Name: James Methe
Organization: N/A
Industry Segment: Consumer

General

1. Are you in general agreement with the payment system gaps and opportunities identified in the "Payment System Improvement Public Consultation Paper"? Please explain, if desired.]

Yes. I am in general agreement with the current payments systems gaps identified above broadly. However, the focus of the stated desired outcomes appears to be straddling existing legacy and future desired payments systems infrastructure paradigms without taking a position on either is a gap that could have serious ramifications on the future design of the US payments systems that as a consequence will continued against achieving the broad desired outcomes specified. While understandable due to the considerable cost invested in, and industries reliant on the US payments system status quo that is buoyed by a powerful congressional lobby force, the strength and weakness of the US payments system is in its multiplicity of options, including those of still significant volume and use but waning in benefit to the value chain touching payments. These off the run payments systems are costly to consumer and provider and serve in effect to drive out competition from smaller community and niche providers who are capital constrained in their ability to offer stand alone services around instruments that are functionally obsolete or due to market opportunities too small to leverage and are thus deprived from participating in payments services fully due to what was a payments system of historic creation and value but is now superseded by direct account to account payment and settlement capabilities in near real time. Thus, it is arguable that as part of the desired outcomes of a national payments system next generation overhaul include the planned phasing out of obsolete payments system instruments versus continued co-existence that results in economic drag to consumers, merchants, banks and the central bank system. Continued coexistence of payments instruments has, in effect, institutionalized a cost drag, and barrier to entry-competitiveness, on the community, state and national banks as service intermediaries, the merchants that are the engine of the economy in addition to the instruments themselves acting as economic and social barriers to entry and inclusion for all citizens. As national payments systems are multi generational in longevity, the decision on the general approach, architecture, fee structure, management and other factors leading to its implementation must all be driven from the completeness of vision of the desired outcomes. In essence, the solution vision is the starting point and the roadmap is achieved by working backwards to achieve the stated aims. Therefore, is imperative that the desired outcomes be considered and defined in their broadest context and usage towards the US national good and interests.

1i. What other gaps or opportunities not mentioned in the paper could be addressed to make improvements to the U.S. payment system?

In this regard, below are listed some observations on the desired outcome gaps to be considered. Desired outcome 1 gaps: Express desire to eliminate inefficient and uneconomic historically evolved

payment methods that do not serve the goals of the desired outcomes, namely efficiency, immediateness, fairness and inclusion and reduction of economic burden on the financial services industry. More tangible defined goals from the next generation payments system such as percentage based reduction in the expenditure on regulatory compliance associated with payments on intermediaries, percentage or actual increase in access to the payments system of the populace and tangible reduction in fees paid by merchants to settle purchase goods and service transactions, the percentage cost of production of cash handling by the payments value chain from origination to distribution to retirement. All these factors and more direct and societal benefits are part of the true purpose of transformation of the US payments system. In order to achieve the program goals and know that the job is truly done is has to be measured. As the oft said saying goes, if it can not be measured, it can not be managed. Desired outcome #2 gaps; related to desired outcome #1 comments, a more definitive point of view and purpose associated with the introduction of ubiquitous real time retail payments. Funds will be debited from the payer and made available in near real time to the payee with minimal service charges that have uneconomic benefit to merchants, act as barrier to entry for many consumers and overly burden credit issuers with regulation ensuring fairness balanced with prudent credit policy execution. Desired outcome 3 gaps: Stated desire to optimize electronification and process improvements to minimize in a set metric definition the end-to-end (societal) costs of payment transactions. Failing to state that payments innovation ultimately is aimed at improving the retained full retail net dollar value as near as possible in the financial settlement of retail transaction payments by and between consumers, merchants, businesses to the original contractual agreement. Imprecise statement that the implementation of such payments systems improvements will also be measured and defined by the ultimate benefit to the nation that the payments system will serve and fund its development, via intelligent, safe, separated authority and administration that will leverage of the improved payments infrastructure asset to more fairly expose and entitle the governments franchise of services to all its citizens without impacting upon the core purpose and design being the payments system. Desired outcome 4: Consumers and businesses have optimized and easily understood fee and quality of service choices that are easily and simply decsionable at source choice in making convenient, cost-effective, and timely cross-border payments from and to the United States; particularly in the case of those cross border payments so designated workers remittances to and from the United States and the goal to reduce fraud, crime and uneconomic benefit waste from the current legacy infrastructures and the associated downstream, mostly cash, spending patterns related to these Desired outcome 5: The public confidence in the security of Federal Reserve Financial Services has remained high due to its quality of service and political impartiality. There are many aspects of security to consider. The too big to fail phenomenon from the financial crisis also revealed the systemic weakness of attempting to close banks whose concentration of deposit accounts being frozen would have had negative repercussions on essential industries dependent upon the timely inflow of receipts from consumers. A stated objective of improving the US payments system should also include a mechanism that would assure the operation of consumer funds remittances regardless of the disposition of the depository institution solvency determination. Any such next generation payments system design, development and deployment must also strive to maintain the integrity of the Federal Reserve Financial Services role as an independent but integral facilitator and orchestration agent versus position of potential arbiter of

transactional agreement settlement access must be assured at all costs to avoid future abuses " be they future industry or political sourced influences - from being even a possibility in order to serve effectively and be worthy of continued public trust.

