

Status of the Federal Reserve Strategic Plan for the Payments System



September 2014



Richmond ▪ Baltimore ▪ Charlotte

Federal Reserve Strategic Direction in Payments

Focus on Transactions from End-to-End

Safety and Security

- Maintain and enhance FRB network security
- Enhance understanding of end-to-end security
- Collaborate and promote industry best practices

Speed

- Develop solutions to enhance payment speed
- Understand market demand for faster payments
- Continue migration of paper to electronic

Efficiency

- Develop solutions to promote efficiency
- Understand needs and barriers
- Promote standards adoption to improve efficiency

New End-to-End Strategic Focus on Speed, Security and Efficiency

Retail Payments Study

ISO 20022 Business Case Assessment

Payments System Improvement Roadmap

Industry Engagement

Faster Payments Assessment

Payment Security Landscape Study

Research on End-User Demand for Select Payment Attributes

Consultation Paper

The road we traveled...

Payment System Improvement – Public Consultation Paper

In late 2013, Federal Reserve Banks solicited comments on a *Payment System Improvement – Public Consultation Paper*.

The paper sought the input of payment system stakeholders and end users on:

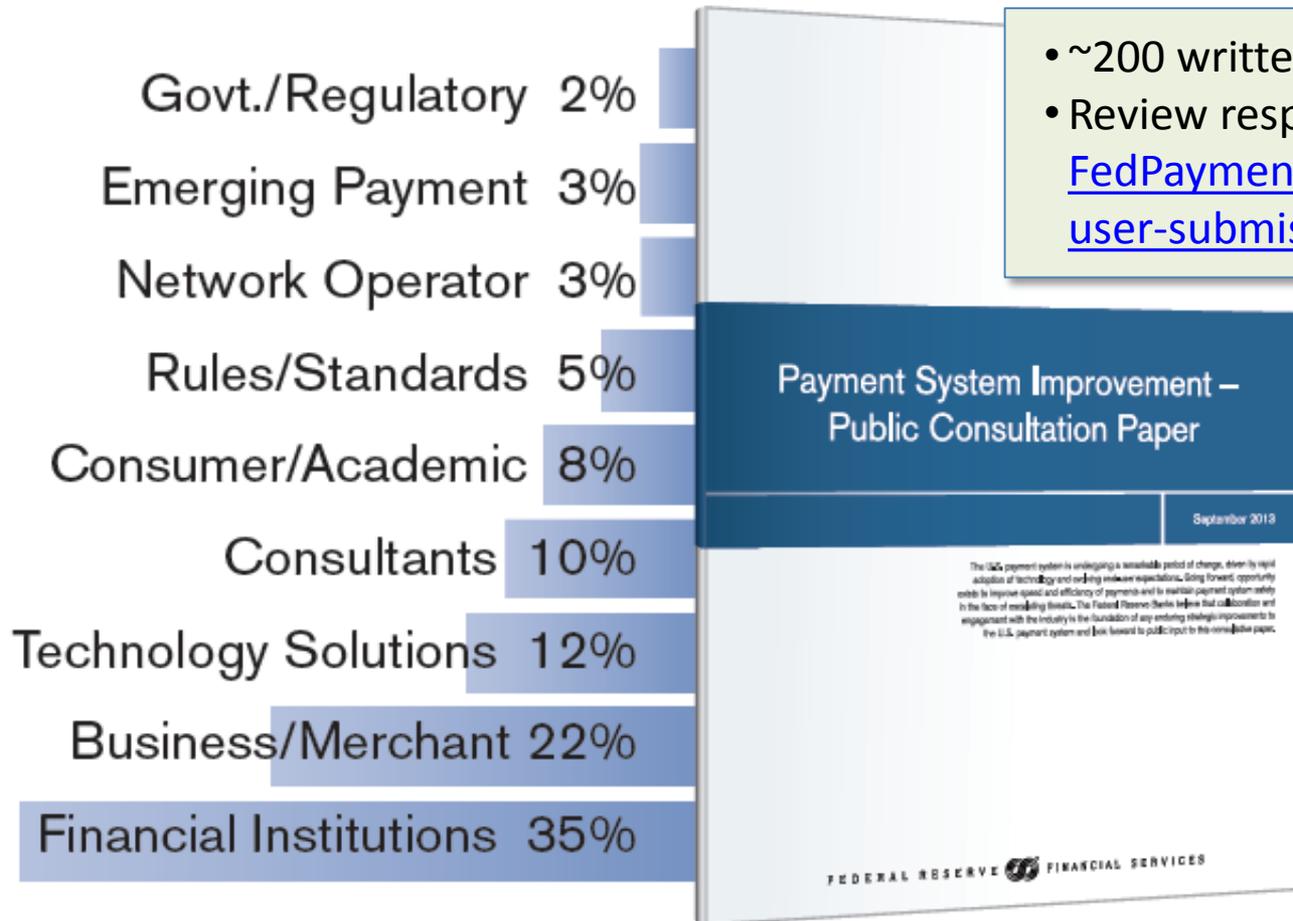
- Payment system gaps, opportunities and desired outcomes
- Potential strategies and tactics to shape the future of the U.S. payment system
- The Federal Reserve Banks' role in implementing these strategies and tactics

