the prior approval of the Federal Reserve Board.

Dividends for certain of the Company's outstanding series of preferred stock described above are, or will in the future be, calculated by reference to LIBOR. The outstanding series contain fallback provisions in the event that LIBOR is no longer published or quoted, but these fallback provisions have not yet been utilized.

During 2019, 2018 and 2017, the Company repurchased shares of its common stock under various authorizations approved by its Board of Directors. As of December 31, 2019, the approximate dollar value of shares that may yet be purchased by the Company under the current Board of Directors approved authorization was $2.4 billion.

The following table summarizes the Company's common stock repurchased in each of the last three years:

(Dollars and Shares in Millions)	Shares	Value
2019	81	$4,515
2018	54	2,844
2017	49	2,622

Shareholders' equity is affected by transactions and valuations of asset and liability positions that require adjustments to accumulated other comprehensive income (loss). The reconciliation of the transactions affecting accumulated other comprehensive income (loss) included in shareholders' equity for the years ended December 31, is as follows:

(Dollars in Millions)	Unrealized Gains (Losses) on Investment Securities Available-For-Sale	Unrealized Gains (Losses) on Investment Securities Transferred From Available-For-Sale to Held-To-Maturity	Unrealized Gains (Losses) on Derivative Hedges	Unrealized Gains (Losses) on Retirement Plans	Foreign Currency Translation	Total
2019						
Balance at beginning of period	$ (946)	$ 14	$ 112	$(1,418)	$(84)	$(2,322)
Changes in unrealized gains and losses	1,693	–	(229)	(380)	–	1,084
Unrealized gains and losses on held-to-maturity investment securities transferred to available-for-sale	150	(9)	–	–	–	141
Foreign currency translation adjustment[a]	–	–	–	–	26	26
Reclassification to earnings of realized gains and losses	(73)	(7)	11	89	–	20
Applicable income taxes	(445)	2	55	73	(7)	(322)
Balance at end of period	$ 379	$ –	$ (51)	$(1,636)	$(65)	$(1,373)
2018						
Balance at beginning of period	$ (357)	$ 17	$ 71	$(1,066)	$(69)	$(1,404)
Revaluation of tax related balances[b]	(77)	4	15	(229)	(13)	(300)
Changes in unrealized gains and losses	(656)	–	39	(302)	–	(919)
Foreign currency translation adjustment[a]	–	–	–	–	3	3
Reclassification to earnings of realized gains and losses	(30)	(9)	(5)	137	–	93
Applicable income taxes	174	2	(8)	42	(5)	205
Balance at end of period	$ (946)	$ 14	$ 112	$(1,418)	$(84)	$(2,322)
2017						
Balance at beginning of period	$ (431)	$ 25	$ 55	$(1,113)	$(71)	$(1,535)
Changes in unrealized gains and losses	178	–	(5)	(41)	–	132
Foreign currency translation adjustment[a]	–	–	–	–	(2)	(2)
Reclassification to earnings of realized gains and losses	(57)	(13)	30	117	–	77
Applicable income taxes	(47)	5	(9)	(29)	4	(76)
Balance at end of period	$ (357)	$ 17	$ 71	$(1,066)	$(69)	$(1,404)

(a) Represents the impact of changes in foreign currency exchange rates on the Company's investment in foreign operations and related hedges.

(b) Reflects the adoption of new accounting guidance on January 1, 2018 to reclassify the impact of the reduced federal statutory rate for corporations included in 2017 tax reform legislation from accumulated other comprehensive income to retained earnings.

Additional detail about the impact to net income for items reclassified out of accumulated other comprehensive income (loss) and into earnings for the years ended December 31, is as follows:

	Impact to Net Income			Affected Line Item in the Consolidated Statement of Income
(Dollars in Millions)	2019	2018	2017	
Unrealized gains (losses) on investment securities available-for-sale				
Realized gains (losses) on sale of investment securities	$ 73	$ 30	$ 57	Total securities gains (losses), net
	(18)	(7)	(22)	Applicable income taxes
	55	23	35	Net-of-tax
Unrealized gains (losses) on investment securities transferred from available-for-sale to held-to-maturity				
Amortization of unrealized gains	7	9	13	Interest income
	(2)	(2)	(5)	Applicable income taxes
	5	7	8	Net-of-tax
Unrealized gains (losses) on derivative hedges				
Realized gains (losses) on derivative hedges	(11)	5	(30)	Interest expense
	3	(2)	11	Applicable income taxes
	(8)	3	(19)	Net-of-tax
Unrealized gains (losses) on retirement plans				
Actuarial gains (losses) and prior service cost (credit) amortization	(89)	(137)	(117)	Other noninterest expense
	22	35	45	Applicable income taxes
	(67)	(102)	(72)	Net-of-tax
Total impact to net income	$(15)	$ (69)	$ (48)	

Regulatory Capital The Company uses certain measures defined by bank regulatory agencies to assess its capital. The regulatory capital requirements effective for the Company follow Basel III, which includes two comprehensive methodologies for calculating risk-weighted assets: a general standardized approach and more risk-sensitive advanced approaches. Effective December 31, 2019, the Company is no longer subject to calculating its capital adequacy as a percentage of risk-weighted assets under advanced approaches. Prior to December 31, 2019, the Company's capital adequacy was evaluated against the methodology that was most restrictive.

Tier 1 capital is considered core capital and includes common shareholders' equity adjusted for the aggregate impact of certain items included in other comprehensive income (loss) ("common equity tier 1 capital"), plus qualifying preferred stock, trust preferred securities and noncontrolling interests in consolidated subsidiaries subject to certain limitations. Total risk-based capital includes Tier 1 capital and other items such as subordinated debt and the allowance for credit losses. Capital measures are stated as a percentage of risk-weighted assets, which are measured based on their perceived credit and operational risks and include certain off-balance sheet exposures, such as unfunded loan commitments, letters of credit, and derivative contracts. As of December 31, 2019, the Company is subject to leverage ratio requirements under each methodology, which is defined as Tier 1 capital as a percentage of adjusted average assets under the standardized approach and Tier 1 capital as a percentage of total on- and off-balance sheet leverage exposure under the advanced approaches.

The following tables provide a summary of the regulatory capital requirements in effect, along with the actual components and ratios for the Company and its bank subsidiary, at December 31, 2019 and 2018:

	U.S. Bancorp		U.S. Bank National Association	
(Dollars in Millions)	2019	2018	2019	2018
Basel III standardized approach:				
Common shareholders' equity	$ 45,869	$ 45,045	$ 48,592	$ 47,728
Less intangible assets				
Goodwill (net of deferred tax liability)	(8,788)	(8,549)	(8,806)	(8,566)
Other disallowed intangible assets	(677)	(601)	(710)	(732)
Other[(a)]	(691)	(1,171)	38	(112)
Total common equity tier 1 capital	35,713	34,724	39,114	38,318
Qualifying preferred stock	5,984	5,984	–	–
Noncontrolling interests eligible for tier 1 capital	28	36	28	36
Other[(b)]	(4)	(3)	(4)	(3)
Total tier 1 capital	41,721	40,741	39,138	38,351
Eligible portion of allowance for credit losses	4,491	4,441	4,491	4,441
Subordinated debt and noncontrolling interests eligible for tier 2 capital	3,532	2,996	3,365	3,168
Total tier 2 capital	8,023	7,437	7,856	7,609
Total risk-based capital	$ 49,744	$ 48,178	$ 46,994	$ 45,960
Risk-weighted assets	$391,269	$381,661	$383,560	$374,299
Common equity tier 1 capital as a percent of risk-weighted assets	9.1%	9.1%	10.2%	10.2%
Tier 1 capital as a percent of risk-weighted assets	10.7	10.7	10.2	10.2
Total risk-based capital as a percent of risk-weighted assets	12.7	12.6	12.3	12.3
Tier 1 capital as a percent of adjusted quarterly average assets (leverage ratio)	8.8	9.0	8.4	8.6
Basel III advanced approaches[(c)]:				
Common shareholders' equity		$ 45,045		$ 47,728
Less intangible assets				
Goodwill (net of deferred tax liability)		(8,549)		(8,566)
Other disallowed intangible assets		(601)		(732)
Other[(a)]		(1,171)		(112)
Total common equity tier 1 capital		34,724		38,318
Qualifying preferred stock		5,984		–
Noncontrolling interests eligible for tier 1 capital		36		36
Other[(b)]		(3)		(3)
Total tier 1 capital		40,741		38,351
Eligible portion of allowance for credit losses		1,399		1,364
Subordinated debt and noncontrolling interests eligible for tier 2 capital		2,996		3,168
Total tier 2 capital		4,395		4,532
Total risk-based capital		$ 45,136		$ 42,883
Risk-weighted assets		$295,002		$287,897
Common equity tier 1 capital as a percent of risk-weighted assets		11.8%		13.3%
Tier 1 capital as a percent of risk-weighted assets		13.8		13.3
Total risk-based capital as a percent of risk-weighted assets		15.3		14.9
Tier 1 capital as a percent of total on- and off-balance sheet leverage exposure (total leverage exposure ratio)	7.0%	7.2	6.7%	6.9

(a) Includes the impact of items included in other comprehensive income (loss), such as unrealized gains (losses) on available-for-sale securities, accumulated net gains on cash flow hedges, pension liability adjustments, etc., and the portion of deferred tax assets related to net operating loss and tax credit carryforwards not eligible for common equity tier 1 capital.

(b) Includes the remaining portion of deferred tax assets not eligible for total tier 1 capital.

(c) Effective December 31, 2019, the Company is no longer subject to calculating its, or its bank subsidiary's, capital adequacy as a percentage of risk-weighted assets under advanced approaches.

	Minimum[a]	Well-Capitalized
Bank Regulatory Capital Requirements		
2019		
Common equity tier 1 capital as a percent of risk-weighted assets	7.000%	6.500%
Tier 1 capital as a percent of risk-weighted assets	8.500	8.000
Total risk-based capital as a percent of risk-weighted assets	10.500	10.000
Tier 1 capital as a percent of adjusted quarterly average assets (leverage ratio)	4.000	5.000
Tier 1 capital as a percent of total on- and off-balance sheet leverage exposure (total leverage exposure ratio)	3.000	3.000
2018		
Common equity tier 1 capital as a percent of risk-weighted assets	6.375%	6.500%
Tier 1 capital as a percent of risk-weighted assets	7.875	8.000
Total risk-based capital as a percent of risk-weighted assets	9.875	10.000
Tier 1 capital as a percent of adjusted quarterly average assets (leverage ratio)	4.000	5.000
Tier 1 capital as a percent of total on- and off-balance sheet leverage exposure (total leverage exposure ratio)	3.000	3.000

(a) The minimum common equity tier 1 capital, tier 1 capital and total risk-based capital ratio requirements reflect a capital conservation buffer requirement of 2.5 percent and 1.875 percent for 2019 and 2018, respectively. Banks and financial services holding companies must maintain minimum capital levels, including a capital conservation buffer requirement, to avoid limitations on capital distributions and certain discretionary compensation payments.

Noncontrolling interests principally represent third-party investors' interests in consolidated entities, including preferred stock of consolidated subsidiaries. During 2006, the Company's banking subsidiary formed USB Realty Corp., a real estate investment trust, for the purpose of issuing 5,000 shares of Fixed-to-Floating Rate Exchangeable Non-cumulative Perpetual Series A Preferred Stock with a liquidation preference of $100,000 per share ("Series A Preferred Securities") to third-party investors. Dividends on the Series A Preferred Securities, if declared, will accrue and be payable quarterly, in arrears, at a rate per annum equal to three-month LIBOR plus 1.147 percent. If USB Realty Corp. has not declared a dividend on the Series A Preferred Securities before the dividend payment date for any dividend period, such dividend shall not be cumulative and shall cease to accrue and be payable, and USB Realty Corp. will have no obligation to pay dividends accrued for such dividend period, whether or not dividends on the Series A Preferred Securities are declared for any future dividend period.

The Series A Preferred Securities will be redeemable, in whole or in part, at the option of USB Realty Corp. on each fifth anniversary after the dividend payment date occurring in January 2012. Any redemption will be subject to the approval of the Office of the Comptroller of the Currency. During 2016, the Company purchased 500 shares of the Series A Preferred Securities held by third-party investors. As of December 31, 2019, 4,500 shares of the Series A Preferred Securities remain outstanding.

NOTE 15 Earnings Per Share

The components of earnings per share were:

Year Ended December 31 (Dollars and Shares in Millions, Except Per Share Data)	2019	2018	2017
Net income attributable to U.S. Bancorp	$6,914	$7,096	$6,218
Preferred dividends	(302)	(282)	(267)
Impact of preferred stock redemption[a]	–	–	(10)
Earnings allocated to participating stock awards	(29)	(30)	(28)
Net income applicable to U.S. Bancorp common shareholders	$6,583	$6,784	$5,913
Average common shares outstanding	1,581	1,634	1,677
Net effect of the exercise and assumed purchase of stock awards	2	4	6
Average diluted common shares outstanding	1,583	1,638	1,683
Earnings per common share	$ 4.16	$ 4.15	$ 3.53
Diluted earnings per common share	$ 4.16	$ 4.14	$ 3.51

(a) Represents stock issuance costs originally recorded in preferred stock upon the issuance of the Company's Series G Preferred Stock that were reclassified to retained earnings on the date the Company announced its intent to redeem the outstanding shares.

Options outstanding at December 31, 2019, 2018 and 2017, to purchase 1 million common shares, were not included in the computation of diluted earnings per share for the years ended December 31, 2019, 2018 and 2017, because they were antidilutive.

NOTE 16 Employee Benefits

Employee Retirement Savings Plan The Company has a defined contribution retirement savings plan that covers substantially all its employees. Qualified employees are allowed to contribute up to 75 percent of their annual compensation, subject to Internal Revenue Service limits, through salary deductions under Section 401(k) of the Internal Revenue Code. Employee contributions are invested at their direction among a variety of investment alternatives. Employee contributions are 100 percent matched by the Company, up to four percent of each employee's eligible annual compensation. The Company's matching contribution vests immediately and is invested in the same manner as each employee's future contribution elections. Total expense for the Company's matching contributions was $179 million, $171 million and $156 million in 2019, 2018 and 2017, respectively.

Pension Plans The Company has a tax qualified noncontributory defined benefit pension plan that provides benefits to substantially all its employees. Participants receive annual cash balance pay credits based on eligible pay multiplied by a percentage determined by their age and years of service. Participants also receive an annual interest credit. Employees become vested upon completing three years of vesting service. For participants in the plan before 2010 that elected to stay under their existing formula, pension benefits are provided to eligible employees based on years of service, multiplied by a percentage of their final average pay. Additionally, as a result of plan mergers, a portion of pension benefits may also be provided using a cash balance benefit formula where only interest credits continue to be credited to participants' accounts.

In general, the Company's qualified pension plan's funding objectives include maintaining a funded status sufficient to meet participant benefit obligations over time while reducing long-term funding requirements and pension costs. The Company has an established process for evaluating the plan, its performance and significant plan assumptions, including the assumed discount rate and the long-term rate of return ("LTROR"). Annually, the Company's Compensation and Human Resources Committee (the "Committee"), assisted by outside consultants, evaluates plan objectives, funding policies and plan investment policies considering its long-term investment time horizon and asset allocation strategies. The process also evaluates significant plan assumptions. Although plan assumptions are established annually, the Company may update its analysis on an interim basis in order to be responsive to significant events that occur during the year, such as plan mergers and amendments.

The Company's funding policy is to contribute amounts to its plan sufficient to meet the minimum funding requirements of the Employee Retirement Income Security Act of 1974, as amended by the Pension Protection Act, plus such additional amounts as the Company determines to be appropriate. The Company did not contribute to its qualified pension plan in 2019 and 2018. The Company expects to contribute approximately $125 million to the plan in 2020. Any contributions made to the qualified plan are invested in accordance with established investment policies and asset allocation strategies.

In addition to the funded qualified pension plan, the Company maintains a non-qualified plan that is unfunded and provides benefits to certain employees. The assumptions used in computing the accumulated benefit obligation, the projected benefit obligation and net pension expense are substantially consistent with those assumptions used for the funded qualified plan. In 2020, the Company expects to contribute approximately $25 million to its non-qualified pension plan which equals the 2020 expected benefit payments.

Postretirement Welfare Plan In addition to providing pension benefits, the Company provides health care and death benefits to certain former employees who retired prior to January 1, 2014. Employees retiring after December 31, 2013, are not eligible for retiree health care benefits. The Company expects to contribute approximately $4 million to its postretirement welfare plan in 2020.

The following table summarizes the changes in benefit obligations and plan assets for the years ended December 31, and the funded status and amounts recognized in the Consolidated Balance Sheet at December 31 for the retirement plans:

(Dollars in Millions)	Pension Plans 2019	Pension Plans 2018	Postretirement Welfare Plan 2019	Postretirement Welfare Plan 2018
Change In Projected Benefit Obligation[a]				
Benefit obligation at beginning of measurement period	$ 5,507	$ 5,720	$ 54	$ 68
Service cost	192	208	–	–
Interest cost	249	224	2	2
Participants' contributions	–	–	7	8
Actuarial loss (gain)	1,100	(440)	(4)	(7)
Lump sum settlements	(56)	(50)	–	–
Benefit payments	(163)	(155)	(13)	(18)
Federal subsidy on benefits paid	–	–	1	1
Benefit obligation at end of measurement period[b]	$ 6,829	$ 5,507	$ 47	$ 54
Change In Fair Value Of Plan Assets[c]				
Fair value at beginning of measurement period	$ 4,936	$ 5,482	$ 81	$ 87
Actual return on plan assets	1,095	(365)	6	–
Employer contributions	26	24	4	5
Participants' contributions	–	–	6	7
Lump sum settlements	(56)	(50)	–	–
Benefit payments	(163)	(155)	(13)	(18)
Fair value at end of measurement period	$ 5,838	$ 4,936	$ 84	$ 81
Funded (Unfunded) Status	$ (991)	$ (571)	$ 37	$ 27
Components Of The Consolidated Balance Sheet				
Noncurrent benefit asset	$ –	$ –	$ 37	$ 27
Current benefit liability	(25)	(23)	–	–
Noncurrent benefit liability	(966)	(548)	–	–
Recognized amount	$ (991)	$ (571)	$ 37	$ 27
Accumulated Other Comprehensive Income (Loss), Pretax				
Net actuarial gain (loss)	$(2,271)	$(1,981)	$ 68	$ 66
Net prior service credit (cost)	–	–	14	18
Recognized amount	$(2,271)	$(1,981)	$ 82	$ 84

(a) The increase and the decrease in the projected benefit obligation for 2019 and 2018, respectively, were primarily due to discount rate changes.

(b) At December 31, 2019 and 2018, the accumulated benefit obligation for all pension plans was $6.2 billion and $5.0 billion.

(c) The increase and the decrease in the fair value of plan assets for 2019 and 2018, respectively, were primary due to market conditions.

The following table provides information for pension plans with benefit obligations in excess of plan assets at December 31:

(Dollars in Millions)	2019	2018
Pension Plans with Projected Benefit Obligations in Excess of Plan Assets		
Projected benefit obligation	$6,829	$5,507
Fair value of plan assets	5,838	4,936
Pension Plans with Accumulated Benefit Obligations in Excess of Plan Assets		
Accumulated benefit obligation	$ 553	$ 467
Fair value of plan assets	–	–

The following table sets forth the components of net periodic benefit cost and other amounts recognized in accumulated other comprehensive income (loss) for the years ended December 31 for the retirement plans:

	Pension Plans			Postretirement Welfare Plan		
(Dollars in Millions)	2019	2018	2017	2019	2018	2017
Components Of Net Periodic Benefit Cost						
Service cost	$ 192	$ 208	$ 187	$ –	$ –	$ –
Interest cost	249	224	220	2	2	2
Expected return on plan assets	(383)	(379)	(284)	(3)	(3)	(3)
Prior service cost (credit) and transition obligation (asset) amortization	–	–	(2)	(3)	(3)	(3)
Actuarial loss (gain) amortization	98	146	127	(6)	(6)	(5)
Net periodic benefit cost	$ 156	$ 199	$ 248	$(10)	$(10)	$(9)
Other Changes In Plan Assets And Benefit Obligations Recognized In Other Comprehensive Income (Loss)						
Net actuarial gain (loss) arising during the year	$(388)	$(305)	$ (48)	$ 7	$ 3	$ 7
Net actuarial loss (gain) amortized during the year	98	146	127	(6)	(6)	(5)
Net prior service cost (credit) and transition obligation (asset) amortized during the year	–	–	(2)	(3)	(3)	(3)
Total recognized in other comprehensive income (loss)	$(290)	$(159)	$ 77	$ (2)	$ (6)	$(1)
Total recognized in net periodic benefit cost and other comprehensive income (loss)	$(446)	$(358)	$(171)	$ 8	$ 4	$ 8

The following table sets forth weighted-average assumptions used to determine the projected benefit obligations at December 31:

	Pension Plans		Postretirement Welfare Plan	
(Dollars in Millions)	2019	2018	2019	2018
Discount rate[(a)]	3.40%	4.45%	2.80%	4.05%
Cash balance interest crediting rate	3.00	3.00	*	*
Rate of compensation increase[(b)]	3.56	3.52	*	*
Health care cost trend rate[(c)]				
Prior to age 65			6.25%	6.50%
After age 65			6.25%	10.00%

(a) The discount rates were developed using a cash flow matching bond model with a modified duration for the qualified pension plan, non-qualified pension plan and postretirement welfare plan of 15.8, 12.3, and 6.1 years, respectively, for 2019, and 14.7, 11.5 and 5.9 years, respectively, for 2018.

(b) Determined on an active liability-weighted basis.

(c) The 2019 and 2018 pre-65 and post-65 rates are both assumed to decrease gradually to 5.00 percent by 2025 and remain at this level thereafter.

* *Not applicable*

The following table sets forth weighted-average assumptions used to determine net periodic benefit cost for the years ended December 31:

	Pension Plans			Postretirement Welfare Plan		
(Dollars in Millions)	2019	2018	2017	2019	2018	2017
Discount rate[(a)]	4.45%	3.84%	4.27%	4.05%	3.34%	3.57%
Cash balance interest crediting rate	3.00	3.00	3.00	*	*	*
Expected return on plan assets[(b)]	7.25	7.25	7.25	3.50	3.50	3.50
Rate of compensation increase[(c)]	3.52	3.56	3.58	*	*	*
Health care cost trend rate[(d)]						
Prior to age 65				6.50%	6.75%	7.00%
After age 65				10.00	6.75	7.00

(a) The discount rates were developed using a cash flow matching bond model with a modified duration for the qualified pension plan, non-qualified pension plan and postretirement welfare plan of 14.7, 11.5, and 5.9 years, respectively, for 2019, and 15.8, 12.3 and 6.1 years, respectively, for 2018.

(b) With the help of an independent pension consultant, the Company considers several sources when developing its expected long-term rates of return on plan assets assumptions, including, but not limited to, past returns and estimates of future returns given the plans' asset allocation, economic conditions, and peer group LTROR information. The Company determines its expected long-term rates of return reflecting current economic conditions and plan assets.

(c) Determined on an active liability weighted basis.

(d) The 2019, 2018 and 2017 pre-65 and post-65 rates are both assumed to decrease gradually to 5.00 percent by 2025 and remain at that level thereafter.

* *Not applicable*

Investment Policies and Asset Allocation In establishing its investment policies and asset allocation strategies, the Company considers expected returns and the volatility associated with different strategies. An independent consultant performs modeling that projects numerous outcomes using a broad range of possible scenarios, including a mix of possible rates of inflation and economic growth. Starting with current economic information, the model bases its projections on past relationships between inflation, fixed income rates and equity returns when these types of economic conditions have existed over the previous 30 years, both in the United States and in foreign countries. Estimated future returns and other actuarially determined adjustments are also considered in calculating the estimated return on assets.

