

# Strategies for Improving the U.S. Payment System Federal Reserve Next Steps in the Payments Improvement Journey



Federal Reserve System

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## Table of Contents

Executive Summary.....	1
Background .....	3
Speed .....	4
Progress.....	4
Challenges and Opportunities.....	5
Next Steps .....	5
Security .....	7
Progress.....	7
Challenges and Opportunities.....	9
Next Steps .....	9
Efficiency .....	10
Progress.....	10
Challenges and Opportunities.....	11
Next Steps .....	12
International .....	12
Progress.....	12
Challenges and Opportunities.....	13
Next Steps .....	13
Collaboration.....	14
Progress.....	14
Challenges and Opportunities.....	15
Next Steps .....	15
Conclusion.....	16



## Executive Summary

Two and a half years ago, the Federal Reserve issued a call to action in the *Strategies for Improving the U.S. Payment System (Strategies)* paper, asking stakeholders to come together in pursuit of a better payment system for the future.<sup>1</sup> The call was answered, with hundreds of organizations and individuals collaborating to support progress on achieving the five desired outcomes shared by the Federal Reserve and industry for speed, security, efficiency, international payments and collaboration outlined in the paper. These desired outcomes continue to reflect the shared vision of the Federal Reserve and a broad spectrum of payment system stakeholders in the United States. The Federal Reserve recognizes the tremendous contributions of leadership, time, and effort to date, and seeks continued stakeholder commitment to the desired outcomes that remain the guiding framework for U.S. payment system improvements.

The strategies and tactics included in the *Strategies* paper represented the first steps in the payments improvement journey. Many are substantially underway or nearing completion and some have been completed. This paper outlines the Federal Reserve's next phase of work, consistent with its objective to foster the efficiency, integrity, and accessibility of the payment system. We have also assessed progress related to marketplace activities and Federal Reserve initiatives, including the recommendations of the Faster Payments Task Force and suggestions emanating from the Secure Payments Task Force.

Good progress has been made, but much work remains to implement safe, ubiquitous real-time retail payments and enhance the safety, efficiency, and resiliency of the U.S. payment system. The Federal Reserve and payment system stakeholders face challenges on the road ahead, and the Federal Reserve is committed to ongoing collaboration and progress. Together, the Federal Reserve and payment system stakeholders can achieve the shared vision for fast, secure, and, efficient payments that meet the future needs of consumers and businesses.

This paper reflects the Federal Reserve's plans for near-term collaboration with the industry to move closer to achieving the desired outcomes articulated in the *Strategies* paper. This paper puts forward a series of refreshed strategies and describes nine new tactics the Federal Reserve will employ, in collaboration with industry, to make further progress. In addition to the tactics described in this paper, the Federal Reserve will continue work on enhancing its existing services and advancing its ongoing initiatives, consistent with the *Strategies* paper. The Federal Reserve's refreshed strategies and new tactics for each desired outcome are:

- **Speed.** Support industry efforts to implement a safe, ubiquitous, faster payments capability in the United States by:
  - Supporting an interim collaboration work group and other collaborative industry efforts to develop a faster payments ecosystem that achieves the Federal Reserve and industry shared desired outcome and the Faster Payments Task Force vision;
  - Pursuing Federal Reserve settlement services that address the future needs of a ubiquitous real-time retail payments environment; and

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<sup>1</sup> *Strategies for Improving the U.S. Payment System* is available at <https://fedpaymentsimprovement.org/wp-content/uploads/strategies-improving-us-payment-system.pdf>.



- Exploring and assessing the need, if any, for Federal Reserve engagement as a service provider, beyond providing settlement services, in the faster payments ecosystem to support industry achievement of the desired outcome.
- **Security.** Work to reduce fraud risk and advance the safety, security and resiliency of the payment system by:
  - Analyzing payment security vulnerabilities, assessing potential approaches to mitigate them, and identifying misalignment of incentives that may hinder progress; and
  - Establishing and engaging in collective industry work groups focused on approaches for reducing the cost and prevalence of specific payment security vulnerabilities.
- **Efficiency.** Achieve greater end-to-end efficiency for domestic payments by:
  - Supporting industry efforts to develop and promote adoption of standards that enable end-to-end electronic processing of business invoices, payments and remittance information.
- **International.** Work to enhance the timeliness, cost effectiveness, and convenience of cross-border payments by:
  - Engaging stakeholders to understand and assess the challenges and opportunities to enhance the timeliness, cost effectiveness and convenience of cross-border payments.
- **Collaboration.** Actively engage with stakeholders on initiatives designed to improve the U.S. payment system by:
  - Facilitating ongoing stakeholder engagement in payments improvement efforts through a highly interactive and flexible payments improvement community; and
  - Furthering outreach and education efforts to create awareness and encourage adoption of identified improvements and initiatives.