Payment System Improvement – Public Consultation Paper

Gaps, Opportunities and Desired Outcomes

1. End User Check Writing
2. Closed Payment Communities
3. ACH and Wires Lack R-T End User Features
4. International Payments
5. The Second Internet Revolution – Mobile
6. Faster Payments
7. Converting Businesses to Electronics
8. Concerns about Payments Security

Payment System Improvement Public Consultation Paper - Industry Response



- ~200 written responses

- Review responses at:

[FedPaymentsImprovement.org/
user-submissions/](https://www.fedpaymentsimprovement.org/user-submissions/)

Payment System Improvement – Public Consultation Paper

September 2018

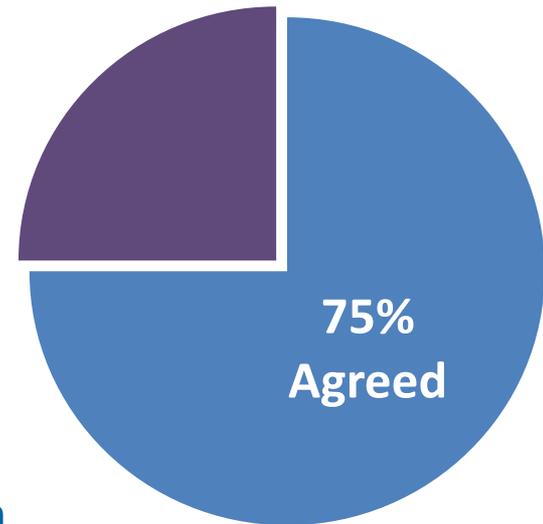
The U.S. payment system is undergoing a remarkable period of change, driven by rapid adoption of technology and evolving customer expectations. Going forward, opportunity exists to improve speed and efficiency of payments and to maintain payment system safety in the face of emerging threats. The Federal Reserve Series Letter that solicited your comment and engagement with the industry is the foundation of any enduring strategic improvement to the U.S. payment system and we look forward to your input to the consultation paper.

FEDERAL RESERVE  FINANCIAL SERVICES

Payment System Improvement – Public Consultation Paper Industry Feedback Summary – Common Themes

Agreement with Gaps, Opportunities and Desired Outcomes

- Approximately **three quarters** of respondents **agreed** with the gaps, opportunities and desired outcomes outlined in the consultation paper
- Feedback suggested that the Fed consider **additional areas for focus**
- Many think a **10-year plan** for improving the U.S. payment system **is not aggressive enough**



Desired Outcome 1



Ubiquitous, Faster Electronic Solution(s)

A ubiquitous, faster electronic solution(s) will exist for making a broad variety of business and personal payments, and the Federal Reserve will provide a flexible and cost-effective means for private sector arrangements to settle their positions rapidly and with finality.

