



# Research Results Summary

## Faster Payments Assessment Summary

In alignment with their refreshed strategic direction, the Federal Reserve Banks proposed five desired outcomes to be achieved to address the gaps and opportunities identified in the “Payment System Improvement – Public Consultation Paper.”

Speed is an important dimension of payments, but today’s core payment system infrastructure does not enable ubiquitous, faster electronic solutions for end users to make real-time payments from any bank account to any other bank account. There is much innovation in U.S. payments, but it is not occurring in a comprehensive way. The Federal Reserve Banks conducted a Faster Payments Assessment to:

- Identify target use cases for faster payments, leveraging global lessons
- Develop potential design options for improving the speed of the U.S. payment system
- Assess each design option with consideration of business and technical requirements, business case and impact on stakeholders
- Provide a potential implementation plan for the path forward

### DESIRED OUTCOME

## UBIQUITOUS, FASTER ELECTRONIC SOLUTION(S)

A ubiquitous, safe, 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 payments clearing and settlement groups to settle their positions rapidly and with finality.

### Key Takeaways

#### Global Studies

The assessment was informed by global case studies and encompassed a review of systems or initiatives in 10 countries and interviews with 17 industry leaders, government officials and experts from these markets.



#### Global Lessons Learned

- The decision to launch a faster payment system was always strategic, not financial, as there was not an explicit business case
- Countries initially prioritized P2P (speed) and B2B (speed, remittance data) payments
- Real-time inter-bank settlement was not considered a requirement to achieve real-time end-user availability
- Permitting payment service providers to create new services surrounding the new platform helped facilitate adoption
- Premium pricing and insufficient payment product differentiation were likely to impede adoption
- All countries relied on a combination of incentives to encourage adoption
- Stakeholder engagement was a powerful tool for building industry support

## Use Case Analysis

To better understand the current landscape, the Faster Payments Assessment identified 11 different use cases where payments may be sent or received by end users. Each use case was assessed against 11 features and functions of an end-to-end payment to determine whether needs were being met by existing payment instruments. While many of the features and functions are required to make the payment transaction efficient, three of the features and functions are needed to ensure the payment is processed at a speed that is appropriate for the circumstances surrounding the use case.

The analysis identified five use cases comprising 12% of total U.S. payments that could benefit from faster authorization and clearing, availability and/or settlement.

Use Case	Volume/% of Total Payments	Speed Required
<b>B2B<sup>1</sup> ad-hoc low value</b> (e.g., just-in-time supplier payments)	11.1 billion/5%	<ul style="list-style-type: none"> <li>Real-time authorization/clearing</li> <li>Intra-day availability of funds</li> <li>Intra-day interbank settlement</li> </ul>
<b>B2P ad-hoc high value</b> (e.g., insurance claims, legal settlements)	NA	<ul style="list-style-type: none"> <li>Real-time authorization/clearing</li> <li>Real-time availability of funds</li> <li>Late-day interbank settlement</li> </ul>
<b>P2P<sup>2</sup> transfers</b> (e.g., rent repayment to roommates)	4.3 billion/2%	<ul style="list-style-type: none"> <li>Real-time authorization/clearing</li> <li>Real-time availability of funds</li> <li>Late-day interbank settlement</li> </ul>
<b>B2P ad-hoc low value</b> (e.g., temporary employee wages)	3.2 billion/1%	<ul style="list-style-type: none"> <li>Intra-day authorization/clearing</li> <li>Intra-day availability of funds</li> <li>Late-day interbank settlement</li> </ul>
<b>P2B ad-hoc remote</b> (e.g., emergency bill pay)	10.3 billion/4%	<ul style="list-style-type: none"> <li>Real-time authorization/clearing</li> <li>Late-day availability of funds</li> <li>Late-day interbank settlement</li> </ul>

<sup>1</sup> Business includes government  
<sup>2</sup> Does not include P2P commerce such as paying babysitter/lawn mowing kid. These transactions 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

## Design Options

In assessing potential strategies for achieving faster payments in the U.S., nine design options were considered – four of which focused on evolving existing payment infrastructures, three of which considered leveraging emerging payment infrastructure and two options that focused on building new infrastructure. The design options were evaluated against their ability to address unmet needs for speed in the five target use cases mentioned above.

• **Evolve ACH** to provide faster and more frequent batch clearing windows. This may be quick to implement with relatively few required changes. However, ACH is fundamentally a batch system not designed to provide (near) real-time notification and clearing.

- **Evolve ATM/PIN debit infrastructure** to leverage existing real-time functionality. This option has existing real-time capabilities, but presents challenges with aligning many different networks, integrating with corporate cash management systems at financial institutions, expanding ability to leverage these networks for credit-push payments and changing the economic model to what would be appropriate for the target use cases.
- **Direct clearing over public IP networks** to enable financial institutions using common protocols and public IP networks in a distributed architecture to clear directly with one another. This option leverages existing, low-cost communications networks used by millions worldwide, but assuring stakeholders of the safety of the system will be challenging.
- **Build new infrastructure** to support faster payments with potential alternatives including:

- Build new single-item clearing infrastructure that leverages legacy infrastructures for settlement. This may be able to meet the needs for real-time in the target use cases in a reasonable time frame, but integration with legacy settlement constrains the flexibility of the design.
- Build new clearing and settlement platform for retail payments (excludes systemically important payments) or for all payments (includes systemically important payments). This 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.

## Overview of Business Case Findings

The consultant engaged on this faster payments assessment analyzed the business case for building a faster payment capability in the U.S. The business case addressed revenue/costs from product usage shifts, end-user surplus and implementation costs. The key highlights include:

- The business case through 2025 for implementing a faster payments solution for the primary use cases is profit contribution net neutral to negative.
- Payments would migrate from paper (cash – ~1%, check – 27%) and electronic (ACH – 11%, wire – 7%), although migration may differ by design option.
- If the faster payment solution includes improved information capabilities (e.g., e-invoicing) that enable more efficient AR/AP systems, \$10B to \$40B in business back-office efficiencies can be captured annually, making the business case positive.
- The business case was developed using analytics on secondary research, interviews with industry practitioners/experts, international case studies and consultant proprietary knowledge and experts.
- The business case does not include estimates of profit contributions from latent demand, new use cases and other sources of value, which if included, would further improve the business case.

## Federal Reserve Banks Strategic Direction in Payments

The Federal Reserve Banks updated their strategic direction in payments in 2012. Our objective is to improve the speed, efficiency and safety of the U.S. payment system from end to end. The analysis reflected in this document is being used to inform improvement strategies to achieve this vision. To advance industry dialogue and gain further insight and commitment to turn this vision into reality, the Federal Reserve Banks continue to engage with all organizations involved in delivering payment services to end users. We believe industry collaboration will be essential to any enduring strategic improvements.