These refreshed strategies and supporting tactics are representative of the Federal Reserve’s ongoing commitment to advancing improvements through leadership and action. With collaboration, inclusiveness and transparency as guiding principles, we will continue to actively monitor and communicate progress, seek feedback and adjust approaches in response to developments as necessary. As we reaffirm our commitment to this important endeavor through these next steps, we echo our original call for all stakeholders to engage in these efforts and continue their commitment to improving the U.S. payment system.



## Background

The U.S. payment system is undergoing a period of rapid change. Innovation and technological advancements are changing end-user preferences and needs; payment security continues to face dynamic, persistent, and intensifying threats; and consumers and businesses are seeking swift and efficient options for making a variety of domestic and cross-border transactions.

In late 2012, the Federal Reserve initiated a payment system improvement initiative to facilitate material, end-to-end advances in the payment system that would take into account diverse stakeholder perspectives, be available to a broad spectrum of users, and promote payment speed, safety and efficiency. In January 2015, after two years of research and stakeholder consultation, the Federal Reserve released the *Strategies* paper. The paper presented the Federal Reserve's and the industry's shared vision for a faster, safer, and more efficient payment system, and called for the commitment of all stakeholders to achieve five desired outcomes focused on speed, security, efficiency, international payments, and collaboration.

In the paper, the Federal Reserve asserted the importance of collective efforts as foundational to achieving the desired outcomes and considered how the Federal Reserve could support these efforts as a leader, catalyst for change, and provider of payment services. Since its release, the Reserve Banks and Board of Governors in partnership have advanced the strategies and tactics outlined in the paper by convening stakeholders in collaborative efforts, leading improvement initiatives, and continuing to enhance existing services. We have actively monitored and communicated progress, sought feedback, solicited broader engagement, and adjusted strategies in response to developments.

The *Strategies* paper and its resulting initiatives have generated significant industry momentum and commitment to collaborate in pursuit of the desired outcomes. In some instances, noteworthy progress has been made. In others, where the industry is tackling more intractable issues demanding sustained focus, industry efforts may only have started the wheels turning.

This paper summarizes the progress that has been made toward achieving each of the desired outcomes, highlighting both observations on market activities as well as progress and outcomes of Federal Reserve initiatives. The paper also outlines the Federal Reserve's planned next steps for collaborating with the industry to drive continued progress and calls on all stakeholders to continue to work together in support of the five desired outcomes. We continue to invite and welcome stakeholder feedback as we move forward.



## Speed

***Desired Outcome: A ubiquitous, safe, faster electronic solution(s) for making a broad variety of business and personal payments, supported by a flexible and cost-effective means for payment clearing and settlement groups to settle their positions rapidly and with finality.***

## Progress

In order to facilitate progress toward this desired outcome, the Federal Reserve's *Strategies* paper laid out a strategy for identifying effective approach(es) for implementing a safe, ubiquitous, faster payments capability in the United States. By mid-2017, the Federal Reserve, in conjunction with payment system stakeholders, will have completed most of the tactics outlined as part of the strategy. However, the Federal Reserve's commitment to support faster payments implementation in the United States will continue beyond 2017.

The Faster Payments Task Force was convened by the Federal Reserve in May 2015. More than 320 organizations, representing a variety of stakeholder segments, joined the task force and have remained active throughout the effort.<sup>2</sup> During the second half of 2015, the task force developed 36 criteria that could be used to evaluate faster payments solutions, both within the task force process and by the broader marketplace as organizations work to develop, implement and adopt solutions.<sup>3</sup>

In early 2016, the task force solicited proposals for end-to-end faster payments solutions that could address the need for fast, safe, ubiquitous payments. A qualified independent assessment team (QIAT) reviewed the 22 proposals that were submitted. After the QIAT provided its initial feedback, 19 proposers opted to continue the process of task force review, where task force participants provided feedback on the proposals and assessments. After receiving comments from the task force, 16 solution proposers decided to release their proposals to the general public. In parallel, a capability showcase provided an open opportunity for firms and individuals to demonstrate components or innovative approaches to faster payments.

In January 2017, the task force released the first of its two-part final report that described the task force's approach and articulated its views on the value of faster payments for addressing stakeholder needs. The second part, released in late July 2017, shared the results of the proposal assessment process and recommended industry actions to support the goal for all end users to be able to receive faster payments transactions by 2020.<sup>4</sup> The task force recommendations identify the need for ongoing industry collaboration to address infrastructure gaps; develop models for governance, rules and standards; and consider actions and investments that will contribute to a healthy and sustainable payments ecosystem.<sup>5</sup> A number of recommendations call for Federal Reserve support to facilitate this ongoing collaboration.

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<sup>2</sup> A member roster is available at <https://fedpaymentsimprovement.org/strategic-initiatives/faster-payments/faster-payments-task-force/>.

<sup>3</sup> The Faster Payments Effectiveness Criteria is available at <https://fedpaymentsimprovement.org/strategic-initiatives/faster-payments/effectiveness-criteria/>.

<sup>4</sup> The report is available at <http://FasterPaymentsTaskForce.org>.

<sup>5</sup> The Faster Payments Task Force defines the faster payments ecosystem as an interdependent economic community that includes all entities providing faster payments solutions, as well as end users of those solutions.