Potential Strategies:

- Industry Faster Payments Initiative
- National Settlement Service Enhancements

Payment System Improvement – Public Consultation Paper Industry Feedback Summary – Common Themes

Faster Payments

- **More than three quarters** of respondents agreed that the following would be important:
 - Ubiquitous participation
 - Confirmation of good funds
 - Speedy payment settlement and delivery of information
- Many suggested that we should **only pursue near real-time payments** if there is a **clear business case**
- Opinions were divided on how to achieve near real-time delivery of payments
- Many suggested that near real-time **confirmation of good funds and notification are more important** than near real-time **posting to end-user accounts and interbank settlement**
- Many urged that any **future faster payment options be limited to credit payments** to help prevent fraud

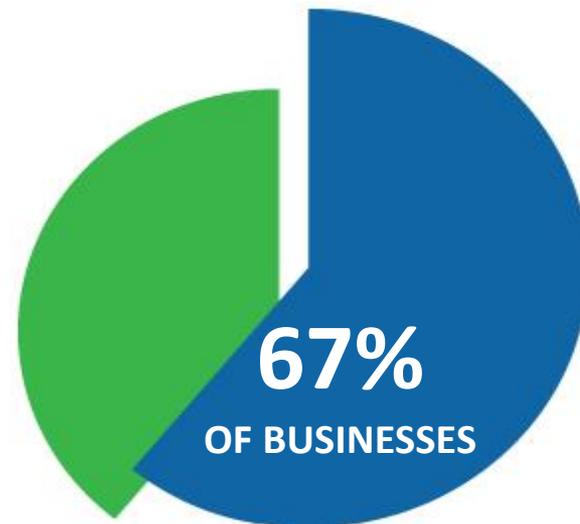
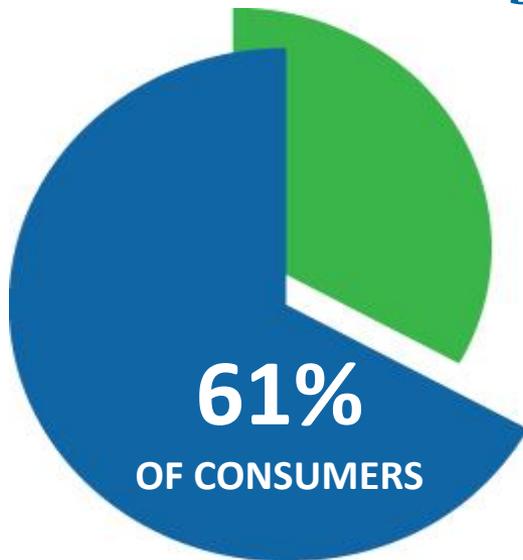


Research on End-User Demand for Select Payment Attributes

Key Takeaways

Payment Acceptance

Most consumers and businesses agreed that they “won’t use a payment method unless it is **used and accepted by most people and businesses**”

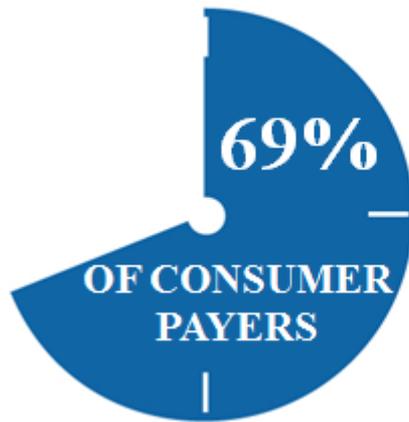


Research on End-User Demand for Select Payment Attributes

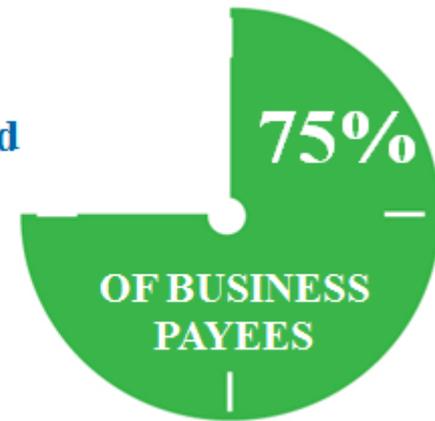
Key Takeaways

Payment Speed

When presented with a choice between payment speeds of either:
Instant • **One hour** • 12 hours • 12-24 hours • 2-3 business days