Generally, based on historical performance of the various investment asset classes, investments in equities have outperformed other investment classes but are subject to higher volatility. In an effort to minimize volatility, while recognizing the long-term up-side potential of investing in equities, the Committee has determined that a target asset allocation of 35 percent long duration bonds, 30 percent global equities, 10 percent real estate equities, 10 percent private equity funds, 5 percent domestic mid-small cap equities, 5 percent emerging markets equities, and 5 percent hedge funds is appropriate.

At December 31, 2019 and 2018, plan assets included an asset management arrangement with a related party totaling $57 million and $52 million, respectively.

In accordance with authoritative accounting guidance, the Company groups plan assets into a three-level hierarchy for valuation techniques used to measure their fair value based on whether the valuation inputs are observable or unobservable. Refer to Note 21 for further discussion on these levels.

The assets of the qualified pension plan include investments in equity and U.S. Treasury securities whose fair values are determined based on quoted prices in active markets and are classified within Level 1 of the fair value hierarchy. The qualified pension plan also invests in U.S. agency, corporate and municipal debt securities, which are all valued based on observable market prices or data by third-party pricing services, and mutual funds which are valued based on quoted net asset values provided by the trustee of the fund; these assets are classified as Level 2. Additionally, the qualified pension plan invests in certain assets that are valued based on net asset values as a practical expedient, including investments in collective investment funds, hedge funds, and private equity funds; the net asset values are provided by the fund trustee or administrator and are not classified in the fair value hierarchy.

The following table summarizes plan investment assets measured at fair value at December 31:

	Qualified Pension Plan								Postretirement Welfare Plan	
	2019				2018				2019	2018
(Dollars in Millions)	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 1
Cash and cash equivalents	$ 58	$ –	$–	$ 58	$ 54	$ –	$–	$ 54	$40	$42
Debt securities	727	1,073	–	1,800	631	904	–	1,535	–	–
Corporate stock										
Real estate equity securities[(a)]	–	–	–	–	109	–	–	109	–	–
Mutual funds										
Debt securities	–	304	–	304	–	295	–	295	–	–
Emerging markets equity securities	–	136	–	136	–	113	–	113	–	–
Other	–	–	3	3	–	–	3	3	–	–
	$785	$1,513	$3	2,301	$794	$1,312	$3	2,109	40	42
Plan investment assets not classified in fair value hierarchy[(b)]:										
Collective investment funds										
Domestic equity securities				1,328				1,183	27	24
Mid-small cap equity securities[(c)]				323				340	–	–
International equity securities				752				643	17	15
Real estate securities				547				146	–	–
Hedge funds[(d)]				283				290	–	–
Private equity funds[(e)]				304				225	–	–
Total plan investment assets at fair value				$5,838				$4,936	$84	$81

(a) At December 31, 2018, securities included $56 million in domestic equities and $53 million in international equities.

(b) These investments are valued based on net asset value per share as a practical expedient; fair values are provided to reconcile to total investment assets of the plans at fair value.

(c) At December 31, 2019 and 2018, securities included $323 million and $340 million in domestic equities, respectively.

(d) This category consists of several investment strategies diversified across several hedge fund managers.

(e) This category consists of several investment strategies diversified across several private equity fund managers.

The following table summarizes the changes in fair value for qualified pension plan investment assets measured at fair value using significant unobservable inputs (Level 3) for the years ended December 31:

	2019	2018	2017
(Dollars in Millions)	Other	Other	Other
Balance at beginning of period	$3	$2	$1
Unrealized gains (losses) relating to assets still held at end of year	–	–	–
Purchases, sales, and settlements, net	–	1	1
Balance at end of period	$3	$3	$2

The following benefit payments are expected to be paid from the retirement plans for the years ended December 31:

(Dollars in Millions)	Pension Plans	Postretirement Welfare Plan[(a)]	Medicare Part D Subsidy Receipts
2020	$ 233	$ 7	$1
2021	254	6	1
2022	267	6	1
2023	294	6	1
2024	306	5	1
2025-2029	1,811	19	2

(a) Net of expected retiree contributions and before Medicare Part D subsidy.

NOTE 17 Stock-Based Compensation

As part of its employee and director compensation programs, the Company currently may grant certain stock awards under the provisions of its stock incentive plan. The plan provides for grants of options to purchase shares of common stock at a fixed price equal to the fair value of the underlying stock at the date of grant. Option grants are generally exercisable up to ten years from the date of grant. In addition, the plan provides for grants of shares of common stock or stock units that are subject to restriction on transfer prior to vesting. Most stock and unit awards vest over three to five years and are subject to forfeiture if certain vesting requirements are not met. Stock incentive plans of acquired companies are generally terminated at the merger closing dates. Participants under such plans receive the Company's common stock, or options to buy the Company's common stock, based on the conversion terms of the various merger agreements. At December 31, 2019, there were 32 million shares (subject to adjustment for forfeitures) available for grant under the Company's stock incentive plan.

Stock Option Awards

The following is a summary of stock options outstanding and exercised under prior and existing stock incentive plans of the Company:

Year Ended December 31	Stock Options/Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term	Aggregate Intrinsic Value (in millions)
2019				
Number outstanding at beginning of period	9,115,010	$34.52		
Granted(a)	—	—		
Exercised	(3,333,467)	26.36		
Cancelled(b)	(63,287)	36.74		
Number outstanding at end of period(c)	5,718,256	$39.25	4.4	$115
Exercisable at end of period	4,869,805	$37.67	4.0	$105
2018				
Number outstanding at beginning of period	12,668,467	$32.15		
Granted(a)	—	—		
Exercised	(3,443,494)	25.41		
Cancelled(b)	(109,963)	46.72		
Number outstanding at end of period(c)	9,115,010	$34.52	4.3	$102
Exercisable at end of period	7,372,036	$31.61	3.5	$104
2017				
Number outstanding at beginning of period	17,059,241	$29.95		
Granted	1,066,188	54.97		
Exercised	(5,389,741)	29.58		
Cancelled(b)	(67,221)	43.31		
Number outstanding at end of period(c)	12,668,467	$32.15	4.5	$272
Exercisable at end of period	9,647,937	$27.87	3.3	$248

(a) The Company did not grant any stock option awards during 2019 and 2018.
(b) Options cancelled include both non-vested (i.e., forfeitures) and vested options.
(c) Outstanding options include stock-based awards that may be forfeited in future periods. The impact of the estimated forfeitures is reflected in compensation expense.

Stock-based compensation expense is based on the estimated fair value of the award at the date of grant or modification. The fair value of each option award is estimated on the date of grant using the Black-Scholes option-pricing model, requiring the use of subjective assumptions. Because employee stock options have characteristics that differ from those of traded options, including vesting provisions and trading limitations that impact their liquidity, the determined value used to measure compensation expense may vary from the actual fair value of the employee stock options. The following table includes the weighted-average estimated fair value of stock options granted and the assumptions utilized by the Company for newly issued grants for the year ended December 31, 2017:

Year Ended December 31	2017
Estimated fair value	$14.66
Risk-free interest rates	2.0%
Dividend yield	2.6%
Stock volatility factor	.35
Expected life of options (in years)	5.5

Expected stock volatility is based on several factors including the historical volatility of the Company's common stock, implied volatility determined from traded options and other factors. The Company uses historical data to estimate option exercises and employee terminations to estimate the expected life of options. The risk-free interest rate for the expected life of the options is based on the U.S. Treasury yield curve in effect on the date of grant. The expected dividend yield is based on the Company's expected dividend yield over the life of the options.

The following summarizes certain stock option activity of the Company:

Year Ended December 31 (Dollars in Millions)	2019	2018	2017
Fair value of options vested	$10	$14	$ 13
Intrinsic value of options exercised	95	97	127
Cash received from options exercised	88	87	159
Tax benefit realized from options exercised	24	24	49

To satisfy option exercises, the Company predominantly uses treasury stock.

Additional information regarding stock options outstanding as of December 31, 2019, is as follows:

	Outstanding Options			Exercisable Options	
Range of Exercise Prices	Shares	Weighted-Average Remaining Contractual Life (Years)	Weighted-Average Exercise Price	Shares	Weighted-Average Exercise Price
$23.36—$25.00	236,661	.2	$23.82	236,661	$23.82
$25.01—$30.00	1,277,726	1.8	28.65	1,277,726	28.65
$30.01—$35.00	537,881	3.1	33.98	537,881	33.98
$35.01—$40.00	1,251,397	6.1	39.49	885,968	39.49
$40.01—$45.00	1,454,651	4.7	42.42	1,454,068	42.43
$45.01—$50.00	—	—	—	—	—
$50.01—$55.01	959,940	7.1	54.97	477,501	54.97
	5,718,256	4.4	$39.25	4,869,805	$37.67

Restricted Stock and Unit Awards

A summary of the status of the Company's restricted shares of stock and unit awards is presented below:

	2019		2018		2017	
Year Ended December 31	Shares	Weighted-Average Grant-Date Fair Value	Shares	Weighted-Average Grant-Date Fair Value	Shares	Weighted-Average Grant-Date Fair Value
Outstanding at beginning of period	6,719,298	$48.17	7,446,955	$44.49	8,265,507	$39.50
Granted	3,519,474	50.45	3,213,023	55.03	2,850,927	54.45
Vested	(3,270,778)	48.69	(3,373,323)	46.42	(3,295,376)	40.66
Cancelled	(361,161)	50.55	(567,357)	49.07	(374,103)	43.91
Outstanding at end of period	6,606,833	$48.99	6,719,298	$48.17	7,446,955	$44.49

The total fair value of shares vested was $175 million, $182 million and $180 million for the years ended December 31, 2019, 2018 and 2017, respectively. Stock-based compensation expense was $178 million, $174 million and $163 million for the years ended December 31, 2019, 2018 and 2017, respectively. On an after-tax basis, stock-based compensation was $133 million, $130 million and $101 million for the years ended December 31, 2019, 2018 and 2017, respectively. As of December 31, 2019, there was $143 million of total unrecognized compensation cost related to nonvested share-based arrangements granted under the plans. That cost is expected to be recognized over a weighted-average period of 1.7 years as compensation expense.

NOTE 18 Income Taxes

The components of income tax expense were:

Year Ended December 31 (Dollars in Millions)	2019	2018	2017
Federal			
Current	$1,162	$1,287	$ 2,086
Deferred	166	(148)	(1,180)
Federal income tax	1,328	1,139	906
State			
Current	379	395	201
Deferred	(59)	20	157
State income tax	320	415	358
Total income tax provision	$1,648	$1,554	$ 1,264

A reconciliation of expected income tax expense at the federal statutory rate of 21 percent for 2019 and 2018 and 35 percent for 2017 to the Company's applicable income tax expense follows:

Year Ended December 31 (Dollars in Millions)	2019	2018	2017
Tax at statutory rate	$1,805	$1,822	$2,631
State income tax, at statutory rates, net of federal tax benefit	355	352	281
Tax effect of			
Revaluation of tax related assets and liabilities[(a)]	—	—	(910)
Tax credits and benefits, net of related expenses	(424)	(513)	(774)
Tax-exempt income	(120)	(130)	(200)
Nondeductible legal and regulatory expenses	23	52	213
Other items[(b)]	9	(29)	23
Applicable income taxes	$1,648	$1,554	$1,264

(a) In late 2017, tax legislation was enacted that, among other provisions, reduced the federal statutory rate for corporations from 35 percent to 21 percent effective in 2018. In accordance with generally accepted accounting principles, the Company revalued its deferred tax assets and liabilities at December 31, 2017, resulting in an estimated net tax benefit of $910 million, which the Company recorded in 2017.

(b) Includes excess tax benefits associated with stock-based compensation and adjustments related to deferred tax assets and liabilities.

The tax effects of fair value adjustments on securities available-for-sale, derivative instruments in cash flow hedges, foreign currency translation adjustments, and pension and post-retirement plans are recorded directly to shareholders' equity as part of other comprehensive income (loss).

In preparing its tax returns, the Company is required to interpret complex tax laws and regulations and utilize income and cost allocation methods to determine its taxable income. On an ongoing basis, the Company is subject to examinations by federal, state, local and foreign taxing authorities that may give rise to differing interpretations of these complex laws, regulations and methods. Due to the nature of the examination process, it generally takes years before these examinations are completed and matters are resolved. Federal tax examinations for all years ending through December 31, 2010, and years ending December 31, 2013 and December 31, 2014 are completed and resolved. The Company's tax returns for the years ended December 31, 2011, 2012, 2015 and 2016 are under examination by the Internal Revenue Service. The years open to examination by state and local government authorities vary by jurisdiction.

A reconciliation of the changes in the federal, state and foreign uncertain tax position balances are summarized as follows:

Year Ended December 31 (Dollars in Millions)	2019	2018	2017
Balance at beginning of period	$335	$287	$302
Additions for tax positions taken in prior years	168	93	3
Additions for tax positions taken in the current year	6	10	9
Exam resolutions	(62)	(51)	(23)
Statute expirations	(15)	(4)	(4)
Balance at end of period	$432	$335	$287

The total amount of uncertain tax positions that, if recognized, would impact the effective income tax rate as of December 31, 2019, 2018 and 2017, were $274 million, $273 million and $265 million, respectively. The Company classifies interest and penalties related to uncertain tax positions as a component of income tax expense. At December 31, 2019, the Company's uncertain tax position balance included $35 million of accrued interest and penalties. During the years ended December 31, 2019, 2018 and 2017 the Company recorded approximately $7 million, $(25) million and $16 million, respectively, in interest and penalties on uncertain tax positions.

Deferred income tax assets and liabilities reflect the tax effect of estimated temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for the same items for income tax reporting purposes.

The significant components of the Company's net deferred tax asset (liability) follows:

At December 31 (Dollars in Millions)	2019	2018
Deferred Tax Assets		
Federal, state and foreign net operating loss and credit carryforwards	$ 2,592	$ 2,699
Allowance for credit losses	1,155	1,141
Accrued expenses	485	508
Obligation for operating leases	328	—
Pension and postretirement benefits	193	85
Partnerships and other investment assets	91	69
Stock compensation	78	79
Fixed assets	2	58
Securities available-for-sale and financial instruments	—	278
Other deferred tax assets, net	257	268
Gross deferred tax assets	5,181	5,185
Deferred Tax Liabilities		
Leasing activities	(2,700)	(2,652)
Goodwill and other intangible assets	(763)	(703)
Mortgage servicing rights	(546)	(642)
Right of use assets	(282)	—
Loans	(139)	(168)
Securities available-for-sale and financial instruments	(111)	—
Other deferred tax liabilities, net	(131)	(102)
Gross deferred tax liabilities	(4,672)	(4,267)
Valuation allowance	(127)	(109)
Net Deferred Tax Asset	$ 382	$ 809

The Company has approximately $2.0 billion of federal, state and foreign net operating loss carryforwards which expire at various times beginning in 2020. A substantial portion of these carryforwards relate to state-only net operating losses, which are subject to a full valuation allowance as they are not expected to be realized within the carryforward period. Management has determined it is more likely than not the other net deferred tax assets could be realized through carry back to taxable income in prior years, future reversals of existing taxable temporary differences and future taxable income.

In addition, the Company has $2.5 billion of federal credit carryforwards which expire at various times through 2039 which are not subject to a valuation allowance as management believes that it is more likely than not that the credits will be utilized within the carryforward period.

At December 31, 2019, retained earnings included approximately $102 million of base year reserves of acquired thrift institutions, for which no deferred federal income tax liability has been recognized. These base year reserves would be recaptured if certain subsidiaries of the Company cease to qualify as a bank for federal income tax purposes. The base year reserves also remain subject to income tax penalty provisions that, in general, require recapture upon certain stock redemptions of, and excess distributions to, stockholders.

NOTE 19 Derivative Instruments

In the ordinary course of business, the Company enters into derivative transactions to manage various risks and to accommodate the business requirements of its customers. The Company recognizes all derivatives on the Consolidated Balance Sheet at fair value in other assets or in other liabilities. On the date the Company enters into a derivative contract, the derivative is designated as either a fair value hedge, cash flow hedge, net investment hedge, or a designation is not made as it is a customer-related transaction, an economic hedge for asset/liability risk management purposes or another stand-alone derivative created through the Company's operations ("free-standing derivative"). When a derivative is designated as a fair value, cash flow or net investment hedge, the Company performs an assessment, at inception and, at a minimum, quarterly thereafter, to determine the effectiveness of the derivative in offsetting changes in the value or cash flows of the hedged item(s).

Fair Value Hedges These derivatives are interest rate swaps the Company uses to hedge the change in fair value related to interest rate changes of its underlying fixed-rate debt. Changes in the fair value of derivatives designated as fair value hedges, and changes in the fair value of the hedged items, are recorded in earnings.

Cash Flow Hedges These derivatives are interest rate swaps the Company uses to hedge the forecasted cash flows from its underlying variable-rate debt. Changes in the fair value of derivatives designated as cash flow hedges are recorded in other comprehensive income (loss) until the cash flows of the hedged items are realized. If a derivative designated as a cash flow hedge is terminated or ceases to be highly effective, the gain or loss in other comprehensive income (loss) is amortized to earnings over the period the forecasted hedged transactions impact earnings. If a hedged forecasted transaction is no longer probable, hedge accounting is ceased and any gain or loss included in other comprehensive income (loss) is reported in earnings immediately, unless the forecasted transaction is at least reasonably possible of occurring, whereby the amounts remain within other comprehensive income (loss). At December 31, 2019, the Company had $51 million (net-of-tax) of realized and unrealized losses on derivatives classified as cash flow hedges recorded in other comprehensive income (loss), compared with $112 million (net-of-tax) of realized and unrealized gains at December 31, 2018. The estimated amount to be reclassified from other comprehensive income (loss) into earnings during the next 12 months is a loss of $32 million (net-of-tax). All cash flow hedges were highly effective for the year ended December 31, 2019.

Net Investment Hedges The Company uses forward commitments to sell specified amounts of certain foreign currencies, and non-derivative debt instruments, to hedge the volatility of its net investment in foreign operations driven by fluctuations in foreign currency exchange rates. The carrying amount of non-derivative debt instruments designated as net investment hedges was $1.3 billion at December 31, 2019, compared with $1.1 billion at December 31, 2018.

Other Derivative Positions The Company enters into free-standing derivatives to mitigate interest rate risk and for other risk management purposes. These derivatives include forward commitments to sell to-be-announced securities ("TBAs") and other commitments to sell residential mortgage loans, which are used to economically hedge the interest rate risk related to MLHFS and unfunded mortgage loan commitments. The Company also enters into interest rate swaps, swaptions, forward commitments to buy TBAs, U.S. Treasury and Eurodollar futures and options on U.S. Treasury futures to economically hedge the change in the fair value of the Company's MSRs. The Company also enters into foreign currency forwards to economically hedge remeasurement gains and losses the Company recognizes on foreign currency denominated assets and liabilities. In addition, the Company acts as a seller and buyer of interest rate derivatives and foreign exchange contracts for its customers. The Company mitigates the market and liquidity risk associated with these customer derivatives by entering into similar offsetting positions with broker-dealers, or on a portfolio basis by entering into other derivative or non-derivative financial instruments that partially or fully offset the exposure from these customer-related positions. The Company's customer derivatives and related hedges are monitored and reviewed by the Company's Market Risk Committee, which establishes policies for market risk management, including exposure limits for each portfolio. The Company also has derivative contracts that are created through its operations, including certain unfunded mortgage loan commitments and swap agreements related to the sale of a portion of its Class B common and preferred shares of Visa Inc. Refer to Note 21 for further information on these swap agreements.

The following table summarizes the asset and liability management derivative positions of the Company:

(Dollars in Millions)	Asset Derivatives Notional Value	Asset Derivatives Fair Value	Asset Derivatives Weighted-Average Remaining Maturity In Years	Liability Derivatives Notional Value	Liability Derivatives Fair Value	Liability Derivatives Weighted-Average Remaining Maturity In Years
December 31, 2019						
Fair value hedges						
Interest rate contracts						
Receive fixed/pay floating swaps	$18,300	$ –	3.89	$ 4,900	$ –	3.49
Cash flow hedges						
Interest rate contracts						
Pay fixed/receive floating swaps	1,532	–	6.06	7,150	10	2.11
Net investment hedges						
Foreign exchange forward contracts	–	–	–	287	3	.04
Other economic hedges						
Interest rate contracts						
Futures and forwards						
Buy	5,409	17	.08	5,477	11	.07
Sell	16,333	13	.81	8,113	25	.03
Options						
Purchased	10,180	79	2.97	–	–	–
Written	1,270	30	.08	4,238	81	2.07
Receive fixed/pay floating swaps	4,408	–	5.99	5,316	–	13.04
Pay fixed/receive floating swaps	1,259	–	5.67	4,497	–	6.03
Foreign exchange forward contracts	113	1	.05	467	6	.04
Equity contracts	128	2	.45	20	–	1.06
Other[(a)]	34	–	.01	1,823	165	2.45
Total	$58,966	$142		$42,288	$301	
December 31, 2018						
Cash flow hedges						
Interest rate contracts						
Pay fixed/receive floating swaps	$ 7,422	$ 8	3.11	$ 4,320	$ –	1.77
Net investment hedges						
Foreign exchange forward contracts	209	5	.05	223	1	.05
Other economic hedges						
Interest rate contracts						
Futures and forwards						
Buy	2,839	27	.07	1,140	5	.05
Sell	994	3	.06	13,968	30	.72
Options						
Purchased	5,080	88	10.77	–	–	–
Written	584	16	.09	3	–	.09
Receive fixed/pay floating swaps	3,605	–	14.80	4,333	–	6.97
Pay fixed/receive floating swaps	4,333	–	6.97	1,132	–	7.64
Foreign exchange forward contracts	549	7	.03	75	1	.05
Equity contracts	19	1	.82	104	2	.45
Other[(a)]	1	–	.01	1,458	84	1.50
Total	$25,635	$155		$26,756	$123	

(a) Includes derivative liability swap agreements related to the sale of a portion of the Company's Class B common and preferred shares of Visa Inc. The Visa swap agreements had a total notional value, fair value and weighted-average remaining maturity of $1.8 billion, $165 million and 2.50 years at December 31, 2019, respectively, compared to $1.5 billion, $84 million and 1.50 years at December 31, 2018, respectively. In addition, includes short-term underwriting purchase and sale commitments with total asset and liability notional values of $34 million at December 31, 2019, and $1 million at December 31, 2018.

The following table summarizes the customer-related derivative positions of the Company:

	Asset Derivatives			Liability Derivatives		
(Dollars in Millions)	Notional Value	Fair Value	Weighted-Average Remaining Maturity In Years	Notional Value	Fair Value	Weighted-Average Remaining Maturity In Years
December 31, 2019						
Interest rate contracts						
Receive fixed/pay floating swaps	$108,560	$1,865	4.83	$ 31,544	$ 88	3.83
Pay fixed/receive floating swaps	28,150	30	3.83	101,078	753	4.55
Other[(a)]	6,895	1	3.45	6,218	2	2.98
Options						
Purchased	46,406	43	2.06	12,804	47	1.25
Written	6,901	49	1.93	49,741	41	1.82
Futures						
Buy	894	–	.21	–	–	–
Sell	3,874	1	1.18	1,995	–	1.04
Foreign exchange rate contracts						
Forwards, spots and swaps	36,350	748	.97	36,671	729	1.07
Options						
Purchased	1,354	17	.54	–	–	–
Written	–	–	–	1,354	17	.54
Credit contracts	2,879	1	3.28	7,488	5	4.33
Total	$242,263	$2,755		$248,893	$1,682	
December 31, 2018						
Interest rate contracts						
Receive fixed/pay floating swaps	$ 42,054	$ 754	6.73	$ 60,731	$ 456	4.32
Pay fixed/receive floating swaps	60,970	288	3.90	40,499	420	6.57
Other[(a)]	5,777	2	3.77	6,496	2	2.72
Options						
Purchased	41,711	51	1.54	1,940	30	1.98
Written	2,060	32	2.07	39,538	51	1.44
Futures						
Buy	460	–	1.58	–	–	–
Sell	–	–	–	6,190	1	.59
Foreign exchange rate contracts						
Forwards, spots and swaps	26,210	681	.91	25,571	663	.88
Options						
Purchased	2,779	47	.75	–	–	–
Written	–	–	–	2,779	47	.75
Credit contracts	2,318	–	3.50	4,923	2	4.04
Total	$184,339	$1,855		$188,667	$1,672	

(a) Primarily represents floating rate interest rate swaps that pay based on differentials between specified interest rate indexes.