The Federal Reserve Board announced in August, following a public comment period, guidelines that will be applied in considering requests for establishing joint accounts at Federal Reserve Banks to facilitate settlement between depository institutions participating in private-sector payment systems.<sup>6</sup> In limited cases and for specific purposes, the Reserve Banks have in the past opened joint accounts held for the benefit of multiple depository institutions, which are managed by an agent on behalf of those depository institutions. The final guidelines will provide consistency and transparency with respect to evaluation of future joint account requests from depository institutions, given continued innovation in the U.S. payment system and the likelihood that there may be broader interest in such joint account arrangements going forward.

The efforts of the Federal Reserve and the task force have driven good progress toward achieving this desired outcome, both in direct accomplishments of the task force as well as the market momentum that has been created. As these efforts were underway, private sector providers have moved to design, and in some cases, introduce faster payment capabilities to end users. The payments industry also has begun exploring potential uses of digital currency and distributed ledger technology in delivering faster payment solutions. In addition, same-day automated clearing house (ACH) credit payments began flowing through the networks in fall 2016, with 13 million payments cleared in the first 100 days. In September 2017, same-day ACH debit payments will begin.

## Challenges and Opportunities

While market activity and task force progress have been impressive, the Federal Reserve sees a need for ongoing industry collaboration to build the foundation for a highly functioning faster payments ecosystem and supporting services. In this timeframe, the early-to-market firms will continue to roll out capabilities and work to build networks.

The objectives of interoperability, ubiquity, and accessibility will continue to pose the greatest challenge. Stakeholders will likely need to agree on the design of a governance framework, and faster payments operators and service providers will have to participate in implementing any framework that is developed. The task force's conclusions suggest that Federal Reserve leadership and participation in these collaborative industry initiatives could help to advance a broadly held collective vision of ubiquitous, safe, faster payments. In particular, the Federal Reserve's involvement could help to ensure inclusion of a broad range of stakeholder perspectives, manage productive collaboration among stakeholders with divergent interests, and provide needed coordination and facilitation for critical foundational work.

## Next Steps

*Strategy: Support industry efforts to implement a safe, ubiquitous, faster payments capability in the United States.*

The Federal Reserve will pursue three new tactics to support the industry's implementation of faster payments, focused on facilitating collaborative efforts to develop a safe, ubiquitous faster payments ecosystem, as well as examining the role that Federal Reserve services could play, as appropriate, to facilitate faster payments:

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<sup>6</sup> A press release is available at <https://www.federalreserve.gov/newsevents/pressreleases/other20170809a.htm>.



- **Support an interim collaboration work group and other collaborative industry efforts to develop a faster payments ecosystem that achieves the Federal Reserve and industry shared desired outcome and the Faster Payments Task Force vision.** The Federal Reserve will facilitate and support, as appropriate, collaborative industry efforts in the near-term that will help to maintain the momentum that has been generated by the Faster Payments Task Force.

The Federal Reserve is currently chairing and supporting an interim collaboration work group. The work group was established by the task force as the task force was developing its final report. The interim collaboration work group is charged with developing recommendations to the industry for a faster payments governance framework for the United States. Establishing an industry governance framework is critical to sustaining progress on the desired outcome and to successfully executing many of the task force's recommendations.

Later this year, the Federal Reserve will also kick off three collaborative industry work groups to lay the groundwork for addressing specific needs identified by the task force, including: (1) faster payments rules and standards; (2) interoperable directories; and (3) the payments regulatory landscape. These work groups will be short-term, targeted efforts focused on producing foundational research to inform possible future decisions made through the industry's governance framework. The Federal Reserve expects that the industry, through its governance framework, will continue work on these needs after groundwork is completed.

Active participation from faster payments operators, providers, and users will be required to realize fully the broad industry-wide benefits derived from a collaborative approach to addressing identified issues. The principles of transparency and inclusion that have been the hallmarks of Federal Reserve efforts to date will continue to guide future endeavors, and the Federal Reserve will provide opportunities for all interested stakeholders, beyond those who choose to actively participate, to stay informed and provide input.<sup>7</sup>

- **Pursue Federal Reserve settlement services that address the future needs of a ubiquitous real-time retail payments environment.** The Federal Reserve will actively engage with the industry to thoroughly understand gaps and requirements for real-time retail payments settlement, as well as to assess alternative models for enhancing Federal Reserve settlement to support real-time retail payments over the long term. As the nation's central bank, the Federal Reserve plays a unique role in providing credit risk-free settlement, which helps reduce risk and promotes financial stability. In addition, the Federal Reserve has solicited input from stakeholders to identify possible enhancements to its multilateral settlement system, the National Settlement Service. The Federal Reserve is assessing demand for weekend hours, consistent with the *Strategies* paper, and will consider the results as it refreshes its strategy for settlement services.

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<sup>7</sup> For more details, see the discussion on the Collaboration desired outcome and <http://fedpaymentsimprovement.org>.