Consumer payers and
business payees preferred
instant or one-hour
payment speed



Research on End-User Demand for Select Payment Attributes

Key Takeaways

Payment Notification

Most consumers and businesses stated that it is important to **receive timely notification** that a payment has been made and when the payment was received by the payee

Payment Made

75% OF

CONSUMERS

84% OF BUSINESSES

Payment Received

70% OF

CONSUMERS

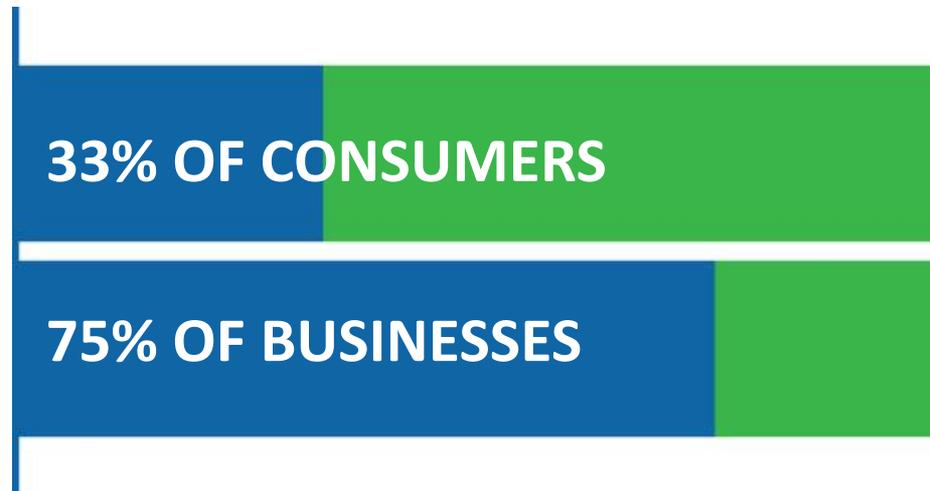
82% OF BUSINESSES

Research on End-User Demand for Select Payment Attributes

Key Takeaways

Willingness to Pay

More businesses than consumers expressed **willingness to pay a fee** for payments that have faster availability to the payee



Faster Payments Assessment

Five Use Cases Could Benefit...

Use case	Volume / % of total payments	Speed required
B2B¹ ad-hoc low value (e.g., just-in-time supplier payments)	11.1 billion / 5%	<ul style="list-style-type: none"> ▪ Real-time authorization/clearing ▪ Intra-day availability of funds ▪ Intra-day interbank settlement
B2P ad-hoc high value (e.g., insurance claims, legal settlements)	NA	<ul style="list-style-type: none"> ▪ Real-time authorization/clearing ▪ Real-time availability of funds ▪ Late-day interbank settlement
P2P² transfers (e.g., rent repayment to roommates)	4.3 billion / 2%	<ul style="list-style-type: none"> ▪ Real-time authorization/clearing ▪ Real-time availability of funds ▪ Late-day interbank settlement
B2P ad-hoc low value (e.g., temporary employee wages)	3.2 billion / 1%	<ul style="list-style-type: none"> ▪ Intra-day authorization/clearing ▪ Intra-day availability of funds ▪ Late-day interbank settlement
P2B ad-hoc, remote (e.g., emergency bill pay)	10.3 billion / 4%	<ul style="list-style-type: none"> ▪ Real-time authorization/clearing ▪ Late-day availability of funds ▪ Late-day interbank settlement

¹ Business includes Government

² Does not include P2P commerce such as paying babysitter/lawn mowing kid; these transaction are distributed across a number of P2B use cases

SOURCE: McKinsey expert and industry interviews, public consultation responses; McKinsey Payments Map; Consumer Financial Life Survey