The table below shows the effective portion of the gains (losses) recognized in other comprehensive income (loss) and the gains (losses) reclassified from other comprehensive income (loss) into earnings (net-of-tax) for the years ended December 31:

(Dollars in Millions)	Gains (Losses) Recognized in Other Comprehensive Income (Loss)			Gains (Losses) Reclassified from Other Comprehensive Income (Loss) into Earnings		
	2019	2018	2017	2019	2018	2017
Asset and Liability Management Positions						
Cash flow hedges						
Interest rate contracts	$(171)	$29	$ (3)	$(8)	$3	$(19)
Net investment hedges						
Foreign exchange forward contracts	3	39	(56)	–	–	–
Non-derivative debt instruments	13	32	(46)	–	–	–

Note: The Company does not exclude components from effectiveness testing for cash flow and net investment hedges.

The table below shows the effect of fair value and cash flow hedge accounting on the Consolidated Statement of Income for the years ended December 31:

(Dollars in Millions)	Other Noninterest Income			Interest Expense		
	2019	2018	2017	2019	2018	2017
Total amount of income and expense line items presented in the Consolidated Statement of Income in which the effects of fair value or cash flow hedges are recorded	$926	$910	$774	$4,442	$3,254	$1,966
Asset and Liability Management Positions						
Fair value hedges						
Interest rate contract derivatives	–	–	(28)	(44)	5	–
Hedged items	–	–	28	44	(5)	–
Cash Flow hedges						
Interest rate contract derivatives	–	–	–	11	(5)	30

Note: The Company does not exclude components from effectiveness testing for fair value and cash flow hedges. The Company did not reclassify gains or losses into earnings as a result of the discontinuance of cash flow hedges during the years ended December 31, 2019, 2018 and 2017.

The table below shows cumulative hedging adjustments and the carrying amount of assets (liabilities) designated in fair value hedges:

At December 31 (Dollars in Millions)	Carrying Amount of the Hedged Assets (Liabilities)		Cumulative Hedging Adjustment(a)	
	2019	2018	2019	2018
Line Item in the Consolidated Balance Sheet				
Long-term Debt	$23,195	$–	$35	$(27)

(a) The cumulative hedging adjustment related to discontinued hedging relationships at December 31, 2019 and 2018 was $(7) million and $(27) million, respectively.

The table below shows the gains (losses) recognized in earnings for other economic hedges and the customer-related positions for the years ended December 31:

(Dollars in Millions)	Location of Gains (Losses) Recognized in Earnings	2019	2018	2017
Asset and Liability Management Positions				
Other economic hedges				
Interest rate contracts				
Futures and forwards	Mortgage banking revenue	$ 34	$ 110	$ 24
Purchased and written options	Mortgage banking revenue	432	188	237
Swaps	Mortgage banking revenue	316	(111)	35
Foreign exchange forward contracts	Other noninterest income	(24)	39	(69)
Equity contracts	Compensation expense	–	(4)	1
Other	Other noninterest income	(140)	2	(1)
Customer-Related Positions				
Interest rate contracts				
Swaps	Commercial products revenue	82	47	67
Purchased and written options	Commercial products revenue	10	2	(24)
Futures	Commercial products revenue	(5)	9	(3)
Foreign exchange rate contracts				
Forwards, spots and swaps	Commercial products revenue	82	84	92
Purchased and written options	Commercial products revenue	1	–	2
Credit contracts	Commercial products revenue	(18)	2	3

Derivatives are subject to credit risk associated with counterparties to the derivative contracts. The Company measures that credit risk using a credit valuation adjustment and includes it within the fair value of the derivative. The Company manages counterparty credit risk through diversification of its derivative positions among various counterparties, by entering into derivative positions that are centrally cleared through clearinghouses, by entering into master netting arrangements and, where possible, by requiring collateral arrangements. A master netting arrangement allows two counterparties, who have multiple derivative contracts with each other, the ability to net settle amounts under all contracts, including any related collateral, through a single payment and in a single currency. Collateral arrangements generally require the counterparty to deliver collateral (typically cash or U.S. Treasury and agency securities) equal to the Company's net derivative receivable, subject to minimum transfer and credit rating requirements.

The Company's collateral arrangements are predominately bilateral and, therefore, contain provisions that require collateralization of the Company's net liability derivative positions. Required collateral coverage is based on net liability thresholds and may be contingent upon the Company's credit rating from two of the nationally recognized statistical rating organizations. If the Company's credit rating were to fall below credit ratings thresholds established in the collateral arrangements, the counterparties to the derivatives could request immediate additional collateral coverage up to and including full collateral coverage for derivatives in a net liability position. The aggregate fair value of all derivatives under collateral arrangements that were in a net liability position at December 31, 2019, was $717 million. At December 31, 2019, the Company had $514 million of cash posted as collateral against this net liability position.

NOTE 20 Netting Arrangements for Certain Financial Instruments and Securities Financing Activities

The Company's derivative portfolio consists of bilateral over-the-counter trades, certain interest rate derivatives and credit contracts required to be centrally cleared through clearinghouses per current regulations, and exchange-traded positions which may include U.S. Treasury and Eurodollar futures or options on U.S. Treasury futures. Of the Company's $592.4 billion total notional amount of derivative positions at December 31, 2019, $299.4 billion related to bilateral over-the-counter trades, $272.4 billion related to those centrally cleared through clearinghouses and $20.6 billion related to those that were exchange-traded. The Company's derivative contracts typically include offsetting rights (referred to as netting arrangements), and depending on expected volume, credit risk, and counterparty preference, collateral maintenance may be required. For all derivatives under collateral support arrangements, fair value is determined daily and, depending on the collateral maintenance requirements, the Company and a counterparty may receive or deliver collateral, based upon the net fair value of all derivative positions between the Company and the counterparty. Collateral is typically cash, but securities may be allowed under collateral arrangements with certain counterparties. Receivables and payables related to cash collateral are included in other assets and other liabilities on the Consolidated Balance Sheet, along with the related derivative asset and liability fair values. Any securities pledged to counterparties as collateral remain on the Consolidated Balance Sheet. Securities received from counterparties as collateral are not recognized on the Consolidated Balance Sheet, unless the counterparty defaults. In general, securities used as collateral can be sold, repledged or otherwise used by the party in possession. No restrictions exist on the use of cash collateral by either party. Refer to Note 19 for further discussion of the Company's derivatives, including collateral arrangements.

As part of the Company's treasury and broker-dealer operations, the Company executes transactions that are treated as securities sold under agreements to repurchase or securities purchased under agreements to resell, both of which are accounted for as collateralized financings. Securities sold under agreements to repurchase include repurchase agreements and securities loaned transactions. Securities purchased under agreements to resell include reverse repurchase agreements and securities borrowed transactions. For securities sold under agreements to repurchase, the Company records a liability for the cash received, which is included in short-term borrowings on the Consolidated Balance Sheet. For securities purchased under agreements to resell, the Company records a receivable for the cash paid, which is included in other assets on the Consolidated Balance Sheet.

Securities transferred to counterparties under repurchase agreements and securities loaned transactions continue to be recognized on the Consolidated Balance Sheet, are measured at fair value, and are included in investment securities or other assets. Securities received from counterparties under reverse repurchase agreements and securities borrowed transactions are not recognized on the Consolidated Balance Sheet unless the counterparty defaults. The securities transferred under repurchase and reverse repurchase transactions typically are U.S. Treasury and agency securities, residential agency mortgage-backed securities or corporate debt securities. The securities loaned or borrowed typically are corporate debt securities traded by the Company's broker-dealer subsidiary. In general, the securities transferred can be sold, repledged or otherwise used by the party in possession. No restrictions exist on the use of cash collateral by either party. Repurchase/reverse repurchase and securities loaned/borrowed transactions expose the Company to counterparty risk. The Company manages this risk by performing assessments, independent of business line managers, and establishing concentration limits on each counterparty. Additionally, these transactions include collateral arrangements that require the fair values of the underlying securities to be determined daily, resulting in cash being obtained or refunded to counterparties to maintain specified collateral levels.

The following table summarizes the maturities by category of collateral pledged for repurchase agreements and securities loaned transactions:

(Dollars in Millions)	Overnight and Continuous	Less Than 30 Days	30-89 Days	Greater Than 90 Days	Total
December 31, 2019					
Repurchase agreements					
U.S. Treasury and agencies	$ 289	$—	$ —	$ —	$ 289
Residential agency mortgage-backed securities	266	—	—	—	266
Corporate debt securities	610	—	—	—	610
Total repurchase agreements	1,165	—	—	—	1,165
Securities loaned					
Corporate debt securities	50	—	—	—	50
Total securities loaned	50	—	—	—	50
Gross amount of recognized liabilities	$1,215	$—	$ —	$ —	$1,215
December 31, 2018					
Repurchase agreements					
U.S. Treasury and agencies	$ 134	$—	$ —	$ —	$ 134
Residential agency mortgage-backed securities	565	—	945	470	1,980
Corporate debt securities	480	—	—	—	480
Total repurchase agreements	1,179	—	945	470	2,594
Securities loaned					
Corporate debt securities	227	—	—	—	227
Total securities loaned	227	—	—	—	227
Gross amount of recognized liabilities	$1,406	$—	$945	$470	$2,821

The Company executes its derivative, repurchase/reverse repurchase and securities loaned/borrowed transactions under the respective industry standard agreements. These agreements include master netting arrangements that allow for multiple contracts executed with the same counterparty to be viewed as a single arrangement. This allows for net settlement of a single amount on a daily basis. In the event of default, the master netting arrangement provides for close-out netting, which allows all of these positions with the defaulting counterparty to be terminated and net settled with a single payment amount.

The Company has elected to offset the assets and liabilities under netting arrangements for the balance sheet presentation of the majority of its derivative counterparties. The netting occurs at the counterparty level, and includes all assets and liabilities related to the derivative contracts, including those associated with cash collateral received or delivered. The Company has not elected to offset the assets and liabilities under netting arrangements for the balance sheet presentation of repurchase/reverse repurchase and securities loaned/borrowed transactions.

The following tables provide information on the Company's netting adjustments, and items not offset on the Consolidated Balance Sheet but available for offset in the event of default:

(Dollars in Millions)	Gross Recognized Assets	Gross Amounts Offset on the Consolidated Balance Sheet(a)	Net Amounts Presented on the Consolidated Balance Sheet	Gross Amounts Not Offset on the Consolidated Balance Sheet		Net Amount
				Financial Instruments(b)	Collateral Received(c)	
December 31, 2019						
Derivative assets(d)	$2,857	$(982)	$1,875	$ (80)	$ (116)	$1,679
Reverse repurchase agreements	1,021	—	1,021	(152)	(869)	—
Securities borrowed	1,624	—	1,624	—	(1,569)	55
Total	$5,502	$(982)	$4,520	$(232)	$(2,554)	$1,734
December 31, 2018						
Derivative assets(d)	$1,987	$(942)	$1,045	$(106)	$ (16)	$ 923
Reverse repurchase agreements	205	—	205	(114)	(91)	—
Securities borrowed	1,069	—	1,069	—	(1,039)	30
Total	$3,261	$(942)	$2,319	$(220)	$(1,146)	$ 953

(a) Includes $429 million and $236 million of cash collateral related payables that were netted against derivative assets at December 31, 2019 and 2018, respectively.

(b) For derivative assets this includes any derivative liability fair values that could be offset in the event of counterparty default; for reverse repurchase agreements this includes any repurchase agreement payables that could be offset in the event of counterparty default; for securities borrowed this includes any securities loaned payables that could be offset in the event of counterparty default.

(c) Includes the fair value of securities received by the Company from the counterparty. These securities are not included on the Consolidated Balance Sheet unless the counterparty defaults.

(d) Excludes $40 million and $23 million at December 31, 2019 and 2018, respectively, of derivative assets not subject to netting arrangements.

(Dollars in Millions)	Gross Recognized Liabilities	Gross Amounts Offset on the Consolidated Balance Sheet[a]	Net Amounts Presented on the Consolidated Balance Sheet	Gross Amounts Not Offset on the Consolidated Balance Sheet: Financial Instruments[b]	Gross Amounts Not Offset on the Consolidated Balance Sheet: Collateral Pledged[c]	Net Amount
December 31, 2019						
Derivative liabilities[d]	$1,816	$(1,067)	$ 749	$ (80)	$ –	$669
Repurchase agreements	1,165	–	1,165	(152)	(1,012)	1
Securities loaned	50	–	50	–	(49)	1
Total	$3,031	$(1,067)	$1,964	$(232)	$(1,061)	$671
December 31, 2018						
Derivative liabilities[d]	$1,710	$ (946)	$ 764	$(106)	$ –	$658
Repurchase agreements	2,594	–	2,594	(114)	(2,480)	–
Securities loaned	227	–	227	–	(224)	3
Total	$4,531	$ (946)	$3,585	$(220)	$(2,704)	$661

(a) Includes $514 million and $240 million of cash collateral related receivables that were netted against derivative liabilities at December 31, 2019 and 2018, respectively.

(b) For derivative liabilities this includes any derivative asset fair values that could be offset in the event of counterparty default; for repurchase agreements this includes any reverse repurchase agreement receivables that could be offset in the event of counterparty default; for securities loaned this includes any securities borrowed receivables that could be offset in the event of counterparty default.

(c) Includes the fair value of securities pledged by the Company to the counterparty. These securities are included on the Consolidated Balance Sheet unless the Company defaults.

(d) Excludes $167 million and $85 million at December 31, 2019 and 2018, respectively, of derivative liabilities not subject to netting arrangements.

NOTE 21 Fair Values of Assets and Liabilities

The Company uses fair value measurements for the initial recording of certain assets and liabilities, periodic remeasurement of certain assets and liabilities, and disclosures. Derivatives, trading and available-for-sale investment securities, MSRs and substantially all MLHFS are recorded at fair value on a recurring basis. Additionally, from time to time, the Company may be required to record at fair value other assets on a nonrecurring basis, such as loans held for sale, loans held for investment and certain other assets. These nonrecurring fair value adjustments typically involve application of lower-of-cost-or-fair value accounting or impairment write-downs of individual assets.

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. A fair value measurement reflects all of the assumptions that market participants would use in pricing the asset or liability, including assumptions about the risk inherent in a particular valuation technique, the effect of a restriction on the sale or use of an asset and the risk of nonperformance.

The Company groups its assets and liabilities measured at fair value into a three-level hierarchy for valuation techniques used to measure financial assets and financial liabilities at fair value. This hierarchy is based on whether the valuation inputs are observable or unobservable. These levels are:

- Level 1—Quoted prices in active markets for identical assets or liabilities. Level 1 includes U.S. Treasury securities, as well as exchange-traded instruments.
- Level 2—Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. Level 2 includes debt securities that are traded less frequently than exchange-traded instruments and which are typically valued using third-party pricing services; derivative contracts and other assets and liabilities, including securities, whose value is determined using a pricing model with inputs that are observable in the market or can be derived principally from or corroborated by observable market data; and MLHFS whose values are determined using quoted prices for similar assets or pricing models with inputs that are observable in the market or can be corroborated by observable market data.
- Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. Level 3 assets and liabilities include financial instruments whose values are determined using pricing models, discounted cash flow methodologies, or similar techniques, as well as instruments for which the determination of fair value requires significant management judgment or estimation. This category includes MSRs and certain derivative contracts.

Valuation Methodologies

The valuation methodologies used by the Company to measure financial assets and liabilities at fair value are described below. In addition, the following section includes an indication of the level of the fair value hierarchy in which the assets or liabilities are classified. Where appropriate, the descriptions include information about the valuation models and key inputs to those models. During the years ended December 31, 2019, 2018 and 2017, there were no significant changes to the valuation techniques used by the Company to measure fair value.

Available-For-Sale Investment Securities When quoted market prices for identical securities are available in an active market, these prices are used to determine fair value and these securities are classified within Level 1 of the fair value hierarchy. Level 1 investment securities include U.S. Treasury and exchange-traded securities.

For other securities, quoted market prices may not be readily available for the specific securities. When possible, the Company determines fair value based on market observable information, including quoted market prices for similar securities, inactive transaction prices, and broker quotes. These securities are classified within Level 2 of the fair value hierarchy. Level 2 valuations are generally provided by a third-party pricing service. Level 2 investment securities are predominantly agency mortgage-backed securities, certain other asset-backed securities, obligations of state and political subdivisions and agency debt securities.

Mortgage Loans Held For Sale MLHFS measured at fair value, for which an active secondary market and readily available market prices exist, are initially valued at the transaction price and are subsequently valued by comparison to instruments with similar collateral and risk profiles. MLHFS are classified within Level 2. Included in mortgage banking revenue was a net gain of $73 million, a net loss of $60 million and a net gain of $84 million for the years ended December 31, 2019, 2018 and 2017, respectively, from the changes to fair value of these MLHFS under fair value option accounting guidance. Changes in fair value due to instrument specific credit risk were immaterial. Interest income for MLHFS is measured based on contractual interest rates and reported as interest income on the Consolidated Statement of Income. Electing to measure MLHFS at fair value reduces certain timing differences and better matches changes in fair value of these assets with changes in the value of the derivative instruments used to economically hedge them without the burden of complying with the requirements for hedge accounting.

Mortgage Servicing Rights MSRs are valued using a discounted cash flow methodology, and are classified within Level 3. The Company determines fair value of the MSRs by projecting future cash flows for different interest rate scenarios using prepayment rates and other assumptions, and discounts these cash flows using a risk adjusted rate based on option adjusted spread levels. There is minimal observable market activity for MSRs on comparable portfolios and, therefore, the determination of fair value requires significant management judgment. Refer to Note 9 for further information on MSR valuation assumptions.

Derivatives The majority of derivatives held by the Company are executed over-the-counter or centrally cleared through clearinghouses and are valued using market standard cash flow valuation techniques. The models incorporate inputs, depending on the type of derivative, including interest rate curves, foreign exchange rates and volatility. All derivative values incorporate an assessment of the risk of counterparty nonperformance, measured based on the Company's evaluation of credit risk including external assessments of credit risk. The Company monitors and manages its nonperformance risk by considering its ability to net derivative positions under master netting arrangements, as well as collateral received or provided under collateral arrangements. Accordingly, the Company has elected to measure the fair value of derivatives, at a counterparty level, on a net basis. The majority of the derivatives are classified within Level 2 of the fair value hierarchy, as the significant inputs to the models, including nonperformance risk, are observable. However, certain derivative transactions are with counterparties where risk of nonperformance cannot be observed in the market and, therefore, the credit valuation adjustments result in these derivatives being classified within Level 3 of the fair value hierarchy.

The Company also has other derivative contracts that are created through its operations, including commitments to purchase and originate mortgage loans and swap agreements executed in conjunction with the sale of a portion of its Class B common and preferred shares of Visa Inc. (the "Visa swaps"). The mortgage loan commitments are valued by pricing models that include market observable and unobservable inputs, which result in the commitments being classified within Level 3 of the fair value hierarchy. The unobservable inputs include assumptions about the percentage of commitments that actually become a closed loan and the MSR value that is inherent in the underlying loan value. The Visa swaps require payments by either the Company or the purchaser of the Visa Inc. Class B common and preferred shares when there are changes in the conversion rate of the Visa Inc. Class B common and preferred shares to Visa Inc. Class A common and preferred shares, respectively, as well as quarterly payments to the purchaser based on specified terms of the agreements. Management reviews and updates the Visa swaps fair value in conjunction with its review of Visa Inc. related litigation contingencies, and the associated escrow funding. The expected litigation resolution impacts the Visa Inc. Class B common share to Visa Inc. Class A common share conversion rate, as well as the ultimate termination date for the Visa swaps. Accordingly, the Visa swaps are classified within Level 3. Refer to Note 22 for further information on the Visa Inc. restructuring and related card association litigation.

Significant Unobservable Inputs of Level 3 Assets and Liabilities

The following section provides information to facilitate an understanding of the uncertainty in the fair value measurements for the Company's Level 3 assets and liabilities recorded at fair value on the Consolidated Balance Sheet. This section includes a description of the significant inputs used by the Company and a description of any interrelationships between these inputs. The discussion below excludes nonrecurring fair value measurements of collateral value used for impairment measures for loans and OREO. These valuations utilize third-party appraisal or broker price opinions, and are classified as Level 3 due to the significant judgment involved.

Mortgage Servicing Rights The significant unobservable inputs used in the fair value measurement of the Company's MSRs are expected prepayments and the option adjusted spread that is added to the risk-free rate to discount projected cash flows. Significant increases in either of these inputs in isolation would have resulted in a significantly lower fair value measurement. Significant decreases in either of these inputs in isolation would have resulted in a significantly higher fair value measurement. There is no direct interrelationship between prepayments and option adjusted spread. Prepayment rates generally move in the opposite direction of market interest rates. Option adjusted spread is generally impacted by changes in market return requirements.

The following table shows the significant valuation assumption ranges for MSRs at December 31, 2019:

	Minimum	Maximum	Weighted Average(a)
Expected prepayment	9%	22%	12%
Option adjusted spread	6	10	7

(a) Determined based on the relative fair value of the related mortgage loans serviced.

Derivatives The Company has two distinct Level 3 derivative portfolios: (i) the Company's commitments to purchase and originate mortgage loans that meet the requirements of a derivative and (ii) the Company's asset/liability and customer-related derivatives that are Level 3 due to unobservable inputs related to measurement of risk of nonperformance by the counterparty. In addition, the Company's Visa swaps are classified within Level 3.

The significant unobservable inputs used in the fair value measurement of the Company's derivative commitments to purchase and originate mortgage loans are the percentage of commitments that actually become a closed loan and the MSR value that is inherent in the underlying loan value. A significant increase in the rate of loans that close would have resulted in a larger derivative asset or liability. A significant increase in the inherent MSR value would have resulted in an increase in the derivative asset or a reduction in the derivative liability. Expected loan close rates and the inherent MSR values are directly impacted by changes in market rates and will generally move in the same direction as interest rates.

The following table shows the significant valuation assumption ranges for the Company's derivative commitments to purchase and originate mortgage loans at December 31, 2019:

	Minimum	Maximum	Weighted Average(a)
Expected loan close rate	12%	100%	78%
Inherent MSR value (basis points per loan)	56	221	130

(a) Determined based on the relative fair value of the related mortgage loans.

The significant unobservable input used in the fair value measurement of certain of the Company's asset/liability and customer-related derivatives is the credit valuation adjustment related to the risk of counterparty nonperformance. A significant increase in the credit valuation adjustment would have resulted in a lower fair value measurement. A significant decrease in the credit valuation adjustment would have resulted in a higher fair value measurement. The credit valuation adjustment is impacted by changes in market rates, volatility, market implied credit spreads, and loss recovery rates, as well as the Company's assessment of the counterparty's credit position. At December 31, 2019, the minimum, maximum and weighted-average credit valuation adjustment as a percentage of the derivative contract fair value prior to adjustment was 0 percent, 671 percent and 1 percent, respectively.

The significant unobservable inputs used in the fair value measurement of the Visa swaps are management's estimate of the probability of certain litigation scenarios, and the timing of the resolution of the related litigation loss estimates in excess, or shortfall, of the Company's proportional share of escrow funds. An increase in the loss estimate or a delay in the resolution of the related litigation would have resulted in an increase in the derivative liability. A decrease in the loss estimate or an acceleration of the resolution of the related litigation would have resulted in a decrease in the derivative liability.