- **Explore and assess the need, if any, for Federal Reserve engagement as a service provider, beyond providing settlement services, in the faster payments ecosystem to support industry achievement of the desired outcome.** The Federal Reserve will assess whether it is appropriate to provide services to support the industry in addressing gaps in capabilities or barriers to achieving the desired outcome, considering requests from stakeholders and the Faster Payments Task Force’s goal of ubiquitous receipt of faster payments by 2020. This analysis will seek to enable the Federal Reserve to better understand current and potential faster payments market developments and challenges, and the conditions that might indicate Federal Reserve services are needed. Beginning in the second half of 2017, the Federal Reserve will assess a range of options and will communicate the results of its assessment to stakeholders.

The Federal Reserve’s assessment of potential new or enhanced services will be guided by its criteria for offering new products and services.<sup>8</sup> These criteria include the need to fully recover costs over the long term, the expectation that the new service will yield clear public benefit and the expectation that other providers alone cannot be expected to provide the service with reasonable effectiveness, scope and equity and following public comment.

In addition to these three tactics, the Federal Reserve will consider other enhancements to its existing services and will continue to monitor, study and solicit input from stakeholders to understand the implications of new payment technologies and models, including distributed ledger technologies and digital currencies, that can facilitate a safe and efficient U.S. payment system.

## Security

***Desired Outcome: U.S. payment system security that remains very strong, with public confidence that remains high, and protections and incident response that keeps pace with the rapidly evolving and expanding threat environment.***

## Progress

As outlined in the *Strategies* paper, the Federal Reserve launched the Secure Payments Task Force in June 2015, with the intent of improving payment system security in the United States.<sup>9</sup> The task force has focused on three core objectives: 1) identifying payment security priorities for industry action; 2) advising the Federal Reserve on payment security issues; and 3) coordinating with the Faster Payments Task Force to help identify approaches to faster payments that are both fast and secure.

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<sup>8</sup> The Federal Reserve’s key policies for the provision of financial services are available at [https://www.federalreserve.gov/paymentsystems/pfs\\_policies.htm](https://www.federalreserve.gov/paymentsystems/pfs_policies.htm).

<sup>9</sup> A member roster is available at <https://fedpaymentsimprovement.org/strategic-initiatives/payments-security/secure-payments-task-force/>.



From the early stages of its launch, the Secure Payments Task Force supported the Faster Payments Task Force's work to identify effective approaches for implementing safe, ubiquitous, faster payment capabilities in the United States. For example, the task forces worked together to outline the security requirements for a future faster payments system. The Secure Payments Task Force also established four work efforts focused on addressing the most pressing security challenges of today's payment systems: (1) payment identity management; (2) data protection; (3) information sharing for the mitigation of payment risk and fraud; and (4) law and regulation coordination, in addition to establishing a standards assessment team to consider the role that standards do or can play in addressing these issues.

The Secure Payments Task Force has documented the payment lifecycles for the eight most prominent payment types to serve as an educational reference guide for payment and security practitioners. The task force has also developed and plans to publish a list of currently-available fraud and risk information sharing data sources that may be used to mitigate fraud and cyber threats, in an effort to broaden the use of actionable information across payment system participants. Building on the payment lifecycles and security profiles, work is underway to document and publish a payment security framework that contains practical, risk-based guidance and advice on payment identity management and data protection to serve as a resource to guide the industry in strengthening payment security controls. Additionally, in an attempt to better identify fraud risks and trends across the payments industry, the task force is working to standardize the definition, collection and reporting of fraud data across multiple payment types.

Finally, in its advisory capacity, the task force provided input and recommendations related to activities the Federal Reserve conducts to reduce fraud risk and advance payment system security, including data collection, standards, outreach, and research. Some of the recommendations focused on how to improve the collection of fraud information that is reported in the Federal Reserve Payments Study.<sup>10</sup> As a result, the Federal Reserve made enhancements to the Federal Reserve Payments Study, which now provides more detailed payments fraud data. In addition, the Federal Reserve will release an annual supplement that contains fraud statistics between triennial studies.

The Federal Reserve continued its support and involvement in several open standards initiatives, working to address issues such as card-not-present fraud, digital currency security, and strong authentication of web applications, among others.<sup>11</sup>

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<sup>10</sup> The Federal Reserve Payments Study is available at <https://www.federalreserve.gov/newsevents/press/other/2016-payments-study-20161222.pdf>.

<sup>11</sup> The Federal Reserve participates in the Accredited Standards Committee X9 Card Not Present Fraud Mitigation Work Group, the International Organization for Standardization TC 68/SC 2 Ad Hoc Committee on digital currency security, the World Wide Web Consortium Web Authentication Work Group and the U.S. Payments Forum Card Not Present Working Group.



## Challenges and Opportunities

As demonstrated by the significant level of task force participation, as well as Federal Reserve and industry activity, stakeholder commitment to this desired outcome is strong. However, the desired outcome for security is framed in terms of an ongoing focus on maintaining security and confidence in the payment system, rather than a specific end state. The return on investments to make substantive progress on the key issues and related solutions will take years to materialize and will be realized only through sustained commitment to both developing solutions and driving adoption. In addition, the dynamic nature of the threat environment makes “security that remains very strong” a continuously moving target.