Faster Payments Assessment

Perspectives on Options Assessment and Path Forward

- **Evolve ACH** may be quickest to implement with the fewest required changes. However, it only achieves near real-time, not real-time, notification and clearing.
- **Evolve ATM/PIN debit infrastructure** has existing real-time capabilities but presents challenges with aligning networks, integrating corporate cash management systems at FIs, expanding credit capability and changing the economic model.
- **Direct clearing over public IP networks** leverages existing, low-cost communications networks used by millions worldwide, but assuring stakeholders of the safety of the system will be challenging even if required security exists.
- **Build new clearing-only infrastructure (legacy settlement infrastructure)** may be able to meet the needs for real-time in the target use cases in a reasonable timeframe, but integration with legacy settlement constrains the flexibility of the design.
- **Build completely new infrastructure** offers the most flexibility to meet future needs, but cost and time to implement may make this challenging to pursue.

To meet the needs of targeted use cases, the options assessment suggests that building new infrastructure is the optimal solution.

National Settlement Service

Potential Enhancements

Current Business Hours

- 8:30 am ET to 5:00 pm ET, align with the traditional banking day on the East Coast

Expanded Hours

- West Coast/foreign-based institutions desire settlement outside the current operating hours.
- Many clearing arrangements settle on the books of commercial banks, which creates more risk than settlement in central bank money.
- Needs could be better addressed through expanded service hours, which could be achieved through a phased approach
 - **Phase 1** - Expand hours to 7:30 am ET to 5:30 pm ET
 - **Phase 2** - Accelerate opening to 9:00 pm ET to coincide with the opening of the Fedwire® Funds Service
 - **Phase 3** - Explore changes needed for weekend and/or 24x7 operating hours

Enhancements

- Enhancements to support settlement arrangements and empower innovation around faster, more efficient retail payment solutions.

Desired Outcome 2



Enhanced Payments Safety and Security

U.S. payment system security is very strong, public confidence in it is high, and protections and incident response have kept pace with the rapidly evolving and expanding threat environment.

Potential Strategies:

- Industry Payments Security Council
- Mobile / digital payments security framework
- Accelerated development and adoption of security standards
- Improved payment fraud data collection and reporting
- Expanded payment security research

Payment System Improvement – Public Consultation Paper Industry Feedback Summary – Common Themes

Security

- Many suggested that the industry **work together to develop new fraud prevention tools**
- Many also advocated for the **development and adoption of security standards**
- Many believe consumers need better **education and incentives** to make fraud-reducing payment choices



Research on End-User Demand for Select Payment Attributes

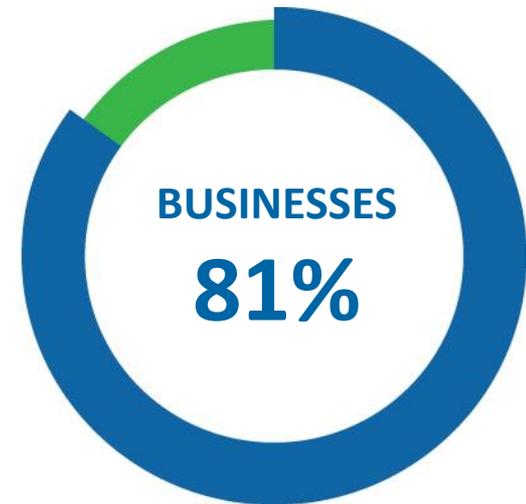
Key Takeaways

Sharing of Information

Consumers and businesses indicated that they would rather **share an email address or a phone number** to make/receive



When making a payment, **not having to give bank account information to the payee** is important





Payments Security Landscape Study Objective, Definition and Scope

The Payment Security Landscape Study was undertaken to enhance our understanding of end-to-end payment security and identify opportunities for improving it in collaboration with payment system stakeholders.

Confidentiality

Integrity

Authentication

Legacy Networks

ACH

Check

Funds Transfer

Credit Card

Debit Card

Emerging/ Alternative Methods

Mobile Wallets

Money Transfer
Solutions

General Purpose
Reloadable Cards

Virtual
Currencies

Potential Strategies for Enhancing Payments Security

Establish an executive level advisory council on payment security with Federal Reserve System leadership and representation from all payment stakeholders to discuss issues and form consensus on how best to address them.