The following table summarizes the balances of assets and liabilities measured at fair value on a recurring basis:

(Dollars in Millions)	Level 1	Level 2	Level 3	Netting	Total
December 31, 2019					
Available-for-sale securities					
U.S. Treasury and agencies	$18,986	$ 853	$ –	$ –	$ 19,839
Mortgage-backed securities					
Residential agency	–	94,111	–	–	94,111
Commercial agency	–	1,453	–	–	1,453
Asset-backed securities					
Collateralized debt obligations/Collateralized loan obligations	–	–	1	–	1
Other	–	375	7	–	382
Obligations of state and political subdivisions	–	6,813	1	–	6,814
Obligations of foreign governments	–	9	–	–	9
Corporate debt securities	–	4	–	–	4
Total available-for-sale	18,986	103,618	9	–	122,613
Mortgage loans held for sale	–	5,533	–	–	5,533
Mortgage servicing rights	–	–	2,546	–	2,546
Derivative assets	9	1,707	1,181	(982)	1,915
Other assets	312	1,563	–	–	1,875
Total	$19,307	$112,421	$3,736	$ (982)	$134,482
Derivative liabilities	$ –	$ 1,612	$ 371	$(1,067)	$ 916
Short-term borrowings and other liabilities(a)	50	1,578	–	–	1,628
Total	$ 50	$ 3,190	$ 371	$(1,067)	$ 2,544
December 31, 2018					
Available-for-sale securities					
U.S. Treasury and agencies	$18,585	$ 672	$ –	$ –	$ 19,257
Mortgage-backed securities					
Residential agency	–	39,752	–	–	39,752
Commercial agency	–	2	–	–	2
Other asset-backed securities	–	403	–	–	403
Obligations of state and political subdivisions	–	6,701	–	–	6,701
Total available-for-sale	18,585	47,530	–	–	66,115
Mortgage loans held for sale	–	2,035	–	–	2,035
Mortgage servicing rights	–	–	2,791	–	2,791
Derivative assets	–	1,427	583	(942)	1,068
Other assets	392	1,273	–	–	1,665
Total	$18,977	$ 52,265	$3,374	$ (942)	$ 73,674
Derivative liabilities	$ 1	$ 1,291	$ 503	$ (946)	$ 849
Short-term borrowings and other liabilities(a)	199	1,019	–	–	1,218
Total	$ 200	$ 2,310	$ 503	$ (946)	$ 2,067

Note: Excluded from the table above are equity investments without readily determinable fair values. The Company has elected to carry these investments at historical cost, adjusted for impairment and any changes resulting from observable price changes for identical or similar investments of the issuer. The aggregate carrying amount of these equity investments was $91 million and $86 million at December 31, 2019 and 2018, respectively. The Company has not recorded impairments or adjustments for observable price changes on these equity investments during 2019 or on a cumulative basis.

(a) Primarily represents the Company's obligation on securities sold short required to be accounted for at fair value per applicable accounting guidance.

The following table presents the changes in fair value for all assets and liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) for the years ended December 31:

(Dollars in Millions)	Beginning of Period Balance	Net Gains (Losses) Included in Net Income	Net Gains (Losses) Included in Other Comprehensive Income (Loss)	Purchases	Sales	Principal Payments	Issuances	Settlements	Transfers into Level 3	End of Period Balance	Net Change in Unrealized Gains (Losses) Relating to Assets and Liabilities Held at End of Period
2019											
Available-for-sale securities											
Asset-backed securities											
Collateralized debt obligations/ Collateralized loan obligations	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$1	$ 1	$ –
Other	–	–	–	–	–	–	–	–	7	7	–
Obligations of state and political subdivisions	–	–	–	–	–	–	–	–	1	1	–
Total available-for-sale	–	–	–	–	–	–	–	–	9	9	–
Mortgage servicing rights	2,791	(829)[c]	–	20	5	–	559[e]	–	–	2,546	(829)[c]
Net derivative assets and liabilities	80	769[d]	–	142	(9)	–	–	(172)	–	810	782[f]
2018											
Mortgage servicing rights	$2,645	$(232)[c]	$ –	$ 8	$ (27)	$ –	$397[e]	$ –	$–	$2,791	$(232)[c]
Net derivative assets and liabilities	107	21[g]	–	13	(41)	–	–	(20)	–	80	34[h]
2017											
Available-for-sale securities											
Residential non-agency mortgage-backed securities											
Prime[a]	$ 242	$ –	$ (2)	$ –	$(234)	$(6)	$ –	$ –	$–	$ –	$ –
Non-prime[b]	195	–	(17)	–	(175)	(3)	–	–	–	–	–
Other asset-backed securities	2	–	–	–	(2)	–	–	–	–	–	–
Corporate debt securities	9	–	2	–	(11)	–	–	–	–	–	–
Total available-for-sale	448	–	(17)[i]	–	(422)	(9)	–	–	–	–	–
Mortgage servicing rights	2,591	(404)[c]	–	13	–	–	445[e]	–	–	2,645	(404)[c]
Net derivative assets and liabilities	171	317[j]	–	1	(10)	–	–	(372)	–	107	(52)[k]

(a) Prime securities are those designated as such by the issuer at origination. When an issuer designation is unavailable, the Company determines at acquisition date the categorization based on asset pool characteristics (such as weighted-average credit score, loan-to-value, loan type, prevalence of low documentation loans) and deal performance (such as pool delinquencies and security market spreads).

(b) Includes all securities not meeting the conditions to be designated as prime.

(c) Included in mortgage banking revenue.

(d) Approximately $287 million included in other noninterest income and $482 million included in mortgage banking revenue.

(e) Represents MSRs capitalized during the period.

(f) Approximately $747 million included in other noninterest income and $35 million included in mortgage banking revenue.

(g) Approximately $(139) million included in other noninterest income and $160 million included in mortgage banking revenue.

(h) Approximately $14 million included in other noninterest income and $20 million included in mortgage banking revenue.

(i) Included in changes in unrealized gains and losses on investment securities available-for-sale.

(j) Approximately $21 million included in other noninterest income and $296 million included in mortgage banking revenue.

(k) Approximately $(77) million included in other noninterest income and $25 million included in mortgage banking revenue.

The Company is also required periodically to measure certain other financial assets at fair value on a nonrecurring basis. These measurements of fair value usually result from the application of lower-of-cost-or-fair value accounting or write-downs of individual assets.

The following table summarizes the balances as of the measurement date of assets measured at fair value on a nonrecurring basis, and still held as of December 31:

	2019				2018			
(Dollars in Millions)	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Loans[(a)]	$–	$–	$136	$136	$–	$–	$40	$40
Other assets[(b)]	–	–	46	46	–	–	57	57

(a) Represents the carrying value of loans for which adjustments were based on the fair value of the collateral, excluding loans fully charged-off.

(b) Primarily represents the fair value of foreclosed properties that were measured at fair value based on an appraisal or broker price opinion of the collateral subsequent to their initial acquisition.

The following table summarizes losses recognized related to nonrecurring fair value measurements of individual assets or portfolios for the years ended December 31:

(Dollars in Millions)	2019	2018	2017
Loans[(a)]	$122	$83	$171
Other assets[(b)]	17	26	20

(a) Represents write-downs of loans which were based on the fair value of the collateral, excluding loans fully charged-off.

(b) Primarily represents related losses of foreclosed properties that were measured at fair value subsequent to their initial acquisition.

Fair Value Option

The following table summarizes the differences between the aggregate fair value carrying amount of MLHFS for which the fair value option has been elected and the aggregate unpaid principal amount that the Company is contractually obligated to receive at maturity as of December 31:

	2019			2018		
(Dollars in Millions)	Fair Value Carrying Amount	Aggregate Unpaid Principal	Carrying Amount Over (Under) Unpaid Principal	Fair Value Carrying Amount	Aggregate Unpaid Principal	Carrying Amount Over (Under) Unpaid Principal
Total loans	$5,533	$5,366	$167	$2,035	$1,972	$63
Nonaccrual loans	1	1	–	2	2	–
Loans 90 days or more past due	1	1	–	–	–	–

Fair Value of Financial Instruments

The following section summarizes the estimated fair value for financial instruments accounted for at amortized cost as of December 31, 2019 and 2018. In accordance with disclosure guidance related to fair values of financial instruments, the Company did not include assets and liabilities that are not financial instruments, such as the value of goodwill, long-term relationships with deposit, credit card, merchant processing and trust customers, other purchased intangibles, premises and equipment, deferred taxes and other liabilities. Additionally, in accordance with the disclosure guidance, receivables and payables due in one year or less, insurance contracts, equity investments not accounted for at fair value, and deposits with no defined or contractual maturities are excluded.

The estimated fair values of the Company's financial instruments as of December 31, are shown in the table below:

	2019					2018				
	Carrying	Fair Value				Carrying	Fair Value			
(Dollars in Millions)	Amount	Level 1	Level 2	Level 3	Total	Amount	Level 1	Level 2	Level 3	Total
Financial Assets										
Cash and due from banks	$ 22,405	$22,405	$ –	$ –	$ 22,405	$ 21,453	$21,453	$ –	$ –	$ 21,453
Federal funds sold and securities purchased under resale agreements	1,036	–	1,036	–	1,036	306	–	306	–	306
Investment securities held-to-maturity	–	–	–	–	–	46,050	4,594	40,359	11	44,964
Loans held for sale[(a)]	45	–	–	43	43	21	–	–	21	21
Loans	292,082	–	–	297,241	297,241	282,837	–	–	284,790	284,790
Other	1,923	–	929	994	1,923	2,412	–	1,241	1,171	2,412
Financial Liabilities										
Time deposits	42,894	–	42,831	–	42,831	44,554	–	44,140	–	44,140
Short-term borrowings[(b)]	22,095	–	21,461	–	21,461	12,921	–	12,678	–	12,678
Long-term debt	40,167	–	41,077	–	41,077	41,340	–	41,003	–	41,003
Other	3,678	–	1,342	2,336	3,678	1,726	–	–	1,726	1,726

(a) Excludes mortgages held for sale for which the fair value option under applicable accounting guidance was elected.

(b) Excludes the Company's obligation on securities sold short required to be accounted for at fair value per applicable accounting guidance.

The fair value of unfunded commitments, deferred non-yield related loan fees, standby letters of credit and other guarantees is approximately equal to their carrying value. The carrying value of unfunded commitments, deferred non-yield related loan fees and standby letters of credit was $528 million and $532 million at December 31, 2019 and 2018, respectively. The carrying value of other guarantees was $200 million and $263 million at December 31, 2019 and 2018, respectively.

NOTE 22 Guarantees and Contingent Liabilities

Visa Restructuring and Card Association Litigation The Company's payment services business issues credit and debit cards and acquires credit and debit card transactions through the Visa U.S.A. Inc. card association or its affiliates (collectively "Visa"). In 2007, Visa completed a restructuring and issued shares of Visa Inc. common stock to its financial institution members in contemplation of its initial public offering ("IPO") completed in the first quarter of 2008 (the "Visa Reorganization"). As a part of the Visa Reorganization, the Company received its proportionate number of shares of Visa Inc. common stock, which were subsequently converted to Class B shares of Visa Inc. ("Class B shares").

Visa U.S.A. Inc. ("Visa U.S.A.") and MasterCard International (collectively, the "Card Associations") are defendants in antitrust lawsuits challenging the practices of the Card Associations (the "Visa Litigation"). Visa U.S.A. member banks have a contingent obligation to indemnify Visa Inc. under the Visa U.S.A. bylaws (which were modified at the time of the restructuring in October 2007) for potential losses arising from the Visa Litigation. The indemnification by the Visa U.S.A. member banks has no specific maximum amount. Using proceeds from its IPO and through reductions to the conversion ratio applicable to the Class B shares held by Visa U.S.A. member banks, Visa Inc. has funded an escrow account for the benefit of member financial institutions to fund their indemnification obligations associated with the Visa Litigation. The receivable related to the escrow account is classified in other liabilities as a direct offset to the related Visa Litigation contingent liability.

In October 2012, Visa signed a settlement agreement to resolve class action claims associated with the multi-district interchange litigation pending in the United States District Court for the Eastern District of New York (the "Multi-District Litigation"). The U.S. Court of Appeals for the Second Circuit reversed the approval of that settlement and remanded the matter to the district court. In September 2018, Visa signed a new settlement agreement, superseding the original settlement agreement, to resolve class action claims associated with the Multi-District Litigation. The new settlement is still subject to court approval.

Commitments to Extend Credit Commitments to extend credit are legally binding and generally have fixed expiration dates or other termination clauses. The contractual amount represents the Company's exposure to credit loss, in the event of default by the borrower. The Company manages this credit risk by using the same credit policies it applies to loans. Collateral is obtained to secure commitments based on management's credit assessment of the borrower. The collateral may include marketable securities, receivables, inventory, equipment and real estate. Since the Company expects many of the commitments to expire without being drawn, total commitment amounts do not necessarily represent the Company's future liquidity requirements. In addition, the commitments include consumer credit lines that are cancelable upon notification to the consumer.

The contract or notional amounts of unfunded commitments to extend credit at December 31, 2019, excluding those commitments considered derivatives, were as follows:

	Term		
(Dollars in Millions)	Less Than One Year	Greater Than One Year	Total
Commercial and commercial real estate loans	$ 31,235	$108,303	$139,538
Corporate and purchasing card loans[(a)]	29,296	–	29,296
Residential mortgages	416	1	417
Retail credit card loans[(a)]	111,773	–	111,773
Other retail loans	12,614	24,183	36,797
Other	6,325	–	6,325

(a) Primarily cancelable at the Company's discretion.

Other Guarantees and Contingent Liabilities

The following table is a summary of other guarantees and contingent liabilities of the Company at December 31, 2019:

(Dollars in Millions)	Collateral Held	Carrying Amount	Maximum Potential Future Payments
Standby letters of credit	$ –	$48	$ 10,258
Third-party borrowing arrangements	–	–	7
Securities lending indemnifications	4,564	–	4,468
Asset sales	–	68	5,069
Merchant processing	589	61	108,875
Tender option bond program guarantee	2,994	–	2,725
Minimum revenue guarantees	–	–	3
Other	–	71	1,461

Letters of Credit Standby letters of credit are commitments the Company issues to guarantee the performance of a customer to a third party. The guarantees frequently support public and private borrowing arrangements, including commercial paper issuances, bond financings and other similar transactions. The Company also issues and confirms commercial letters of credit on behalf of customers to ensure payment or collection in connection with trade transactions. In the event of a customer's or counterparty's nonperformance, the Company's credit loss exposure is similar to that in any extension of credit, up to the letter's contractual amount. Management assesses the borrower's credit to determine the necessary collateral, which may include marketable securities, receivables, inventory, equipment and real estate. Since the conditions requiring the Company to fund letters of credit may not occur, the Company expects its liquidity requirements to be less than the total outstanding commitments. The maximum potential future payments guaranteed by the Company under standby letter of credit arrangements at December 31, 2019, were approximately $10.3 billion with a weighted-average term of approximately 21 months. The estimated fair value of standby letters of credit was approximately $48 million at December 31, 2019.

The contract or notional amount of letters of credit at December 31, 2019, were as follows:

	Term		
(Dollars in Millions)	Less Than One Year	Greater Than One Year	Total
Standby	$4,676	$5,582	$10,258
Commercial	339	28	367

Guarantees Guarantees are contingent commitments issued by the Company to customers or other third parties. The Company's guarantees primarily include parent guarantees related to subsidiaries' third-party borrowing arrangements; third-party performance guarantees inherent in the Company's business operations, such as indemnified securities lending programs and merchant charge-back guarantees; and indemnification or buy-back provisions related to certain asset sales. For certain guarantees, the Company has recorded a liability related to the potential obligation, or has access to collateral to support the guarantee or through the exercise of other recourse provisions can offset some or all of the maximum potential future payments made under these guarantees.

Third-Party Borrowing Arrangements The Company provides guarantees to third parties as a part of certain subsidiaries' borrowing arrangements. The maximum potential future payments guaranteed by the Company under these arrangements were approximately $7 million at December 31, 2019.

Commitments from Securities Lending The Company participates in securities lending activities by acting as the customer's agent involving the loan of securities. The Company indemnifies customers for the difference between the fair value of the securities lent and the fair value of the collateral received. Cash collateralizes these transactions. The maximum potential future payments guaranteed by the Company under these arrangements were approximately $4.5 billion at December 31, 2019, and represent the fair value of the securities lent to third parties. At December 31, 2019, the Company held $4.6 billion of cash as collateral for these arrangements.

Asset Sales The Company has provided guarantees to certain third parties in connection with the sale or syndication of certain assets, primarily loan portfolios and tax-advantaged investments. These guarantees are generally in the form of asset buy-back or make-whole provisions that are triggered upon a credit event or a change in the tax-qualifying status of the related projects, as applicable, and remain in effect until the loans are collected or final tax credits are realized, respectively. The maximum potential future payments guaranteed by the Company under these arrangements were approximately $5.1 billion at December 31, 2019, and represented the proceeds received from the buyer or the guaranteed portion in these transactions where the buy-back or make-whole provisions have not yet expired. At December 31, 2019, the Company had reserved $68 million for potential losses related to the sale or syndication of tax-advantaged investments.

The maximum potential future payments do not include loan sales where the Company provides standard representation and warranties to the buyer against losses related to loan underwriting documentation defects that may have existed at the time of sale that generally are identified after the occurrence of a triggering event such as delinquency. For these types of loan sales, the maximum potential future payments is generally the unpaid principal balance of loans sold measured at the end of the current reporting period. Actual losses will be significantly less than the maximum exposure, as only a fraction of loans sold will have a representation and warranty breach, and any losses on repurchase would generally be mitigated by any collateral held against the loans.

The Company regularly sells loans to GSEs as part of its mortgage banking activities. The Company provides customary representations and warranties to GSEs in conjunction with these sales. These representations and warranties generally require the Company to repurchase assets if it is subsequently determined that a loan did not meet specified criteria, such as a documentation deficiency or rescission of mortgage insurance. If the Company is unable to cure or refute a repurchase request, the Company is generally obligated to repurchase the loan or otherwise reimburse the GSE for losses. At December 31, 2019, the Company had reserved $9 million for potential losses from representation and warranty obligations, compared with $10 million at December 31, 2018. The Company's reserve reflects management's best estimate of losses for representation and warranty obligations. The Company's repurchase reserve is modeled at the loan level, taking into consideration the individual credit quality and borrower activity that has transpired since origination. The model applies credit quality and economic risk factors to derive a probability of default and potential repurchase that are based on the Company's historical loss experience, and estimates loss severity based on expected collateral value. The Company also considers qualitative factors that may result in anticipated losses differing from historical loss trends.

As of December 31, 2019 and 2018, the Company had $10 million and $15 million, respectively, of unresolved representation and warranty claims from GSEs. The Company does not have a significant amount of unresolved claims from investors other than GSEs.

Merchant Processing The Company, through its subsidiaries, provides merchant processing services. Under the rules of credit card associations, a merchant processor retains a contingent liability for credit card transactions processed. This contingent liability arises in the event of a billing dispute between the merchant and a cardholder that is ultimately resolved in the cardholder's favor. In this situation, the transaction is "charged-back" to the merchant and the disputed amount is credited or otherwise refunded to the cardholder. If the Company is unable to collect this amount from the merchant, it bears the loss for the amount of the refund paid to the cardholder.

A cardholder, through its issuing bank, generally has until the later of up to four months after the date the transaction is processed or the receipt of the product or service to present a charge-back to the Company as the merchant processor. The absolute maximum potential liability is estimated to be the total volume of credit card transactions that meet the associations' requirements to be valid charge-back transactions at any given time. Management estimates that the maximum potential exposure for charge-backs would approximate the total amount of merchant transactions processed through the credit card associations for the last four months. For the last four months of 2019 this amount totaled approximately $108.9 billion. In most cases, this contingent liability is unlikely to arise, as most products and services are delivered when purchased and amounts are refunded when items are returned to merchants. However, where the product or service has been purchased but is not provided until a future date ("future delivery"), the potential for this contingent liability increases. To mitigate this risk, the Company may require the merchant to make an escrow deposit, place maximum volume limitations on future delivery transactions processed by the merchant at any point in time, or require various credit enhancements (including letters of credit and bank guarantees). Also, merchant processing contracts may include event triggers to provide the Company more financial and operational control in the event of financial deterioration of the merchant.

The Company currently processes card transactions in the United States, Canada, Europe and Mexico through wholly-owned subsidiaries and a network of other financial institutions. In the event a merchant was unable to fulfill product or services subject to future delivery, such as airline tickets, the Company could become financially liable for refunding the purchase price of such products or services purchased through the credit card associations under the charge-back provisions. Charge-back risk related to these merchants is evaluated in a manner similar to credit risk assessments and, as such, merchant processing contracts contain various provisions to protect the Company in the event of default. At December 31, 2019, the value of airline tickets purchased to be delivered at a future date through card transactions processed by the Company was $8.3 billion. The Company held collateral of $496 million in escrow deposits, letters of credit and indemnities from financial institutions, and liens on various assets. In addition to specific collateral or other credit enhancements, the Company maintains a liability for its implied guarantees associated with future delivery. At December 31, 2019, the liability was $44 million primarily related to these airline processing arrangements.

In the normal course of business, the Company has unresolved charge-backs. The Company assesses the likelihood of its potential liability based on the extent and nature of unresolved charge-backs and its historical loss experience. At

December 31, 2019, the Company held $89 million of merchant escrow deposits as collateral and had a recorded liability for potential losses of $17 million.

Tender Option Bond Program Guarantee As discussed in Note 7, the Company sponsors a municipal bond securities tender option bond program and consolidates the program's entities on its Consolidated Balance Sheet. The Company provides financial performance guarantees related to the program's entities. At December 31, 2019, the Company guaranteed $2.7 billion of borrowings of the program's entities, included on the Consolidated Balance Sheet in short-term borrowings. The Company also included on its Consolidated Balance Sheet the related $3.0 billion of available-for-sale investment securities serving as collateral for this arrangement.

Minimum Revenue Guarantees In the normal course of business, the Company may enter into revenue share agreements with third-party business partners who generate customer referrals or provide marketing or other services related to the generation of revenue. In certain of these agreements, the Company may guarantee that a minimum amount of revenue share payments will be made to the third party over a specified period of time. At December 31, 2019, the maximum potential future payments required to be made by the Company under these agreements were $3 million.

Other Guarantees and Commitments As of December 31, 2019, the Company sponsored, and owned 100 percent of the common equity of, USB Capital IX, a wholly-owned unconsolidated trust, formed for the purpose of issuing redeemable Income Trust Securities ("ITS") to third-party investors, originally investing the proceeds in junior subordinated debt securities ("Debentures") issued by the Company and entering into stock purchase contracts to purchase the Company's preferred stock in the future. As of December 31, 2019, all of the Debentures issued by the Company have either matured or been retired. Total assets of USB Capital IX were $682 million at December 31, 2019, consisting primarily of the Company's Series A Preferred Stock. The Company's obligations under the transaction documents, taken together, have the effect of providing a full and unconditional guarantee by the Company, on a junior subordinated basis, of the payment obligations of the trust to third-party investors totaling $681 million at December 31, 2019.

The Company has also made other financial performance guarantees and commitments primarily related to the operations of its subsidiaries. At December 31, 2019, the maximum potential future payments guaranteed or committed by the Company under these arrangements were approximately $781 million.

Litigation and Regulatory Matters

The Company is subject to various litigation and regulatory matters that arise in the ordinary course of its business. The Company establishes reserves for such matters when potential losses become probable and can be reasonably estimated. The Company believes the ultimate resolution of existing legal and regulatory matters will not have a material adverse effect on the financial condition, results of operations or cash flows of the Company. However, in light of the uncertainties inherent in these matters, it is possible that the ultimate resolution of one or more of these matters may have a material adverse effect on the Company's results from operations for a particular period, and future changes in circumstances or additional information could result in additional accruals or resolution in excess of established accruals, which could adversely affect the Company's results from operations, potentially materially.