In the broader marketplace, many industry initiatives seek to address standards and other payment security challenges, including the Europay, MasterCard®, and Visa® (EMV) chip migration, card-not-present fraud, cybersecurity, identity management and data protection. These industry efforts are helping to strengthen payment system security, although the number and variety of efforts can make it challenging for industry participants to assess how and when to invest in improvements.

Progress on this desired outcome continues to be challenged by the fragmented nature of the industry despite collaboration and coordination efforts taking place. Across the end-to-end payments chain, incentives among payments stakeholders can be misaligned, weakening the business case to adopt security-related enhancements in a coordinated way. This problem is intensified by a lack of resources to educate and inform participants of costs and benefits of additional security.

## Next Steps

*Strategy: Work to reduce fraud risk and advance the safety, security and resiliency of the payment system.*

In addition to the Secure Payments Task Force work currently underway, the Federal Reserve will pursue two new tactics to support payment security, focused on studying security vulnerabilities and misalignment of incentives, as well as facilitating collaborative efforts to prioritize improvement efforts and stimulate market activity to effectively mitigate vulnerabilities.

- **Analyze payment security vulnerabilities, assess potential approaches to mitigate them, and identify misalignment of incentives that may hinder progress.** The Federal Reserve will conduct a study designed to inform industry security improvement efforts. The study will analyze payment system security vulnerabilities and the costs and benefits of various approaches to mitigate them.

The task force identified broad payment security challenges (e.g., identity management, data protection, and payment risk information sharing) and is producing foundational industry resources. While there is agreement that gaps exist in delivering what payment system stakeholders expect and need in payments security, interactions with members of the task force suggest there is some disagreement about what, exactly, those gaps are, how severe the gaps might be and how to mitigate them. A systematic and objective analysis that identifies and prioritizes payment security issues, defines potential costs and benefits of mitigation, and assesses stakeholder impact will be valuable in measuring outcomes and in better understanding stakeholder incentives to implement improvements.



- As part of the study, the Federal Reserve will research the misalignment of incentives that impede the advancement of potential solutions associated with key vulnerabilities. Both the Federal Reserve (in its Security Landscape Study) and the task force have concluded that entities in the best position to implement security protections may not always have sufficient incentives to do so, which can result in underinvestment or misaligned incentives in security protections.<sup>12</sup> The Federal Reserve will conduct research and seek industry views to identify specific cases where incentives to implement strong security practices are inadequate.
- **Establish and engage in collaborative industry work groups focused on approaches for reducing the cost and prevalence of specific payment security vulnerabilities.** The Federal Reserve will leverage the foundational contributions of the task force and the analysis referenced above to facilitate industry engagement on key payment security priorities and efforts to mitigate identified vulnerabilities. Engaging relevant industry stakeholder perspectives and expertise will remain of paramount importance in aligning payment security priorities, defining potential initiatives and advancing targeted opportunities to enhance payment system security. In addition to work efforts focused on addressing key security vulnerabilities, the Federal Reserve will engage with specific stakeholder groups, payments regulators and/or rule makers to help address misaligned incentives, as needed.

In addition, the Federal Reserve remains committed to continued participation in industry-sponsored payment security improvement initiatives and standards development efforts, and will work to identify other forums where Federal Reserve contributions advance the desired outcome for security in the payments system. The Federal Reserve will also continue to identify and implement enhancements to help promote strong security and enrich the risk management capabilities associated with the Federal Reserve's payments network and services.

## Efficiency

***Desired Outcome: Greater proportion of payments originated and received electronically to reduce the average end-to-end (societal) costs of payment transactions and enable innovative payment services that deliver improved value to consumers and businesses.***

## Progress

The Federal Reserve and the industry have invested significantly in efforts to promote and implement ISO<sup>®</sup> 20022. Organizations including the Business Payments Coalition, NACHA, The Clearing House, the Society for Worldwide Interbank and Financial Telecommunications (SWIFT), the Association of Financial Professionals, Accredited Standards Committee X9 Financial Industry Standards, and the Federal Reserve have conducted research to understand the current state of adoption, perceived benefits, business case, and use cases. Similarly, the Federal Reserve has closely collaborated on global efforts to drive common approaches to implementing ISO 20022 with an eye toward cross-border interoperability.

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<sup>12</sup> A summary of the Security Landscape Study is available at [https://fedpaymentsimprovement.org/wp-content/uploads/payment\\_security\\_landscape.pdf](https://fedpaymentsimprovement.org/wp-content/uploads/payment_security_landscape.pdf).