Expand current collaborative effort (Fed's Mobile Payments Industry Work Group) to develop a mobile/digital payments end-to-end security framework.

Work with payment system stakeholders to accelerate development and adoption of payment security standards and related business processes.

Lead a collaborative effort with stakeholders to improve the quality, consistency and value of payment fraud data collected and reported.

Expand Federal Reserve System capacity to deliver payment security research that anticipates future payment security challenges and is highly valued by policy makers and industry stakeholders.

Desired Outcome 3



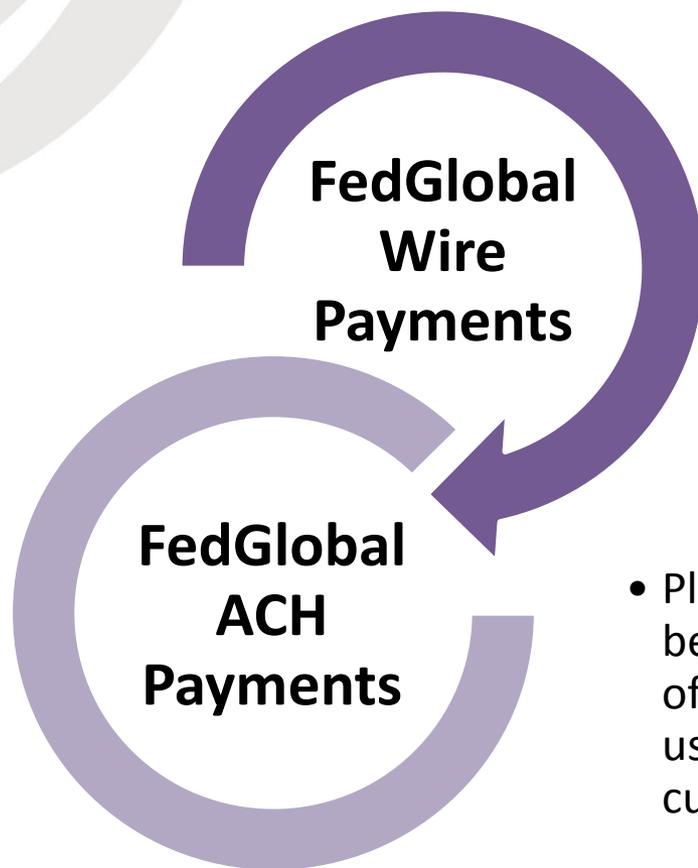
Improvements in Cross-Border Payments

Consumers and businesses have better choices in making convenient, cost-effective and timely cross-border payments from and to the U.S.

Potential Strategies:

- FedGlobal[®] Payments expansion
- Adoption of ISO 20022 standard

FedGlobal[®] Payments Expansion



**FedGlobal
Wire
Payments**

**FedGlobal
ACH
Payments**

- A proposed service for Fedwire Funds Service participants to allow initiation of cross-border wires through their normal Fedwire Funds connection, payable in either U.S. dollar or foreign currency to beneficiaries in a diverse set of jurisdictions and currencies around the world.
- Plans to vastly expand network beyond the current 35 countries and offer improved features for business users, as well as remittance customers.

ISO 20022 Implementation

What is ISO 20022?

- ISO 20022 is a harmonized set of XML messaging standards across major financial services domains (cash, securities, trade, card and FX) based on a shared data dictionary and business process model. It allows room for additional payment-related information from the remitter through the beneficiary.

Should the U.S. adopt?

- The Fed, X9, NACHA and The Clearing House completed a business case assessment in early 2014 to assess whether the U.S. ACH and funds transfer systems should adopt ISO 20022 to remain competitive.

What was assessed?