Residential Mortgage-Backed Securities Litigation Starting in 2011, the Company and other large financial institutions have been sued in their capacity as trustee for residential mortgage–backed securities trusts. In the lawsuits brought against the Company, the investors allege that the Company's banking subsidiary, U.S. Bank National Association ("U.S. Bank"), as trustee caused them to incur substantial losses by failing to enforce loan repurchase obligations and failing to abide by appropriate standards of care after events of default allegedly occurred. The plaintiffs in these matters seek monetary damages in unspecified amounts and most also seek equitable relief.

Regulatory Matters The Company is continually subject to examinations, inquiries and investigations in areas of heightened regulatory scrutiny, such as compliance, risk management, third-party risk management and consumer protection. For example, the Company is currently subject to examinations, inquiries and investigations by government agencies and bank regulators concerning mortgage-related practices, including those related to lender-placed insurance, and notices and filings in bankruptcy cases. The Company is cooperating fully with all pending examinations, inquiries and investigations, any of which could lead to administrative or legal proceedings or settlements. Remedies in these proceedings or settlements may include fines, penalties, restitution or alterations in the Company's business practices (which may increase the Company's operating expenses and decrease its revenue).

In February 2018, the Company entered into a deferred prosecution agreement (the "DPA") with the United States Attorney's Office in Manhattan that resolved its investigation of the Company concerning a legacy banking relationship between U.S. Bank and payday lending businesses associated with a former customer and U.S. Bank's legacy Bank Secrecy Act/anti-money laundering compliance program. The DPA deferred prosecution for a period of two years, subject to the Company's compliance with its terms, which included ongoing efforts to implement and maintain an adequate Bank Secrecy Act/anti-money laundering compliance program. The United States Attorney's Office filed a motion to dismiss all charges under the DPA with the United States District Court for the Southern District of New York and that motion was granted by the court on February 13, 2020.

In related actions taken in February 2018, the Company and one of its affiliates entered into a regulatory settlement with the

Board of Governors of the Federal Reserve System (the “Federal Reserve”) and U.S. Bank entered into a regulatory settlement with the Financial Crimes Enforcement Network (“FinCEN”). In December 2019, the Federal Reserve terminated the order that it had entered into with the Company and its affiliate and thereby terminated the ongoing obligations under that settlement. Additionally, U.S. Bank’s ongoing obligations under its settlement agreement with FinCEN will expire on February 22, 2020, in accordance with the terms of that agreement.

Outlook Due to their complex nature, it can be years before litigation and regulatory matters are resolved. The Company may be unable to develop an estimate or range of loss where matters are in early stages, there are significant factual or legal issues to be resolved, damages are unspecified or uncertain, or there is uncertainty as to a litigation class being certified or the outcome of pending motions, appeals or proceedings. For those litigation and regulatory matters where the Company has information to develop an estimate or range of loss, the Company believes the upper end of the range of reasonably possible losses in aggregate, in excess of any reserves established for matters where a loss is considered probable, will not be material to its financial condition, results of operations or cash flows. The Company’s estimates are subject to significant judgment and uncertainties, and the matters underlying the estimates will change from time to time. Actual results may vary significantly from the current estimates.

NOTE 23 Business Segments

Within the Company, financial performance is measured by major lines of business based on the products and services provided to customers through its distribution channels. These operating segments are components of the Company about which financial information is prepared and is evaluated regularly by management in deciding how to allocate resources and assess performance. The Company has five reportable operating segments:

Corporate and Commercial Banking Corporate and Commercial Banking offers lending, equipment finance and small-ticket leasing, depository services, treasury management, capital markets services, international trade services and other financial services to middle market, large corporate, commercial real estate, financial institution, non-profit and public sector clients.

Consumer and Business Banking Consumer and Business Banking delivers products and services through banking offices, telephone servicing and sales, on-line services, direct mail, ATM processing and mobile devices. It encompasses community banking, metropolitan banking and indirect lending, as well as mortgage banking.

Wealth Management and Investment Services Wealth Management and Investment Services provides private banking, financial advisory services, investment management, retail brokerage services, insurance, trust, custody and fund servicing through four businesses: Wealth Management, Global Corporate Trust & Custody, U.S. Bancorp Asset Management and Fund Services.

Payment Services Payment Services includes consumer and business credit cards, stored-value cards, debit cards, corporate, government and purchasing card services, consumer lines of credit and merchant processing.

Treasury and Corporate Support Treasury and Corporate Support includes the Company's investment portfolios, funding, capital management, interest rate risk management, income taxes not allocated to business segments, including most investments in tax-advantaged projects, and the residual aggregate of those expenses associated with corporate activities that are managed on a consolidated basis.

Basis of Presentation Business segment results are derived from the Company's business unit profitability reporting systems by specifically attributing managed balance sheet assets, deposits and other liabilities and their related income or expense. The allowance for credit losses and related provision expense are allocated to the business segments based on the related loan balances managed. Goodwill and other intangible assets are assigned to the business segments based on the mix of business of an entity acquired by the Company. Within the Company, capital levels are evaluated and managed centrally; however, capital is allocated to the business segments to support evaluation of business performance. Business segments are allocated capital on a risk-adjusted basis considering economic and regulatory capital requirements. Generally, the determination of the amount of capital allocated to each business segment includes credit and operational capital allocations following a Basel III regulatory framework. Interest income and expense is determined based on the assets and liabilities managed by the business segment. Because funding and asset liability management is a central function, funds transfer-pricing methodologies are utilized to allocate a cost of funds used or credit for funds provided to all business segment assets and liabilities, respectively, using a matched funding concept. Also, each business unit is allocated the taxable-equivalent benefit of tax-exempt products. The residual effect on net interest income of asset/liability management activities is included in Treasury and Corporate Support. Noninterest income and expenses directly managed by each business segment, including fees, service charges, salaries and benefits, and other direct revenues and costs are accounted for within each segment's financial results in a manner similar to the consolidated financial statements. Occupancy costs are allocated based on utilization of facilities by the business segments. Generally, operating losses are charged to the business segment when the loss event is realized in a manner similar to a loan charge-off. Noninterest expenses incurred by centrally managed operations or business segments that directly support another business segment's operations are charged to the applicable business segment based on its utilization of those services, primarily measured by the volume of customer activities, number of employees or other relevant factors. These allocated expenses are reported as net shared services expense within noninterest expense. Certain activities that do not directly support the operations of the business segments or for which the business segments are not considered financially accountable in evaluating their performance are not charged to the business segments. The income or expenses associated with these corporate activities is reported within the Treasury and Corporate Support business segment. Income taxes are assessed to each business segment at a standard tax rate with the residual tax expense or benefit to arrive at the consolidated effective tax rate included in Treasury and Corporate Support.

Designations, assignments and allocations change from time to time as management systems are enhanced, methods of evaluating performance or product lines change or business segments are realigned to better respond to the Company's diverse customer base. During 2019, certain organization and methodology changes were made and, accordingly, 2018 results were restated and presented on a comparable basis.

Business segment results for the years ended December 31 were as follows:

Year Ended December 31 (Dollars in Millions)	Corporate and Commercial Banking 2019	Corporate and Commercial Banking 2018	Consumer and Business Banking 2019	Consumer and Business Banking 2018	Wealth Management and Investment Services 2019	Wealth Management and Investment Services 2018
Condensed Income Statement						
Net interest income (taxable-equivalent basis)	$ 2,871	$ 2,936	$ 6,261	$ 6,156	$ 1,157	$ 1,131
Noninterest income	867	843	2,387	2,316	1,799	1,748
Securities gains (losses), net	–	–	–	–	–	–
Total net revenue	3,738	3,779	8,648	8,472	2,956	2,879
Noninterest expense	1,607	1,591	5,285	5,232	1,752	1,778
Other intangibles	4	4	20	27	13	16
Total noninterest expense	1,611	1,595	5,305	5,259	1,765	1,794
Income before provision and income taxes	2,127	2,184	3,343	3,213	1,191	1,085
Provision for credit losses	78	65	310	232	(3)	(2)
Income before income taxes	2,049	2,119	3,033	2,981	1,194	1,087
Income taxes and taxable-equivalent adjustment	513	531	759	745	299	273
Net income	1,536	1,588	2,274	2,236	895	814
Net (income) loss attributable to noncontrolling interests	–	–	–	–	–	–
Net income attributable to U.S. Bancorp	$ 1,536	$ 1,588	$ 2,274	$ 2,236	$ 895	$ 814
Average Balance Sheet						
Loans	$ 96,608	$ 93,854	$144,595	$140,875	$ 10,080	$ 9,364
Other earning assets	3,751	3,072	3,989	3,501	282	184
Goodwill	1,647	1,647	3,475	3,604	1,617	1,618
Other intangible assets	8	11	2,617	2,953	49	63
Assets	106,716	102,801	158,884	155,267	13,330	12,437
Noninterest-bearing deposits	29,152	32,938	27,876	27,691	13,195	14,006
Interest-bearing deposits	72,780	69,913	129,289	124,934	62,031	56,000
Total deposits	101,932	102,851	157,165	152,625	75,226	70,006
Total U.S. Bancorp shareholders' equity	10,399	10,463	11,713	11,812	2,525	2,476

Year Ended December 31 (Dollars in Millions)	Payment Services 2019	Payment Services 2018	Treasury and Corporate Support 2019	Treasury and Corporate Support 2018	Consolidated Company 2019	Consolidated Company 2018
Condensed Income Statement						
Net interest income (taxable-equivalent basis)	$ 2,493	$ 2,443	$ 373	$ 369	$ 13,155	$ 13,035
Noninterest income	3,707(a)	3,599(a)	998	1,066	9,758(b)	9,572(b)
Securities gains (losses), net	–	–	73	30	73	30
Total net revenue	6,200	6,042	1,444	1,465	22,986	22,637
Noninterest expense	2,940	2,859	1,033	843	12,617	12,303
Other intangibles	131	114	–	–	168	161
Total noninterest expense	3,071	2,973	1,033	843	12,785	12,464
Income before provision and income taxes	3,129	3,069	411	622	10,201	10,173
Provision for credit losses	1,108	1,081	11	3	1,504	1,379
Income before income taxes	2,021	1,988	400	619	8,697	8,794
Income taxes and taxable-equivalent adjustment	505	497	(325)	(376)	1,751	1,670
Net income	1,516	1,491	725	995	6,946	7,124
Net (income) loss attributable to noncontrolling interests	–	–	(32)	(28)	(32)	(28)
Net income attributable to U.S. Bancorp	$ 1,516	$ 1,491	$ 693	$ 967	$ 6,914	$ 7,096
Average Balance Sheet						
Loans	$ 33,566	$ 31,102	$ 5,837	$ 5,506	$290,686	$280,701
Other earning assets	348	291	131,481	127,318	139,851	134,366
Goodwill	2,839	2,570	–	–	9,578	9,439
Other intangible assets	538	406	–	–	3,212	3,433
Assets	39,743	36,912	156,980	149,597	475,653	457,014
Noninterest-bearing deposits	1,205	1,099	2,435	2,462	73,863	78,196
Interest-bearing deposits	115	110	8,734	4,309	272,949	255,266
Total deposits	1,320	1,209	11,169	6,771	346,812	333,462
Total U.S. Bancorp shareholders' equity	7,084	6,629	20,902	18,383	52,623	49,763

(a) Presented net of related rewards and rebate costs and certain partner payments of $2.2 billion for 2019 and 2018.

(b) Includes revenue generated from certain contracts with customers of $7.3 billion and $7.4 billion for 2019 and 2018, respectively.

NOTE 24 U.S. Bancorp (Parent Company)

Condensed Balance Sheet

At December 31 (Dollars in Millions)	2019	2018
Assets		
Due from banks, principally interest-bearing	$11,583	$ 9,969
Available-for-sale securities	1,631	921
Investments in bank subsidiaries	48,518	47,549
Investments in nonbank subsidiaries	3,128	2,568
Advances to bank subsidiaries	3,850	3,800
Advances to nonbank subsidiaries	1,465	2,543
Other assets	1,211	813
Total assets	$71,386	$68,163
Liabilities and Shareholders' Equity		
Short-term funds borrowed	$ 8	$ –
Long-term debt	18,602	16,291
Other liabilities	923	843
Shareholders' equity	51,853	51,029
Total liabilities and shareholders' equity	$71,386	$68,163

Condensed Income Statement

Year Ended December 31 (Dollars in Millions)	2019	2018	2017
Income			
Dividends from bank subsidiaries	$7,100	$5,300	$4,800
Dividends from nonbank subsidiaries	6	6	5
Interest from subsidiaries	317	220	159
Other income	25	33	41
Total income	7,448	5,559	5,005
Expense			
Interest expense	551	471	402
Other expense	140	133	124
Total expense	691	604	526
Income before income taxes and equity in undistributed income of subsidiaries	6,757	4,955	4,479
Applicable income taxes	(92)	(91)	(176)
Income of parent company	6,849	5,046	4,655
Equity in undistributed income of subsidiaries	65	2,050	1,563
Net income attributable to U.S. Bancorp	$6,914	$7,096	$6,218

Condensed Statement of Cash Flows

Year Ended December 31 (Dollars in Millions)	2019	2018	2017
Operating Activities			
Net income attributable to U.S. Bancorp	$ 6,914	$ 7,096	$ 6,218
Adjustments to reconcile net income to net cash provided by operating activities			
Equity in undistributed income of subsidiaries	(65)	(2,050)	(1,563)
Other, net	231	359	(125)
Net cash provided by operating activities	7,080	5,405	4,530
Investing Activities			
Proceeds from sales and maturities of investment securities	291	39	100
Purchases of investment securities	(1,013)	(10)	(844)
Net (increase) decrease in short-term advances to subsidiaries	578	(488)	(790)
Long-term advances to subsidiaries	(2,600)	(500)	–
Principal collected on long-term advances to subsidiaries	2,550	–	500
Other, net	(341)	304	(12)
Net cash used in investing activities	(535)	(655)	(1,046)
Financing Activities			
Net increase (decrease) in short-term borrowings	8	(1)	(21)
Proceeds from issuance of long-term debt	3,743	2,100	3,920
Principal payments or redemption of long-term debt	(1,500)	(1,500)	(1,250)
Proceeds from issuance of preferred stock	–	565	993
Proceeds from issuance of common stock	88	86	159
Repurchase of preferred stock	–	–	(1,085)
Repurchase of common stock	(4,525)	(2,822)	(2,631)
Cash dividends paid on preferred stock	(302)	(274)	(284)
Cash dividends paid on common stock	(2,443)	(2,092)	(1,928)
Net cash used in financing activities	(4,931)	(3,938)	(2,127)
Change in cash and due from banks	1,614	812	1,357
Cash and due from banks at beginning of year	9,969	9,157	7,800
Cash and due from banks at end of year	$11,583	$ 9,969	$ 9,157

Transfer of funds (dividends, loans or advances) from bank subsidiaries to the Company is restricted. Federal law requires loans to the Company or its affiliates to be secured and generally limits loans to the Company or an individual affiliate to 10 percent of each bank's unimpaired capital and surplus. In the aggregate, loans to the Company and all affiliates cannot exceed 20 percent of each bank's unimpaired capital and surplus.

Dividend payments to the Company by its subsidiary bank are subject to regulatory review and statutory limitations and, in some instances, regulatory approval. In general, dividends by the Company's bank subsidiary to the parent company are limited by rules which compare dividends to net income for regulatorily-defined periods. Furthermore, dividends are restricted by minimum capital constraints for all national banks.

NOTE 25 Subsequent Events

The Company has evaluated the impact of events that have occurred subsequent to December 31, 2019 through the date the consolidated financial statements were filed with the United States Securities and Exchange Commission. Based on this evaluation, the Company has determined none of these events were required to be recognized or disclosed in the consolidated financial statements and related notes.

U.S. Bancorp
Consolidated Balance Sheet—Five Year Summary (Unaudited)

At December 31 (Dollars in Millions)	2019	2018	2017	2016	2015	% Change 2019 v 2018
Assets						
Cash and due from banks	$ 22,405	$ 21,453	$ 19,505	$ 15,705	$ 11,147	4.4%
Held-to-maturity securities	–	46,050	44,362	42,991	43,590	*
Available-for-sale securities	122,613	66,115	68,137	66,284	61,997	85.5
Loans held for sale	5,578	2,056	3,554	4,826	3,184	*
Loans	296,102	286,810	280,432	273,207	260,849	3.2
Less allowance for loan losses	(4,020)	(3,973)	(3,925)	(3,813)	(3,863)	(1.2)
Net loans	292,082	282,837	276,507	269,394	256,986	3.3
Other assets	52,748	48,863	49,975	46,764	44,949	8.0
Total assets	$495,426	$467,374	$462,040	$445,964	$421,853	6.0
Liabilities and Shareholders' Equity						
Deposits						
Noninterest-bearing	$ 75,590	$ 81,811	$ 87,557	$ 86,097	$ 83,766	(7.6)%
Interest-bearing	286,326	263,664	259,658	248,493	216,634	8.6
Total deposits	361,916	345,475	347,215	334,590	300,400	4.8
Short-term borrowings	23,723	14,139	16,651	13,963	27,877	67.8
Long-term debt	40,167	41,340	32,259	33,323	32,078	(2.8)
Other liabilities	17,137	14,763	16,249	16,155	14,681	16.1
Total liabilities	442,943	415,717	412,374	398,031	375,036	6.5
Total U.S. Bancorp shareholders' equity	51,853	51,029	49,040	47,298	46,131	1.6
Noncontrolling interests	630	628	626	635	686	.3
Total equity	52,483	51,657	49,666	47,933	46,817	1.6
Total liabilities and equity	$495,426	$467,374	$462,040	$445,964	$421,853	6.0

* *Not meaningful*

U.S. Bancorp
Consolidated Statement of Income — Five-Year Summary (Unaudited)

Year Ended December 31 (Dollars in Millions)	2019	2018	2017	2016	2015	% Change 2019 v 2018
Interest Income						
Loans	$14,099	$13,120	$11,788	$10,777	$10,034	7.5%
Loans held for sale	162	165	144	154	206	(1.8)
Investment securities	2,893	2,616	2,232	2,078	2,001	10.6
Other interest income	340	272	182	125	136	25.0
Total interest income	17,494	16,173	14,346	13,134	12,377	8.2
Interest Expense						
Deposits	2,855	1,869	1,041	622	457	52.8
Short-term borrowings	360	378	141	92	70	(4.8)
Long-term debt	1,227	1,007	784	754	699	21.8
Total interest expense	4,442	3,254	1,966	1,468	1,226	36.5
Net interest income	13,052	12,919	12,380	11,666	11,151	1.0
Provision for credit losses	1,504	1,379	1,390	1,324	1,132	9.1
Net interest income after provision for credit losses	11,548	11,540	10,990	10,342	10,019	.1
Noninterest Income						
Credit and debit card revenue	1,413	1,401	1,289	1,206	1,095	.9
Corporate payment products revenue	664	644	575	541	533	3.1
Merchant processing services	1,601	1,531	1,486	1,498	1,468	4.6
Trust and investment management fees	1,673	1,619	1,522	1,427	1,321	3.3
Deposit service charges	909	1,070	1,035	983	942	(15.0)
Treasury management fees	578	594	618	583	561	(2.7)
Commercial products revenue	934	895	954	971	918	4.4
Mortgage banking revenue	874	720	834	979	906	21.4
Investment products fees	186	188	173	169	197	(1.1)
Securities gains (losses), net	73	30	57	22	–	*
Other	926	910	774	911	877	1.8
Total noninterest income	9,831	9,602	9,317	9,290	8,818	2.4
Noninterest Expense						
Compensation	6,325	6,162	5,746	5,212	4,812	2.6
Employee benefits	1,286	1,231	1,134	1,008	970	4.5
Net occupancy and equipment	1,123	1,063	1,019	988	991	5.6
Professional services	454	407	419	502	423	11.5
Marketing and business development	426	429	542	435	360	(.7)
Technology and communications	1,095	978	903	877	816	12.0
Postage, printing and supplies	290	324	323	311	297	(10.5)
Other intangibles	168	161	175	179	174	4.3
Other	1,618	1,709	2,529	2,015	1,964	(5.3)
Total noninterest expense	12,785	12,464	12,790	11,527	10,807	2.6
Income before income taxes	8,594	8,678	7,517	8,105	8,030	(1.0)
Applicable income taxes	1,648	1,554	1,264	2,161	2,097	6.0
Net income	6,946	7,124	6,253	5,944	5,933	(2.5)
Net (income) loss attributable to noncontrolling interests	(32)	(28)	(35)	(56)	(54)	(14.3)
Net income attributable to U.S. Bancorp	$ 6,914	$ 7,096	$ 6,218	$ 5,888	$ 5,879	(2.6)
Net income applicable to U.S. Bancorp common shareholders	$ 6,583	$ 6,784	$ 5,913	$ 5,589	$ 5,608	(3.0)

* *Not meaningful*

U.S. Bancorp
Quarterly Consolidated Financial Data (Unaudited)

	2019				2018			
(Dollars in Millions, Except Per Share Data)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Interest Income								
Loans	$3,540	$3,582	$3,555	$3,422	$3,095	$3,197	$3,353	$3,475
Loans held for sale	25	34	48	55	33	39	36	57
Investment securities	705	745	734	709	613	653	661	689
Other interest income	81	90	100	69	50	59	73	90
Total interest income	4,351	4,451	4,437	4,255	3,791	3,948	4,123	4,311
Interest Expense								
Deposits	695	762	744	654	345	427	491	606
Short-term borrowings	93	91	97	79	75	86	104	113
Long-term debt	304	293	315	315	203	238	277	289
Total interest expense	1,092	1,146	1,156	1,048	623	751	872	1,008
Net interest income	3,259	3,305	3,281	3,207	3,168	3,197	3,251	3,303
Provision for credit losses	377	365	367	395	341	327	343	368
Net interest income after provision for credit losses	2,882	2,940	2,914	2,812	2,827	2,870	2,908	2,935
Noninterest Income								
Credit and debit card revenue	304	365	366	378	324	351	344	382
Corporate payment products revenue	162	167	177	158	154	158	169	163
Merchant processing services	378	404	410	409	363	387	392	389
Trust and investment management fees	399	415	421	438	398	401	411	409
Deposit service charges	217	227	234	231	261	273	283	253
Treasury management fees	146	153	139	140	150	155	146	143
Commercial products revenue	219	249	240	226	220	234	216	225
Mortgage banking revenue	169	189	272	244	184	191	174	171
Investment products fees	45	47	46	48	46	47	47	48
Securities gains (losses), net	5	17	25	26	5	10	10	5
Other	247	257	284	138	167	207	226	310
Total noninterest income	2,291	2,490	2,614	2,436	2,272	2,414	2,418	2,498
Noninterest Expense								
Compensation	1,559	1,574	1,595	1,597	1,523	1,542	1,529	1,568
Employee benefits	333	314	324	315	330	299	294	308
Net occupancy and equipment	277	281	279	286	265	262	270	266
Professional services	95	106	114	139	83	95	96	133
Marketing and business development	89	111	109	117	97	111	106	115
Technology and communications	257	270	277	291	235	242	247	254
Postage, printing and supplies	72	73	74	71	80	80	84	80
Other intangibles	40	42	42	44	39	40	41	41
Other	365	382	330	541	403	414	377	515
Total noninterest expense	3,087	3,153	3,144	3,401	3,055	3,085	3,044	3,280
Income before income taxes	2,086	2,277	2,384	1,847	2,044	2,199	2,282	2,153
Applicable income taxes	378	449	467	354	362	441	460	291
Net income	1,708	1,828	1,917	1,493	1,682	1,758	1,822	1,862
Net (income) loss attributable to noncontrolling interests	(9)	(7)	(9)	(7)	(7)	(8)	(7)	(6)
Net income attributable to U.S. Bancorp	$1,699	$1,821	$1,908	$1,486	$1,675	$1,750	$1,815	$1,856
Net income applicable to U.S. Bancorp common shareholders	$1,613	$1,741	$1,821	$1,408	$1,597	$1,678	$1,732	$1,777
Earnings per common share	$ 1.01	$ 1.09	$ 1.16	$ .91	$ .97	$ 1.02	$ 1.06	$ 1.10
Diluted earnings per common share	$ 1.00	$ 1.09	$ 1.15	$ .90	$ .96	$ 1.02	$ 1.06	$ 1.10