To drive adoption of ISO 20022, the Federal Reserve and industry have undertaken educational initiatives focused on explaining the standard, reviewing use cases and benefits for both high-value and low-value payments, highlighting existing ACH tools that can aid in integration, outlining a roadmap for how the major wire transfer systems in the United States might adopt the standard, and providing tools for vendors to use in implementing the standard and educating their customers. Relatedly, the Federal Reserve has begun developing detailed mapping documents, usage guidelines, and an implementation plan to support the ISO 20022 implementation for the Fedwire® Funds Service and plans to share a draft of these documents with its users and to announce an implementation timeline by the end of the year.

To accelerate adoption of secure electronic business-to-business (B2B) payments, the Federal Reserve has engaged in ongoing collaboration with the industry to understand the barriers to electronic B2B payments adoption and possible solutions; to develop and promote standards to simplify B2B straight-through processing; and to facilitate industry efforts to establish a B2B directory. In addition, the Federal Reserve collaborated with the Business Payments Coalition to develop, publish and promote the Small Business Payments Toolkit.

The Business Payments Coalition is a volunteer group of organizations and individuals working together to promote greater adoption of electronic B2B payments and electronic remittance data exchanges. The toolkit was created for small businesses and the bankers and advisors who serve them in order to encourage more efficient and safer payments processes by small businesses, provide education on payments fraud prevention, and advance work on a catalog of e-invoicing standards.<sup>13</sup>

Finally, consistent with the *Strategies* paper, the Federal Reserve conducted a research effort to assess the potential savings and benefits of e-invoicing for the U.S. market and published the results in July 2016 in the paper, *U.S. Adoption of Electronic Invoicing: Challenges and Opportunities*.<sup>14</sup> Guided by available literature and industry practitioners, this paper sought to explore the possibility of developing and implementing a standard, ubiquitous B2B electronic invoice and processing platform in the United States similar to those that have been developed in other countries. The paper concludes that the societal benefit in reducing paper invoices is substantial, but the challenges to implementing e-invoicing are just as substantial and a one-size fits all platform may not be effective for the United States. The paper also highlights the strong desire and effort of many business stakeholders to drive adoption of e-invoicing and the value of ongoing industry dialogue to advance efforts.

## Challenges and Opportunities

Though the efforts and progress noted above are important, they represent only part of a long journey to reaching end-to-end electrification. Change may be accelerated as innovative payment services, such as faster payment systems, come to market with offerings that address existing pain points and create a stronger value proposition. However, change will take time, as well as ongoing collaboration among businesses and the financial institutions and technology firms that support their payment needs.

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<sup>13</sup> The Small Business Payments Toolkit is available at <https://fedpaymentsimprovement.org/wp-content/uploads/small-business-toolkit.pdf>

<sup>14</sup> The U.S. Adoption of Electronic Invoicing: Challenges and Opportunities paper is available at <https://fedpaymentsimprovement.org/wp-content/uploads/e-invoicing-white-paper.pdf>



## Next Steps

*Strategy: Achieve greater end-to-end efficiency for domestic payments.*

The Federal Reserve will pursue a new tactic to support greater end-to-end efficiency for business payments, specifically focused on the need to electronify information related to payments in order to increase use of electronic payments.

- **Support industry efforts to develop and promote adoption of standards that enable end-to-end electronic processing of business invoices, payments and remittance information.** The Federal Reserve will support industry efforts to develop and promote adoption of standards and to build an interoperability framework for vendors. A major barrier identified by U.S. businesses to adopting electronic payments is the willingness of their trading partner to send or receive automated electronic invoicing information. As part of the Business Payments Coalition, the Federal Reserve will support a three-year initiative to catalog existing e-invoicing standards and design an electronic invoice interoperability framework for the U.S. market. As a complement to this work, the Federal Reserve is helping to coordinate work across leading standards organizations on an open library of standards for electronic XML business documents.

In addition, over the past four years, the Business Payments Coalition worked to identify ways to achieve better B2B payments efficiencies and identified the need for a standard for exchanging remittance data about payments between businesses. In an effort to address this need, the Federal Reserve will support and guide a multi-year industry-led collaborative initiative to develop a remittance data standard and outline a roadmap for achieving widespread industry adoption.

The Federal Reserve will also seek to understand more fully why small and mid-size businesses use checks heavily for B2B payments.

## International

*Desired Outcome: Better choices for consumers and businesses to send and receive convenient, cost-effective and timely cross-border payments.*

## Progress

The Federal Reserve has worked to assess its cross-border payment services. As contemplated in the *Strategies* paper, the Federal Reserve completed a review of one possible service option that would enable Federal Reserve account-holding institutions participating in the Fedwire Funds Service to send cross-border payments more easily. After considering the costs, benefits, and risks, the Federal Reserve determined not to pursue this enhancement to the Fedwire Funds Service at this time. The Federal Reserve continues to assess potential enhancements to its FedGlobal<sup>®</sup> ACH service offerings.<sup>15</sup>

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<sup>15</sup> In 2016, the Federal Reserve discontinued the FedGlobal ACH Account-to-Receiver (A2R) service, which serviced certain countries in Latin America, partly as a result of successful financial inclusion efforts in Mexico.