- The scope of the study included the current landscape of U.S. participants, ISO 20022 adoption activities in other markets, impact analysis for U.S. participants (adoption vs. lack of adoption) and competitive impact analysis

Desired Outcome 4



Improved Efficiency

Greater electrification of payments originated and received has reduced the average end-to-end (societal) costs of payment transactions and resulted in innovative payment services that deliver improved value to consumers, businesses and governments.

Potential Strategies:

- Industry payment directory or directories
- E-payments education for small businesses
- B2B payment standards development and adoption
- Exploration of a B2B electronic invoice and payment processing platform
- FedACH[®] SameDay Service expansion and adoption

Potential Directory Strategy

Convene diverse stakeholders to develop a shared vision, design and potential funding model for a national payment directory or directories

Enable the storage, management and look-up of electronic payment identities of payees, including their accepted payment methods and requested remittance information

Open, trusted and secure and focused on enabling interoperability with closed-loop directory providers

Enable multiple payment types, providing institutions and end users with choice

Potential B2B Electronification Strategies

Collaborate with stakeholders to develop a B2B directory

Partner with the industry to develop and implement education for small businesses

Work with the industry to develop and promote simplified, common guidelines to make it easier to implement and use B2B-focused standards

Implement a Vendors' Council to promote interoperability and adoption of new B2B-focused standards

Lead an industry effort to evaluate development of a B2B electronic and payment invoice and processing service

FedACH[®] SameDay Service Expansion and Adoption

Collaboration with industry to achieve ubiquitous, same-day ACH settlement capability for virtually any ACH network transaction

Ongoing efforts to increase adoption of FedACH SameDay Service through education and promotion

Enhancements to FedACH SameDay Service in alignment with network initiatives and rule changes

Desired Outcome 5



Strategic Industry Engagement

Key improvements for the future state of the payment system have been collectively identified and embraced by a broad array of payment participants, and material progress has been made in implementing them.

Potential Strategies:

- Industry advisory councils and workgroups to collaborate on strategies
- Industry meetings, Fed-hosted events and outreach to gather input and communicate progress
- Existing Fed- and industry-sponsored groups to support strategy work and provide input

Potential Industry Advisory Groups

U.S. Payments Advisory Council

Establish a **U.S. Payments Advisory Council** to help guide industry direction on strategic issues and influence successful implementation of the Federal Reserve’s “roadmap” for payment system improvements.

- Leadership Council would be comprised of CEO-level (C-suite) industry participants across broad spectrum of payment industry stakeholders.
- The Council would help set priorities on payment speed, safety/security and efficiency strategies in the roadmap.
- The Council would meet at least twice a year and more frequently if needed
- The Council may call for additional sub-work groups to advance specific work as needed.

Potential Industry Advisory Groups

As noted in a number of the proposed strategies, industry advisory and working groups could be formed to assist with execution of specific roadmap strategies:

1. **Faster Payments Council** to develop a detailed roadmap and execution plan for ubiquitous real time payment capabilities in the United States.
2. **Directory Working Group** to determine options and develop a detailed design proposal for directories.
3. **B2B Vendor Council** to promote interoperability and adoption of B2B-focused standards for e-payments and related information.
4. **Payments Security Council** to discuss security issues and seek consensus on how to address.
5. **Mobile Payments Security Working Group** to develop a holistic framework for end-to-end mobile/digital payment security.

Next Steps



Prepare and Share a Roadmap

Using industry input and research insight, prepare and share a roadmap for payment system improvement initiatives that advance the speed, efficiency and security of payments



Collaborate to Achieve Desired Outcomes

Engage industry stakeholders in advisory roles and working groups to design and implement roadmap initiatives

Available Research and Event Summaries on FedPaymentsImprovement.org

Research

- Faster Payments Assessment Summary (August 2014)
- ISO 20022 Business Case Assessment Summary (August 2014)
- Payment Security Landscape Study Summary (August 2014)
- Consultation Paper Response Summary (March 2014)
- End-User Payment Research Summary (March 2014)

Event Summaries

- Payment System Improvement Town Hall Summary (June 2014)
- Faster Payments Roundtable Summary (June 2014)
- Payment Security Roundtable Summary (June 2014)

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QUESTIONS?



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