U.S. Bancorp
Supplemental Financial Data (Unaudited)

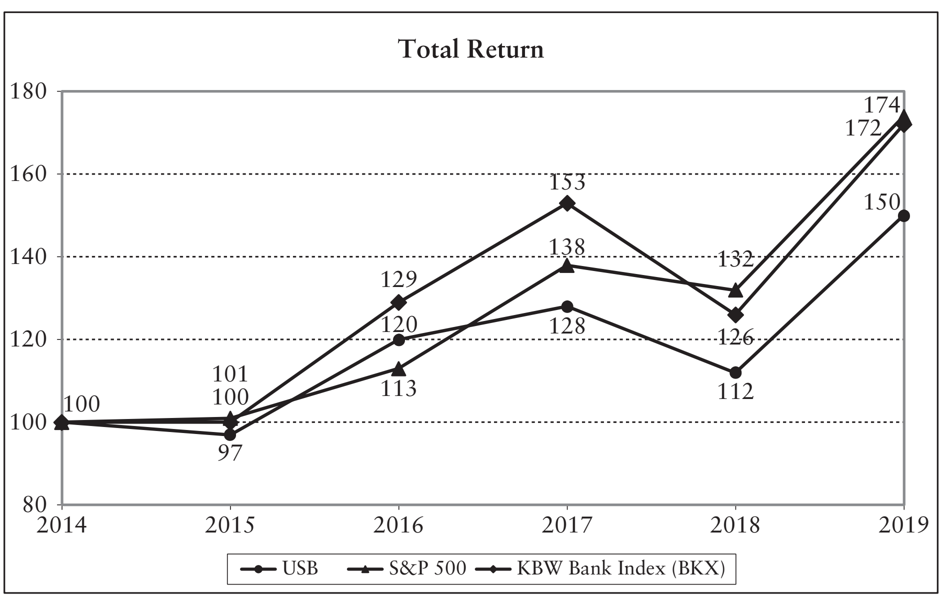
Earnings Per Common Share Summary	2019	2018	2017	2016	2015
Earnings per common share	$ 4.16	$ 4.15	$ 3.53	$ 3.25	$ 3.18
Diluted earnings per common share	4.16	4.14	3.51	3.24	3.16
Dividends declared per common share	1.58	1.34	1.16	1.07	1.01
Ratios					
Return on average assets	1.45%	1.55%	1.39%	1.36%	1.44%
Return on average common equity	14.1	15.4	13.8	13.4	14.0
Average total U.S. Bancorp shareholders' equity to average assets	11.1	10.9	10.8	10.9	11.0
Dividends per common share to net income per common share	38.0	32.3	32.9	32.9	31.8
Other Statistics (Dollars and Shares in Millions)					
Common shares outstanding[(a)]	1,534	1,608	1,656	1,697	1,745
Average common shares outstanding and common stock equivalents					
Earnings per common share	1,581	1,634	1,677	1,718	1,764
Diluted earnings per common share	1,583	1,638	1,683	1,724	1,772
Number of shareholders[(b)]	33,515	35,154	36,841	38,794	40,666
Common dividends declared	$ 2,493	$ 2,190	$ 1,950	$ 1,842	$ 1,785

(a) Defined as total common shares less common stock held in treasury at December 31.
(b) Based on number of common stock shareholders of record at December 31.

The common stock of U.S. Bancorp is traded on the New York Stock Exchange, under the ticker symbol "USB." At January 31, 2020, there were 33,410 holders of record of the Company's common stock.

Stock Performance Chart

The following chart compares the cumulative total shareholder return on the Company's common stock during the five years ended December 31, 2019, with the cumulative total return on the Standard & Poor's 500 Index and the KBW Bank Index. The comparison assumes $100 was invested on December 31, 2014, in the Company's common stock and in each of the foregoing indices and assumes the reinvestment of all dividends. The comparisons in the graph are based upon historical data and are not indicative of, nor intended to forecast, future performance of the Company's common stock.



U.S. Bancorp
Consolidated Daily Average Balance Sheet and Related Yields and Rates (a) (Unaudited)

	2019			2018		
Year Ended December 31 (Dollars in Millions)	Average Balances	Interest	Yields and Rates	Average Balances	Interest	Yields and Rates
Assets						
Investment securities	$117,150	$ 2,950	2.52%	$113,940	$ 2,674	2.35%
Loans held for sale	3,769	162	4.30	3,230	165	5.12
Loans[b]						
Commercial	103,198	4,229	4.10	98,854	3,795	3.84
Commercial real estate	39,386	1,919	4.87	39,977	1,881	4.71
Residential mortgages	67,747	2,644	3.90	61,893	2,366	3.82
Credit card	23,309	2,680	11.50	21,672	2,545	11.74
Other retail	57,046	2,682	4.70	56,136	2,466	4.39
Covered loans	—	—	—	2,169	134	6.17
Total loans	290,686	14,154	4.87	280,701	13,187	4.70
Other earning assets	18,932	341	1.80	17,196	272	1.58
Total earning assets	430,537	17,607	4.09	415,067	16,298	3.93
Allowance for loan losses	(4,007)			(3,939)		
Unrealized gain (loss) on investment securities	(117)			(1,650)		
Other assets	49,240			47,536		
Total assets	$475,653			$457,014		
Liabilities and Shareholders' Equity						
Noninterest-bearing deposits	$ 73,863			$ 78,196		
Interest-bearing deposits						
Interest checking	72,553	227	.31	70,154	150	.21
Money market savings	109,849	1,637	1.49	101,732	1,078	1.06
Savings accounts	46,130	111	.24	44,713	56	.13
Time deposits	44,417	880	1.98	38,667	585	1.51
Total interest-bearing deposits	272,949	2,855	1.05	255,266	1,869	.73
Short-term borrowings	18,137	370	2.04	21,790	387	1.78
Long-term debt	41,572	1,227	2.95	37,450	1,007	2.69
Total interest-bearing liabilities	332,658	4,452	1.34	314,506	3,263	1.04
Other liabilities	15,880		.	13,921		
Shareholders' equity						
Preferred equity	5,984			5,636		
Common equity	46,639			44,127		
Total U.S. Bancorp shareholders' equity	52,623			49,763		
Noncontrolling interests	629			628		
Total equity	53,252			50,391		
Total liabilities and equity	$475,653			$457,014		
Net interest income		$13,155			$13,035	
Gross interest margin			2.75%			2.89%
Gross interest margin without taxable-equivalent increments			2.73%			2.86%
Percent of Earning Assets						
Interest income			4.09%			3.93%
Interest expense			1.03			.79
Net interest margin			3.06%			3.14%
Net interest margin without taxable-equivalent increments			3.04%			3.11%

* *Not meaningful*

(a) *Interest and rates are presented on a fully taxable-equivalent basis based on a federal income tax rate of 21 percent for 2019 and 2018 and 35 percent for 2017, 2016 and 2015.*

(b) *Interest income and rates on loans include loan fees. Nonaccrual loans are included in average loan balances.*

2017			2016			2015			2019 v 2018
Average Balances	Interest	Yields and Rates	Average Balances	Interest	Yields and Rates	Average Balances	Interest	Yields and Rates	% Change Average Balances
$111,820	$ 2,328	2.08%	$107,922	$ 2,181	2.02%	$103,161	$ 2,120	2.06%	2.8%
3,574	144	4.04	4,181	154	3.70	5,784	206	3.56	16.7
95,904	3,131	3.26	92,043	2,596	2.82	84,083	2,281	2.71	4.4
42,077	1,788	4.25	43,040	1,698	3.94	42,415	1,650	3.89	(1.5)
58,784	2,180	3.71	55,682	2,070	3.72	51,840	1,966	3.79	9.5
20,906	2,358	11.28	20,490	2,204	10.76	18,057	1,944	10.77	7.6
55,416	2,272	4.10	52,330	2,114	4.04	49,079	2,020	4.12	1.6
3,450	175	5.07	4,226	200	4.73	4,985	271	5.42	*
276,537	11,904	4.30	267,811	10,882	4.06	250,459	10,132	4.05	3.6
14,490	183	1.26	9,963	125	1.26	8,041	136	1.69	10.1
406,421	14,559	3.58	389,877	13,342	3.42	367,445	12,594	3.43	3.7
(3,862)			(3,837)			(4,035)			(1.7)
(348)			593			710			92.9
46,371			46,680			44,745			3.6
$448,582			$433,313			$408,865			4.1
$ 81,933			$ 81,176			$ 79,203			(5.5)%
67,953	84	.12	61,726	42	.07	55,974	30	.05	3.4
106,476	644	.61	96,518	349	.36	79,266	192	.24	8.0
43,393	32	.07	40,382	34	.09	37,150	40	.11	3.2
33,759	281	.83	33,008	197	.60	35,558	195	.55	14.9
251,581	1,041	.41	231,634	622	.27	207,948	457	.22	6.9
15,022	149	1.00	19,906	97	.49	27,960	74	.27	(16.8)
35,601	784	2.20	36,220	754	2.08	33,566	699	2.08	11.0
302,204	1,974	.65	287,760	1,473	.51	269,474	1,230	.46	5.8
15,348			16,389			14,686			14.1
5,490			5,501			4,836			6.2
42,976			41,838			39,977			5.7
48,466			47,339			44,813			5.7
631			649			689			.2
49,097			47,988			45,502			5.7
$448,582			$433,313			$408,865			4.1
	$12,585			$11,869			$11,364		
		2.93%			2.91%			2.97%	
		2.88%			2.86%			2.91%	
		3.58%			3.42%			3.43%	
		.48			.38			.34	
		3.10%			3.04%			3.09%	
		3.05%			2.99%			3.03%	

Company Information

General Business Description U.S. Bancorp is a multi-state financial services holding company headquartered in Minneapolis, Minnesota. U.S. Bancorp was incorporated in Delaware in 1929 and operates as a financial holding company and a bank holding company under the Bank Holding Company Act of 1956. The Company provides a full range of financial services, including lending and depository services, cash management, capital markets, and trust and investment management services. It also engages in credit card services, merchant and ATM processing, mortgage banking, insurance, brokerage and leasing.

U.S. Bancorp's banking subsidiary, U.S. Bank National Association, is engaged in the general banking business, principally in domestic markets. U.S. Bank National Association, with $374 billion in deposits at December 31, 2019, provides a wide range of products and services to individuals, businesses, institutional organizations, governmental entities and other financial institutions. Commercial and consumer lending services are principally offered to customers within the Company's domestic markets, to domestic customers with foreign operations and to large national customers operating in specific industries targeted by the Company. Lending services include traditional credit products as well as credit card services, lease financing and import/export trade, asset-backed lending, agricultural finance and other products. Depository services include checking accounts, savings accounts and time certificate contracts. Ancillary services such as capital markets, treasury management and receivable lock-box collection are provided to corporate customers. U.S. Bancorp's bank and trust subsidiaries provide a full range of asset management and fiduciary services for individuals, estates, foundations, business corporations and charitable organizations.

Other U.S. Bancorp non-banking subsidiaries offer investment and insurance products to the Company's customers principally within its domestic markets, and fund administration services to a broad range of mutual and other funds.

Banking and investment services are provided through a network of 2,795 banking offices principally operating in the Midwest and West regions of the United States, through on-line services and over mobile devices. The Company operates a network of 4,459 ATMs and provides 24-hour, seven day a week telephone customer service. Mortgage banking services are provided through banking offices and loan production offices throughout the Company's domestic markets. Lending products may be originated through banking offices, indirect correspondents, brokers or other lending sources. The Company is also one of the largest providers of corporate and purchasing card services and corporate trust services in the United States. A wholly-owned subsidiary, Elavon, Inc. ("Elavon"), provides domestic merchant processing services directly to merchants and through a network of banking affiliations. Wholly-owned subsidiaries, and affiliates of Elavon, provide similar merchant services in Canada, Mexico and segments of Europe. The Company also provides corporate trust and fund administration services in Europe. These foreign operations are not significant to the Company.

On a full-time equivalent basis, as of December 31, 2019, U.S. Bancorp employed 69,651 people.

Risk Factors An investment in the Company involves risk, including the possibility that the value of the investment could fall substantially and that dividends or other distributions on the investment could be reduced or eliminated. Below are risk factors that could adversely affect the Company's financial results and condition and the value of, and return on, an investment in the Company.

Economic and Market Conditions Risk

Deterioration in business and economic conditions could adversely affect the Company's lending business and the value of loans and debt securities it holds The Company's business activities and earnings are affected by general business conditions in the United States and abroad, including factors such as the level and volatility of short-term and long-term interest rates, inflation, home prices, unemployment and under-employment levels, bankruptcies, household income, consumer spending, fluctuations in both debt and equity capital markets, liquidity of the global financial markets, the availability and cost of capital and credit, investor sentiment and confidence in the financial markets, and the strength of the domestic and global economies in which the Company operates. Changes in any of these conditions can adversely affect the Company's consumer and commercial businesses and securities portfolios, its level of charge-offs and provision for credit losses, its capital levels and liquidity, and its results of operations.

Given the high percentage of the Company's assets represented directly or indirectly by loans, and the importance of lending to its overall business, weak economic conditions are likely to have a negative impact on the Company's business and results of operations. A deterioration in economic conditions could adversely impact new loan origination activity and existing loan utilization rates as well as delinquencies, defaults and the ability of customers to meet obligations under the loans. The value to the Company of other assets such as investment securities, most of which are debt securities or other financial instruments supported by loans, similarly would be negatively impacted by widespread decreases in credit quality resulting from a weakening of the economy.

Any deterioration in global economic conditions could damage the domestic economy or negatively impact the Company's borrowers or other counterparties that have direct or indirect exposure to these regions. Such global disruptions can undermine investor confidence, cause a contraction of available credit, or create market volatility, any of which could have significant adverse effects on the Company's businesses, results of operations, financial condition and liquidity, even if the Company's direct exposure to the affected region is limited. A withdrawal of the United Kingdom from the European Union, as well as other global political trends toward nationalism and isolationism, could increase the probability of a deterioration in global economic conditions.

Any further changes to economic policies could erode consumer confidence levels, cause adverse changes in payment patterns, lead to increases in delinquencies and default rates in certain industries or regions, or have other negative market or customer impacts. Such developments could increase the Company's loan charge-offs and provision for credit losses. Any future economic deterioration that affects household or corporate incomes could also result in reduced demand for credit or fee-based products and services.

Changes in United States trade policies, including the imposition of tariffs and retaliatory tariffs, may adversely impact the Company's business, financial condition and results of operations There has been increased discussion and activity regarding potential and proposed changes to United States trade policies, legislation, treaties and tariffs, including trade policies and tariffs affecting China, the European Union, Canada and Mexico and retaliatory tariffs by such countries. Tariffs and retaliatory tariffs have been imposed, and additional tariffs and retaliation tariffs have been proposed. Such tariffs, retaliatory tariffs or other trade restrictions on products and materials that the Company's customers import or export could cause the prices of its customers' products to increase, which could reduce demand for such products, or reduce the Company's customers' margins, and adversely impact their revenues, financial results and ability to service debt. This in turn, could adversely affect the Company's financial condition and results of operations. In addition, to the extent changes in the political environment have a negative impact on the Company or on the markets in which it does business, or otherwise result in sustained deterioration in economic conditions, results of operations and financial condition could be materially and adversely impacted in the future. Additionally, if prices of consumer goods increase materially as a result of tariffs, the ability of individual households to service debt may be negatively impacted. In total, these outcomes could adversely affect the Company's financial condition and results of operations. It remains unclear what the United States government or foreign governments will do with respect to tariffs already imposed, additional tariffs that may be imposed, or international trade agreements and policies, and this uncertainty further complicates business planning for the Company's customers in certain industries.

Changes in interest rates could reduce the Company's net interest income The Company's earnings are dependent to a large degree on net interest income, which is the difference between interest income from loans and investments and interest expense on deposits and borrowings. Net interest income is significantly affected by market rates of interest, which in turn are affected by prevailing economic conditions, by the fiscal and monetary policies of the federal government and by the policies of various regulatory agencies. Like all financial institutions, the Company's financial position is affected by fluctuations in interest rates. Volatility in interest rates can also result in the flow of funds away from financial institutions into direct investments. Direct investments, such as United States government and corporate securities and other investment vehicles (including mutual funds), generally pay higher rates of return than financial institutions, because of the absence of federal insurance premiums and reserve requirements. Some foreign central banks have moved to a negative interest rate environment, which has exerted downward pressure on the profitability of banks in those regions. The Company's financial condition could be damaged if this interest rate trend extends to the United States.

Changes in, or the discontinuance of, the London Interbank Offered Rate ("LIBOR") as an interest rate benchmark could adversely affect the Company's business, financial condition and results of operations In July 2017, the United Kingdom's Financial Conduct Authority, which regulates LIBOR, announced that it intends to stop compelling banks to submit rates for the calculation of LIBOR after 2021. It is likely that banks will cease submitting LIBOR rates after 2021 and possibly sooner. It is not possible to know whether LIBOR will continue to be viewed as an acceptable market benchmark, what rate or rates may become accepted alternatives to LIBOR, or what the effect of any such changes in views or alternatives may have on the financial markets for LIBOR-linked financial instruments.

In April 2018, the Federal Reserve Bank of New York commenced publication of the Secured Overnight Financing Rate ("SOFR"), which has been recommended as an alternative to United States dollar LIBOR by the Alternative Reference Rates Committee, a group of market and official sector participants. However, uncertainty remains as to the transition process and acceptance of SOFR as the primary alternative to LIBOR.

The market transition from LIBOR to SOFR or a different alternative reference rate is complex and could have a range of adverse impacts on the Company. In particular, any such transition or reform could, among other things, (i) adversely impact the value of, return on and trading for the Company's financial assets or liabilities that are linked to LIBOR, including its securities, loans and derivatives; (ii) require renegotiations of outstanding financial assets and liabilities; (iii) result in additional inquiries or other actions from regulators in respect of the Company's preparation and readiness for the LIBOR transition; (iv) increase the risk of disputes or litigation and/or increase expenses related to the transition, including with respect to any actions resulting from the Company's interpretation and execution of its roles and responsibilities in corporate trust transactions; (v) adversely impact the Company's reputation as it works with customers to transition loans and financial instruments from LIBOR; (vi) require successful system and analytics development and operationalization to transition the Company's systems, loan portfolio and risk management processes away from LIBOR, which will require the Company to rely on the readiness of third-party vendors; and (vii) cause significant disruption to financial markets that are relevant to the Company's business segments. In addition, there can be no assurance that actions taken by the Company and third parties to address these risks and otherwise prepare for the transition from LIBOR to alternative interest rate benchmarks will be successful.

Operations and Business Risk

A breach in the security of the Company's systems, or the systems of certain third parties, could disrupt the Company's businesses, result in the disclosure of confidential information, damage its reputation and create significant financial and legal exposure The Company experiences numerous attacks on its computer systems, software, networks and other technology assets daily, and the number of attacks is increasing. Although the Company devotes significant resources to maintain and regularly upgrade its systems and processes that are designed to protect the security of the Company's computer systems, software, networks and other technology assets, as well as its intellectual property, and to protect the confidentiality, integrity and availability of information belonging to the Company and its customers, the Company's security measures may not be effective. Adversaries continue to develop more sophisticated cyber attacks that could impact the Company. Many financial services institutions, retailers and other companies engaged in data processing have reported breaches in the security of their websites or other systems, some of which have involved sophisticated and targeted attacks intended to obtain unauthorized access to confidential information, destroy data, disable or degrade service, or sabotage systems, often through the introduction of computer viruses or malware, cyber attacks and other means.

Attacks on financial or other institutions important to the overall functioning of the financial system could also adversely affect, directly or indirectly, aspects of the Company's businesses. The increasing consolidation, interdependence and complexity of financial entities and technology systems means that a technology failure, cyber attack, or other information or security breach that significantly degrades, deletes or compromises the systems or data of one or more financial entities could have a material impact on counterparties or other market participants, including the Company. This consolidation, interconnectivity and complexity increases the risk of operational failure, on both an entity-specific and an industry-wide basis.

Third parties that facilitate the Company's business activities, including exchanges, clearinghouses, payment and ATM networks, financial intermediaries or vendors that provide services or technology solutions for the Company's operations, could also be sources of operational and security risks to the Company, including with respect to breakdowns or failures of their systems, misconduct by their employees or cyber attacks that could affect their ability to deliver a product or service to the Company or result in lost or compromised information of the Company or its customers. The Company's ability to implement back-up systems or other safeguards with respect to third-party systems is limited. Furthermore, an attack on or failure of a third-party system may not be revealed to the Company in a timely manner, which could compromise the Company's ability to respond effectively. Some of these third parties may engage vendors of their own as they provide services or technology solutions for the Company's operations, which introduces the risk that these "fourth parties" could be the source of operational and security failures.

In addition, during the past several years a number of retailers and hospitality companies have disclosed substantial cyber security breaches affecting debit and credit card accounts of their customers, some of whom were the Company's cardholders. When that happens, holders of Company cards who have made purchases from the business whose systems were breached might experience fraud on their card accounts. The Company might suffer losses associated with reimbursing its customers for such fraudulent transactions on the customers' card accounts, as well as for other costs related to data security compromise events, such as replacing cards associated with compromised card accounts. These attacks involving Company cards are likely to continue and could, individually or in the aggregate, have a material adverse effect on the Company's financial condition or results of operations.

It is possible that the Company may not be able to anticipate or to implement effective preventive measures against all security breaches of these types, because the techniques used change frequently, generally increase in sophistication, often are not recognized until launched, sometimes go undetected even when successful, and originate from a wide variety of sources, including organized crime, hackers, terrorists, activists, hostile foreign governments and other external parties. Those parties may also attempt to fraudulently induce employees, customers or other users of the Company's systems to disclose sensitive information to gain access to the Company's data or that of its customers or clients, such as through "phishing" schemes. Other types of attacks may include computer viruses, malicious or destructive code, denial-of-service attacks, ransomware or ransom demands to not expose security vulnerabilities in the Company's systems or the systems of third parties. These risks may increase in the future as the Company continues to increase its mobile and internet-based product offerings and expands its internal usage of web-based products and applications. In addition, the Company's customers often use their own devices, such as computers, smart phones and tablet computers, to make payments and manage their accounts. The Company has limited ability to assure the safety and security of its customers' transactions with the Company to the extent they are using their own devices, which could be subject to similar threats.

In the event that the Company's security systems are penetrated or circumvented, or an authorized user intentionally or unintentionally removes, loses or destroys operations data, serious negative consequences for the Company can follow, including significant disruption of the Company's operations, misappropriation of confidential information of the Company or that of its customers, or damage to computers or systems of the

Company or those of its customers and counterparties. These consequences could result in violations of applicable privacy and other laws; financial loss to the Company or to its customers; loss of confidence in the Company's security measures; customer dissatisfaction; significant litigation exposure; regulatory fines, penalties or intervention; reimbursement or other compensatory costs; additional compliance costs; and harm to the Company's reputation, all of which could adversely affect the Company.

The Company relies on its employees, systems and third parties to conduct its business, and certain failures by systems or misconduct by employees or third parties could adversely affect its operations The Company operates in many different businesses in diverse markets and relies on the ability of its employees and systems to process a high number of transactions. The Company's business, financial, accounting, data processing, and other operating systems and facilities may stop operating properly or become disabled or damaged as a result of a number of factors, including events that are out of its control. In addition to the risks posed by information security breaches, as discussed above, such systems could be compromised because of spikes in transaction volume, electrical or telecommunications outages, degradation or loss of internet or website availability, natural disasters, political or social unrest, and terrorist acts. The Company's business operations may be adversely affected by significant disruption to the operating systems that support its businesses and customers. If backup systems are used during outages, they might not process data as quickly as do the primary systems, resulting in the potential of some data not being backed up.