At the same time, the Federal Reserve worked with the industry on specific efforts to improve cross-border payments, in particular SWIFT's® Global Payments Innovation (GPI) initiative. SWIFT's GPI initiative is focused on improving the speed and transparency of cross-border payments. The Federal Reserve has developed a market practice for Fedwire Funds Service participants that are using the SWIFT GPI service that enables them to include GPI-related information in Fedwire Funds messages.

As discussed earlier, work to implement the ISO 20022 payment format for wire services could also enhance cross-border payments in addition to providing gains in efficiency. The Federal Reserve and The Clearing House each decided to adopt the ISO standard for their respective wire transfer systems. To benefit their mutual customers, they have been working to coordinate when and how they will implement the standard. The Federal Reserve plans to announce its implementation plans later this year.

In addition to these efforts, a number of nonbank and banking-sector providers are exploring the potential for new technologies, standards and models to enhance the speed and transparency of international payments. A variety of nonbank service providers have also expanded payment services targeted at consumers.

## Challenges and Opportunities

Concerns about compliance with economic sanctions and anti-money laundering (AML) requirements of the Bank Secrecy Act persist in the market. Anecdotal evidence suggests that, in light of these obligations and associated costs, depository institutions are making business decisions to reexamine their cross-border payment service offerings and account relationships. A number of recent efforts have clarified regulatory expectations in this area, such as the U.S. Department of the Treasury's joint fact sheet on AML and sanctions enforcement, the Basel Committee on Banking Supervision's update to the guidelines, *Sound management of risks related to money laundering and terrorist financing*, and the Financial Action Task Force's guidance, *Correspondent Banking Services*. While dialogue has continued, more work is needed to address concerns for cross-border payments.

More broadly, stakeholders, including members of both task forces, have emphasized that the desired outcome remains important, and that more work is needed to improve the speed, efficiency and safety of cross-border payments. Specifically, the Faster Payments Task Force has expressed its desire to achieve cross-border interoperability for real-time retail payments in the future. Further, the Federal Reserve recognizes that fraud and threats to payment confidentiality and integrity can easily cross borders. The Federal Reserve believes it would be valuable to continue to assess opportunities for improving cross-border payments working collaboratively with industry.

## Next Steps

*Strategy: Work to enhance the timeliness, cost effectiveness, and convenience of cross-border payments.*

The Federal Reserve will pursue a new tactic to support international payments, focused on proactive engagement with stakeholders:

- **Engage with stakeholders to understand and assess the challenges and opportunities to enhance the timeliness, cost effectiveness and convenience of cross-border payments.** The Federal Reserve will



develop and implement a strategy for engaging proactively with stakeholders to understand better the current landscape and perceived gaps and areas for Federal Reserve research or engagement. The Federal Reserve is also committed to participating in collaborative industry efforts on cross-border issues related to faster payments and payment security.

## Collaboration

***Desired Outcome: Needed payment system improvements are collectively identified and embraced by a broad array of payment participants, with material progress in implementing them.***

## Progress

The Federal Reserve has seen public-private engagements yield important gains for the country, with such collaboration contributing to a more efficient, effective and resilient payment system and providing significant benefits to the public. Examples of past success include the development of routing numbers, the growth of the ACH network, and the development of the Check Clearing for the 21st Century Act.

The *Strategies* paper built upon this history by establishing collaboration as a desired outcome and committing to a strategy of active engagement with stakeholders on initiatives designed to improve the U.S. payment system. Specifically, the Federal Reserve committed to facilitating mechanisms for payment stakeholders to engage in initiatives, provide strategic input, submit feedback, and stay informed about payment system improvement activities. In addition, the Federal Reserve planned to participate, as appropriate, in industry-led initiatives designed to further the desired outcomes.<sup>16</sup>

One of the tactics outlined as part of this strategy was to establish two stakeholder task forces, as described above, focused on faster payments and payments security. Guided by a desire for inclusion of diverse stakeholder perspectives, the Federal Reserve actively recruited roughly 500 participants from 400 organizations representing financial institutions, merchant and business users, consumer interest groups, nonbank payment service providers and networks, government users, regulators, trade associations, and more. Participants were engaged through in-person meetings, teleconferences, webinars, and drop-in calls, with input on work products solicited via surveys, polls, and a secure, online collaboration space. Task force participant feedback has been very positive and engagement as measured by voting participation has remained at 60-80 percent of task force members since inception.

The Federal Reserve also supported industry collaboration related to payments efficiency, facilitating and supporting the work of the 550-member Business Payments Coalition and the ISO 20022 Stakeholder Group.

Broad stakeholder education and outreach to create awareness and support of improvement initiatives has remained a priority. Outreach efforts have encompassed hundreds of industry events, conferences, meetings, and webinars, with a focus on reaching broad and diverse stakeholder audiences. Online content and social media channels have delivered news and information regularly to more than 4,000 subscribers to the FedPaymentsImprovement.org community.

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<sup>16</sup> Information on engagement opportunities is available at <http://FedPaymentsImprovement.org>.