The Company could also incur losses resulting from the risk of fraud by employees or persons outside of the Company, unauthorized access to its computer systems, the execution of unauthorized transactions by employees, errors relating to transaction processing and technology, breaches of the internal control system and compliance requirements, and business continuation and disaster recovery. This risk of loss also includes the potential legal actions, fines or civil money penalties that could arise as a result of an operational deficiency or as a result of noncompliance with applicable regulatory standards, adverse business decisions or their implementation, and customer attrition due to potential negative publicity.

Third parties provide key components of the Company's business infrastructure, such as internet connections, network access and mutual fund distribution. While the Company has selected these third parties carefully, it does not control their actions. Any problems caused by third-party service providers, including as a result of not providing the Company their services for any reason or performing their services poorly, could adversely affect the Company's ability to deliver products and services to the Company's customers and otherwise to conduct its business. Replacing third-party service providers could also entail significant delay and expense. In addition, failure of third-party service providers to handle current or higher volumes of use could adversely affect the Company's ability to deliver products and services to clients and otherwise to conduct business. Technological or financial difficulties of a third-party service provider could adversely affect the Company's businesses to the extent those difficulties result in the interruption or discontinuation of services provided by that party.

Operational risks for large institutions such as the Company have generally increased in recent years, in part because of the proliferation of new technologies, the use of internet services and telecommunications technologies to conduct financial transactions, the increased number and complexity of transactions being processed, and the increased sophistication and activities of organized crime, hackers, terrorists, activists, and other external parties. In the event of a breakdown in the internal control system, improper operation of systems or improper employee or third-party actions, the Company could suffer financial loss, face legal or regulatory action and suffer damage to its reputation.

The Company could face significant legal and reputational harm if it fails to safeguard personal information The Company is subject to complex and evolving laws and regulations, both inside and outside of the United States, governing the privacy and protection of personal information of individuals. The protected individuals can include the Company's customers, its employees, and the employees of the Company's suppliers, counterparties and other third parties. Ensuring that the Company's collection, use, transfer and storage of personal information comply with applicable laws and regulations in relevant jurisdictions can increase operating costs, impact the development of new products or services, and reduce operational efficiency. Any mishandling or misuse of the personal information of customers, employees or others by the Company or a third party affiliated with the Company could expose the Company to litigation or regulatory fines, penalties or other sanctions.

Additional risks could arise if the Company or third parties do not provide adequate disclosure or transparency to the Company's customers about the personal information collected from them and its use; any failure to receive, document, and honor the privacy preferences expressed by the Company's customers; any failure to protect personal information from unauthorized disclosure; or any failure to maintain proper training on privacy practices for all employees or third parties who have access to personal data. Concerns regarding the effectiveness of the Company's measures to safeguard personal information and abide by privacy preferences, or even the perception that those measures are inadequate, could cause the Company to lose existing or potential customers and thereby reduce its revenues. In addition, any failure or perceived failure by the Company to comply with applicable privacy or data protection laws and regulations could result in requirements to modify or cease certain operations or practices, significant liabilities or regulatory fines, penalties, or other sanctions. Refer to "Supervision and Regulation" in the Company's Annual Report on Form 10-K for additional information regarding data privacy laws and regulations. Any of these outcomes could damage the

Company's reputation and otherwise adversely affect its business.

The Company could lose market share and experience increased costs if it does not effectively develop and implement new technology The financial services industry is continually undergoing rapid technological change with frequent introductions of new technology-driven products and services, including innovative ways that customers can make payments or manage their accounts, such as through the use of mobile payments, digital wallets or digital currencies. The Company's continued success depends, in part, upon its ability to address customer needs by using technology to provide products and services that customers want to adopt, and create additional efficiencies in the Company's operations. When launching a new product or service or introducing a new platform for the delivery of products and services, the Company might not identify or fully appreciate new operational risks arising from those innovations or might fail to implement adequate controls to mitigate those risks. Developing and deploying new technology-driven products and services can also involve costs that the Company may not recover and divert resources away from other product development efforts. The Company may not be able to effectively develop and implement profitable new technology-driven products and services or be successful in marketing these products and services to its customers. Failure to successfully keep pace with technological change affecting the financial services industry could harm the Company's competitive position and negatively affect its revenue and profit.

Damage to the Company's reputation could adversely impact its business and financial results Reputation risk, or the risk to the Company's business, earnings and capital from negative public opinion, is inherent in the Company's business. Negative public opinion about the financial services industry generally or the Company specifically could adversely affect the Company's ability to keep and attract customers, investors, and employees and could expose the Company to litigation and regulatory action. Negative public opinion can result from the Company's actual or alleged conduct in any number of activities, including lending practices, cybersecurity breaches, failures to safeguard personal information, discriminating or harassing behavior of employees toward other employees or customers, mortgage servicing and foreclosure practices, compensation practices, sales practices, environmental, social, and governance practices and disclosures, regulatory compliance, mergers and acquisitions, and actions taken by government regulators and community organizations in response to that conduct. In addition, social and environmental activists are increasingly targeting financial services firms with public criticism for their relationships with clients engaged in industries they perceive to be harmful to communities or the environment. Such criticism directed at the Company could generate dissatisfaction among its customers, investors, and employees. Although the Company takes steps to minimize reputation risk in dealing with customers and other constituencies, the Company, as a large diversified financial services company with a high industry profile, is inherently exposed to this risk.

The Company's business and financial performance could be adversely affected, directly or indirectly, by natural disasters, climate change, pandemics, terrorist activities or international hostilities Neither the occurrence nor the potential impact of natural disasters, climate change, pandemics, terrorist activities or international hostilities can be predicted. However, these occurrences could impact the Company directly (for example, by interrupting the Company's systems, which could prevent the Company from obtaining deposits, originating loans and processing and controlling its flow of business; causing significant damage to the Company's facilities; or otherwise preventing the Company from conducting business in the ordinary course), or indirectly as a result of their impact on the Company's borrowers, depositors, other customers, vendors or other counterparties (for example, by damaging properties pledged as collateral for the Company's loans or impairing the ability of certain borrowers to repay their loans). The Company could also suffer adverse consequences to the extent that natural disasters, climate change, pandemics, terrorist activities or international hostilities affect the financial markets or the economy in general or in any particular region. These types of impacts could lead, for example, to an increase in delinquencies, bankruptcies or defaults that could result in the Company experiencing higher levels of nonperforming assets, net charge-offs and provisions for credit losses.

The Company's ability to mitigate the adverse consequences of these occurrences is in part dependent on the quality of the Company's resiliency planning, and the Company's ability, if any, to anticipate the nature of any such event that occurs. The adverse impact of natural disasters, climate change, pandemics, terrorist activities or international hostilities also could be increased to the extent that there is a lack of preparedness on the part of national or regional emergency responders or on the part of other organizations and businesses that the Company transacts with, particularly those that it depends upon, but has no control over. Additionally, the force and frequency of natural disasters are increasing as the climate changes.

The Company's framework for managing risks may not be effective in mitigating risk and loss to the Company The Company's risk management framework seeks to mitigate risk and loss. The Company has established processes and procedures intended to identify, measure, monitor, report, and analyze the types of risk to which it is subject, including liquidity risk, credit risk, market risk, interest rate risk, compliance risk, strategic risk, reputation risk, and operational risk related to its employees, systems and vendors, among others. However, as with any risk management framework, there are inherent limitations to the Company's risk management strategies as there may exist, or develop in the future, risks that it has not appropriately anticipated or identified. In addition, the Company relies on quantitative models to measure certain risks and to estimate certain financial values, and these models could fail to predict future events or exposures accurately. The Company must also develop and maintain a culture of risk management among its employees, as well as manage risks associated with third parties, and could fail to do so effectively. If the Company's risk management framework proves ineffective, the Company could incur litigation and negative regulatory consequences, and suffer unexpected losses that could affect its financial condition or results of operations.

Regulatory and Legal Risk

The Company is subject to extensive and evolving government regulation and supervision, which can increase the cost of doing business, limit the Company's ability to make investments and generate revenue, and lead to costly enforcement actions Banking regulations are primarily intended to protect depositors' funds, the federal Deposit Insurance Fund, and the United States financial system as a whole, and not the Company's debt holders or shareholders. These regulations, and the Company's inability to act in certain instances without receiving prior regulatory approval, affect the Company's lending practices, capital structure, investment practices, dividend policy, ability to repurchase common stock, and ability to pursue strategic acquisitions, among other activities.

Both the scope of the laws and regulations and the intensity of the supervision to which the Company is subject have increased in response to the financial crisis of 2008 and 2009, as well as other factors such as technological and market changes. Regulatory enforcement and fines have also increased across the banking and financial services sector. Although the regulatory environment of the post financial crisis framework has been, and is being, rebalanced in some aspects, the Company expects that its business will remain subject to extensive regulation and supervision and that the level of scrutiny and the enforcement environment may fluctuate over time, based on numerous factors, including changes in the United States presidential administration or one or both houses of Congress and public sentiment regarding financial institutions (which can be influenced by scandals and other incidents that involve participants in the industry). In addition, although an overall reduction in the regulation of the financial services sector could result in some operational and cost benefits, any new regulations or modifications to existing regulations and supervisory expectations have and may in the future necessitate changes to the Company's existing regulatory compliance and risk management infrastructure and could result in increased competition.

Changes to statutes, regulations or regulatory policies, or their interpretation or implementation, and/or regulatory practices, requirements or expectations, could affect the Company in substantial and unpredictable ways. For example, the Guidelines for Heightened Standards of the Office of the Comptroller of the Currency and the Enhanced Prudential Supervision Rules of the Board of Governors of the Federal Reserve System (the "Federal Reserve") have required and will continue to require significant oversight by the Company's Board of Directors and focus by the Company's management on governance and risk-management activities. Moreover, general regulatory practices, such as longer time frames to obtain regulatory approvals for acquisitions and other activities (and the resultant impact on businesses the Company may seek to acquire), could affect the attractiveness of certain acquisitions or the introduction of new products or services, or otherwise affect the Company's ability to make acquisitions or introduce new products and services.

The financial services industry continues to face scrutiny from bank supervisors in the examination process and stringent enforcement of regulations on both the federal and state levels, particularly with respect to mortgage-related practices, student lending practices, sales practices and related incentive compensation programs, and other consumer compliance matters, as well as compliance with Bank Secrecy Act/anti-money laundering ("BSA/AML") requirements and sanctions compliance requirements as administered by the Office of Foreign Assets Control. This heightened regulatory scrutiny, or the results of an investigation or examination, may lead to additional regulatory investigations or enforcement actions. There is no assurance that those actions will not result in regulatory settlements or other enforcement actions against the Company. Furthermore, a single event involving a potential violation of law or regulation may give rise to numerous and overlapping investigations and proceedings, either by multiple federal and state agencies and officials in the United States or, in some instances, regulators and other governmental officials in foreign jurisdictions.

Federal law grants substantial enforcement powers to federal banking regulators and law enforcement agencies. This enforcement authority includes, among other things, the ability to assess significant civil or criminal monetary penalties, fines, or restitution; to issue cease and desist or removal orders; and to initiate injunctive actions against banking organizations and institution-affiliated parties. These enforcement actions may be initiated for violations of laws and regulations and unsafe or unsound practices. Foreign supervisors also have increased regulatory scrutiny and enforcement in areas related to consumer compliance, money laundering, and information technology systems and controls, among others. Any future enforcement action could have a material adverse impact on the Company.

In general, the amounts paid by financial institutions in settlement of proceedings or investigations and the severity of other terms of regulatory settlements are likely to remain elevated in the near term. In some cases, governmental authorities have required criminal pleas or other extraordinary terms, including admissions of wrongdoing and the imposition of monitors, as part of such settlements, which could have significant consequences for a financial institution, including loss of customers, reputational harm, restrictions on the ability to access the capital markets, and the inability to operate certain businesses or offer certain products for a period of time.

Non-compliance with sanctions laws and/or AML laws or failure to maintain an adequate BSA/AML compliance program can lead to significant monetary penalties and reputational damage. In addition, federal regulators evaluate the effectiveness of an applicant in combating money laundering when determining whether to approve a proposed bank merger, acquisition, restructuring, or other expansionary activity. There have been a number of significant enforcement actions against banks, broker-dealers and non-bank financial institutions with respect to sanctions laws and BSA/AML laws and some have resulted in substantial penalties, including against the Company and U.S. Bank National Association in 2018.

Violations of laws and regulations or deemed deficiencies in risk management practices also may be incorporated into the Company's confidential supervisory ratings. A downgrade in these ratings, or these or other regulatory actions and settlements, could limit the Company's ability to conduct expansionary activities for a period of time and require new or additional regulatory approvals before engaging in certain other business activities.

Compliance with new regulations and supervisory initiatives have increased the Company's costs over time and may continue to do so. In addition, regulatory changes may reduce the Company's revenues, limit the types of financial services and products it may offer, alter the investments it makes, affect the manner in which it operates its businesses, increase its litigation and regulatory costs should it fail to appropriately comply with new or modified laws and regulatory requirements, and increase the ability of non-banks to offer competing financial services and products.

Stringent requirements related to capital and liquidity have been adopted by United States banking regulators that may limit the Company's ability to return earnings to shareholders or operate or invest in its business United States banking regulators have adopted stringent capital- and liquidity-related standards applicable to larger banking organizations, including the Company. The rules require banks to hold more and higher quality capital as well as sufficient unencumbered liquid assets to meet certain stress scenarios defined by regulation. In November 2019, the federal banking regulators adopted two final rules (the "Tailoring Rules") that revised the criteria for determining the applicability of regulatory capital and liquidity requirements for large U.S. banking organizations, including the Company and U.S. Bank National Association, and that tailored the application of the Federal Reserve's enhanced prudential standards to large banking organizations. Although the Tailoring Rules and other recent changes to capital- and liquidity-related rules generally have simplified the regulatory framework applicable to the Company, future changes to the implementation of these rules including the common equity tier 1 capital conservation buffer, or additional capital- and liquidity-related rules, could require the Company to take further steps to increase its capital, increase its investment security holdings, divest assets or operations, or otherwise change aspects of its capital and/or liquidity measures, including in ways that may be dilutive to shareholders or could limit the Company's ability to pay common stock dividends, repurchase its common stock, invest in its businesses or provide loans to its customers. Refer to "Supervision and Regulation" in the Company's Annual Report on Form 10-K for additional information regarding the Company's capital and liquidity requirements.

Additional requirements may be imposed in the future. In December 2017, the Basel Committee finalized a package of revisions to the Basel III framework. The changes are meant to improve the calculation of risk-weighted assets and the comparability of capital ratios. Federal banking regulators are expected to undertake rule-makings in future years to implement these revisions in the United States. In addition, in April 2018 the Federal Reserve proposed stress capital buffer requirements that would replace the capital conservation buffer with a stress capital buffer and introduce a stress leverage buffer. Refer to "Supervision and Regulation" in the Company's Annual Report on Form 10-K for additional information regarding the proposed stress buffer requirements. The ultimate impact of revisions to the Basel III–based framework in the United States and the stress buffer requirements on the Company's capital and liquidity will depend on the final rule-makings and the implementation process thereafter.

The Company is subject to significant financial and reputation risks from potential legal liability and governmental actions The Company faces significant legal risks in its businesses, and the volume of claims and amount of damages and penalties claimed in litigation and governmental proceedings against it and other financial institutions are substantial. Customers, clients and other counterparties are making claims for substantial or indeterminate amounts of damages, while banking regulators and certain other governmental authorities have focused on enforcement. As a participant in the financial services industry, it is likely that the Company will continue to experience a high level of litigation related to its businesses and operations in the future.

In addition, governmental authorities have, at times, sought criminal penalties against companies in the financial services sector for violations, and, at times, have required an admission of wrongdoing from financial institutions in connection with resolving such matters. Criminal convictions or admissions of wrongdoing in a settlement with the government can lead to greater exposure in civil litigation and reputational harm.

Substantial legal liability or significant governmental action against the Company could materially impact its financial condition and results of operations or cause significant reputational harm to the Company, which in turn could adversely impact its business prospects. Also, the resolution of a litigation or regulatory matter could result in additional accruals or exceed established accruals for a particular period, which could materially impact the Company's results from operations for that period.

The Company may be required to repurchase mortgage loans or indemnify mortgage loan purchasers as a result of breaches in contractual representations and warranties When the Company sells mortgage loans that it has originated to various parties, including GSEs, it is required to make customary representations and warranties to the purchaser about the mortgage loans and the manner in which they were originated. The Company may be required to repurchase mortgage loans or be subject to indemnification claims in the event of a breach of contractual representations or warranties that is not remedied within a certain period. Contracts for residential mortgage loan sales to the GSEs include various types of specific remedies and penalties that could be applied if the Company does not adequately respond to repurchase requests. If economic conditions and the housing market deteriorate or the GSEs increase their claims for breached representations and warranties, the Company could have increased repurchase obligations and increased losses on repurchases, requiring material increases to its repurchase reserve.

Credit and Mortgage Business Risk

Heightened credit risk could require the Company to increase its provision for credit losses, which could have a material adverse effect on the Company's results of operations and financial condition When the Company lends money, or commits to lend money, it incurs credit risk, or the risk of losses if its borrowers do not repay their loans. As one of the largest lenders in the United States, the credit performance of the Company's loan portfolios significantly affects its financial results and condition. If the current economic environment were to deteriorate, the Company's customers may have difficulty in repaying their loans or other obligations, which could result in a higher level of credit losses and higher provisions for credit losses. The Company reserves for credit losses by establishing an allowance through a charge to earnings to provide for loan defaults and nonperformance. The amount of the Company's allowance for loan losses is based on its historical loss experience as well as an evaluation of the risks associated with its loan portfolio, including the size and composition of the loan portfolio, current economic conditions and geographic concentrations within the portfolio. Unexpected stress on the United States economy or the local economies in which the Company does business may result in, among other things, unexpected deterioration in credit quality of the loan portfolio, or in the value of collateral securing those loans.

In addition, the process the Company uses to estimate losses inherent in its credit exposure requires difficult, subjective, and complex judgments, including forecasts of economic conditions and how these economic predictions might impair the ability of its borrowers to repay their loans. These economic predictions and their impact may not be capable of accurate estimation, which may, in turn, impact the reliability of the process. As with any such assessments, the Company may fail to identify the proper factors or to accurately estimate the impacts of the factors that the Company does identify. The Company also makes loans to borrowers where it does not have or service the loan with the first lien on the property securing its loan. For loans in a junior lien position, the Company may not have access to information on the position or performance of the first lien when it is held and serviced by a third party, which may adversely affect the accuracy of the loss estimates for loans of these types. Increases in the Company's allowance for loan losses may not be adequate to cover actual loan losses, and future provisions for loan losses could materially and adversely affect its financial results. In addition, the Company's ability to assess the creditworthiness of its customers may be impaired if the models and approaches it uses to select, manage, and underwrite its customers become less predictive of future behaviors.

A concentration of credit and market risk in the Company's loan portfolio could increase the potential for significant losses The Company may have higher credit risk, or experience higher credit losses, to the extent its loans are concentrated by loan type, industry segment, borrower type, or location of the borrower or collateral. For example, the Company's credit risk and credit losses can increase if borrowers who engage in similar activities are uniquely or disproportionately affected by economic or market conditions, or by regulation, such as regulation related to climate change. Deterioration in economic conditions or real estate values in states or regions where the Company has relatively larger concentrations of residential or commercial real estate could result in higher credit costs. In particular, deterioration in real estate values and underlying economic conditions in California could result in significantly higher credit losses to the Company.

Changes in interest rates can impact the value of the Company's mortgage servicing rights and mortgages held for sale, and can make its mortgage banking revenue volatile from quarter to quarter, which can reduce its earnings The Company has a portfolio of MSRs, which is the right to service a mortgage loan—collect principal, interest and escrow amounts—for a fee. The Company initially carries its MSRs using a fair value measurement of the present value of the estimated future net servicing income, which includes assumptions about the likelihood of prepayment by borrowers. Changes in interest rates can affect prepayment assumptions and thus fair value. When interest rates fall, prepayments tend to increase as borrowers refinance, and the fair value of MSRs can decrease, which in turn reduces the Company's earnings. Further, it is possible that, because of economic conditions and/or a weak or deteriorating housing market, even when interest rates fall or remain low, mortgage originations may fall or any increase in mortgage originations may not be enough to offset the decrease in the MSRs' value caused by the lower rates.

A decline in the soundness of other financial institutions could adversely affect the Company's results of operations The Company's ability to engage in routine funding or settlement transactions could be adversely affected by the actions and commercial soundness of other domestic or foreign financial institutions. Financial services institutions are interrelated as a result of trading, clearing, counterparty or other relationships. The Company has exposure to many different counterparties, and the Company routinely executes and settles transactions with counterparties in the financial services industry, including brokers and dealers, commercial banks, investment banks, mutual and hedge funds, and other institutional clients. As a result, defaults by, or even rumors or questions about, the soundness of one or more financial services institutions, or the financial services industry generally, could lead to losses or defaults by the Company or by other institutions and impact the Company's predominately United States–based businesses or the less significant merchant processing, corporate trust and fund administration services businesses it operates in foreign countries. Many of these transactions expose the Company to credit risk in the event of a default by a counterparty or client. In addition, the Company's credit risk may be further increased when the collateral held by the Company cannot be realized upon or is liquidated at prices not sufficient to recover the full amount of the financial instrument exposure due the Company. There is no assurance that any such losses would not adversely affect the Company's results of operations.

Change in residual value of leased assets may have an adverse impact on the Company's financial results The Company engages in leasing activities and is subject to the risk that the residual value of the property under lease will be less than the Company's recorded asset value. Adverse changes in the residual value of leased assets can have a negative impact on the Company's financial results. The risk of changes in the realized value of the leased assets compared to recorded residual values depends on many factors outside of the Company's control, including supply and demand for the assets, condition of the assets at the end of the lease term, and other economic factors.

Liquidity Risk

If the Company does not effectively manage its liquidity, its business could suffer The Company's liquidity is essential for the operation of its business. Market conditions, unforeseen outflows of funds or other events could negatively affect the Company's level or cost of funding, affecting its ongoing ability to accommodate liability maturities and deposit withdrawals, meet contractual obligations, and fund asset growth and new business transactions at a reasonable cost and in a timely manner. If the Company's access to stable and low-cost sources of funding, such as customer deposits, is reduced, the Company might need to use alternative funding, which could be more expensive or of limited availability. Any substantial, unexpected or prolonged changes in the level or cost of liquidity could adversely affect the Company's business.

Loss of customer deposits could increase the Company's funding costs The Company relies on bank deposits to be a low-cost and stable source of funding. The Company competes with banks and other financial services companies for deposits, including those that offer on-line channels. If the Company's competitors raise the interest rates they pay on deposits, the Company's funding costs may increase, either because the Company raises the interest rates it pays on deposits to avoid losing deposits to competitors or because the Company loses deposits to competitors and must rely on more expensive sources of funding. Higher funding costs reduce the Company's net interest margin and net interest income. Checking and savings account balances and other forms of customer deposits may decrease when customers perceive alternative investments, such as the stock market, as providing a better risk/return tradeoff. When customers move money out of bank deposits and into other investments, the Company may lose a relatively low-cost source of funds, increasing the Company's funding costs and reducing the Company's net interest income.

A downgrade in the Company's credit ratings could have a material adverse effect on its liquidity, funding costs and access to capital markets The Company's credit ratings are important to its liquidity. A reduction in one or more of the Company's credit ratings could adversely affect its liquidity, increase its funding costs or limit its access to the capital markets. Further, a downgrade could decrease the number of investors and counterparties willing or able, contractually or otherwise, to do business or lend to the Company, thereby adversely affecting the Company's competitive position. The Company's credit ratings and credit rating agencies' outlooks are subject to ongoing review by the rating agencies, which consider a number of factors, including the Company's own financial strength, performance, prospects and operations, as well as factors not within the control of the Company, including conditions affecting the financial services industry generally. There can be no assurance that the Company will maintain its current ratings and outlooks.

The Company relies on dividends from its subsidiaries for its liquidity needs, and the payment of those dividends is limited by laws and regulations The Company is a separate and distinct legal entity from U.S. Bank National Association and its non-bank subsidiaries. The Company receives a significant portion of its cash from dividends paid by its subsidiaries. These dividends are the principal source of funds to pay dividends on the Company's stock and interest and principal on its debt. Various federal and state laws and regulations limit the amount of dividends that U.S. Bank National Association and certain of its non-bank subsidiaries may pay to the Company without regulatory approval. Also, the Company's right to participate in a distribution of assets upon a subsidiary's liquidation or reorganization is subject to prior claims of the subsidiary's creditors, except to the extent that any of the Company's claims as a creditor of that subsidiary may be recognized.

Competitive and Strategic Risk

The financial services industry is highly competitive, and competitive pressures could intensify and adversely affect the Company's financial results The Company operates in a highly competitive industry that could become even more competitive as a result of legislative, regulatory and technological changes, as well as continued industry consolidation, which may increase in connection with current economic and market conditions. This consolidation may produce larger, better-capitalized and more geographically diverse companies that are capable of offering a wider array of financial products and services at more competitive prices. The Company competes with other commercial banks, savings and loan associations, mutual savings banks, finance companies, mortgage banking companies, credit unions, investment companies, credit card companies, and a variety of other financial services and advisory companies. Legislative or regulatory changes also could lead to increased competition in the financial services sector. For example, the Economic Growth Act and the Tailoring Rules have reduced the regulatory burden of large bank holding companies, including the Company and some of its competitors, and raised the asset thresholds at which more onerous requirements apply, which could cause certain large bank holding companies with less than $250 billion in total consolidated assets, which were previously subject to more stringent enhanced prudential standards, to become more competitive or to pursue expansion more aggressively.

In addition, technology has lowered barriers to entry and made it possible for non-banks to offer products and services, such as loans and payment services, that traditionally were banking products, and made it possible for technology companies to compete with financial institutions in providing electronic, internet-based, and mobile phone–based financial solutions. Competition with non-banks, including technology companies, to provide financial products and services is intensifying. In particular, the activity of financial technology companies ("fintechs") has grown significantly over recent years and is expected to continue to grow. Fintechs have and may continue to offer bank or bank-like products. For example, a number of fintechs have applied for bank or industrial loan charters. In addition, other fintechs have partnered with existing banks to allow them to offer deposit products to their customers. Many of these companies, including the Company's competitors, have fewer regulatory constraints, and some have lower cost structures, in part due to lack of physical structures. Also, the potential need to adapt to industry changes in information technology systems, on which the Company and financial services industry are highly dependent, could present operational issues and require capital spending. The Company's ability to compete successfully depends on a number of factors, including, among others, its ability to develop and execute strategic plans and initiatives; developing, maintaining and building long-term customer relationships based on quality service, competitive prices, high ethical standards and safe, sound assets; and industry and general economic trends. A failure to compete effectively could contribute to downward price pressure on the Company's products or services or a loss of market share.

The Company may need to lower prices on existing products and services and develop and introduce new products and services to maintain market share The Company's success depends, in part, on its ability to adapt its products and services to evolving industry standards. There is increasing pressure to provide products and services at lower prices. Lower prices can reduce the Company's net interest margin and revenues from its fee-based products and services. In addition, the adoption of new technologies or further developments in current technologies require the Company to make substantial expenditures to modify or adapt its existing products and services. Also, these and other capital investments in the Company's businesses may not produce expected growth in earnings anticipated at the time of the expenditure. The Company might not be successful in developing or introducing new products and services, adapting to changing customer preferences and spending and saving habits, achieving market acceptance of its products and services, or sufficiently developing and maintaining loyal customer relationships.

The Company's business could suffer if it fails to attract and retain skilled employees The Company's success depends, in large part, on its ability to attract and retain key employees. Competition for the best people in most activities the Company engages in can be intense. The Company may not be able to hire the best people or to keep them. Recent strong scrutiny of compensation practices has resulted in, and may continue to result in, additional regulation and legislation in this area. As a result, the Company may not be able to retain key employees by providing adequate compensation. In addition, there is the potential for changes in immigration policies in multiple jurisdictions, and the Company could be adversely affected to the extent that immigration policies or work authorization programs were to unduly restrict or otherwise make it more difficult for qualified employees to work in, or transfer among, jurisdictions in which the Company has operations or conducts its business. There is no assurance that these developments will not cause increased turnover or impede the Company's ability to retain and attract the highest caliber employees.

The Company may not be able to complete future acquisitions, and completed acquisitions may not produce revenue enhancements or cost savings at levels or within timeframes originally anticipated, may result in unforeseen integration difficulties, and may dilute existing shareholders' interests The Company regularly explores opportunities to acquire financial services businesses or assets and may also consider opportunities to acquire other banks or financial institutions. The Company cannot predict the number, size or timing of acquisitions it might pursue.

The Company must generally receive federal regulatory approval before it can acquire a bank or bank holding company. The Company's ability to pursue or complete an attractive acquisition could be negatively impacted by regulatory delay or other regulatory issues. The Company cannot be certain when or if, or on what terms and conditions, any required regulatory approvals will be granted. For example, the Company may be required to sell branches as a condition to receiving regulatory approval for bank acquisitions. If the Company commits certain regulatory violations, including those that result in a downgrade in certain of the Company's bank regulatory ratings, governmental authorities could, as a consequence, preclude it from pursuing future acquisitions for a period of time.

There can be no assurance that acquisitions the Company completes will have the anticipated positive results, including results related to expected revenue increases, cost savings, increases in geographic or product presence, and/or other projected benefits. Integration efforts could divert management's attention and resources, which could adversely affect the Company's operations or results. The integration could result in higher than expected customer loss, deposit attrition, loss of key employees, disruption of the Company's businesses or the businesses of the acquired company, or otherwise adversely affect the Company's ability to maintain relationships with customers and employees or achieve the anticipated benefits of the acquisition. Also, the negative effect of any divestitures required by regulatory authorities in acquisitions or business combinations may be greater than expected. In addition, future acquisitions may also expose the Company to increased legal or regulatory risks. Finally, future acquisitions could be material to the Company, and it may issue additional shares of stock to pay for those acquisitions, which would dilute current shareholders' ownership interests.

Accounting and Tax Risk

The Company's reported financial results depend on management's selection of accounting methods and certain assumptions and estimates, which, if incorrect, could cause unexpected losses in the future The Company's accounting policies and methods are fundamental to how the Company records and reports its financial condition and results of operations. The Company's management must exercise judgment in selecting and applying many of these accounting policies and methods so they comply with generally accepted accounting principles and reflect management's judgment regarding the most appropriate manner to report the Company's financial condition and results of operations. In some cases, management must select the accounting policy or method to apply from two or more alternatives, any of which might be reasonable under the circumstances, yet might result in the Company's reporting materially different results than would have been reported under a different alternative.

Certain accounting policies are critical to presenting the Company's financial condition and results of operations. They require management to make difficult, subjective or complex judgments about matters that are uncertain. Materially different amounts could be reported under different conditions or using different assumptions or estimates. These critical accounting policies include the allowance for credit losses, estimations of fair value, the valuation of MSRs, and income taxes. Because of the uncertainty of estimates involved in these matters, the Company may be required to do one or more of the following: significantly increase the allowance for credit losses and/or sustain credit losses that are significantly higher than the reserve provided, recognize significant losses on the remeasurement of certain asset and liability balances, or significantly increase its accrued taxes liability. For more information, refer to "Critical Accounting Policies" in this Annual Report.

Changes in accounting standards could materially impact the Company's financial statements From time to time, the Financial Accounting Standards Board and the United States Securities and Exchange Commission change the financial accounting and reporting standards that govern the preparation of the Company's financial statements. These changes can be hard to predict and can materially impact how the Company records and reports its financial condition and results of operations. The Company could be required to apply a new or revised standard retroactively or apply an existing standard differently, on a retroactive basis, in each case potentially resulting in the Company restating prior period financial statements. As an example, effective January 1, 2020, the Company adopted accounting guidance issued by the Financial Accounting Standards Board related to the impairment of financial instruments, particularly the allowance for loan losses. This guidance changes impairment recognition to a model that is based on expected losses rather than incurred losses, which is intended to result in more timely recognition of credit losses. Upon adoption, the Company increased its allowance for credit losses and reduced retained earnings by $1.5 billion.

The Company's investments in certain tax-advantaged projects may not generate returns as anticipated and may have an adverse impact on the Company's financial results The Company invests in certain tax-advantaged projects promoting affordable housing, community development and renewable energy resources. The Company's investments in these projects are designed to generate a return primarily through the realization of federal and state income tax credits, and other tax benefits, over specified time periods. The Company is subject to the risk that previously recorded tax credits, which remain subject to recapture by taxing authorities based on compliance features required to be met at the project level, will fail to meet certain government compliance requirements and will not be able to be realized. The possible inability to realize these tax credit and other tax benefits can have a negative impact on the Company's financial results. The risk of not being able to realize the tax credits and other tax benefits depends on many factors outside of the Company's control, including changes in the applicable tax code and the ability of the projects to be completed.

Executive Officers

Andrew Cecere

Mr. Cecere is Chairman, President and Chief Executive Officer of U.S. Bancorp. Mr. Cecere, 59, has served as President of U.S. Bancorp since January 2016, Chief Executive Officer since April 2017 and Chairman since April 2018. He also served as Vice Chairman and Chief Operating Officer from January 2015 to January 2016 and was U.S. Bancorp's Vice Chairman and Chief Financial Officer from February 2007 until January 2015. Until that time, he served as Vice Chairman, Wealth Management and Investment Services, of U.S. Bancorp since the merger of Firstar Corporation and U.S. Bancorp in February 2001. Previously, he had served as an executive officer of the former U.S. Bancorp, including as Chief Financial Officer from May 2000 through February 2001.

Ismat Aziz

Ms. Aziz is Senior Executive Vice President and Chief Human Resources Officer of U.S. Bancorp. Ms. Aziz, 52, has served in this position since joining U.S. Bancorp in September 2018. She served as Chief Human Resources Officer of Sprint Corporation from May 2016 until September 2018. Ms. Aziz served as the Chief Human Resources Officer of Sam's Club from April 2012 to April 2016, and as the Senior Vice President of Business Capability and Human Resources of Sam's Club from August 2010 to April 2012. Prior to that time, she served as the Vice President of Business Capability and Human Resources at Sears Canada from June 2009 to August 2010.

James L. Chosy

Mr. Chosy is Senior Executive Vice President and General Counsel of U.S. Bancorp. Mr. Chosy, 56, has served in this position since March 2013. He also served as Corporate Secretary of U.S. Bancorp from March 2013 until April 2016. From 2001 to 2013, he served as the General Counsel and Secretary of Piper Jaffray Companies. From 1995 to 2001, Mr. Chosy was Vice President and Associate General Counsel of U.S. Bancorp, having also served as Assistant Secretary of U.S. Bancorp from 1995 through 2000 and as Secretary from 2000 until 2001.

Terrance R. Dolan

Mr. Dolan is Vice Chair and Chief Financial Officer of U.S. Bancorp. Mr. Dolan, 58, has served in this position since August 2016. From July 2010 to July 2016, he served as Vice Chairman, Wealth Management and Investment Services, of U.S. Bancorp. From September 1998 to July 2010, Mr. Dolan served as U.S. Bancorp's Controller. He additionally held the title of Executive Vice President from January 2002 until June 2010 and Senior Vice President from September 1998 until January 2002.

Leslie V. Godridge

Ms. Godridge is Vice Chair, Corporate and Commercial Banking, of U.S. Bancorp. Ms. Godridge, 64, has served in this position since January 2016. From February 2013 until December 2015, she served as Executive Vice President, National Corporate Specialized Industries and Global Treasury Management, of U.S. Bancorp. From February 2007, when she joined U.S. Bancorp, until January 2013, Ms. Godridge served as Executive Vice President, National Corporate and Institutional Banking, of U.S. Bancorp. Prior to that time, she served as Senior Executive Vice President and a member of the Executive Committee at The Bank of New York, where she was head of BNY Asset Management, Private Banking, Consumer Banking and Regional Commercial Banking from 2004 to 2006. Ms. Godridge will retire from U.S. Bancorp on June 30, 2020.

Gunjan Kedia

Ms. Kedia is Vice Chair, Wealth Management and Investment Services, of U.S. Bancorp. Ms. Kedia, 49, has served in this position since joining U.S. Bancorp in December 2016. From October 2008 until May 2016, she served as Executive Vice President of State Street Corporation where she led the core investment servicing business in North and South America and served as a member of State Street's management committee, its senior most strategy and policy committee. Previously, Ms. Kedia was an Executive Vice President of global product management at Bank of New York Mellon from 2004 to 2008.

James B. Kelligrew

Mr. Kelligrew is Vice Chair, Corporate and Commercial Banking, of U.S. Bancorp. Mr. Kelligrew, 54, has served in this position since January 2016. From March 2014 until December 2015, he served as Executive Vice President, Fixed Income and Capital Markets, of U.S. Bancorp, having served as Executive Vice President, Credit Fixed Income, of U.S. Bancorp from May 2009 to March 2014. Prior to that time, he held various leadership positions with Wells Fargo Securities from 2003 to 2009.

Shailesh M. Kotwal

Mr. Kotwal is Vice Chair, Payment Services, of U.S. Bancorp. Mr. Kotwal, 55, has served in this position since joining U.S. Bancorp in March 2015. From July 2008 until May 2014, he served as Executive Vice President of TD Bank Group with responsibility for retail banking products and services and as Chair of its enterprise payments council. From 2006 until 2008, he served as President, International, of eFunds Corporation. Previously, Mr. Kotwal served in various leadership roles at American Express Company from 1989 until 2006, including responsibility for operations in North and South America, Europe and the Asia-Pacific regions.

Katherine B. Quinn

Ms. Quinn is Vice Chair and Chief Administrative Officer of U.S. Bancorp. Ms. Quinn, 55, has served in this position since April 2017. From September 2013 to April 2017, she served as Executive Vice President and Chief Strategy and Reputation Officer of U.S. Bancorp and has served on U.S. Bancorp's Managing Committee since January 2015. From September 2010 until January 2013, she served as Chief Marketing Officer of WellPoint, Inc. (now known as Anthem, Inc.), having served as Head of Corporate Marketing of WellPoint from July 2005 until September 2010.

Jodi L. Richard

Ms. Richard is Vice Chair and Chief Risk Officer of U.S. Bancorp. Ms. Richard, 51, has served in this position since October 2018. She served as Executive Vice President and Chief Operational Risk Officer of U.S. Bancorp from January 2018 until October 2018, having served as Senior Vice President and Chief Operational Risk Officer from 2014 until January 2018. Prior to that time, Ms. Richard held various senior leadership roles at HSBC from 2003 until 2014, including Executive Vice President and Head of Operational Risk and Internal Control at HSBC North America from 2008 to 2014. Ms. Richard started her career at the Office of the Comptroller of the Currency in 1990 as a national bank examiner.

Mark G. Runkel

Mr. Runkel is Senior Executive Vice President and Chief Credit Officer of U.S. Bancorp. Mr. Runkel, 43, has served in this position since December 2013. From February 2011 until December 2013, he served as Senior Vice President and Credit Risk Group Manager of U.S. Bancorp Retail and Payment Services Credit Risk Management, having served as Senior Vice President and Risk Manager of U.S. Bancorp Retail and Small Business Credit Risk Management from June 2009 until February 2011. From March 2005 until May 2009, he served as Vice President and Risk Manager of U.S. Bancorp.

Jeffry H. von Gillern

Mr. von Gillern is Vice Chair, Technology and Operations Services, of U.S. Bancorp. Mr. von Gillern, 54, has served in this position since July 2010. From April 2001, when he joined U.S. Bancorp, until July 2010, Mr. von Gillern served as Executive Vice President of U.S. Bancorp, additionally serving as Chief Information Officer from July 2007 until July 2010.

Timothy A. Welsh

Mr. Welsh is Vice Chair, Consumer and Business Banking, of U.S. Bancorp. Mr. Welsh, 54, has served in this position since joining U.S. Bancorp in July 2017. From July 2006 until June 2017, he served as a Senior Partner at McKinsey & Company where he specialized in financial services and the consumer experience. Previously, Mr. Welsh served as a Partner at McKinsey & Company from 1999 to 2006.

Derek J. White

Mr. White is Vice Chair and Chief Digital Officer of U.S. Bancorp. Mr. White, 46, has served in this position since joining U.S. Bancorp in June 2019. He served as Global Head of Client Solutions of BBVA from March 2016 until April 2019. Prior to joining BBVA, Mr. White served in various senior leadership roles at Barclays Bank from 2005 to 2016, including as the Chief Design and Digital Officer from June 2013 to February 2016.

Directors

Andrew Cecere[1,3,7]
Chairman, President and Chief Executive Officer
U.S. Bancorp

Warner L. Baxter[1,2,3]
Chairman, President and Chief Executive Officer
Ameren Corporation
(Energy)

Dorothy J. Bridges[6,7]
Former Senior Vice President
Federal Reserve Bank of Minneapolis
(Government)

Elizabeth L. Buse[2,3]
Former Chief Executive Officer
Monitise PLC
(Financial services)

Marc N. Casper[5,6]
President and Chief Executive Officer
Thermo Fisher Scientific Inc.
(Life sciences and healthcare technology)

Arthur D. Collins, Jr.[1,4,5]
Retired Chairman and Chief Executive Officer
Medtronic, Inc.
(Medical device and technology)

Kimberly J. Harris[1,5,6]
Retired President and Chief Executive Officer
Puget Energy, Inc.
(Energy)

Roland A. Hernandez[1,2,3]
Founding Principal and Chief Executive Officer
Hernandez Media Ventures
(Media)

Doreen Woo Ho[3,7]
Commissioner
San Francisco Port Commission
(Government)

1. *Executive Committee*
2. *Audit Committee*
3. *Capital Planning Committee*
4. *Compensation and Human Resources Committee*
5. *Governance Committee*
6. *Public Responsibility Committee*
7. *Risk Management Committee*

Olivia F. Kirtley[4,5,7]
Business Consultant
(Consulting)

Karen S. Lynch[2,6]
Executive Vice President
CVS Health Corporation
(Health care)

Richard P. McKenney[1,6,7]
President and Chief Executive Officer
Unum Group
(Financial protection benefits)

Yusuf I. Mehdi[6,7]
Corporate Vice President
Microsoft Corporation
(Technology)

David B. O'Maley [1,4,5]
Retired Chairman, President and Chief Executive Officer
Ohio National Mutual Holdings, Inc.
(Insurance)

O'dell M. Owens, M.D., M.P.H.[3,4]
President and Chief Executive Officer
Interact for Health
(Health and wellness)

Craig D. Schnuck[5,7]
Former Chairman and Chief Executive Officer
Schnuck Markets, Inc.
(Food retail)

John P. Wiehoff[6,7]
Chairman and Retired Chief Executive Officer
C.H. Robinson Worldwide, Inc.
(Transportation and logistics services)

Scott W. Wine[1,2,4]
Chairman and Chief Executive Officer
Polaris Industries Inc.
(Motorized products)

Corporate Information

Executive Offices

U.S. Bancorp
800 Nicollet Mall
Minneapolis, MN 55402

Common Stock Transfer Agent and Registrar

Computershare acts as our transfer agent and registrar, dividend paying agent and dividend reinvestment plan administrator, and maintains all shareholder records for the company. Inquiries related to shareholder records, stock transfers, changes of ownership, lost stock certificates, changes of address and dividend payment should be directed to the transfer agent at:

Computershare
P.O. Box 505000
Louisville, KY 40233
Phone: 888.778.1311 or
201.680.6578 (international calls)

computershare.com/investor

Registered or Certified Mail:
Computershare
462 South 4th Street, Suite 1600
Louisville, KY 40202

Telephone representatives are available weekdays from 8 a.m. to 6 p.m., Central Time, and automated support is available 24 hours a day, seven days a week. Specific information about your account is available on Computershare's Investor Center website.

Independent Auditor

Ernst & Young LLP serves as the independent auditor for U.S. Bancorp's financial statements.

Common Stock Listing and Trading

U.S. Bancorp common stock is listed and traded on the New York Stock Exchange under the ticker symbol USB.

Dividends and Reinvestment Plan

U.S. Bancorp currently pays quarterly dividends on our common stock on or about the 15th day of January, April, July and October, subject to approval by our Board of Directors. U.S. Bancorp shareholders can choose to participate in a plan that provides automatic reinvestment of dividends and/or optional cash purchase of additional shares of U.S. Bancorp common stock. For more information, please contact our transfer agent, Computershare.

Investor Relations Contact

Jennifer A. Thompson, CFA
Executive Vice President
Investor Relations
jen.thompson@usbank.com
Phone: 612.303.0778 or 866.755.9668

Financial Information

U.S. Bancorp news and financial results are available through our website and by mail.

Website: For information about U.S. Bancorp, including news, financial results, annual reports and other documents filed with the Securities and Exchange Commission, visit **usbank.com** and click on About Us.

Mail: At your request, we will mail to you our quarterly earnings, news releases, quarterly financial data reported on Form 10-Q, Form 10-K and additional copies of our annual reports. Please contact:

U.S. Bancorp Investor Relations
800 Nicollet Mall
Minneapolis, MN 55402
investorrelations@usbank.com
Phone: 866.775.9668

Media Requests

David R. Palombi
Global Chief Communications Officer
Public Affairs and Communications
david.palombi@usbank.com
Phone: 612.303.3167

Privacy

U.S. Bancorp is committed to respecting the privacy of our customers and safeguarding the financial and personal information provided to us. To learn more about the U.S. Bancorp commitment to protecting privacy, visit **usbank.com** and click on Privacy.

Accessibility

U.S. Bancorp is committed to providing ready access to our products and services so all of our customers, including people with disabilities, can succeed financially. To learn more, visit **usbank.com** and click on Accessibility.

Code of Ethics

At U.S. Bancorp, our commitment to high ethical standards guides everything we do. Demonstrating this commitment through our words and actions is how each of us does the right thing every day for our customers, shareholders, communities and each other. Our ethical culture has been recognized by the Ethisphere® Institute, which again named us to its World's Most Ethical Companies® list.

Each year, every employee certifies compliance with the letter and spirit of our Code of Ethics and Business Conduct.

For details about our Code of Ethics and Business Conduct, visit **usbank.com** and click on About Us and then Investor Relations and then Corporate Governance.

Diversity, Equity and Inclusion

At U.S. Bancorp, embracing diversity, championing equity and fostering inclusion are business imperatives. We view everything we do through a diversity, equity and inclusion lens to deepen our relationships with our stakeholders: our employees, customers, shareholders and communities.

Our employees bring their whole selves to work. We respect and value each other's differences, strengths and perspectives, and we strive to reflect the communities we serve. This makes us stronger, more innovative and more responsive to our diverse customers' needs.

Equal Opportunity and Affirmative Action

U.S. Bancorp and our subsidiaries are committed to providing Equal Employment Opportunity to all employees and applicants for employment. In keeping with this commitment, employment decisions are made based on abilities, not race, color, religion, creed, citizenship, national origin or ancestry, gender, age, disability, veteran status, sexual orientation, marital status, gender identity or expression, genetic information or any other factors protected by law. The company complies with municipal, state and federal fair employment laws, including regulations applying to federal contractors.

U.S. Bancorp, including each of our subsidiaries, is an equal opportunity employer committed to creating a diverse workforce.

usbancorp

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800.USBANKS
usbank.com

U.S. Bancorp 2019 Annual Report