Efforts to attend a wide array of industry events and meetings have enabled dialogue with a variety of stakeholders from across the payment system, including nonbank payment service providers, start-up companies, merchants, consumer interest groups, financial institutions and payments network operators. This approach has provided the Federal Reserve with a comprehensive view of challenges and opportunities within the payments landscape in the United States. International events with other central banks and agencies also provided unique opportunities to learn how other markets are addressing similar challenges.

## Challenges and Opportunities

Stakeholders have invested significant time and dollars to contribute to these collaborative efforts. Enthusiasm remains strong, but stakeholders have indicated that sustaining a high level of time and travel commitment for these “volunteer” efforts is challenging. To address the challenges, future collaboration efforts will consider narrower scope and shorter timelines and employ creative and flexible engagement tactics. Future Federal Reserve efforts also will leverage communication and education programs targeted for the needs of specific audiences in addition to encouraging direct engagement in improvement initiatives.

## Next Steps

*Strategy: Actively engage with stakeholders on initiatives designed to improve the U.S. payment system.*

As the foundation of the *Strategies* paper, collaboration with a broad spectrum of payment system stakeholders is central to the successes experienced to date and will continue to guide Federal Reserve efforts moving forward. The Federal Reserve has identified two tactics to support industry collaboration and progress across all desired outcomes:

- **Facilitate ongoing stakeholder engagement in payments improvement efforts through a highly interactive and flexible payments improvement community.** An enhanced FedPayments Improvement Community will provide members the opportunity to tailor their engagement by indicating which initiatives and topics are of interest to them and engaging only when and how they wish. Community members will be notified of opportunities to participate in Fed-sponsored work groups, like those described in this paper, and will receive requests for input from these working groups as work products emerge. Engagement will encompass an ala carte menu of online communication and interaction, webinars, and periodic in-person events.

The Community will continue to be open to all interested stakeholders and represent a continuation of transparent, inclusive, and effective engagement. As task forces and other collaboration groups complete their work efforts, the Community provides a mechanism for remaining engaged and tracking ongoing related efforts.<sup>17</sup> In facilitating Community engagement in the Fed-sponsored work efforts described in this paper, the Federal Reserve will work to ensure that the appropriate tools, technologies, and capabilities are available to facilitate meaningful contribution.

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<sup>17</sup> Faster Payments Task Force members were enrolled in the community at the conclusion of their work in July 2017.



- **Further outreach and education efforts to create awareness and encourage adoption of identified improvements and initiatives.** The evolved approach will support awareness and adoption of identified improvements, such as the Faster Payments Effectiveness Criteria and the forthcoming Secure Payments Task Force Payment Security Framework. Future efforts will enhance current communication programs to promote the work of the task forces and other Federal Reserve-sponsored collaboration efforts, as well as to educate stakeholders on desired improvements in the U.S. payment system in order to drive change. Outreach will continue to focus on reaching a broad stakeholder audience that encompasses both payments providers and users.

## Conclusion

Achieving the vision for U.S. payment system modernization represented by the five desired outcomes is a complex endeavor. The Federal Reserve and industry have made considerable progress to date. However, substantial work lies ahead to implement and adopt safe, ubiquitous real-time retail payments and to foster a safe, resilient and efficient U.S. payment system.

The Federal Reserve has already initiated work on several of the tactics described in this paper. The industry's faster payments governance-focused interim collaboration work group kicked off its effort this summer with Federal Reserve support. Similarly, while continuing to support the current work of the Secure Payments Task Force, the Federal Reserve has begun to design the security study envisioned to guide the next phase of industry effort. Finally, the multi-year strategy to support B2B electrification marked the beginning of a new phase of longstanding industry collaboration on these challenges.

In addition to moving forward with tactics related to the existing services it provides, the Federal Reserve has started to take a deeper look at how to address gaps and define requirements for settlement in a future ubiquitous real-time retail payments environment, consistent with Federal Reserve policy on the provision of payment services.<sup>18</sup> Also, before year-end, the Federal Reserve will establish a work effort to explore and assess the need, if any, for Federal Reserve engagement as a service provider in the faster payments ecosystem, beyond providing settlement services, to support industry achievement of the desired outcome.

In defining these next steps in the payments improvement journey, the Federal Reserve remains steadfast in its commitment to progress and to achieving the five desired outcomes through leadership and action. The Federal Reserve will continue to act as a leader, convener, catalyst, and service provider, as appropriate, in support of these initiatives. The Federal Reserve will also actively monitor and communicate progress, adjust approaches in response to developments, and seek input from all stakeholders on key issues as initiatives progress.

Collectively-designed solutions are foundational to achieving the desired outcomes. The Federal Reserve repeats its call for stakeholders to engage collaboratively in these next steps to achieve a faster, ubiquitous, safer, more efficient payment system for the United States.

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<sup>18</sup> The Federal Reserve in the Payments System is available at [https://www.federalreserve.gov/paymentsystems/pfs\\_frpaysys.htm](https://www.federalreserve.gov/paymentsystems/pfs_frpaysys.htm).



<https://fedpaymentsimprovement.org/>

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