2. Are you in general agreement with the desired outcomes for payment system improvements over the next 10 years? Please explain, if desired.

Yes. I am in general agreement with the current payments systems gaps identified above broadly with the caveat that the desired outcomes require deeper definition and implication analysis. However, there is room for improvement in the near term, i.e., within 10 years, improvements planned that can have dramatic impacts on the policies of the United States beyond the domestic payments system improvements.

2i. What other outcomes should be pursued?

For example, Citing as part of the 10 year program goals could include a goal of extension and integration of the improved system IP (e.g., at the message standard level and use of similar identifiable virtual account structures) to include a synchronization of the scheme for cross border settlements to NAFTA countries or other key remittance alleys, e.g., working with the Mexican and Canadian central banks to produce a more efficient and net fuller clearance of funds in near real time on both sides of the transaction would yield liquidity benefits to corporates and societal benefits in terms of inclusion that could possibly have potential carry on positive effects on such areas as immigration flows, underground market economies and illegal trade curtailment, etc Extending the key Intellectual Property components such as messaging standards, virtualization of accounts, SLA standards etc of the next generation system will also ensure to future proof the investment in a payments system overhaul as there are multiple approaches globally underway currently that without a strong and clear guidance could result in a costly replacement of more popular schemes adoption globally or the introduction of technological work arounds to transform disparate schemes being integrated that would result in batch process transformations and file reformatting of messages that may ultimately defeat the defeat the purpose of the transformation program initial goals.

3. In what ways should the Federal Reserve Banks help improve the payment system as an operator, leader, and/or catalyst?

The Federal Reserve Banks ideally should take the lead primarily as a leader and catalyst for change. The capacity for operation exists widely within the public sector and it would best serve the user ecosystem and the nation for the next generation scheme to be outsourced to trusted specialist in this area. In the public consultation solicitation it is footnoted that due to the 14,000 depository institutions in place today with multitudes of payments related service providers that innovation is difficult to coordinate. While this is true that there are numerous constituents today each with their own invested interests in preserving their unique portion of retail payments value chain, it is the position of this response that the Federal Reserve should be mindful of the many interest in play today in terms of time to cut over to the new payments technologies in realistic time frames so as to not upset the national systems in place. However, yet it is imperative that in order to define a truly

next generation design that the complexities of today's provide landscape to a large extent be ignored in favor of focusing solely on the core principles favoring the national constituents the system will serve " consumers and merchants and the account relationships those constituents maintain. The current ecosystem of private sector service providers and constituents should ultimately bear the responsibility of keeping current with the Federal Reserve thought leadership (and global trends) and adjusting their business models to embrace the new payments and how they will most effectively participate and compete in the new paradigm. This makes it incumbent on the Federal Reserve as the leader and catalyst of the transformation of the national payments system to clearly and specifically define the desired outcomes of the new payments infrastructure model in precise and detailed terms that will specifically address the ultimate stakeholders of a new national payments system " which will include clear definition of the measures of success for the new national payments infrastructure. In this regard it is extremely difficult for the Federal Reserve to balance the ultimate interests of its national citizenry for ubiquitous, low-to-no fee retail transaction settlement services for both consumers and merchants that the payments system of the US ultimately serves and whose optimized and efficient economy the US benefits with the interests and commercial pressures from the 14,000 depository members , and their considerable lobby, who are federally and state chartered members of the Federal Reserve system and have distinctly different motivations, capacity and interest to invest in what may be for them unproductive returns in capital expended as they provide payments today at a managed cost and revenue balance that may fundamentally change with what could involve considerable investment for little apparent profit returns. This is not unlike the HIPAA stand in services that allowed banks to innovate and step in to offer non traditional areas of payments services when the new HIPAA paradigm was released and the current market providers and participants were unable to adapt to them in a timely fashion. The Federal Reserve Banks have the mandated position to lead the vision for the next generation system with a broader remit than the industry providers would. As referred to in response to Question 1, the Federal Reserve banks can also hold the Catalyst or industry drivers of change in the desired outcomes of such a program. It is this opinion that the considerable capital costs to be expended by all constituents today will need to be clearly convinced of its merits through a clear and careful business case of stated benefits in the revenue and cost ledgers as new revenues are complemented by the definite retirement of obsolete payments alternatives in place today rather than an investment in yet another retail payments infrastructure.

Ubiquitous near-real-time payments

4. In discussions with industry participants, some have stated that implementing a system for near-real-time payments with the features described in the second desired outcome (ubiquitous participation; sender doesn't need to know the bank account number of the recipient; confirmation of good funds is made at the initiation of the payment; sender and receiver receive timely notification that the payment has been made; funds debited from the payer and made available in near real time to the payee)will require coordinated action by a public authority or industry group. Others have stated that current payment services are evolving toward this outcome and no special action by a public authority or industry group is required.

4i. Which of these perspectives is more accurate, and why?

As a national payments system set out to achieve a national objectives as stated in the five desired outcomes, it is the decided opinion in this response that the most efficient route to this outcome would be led solely by a public authority to set out the vision, an industry group to set out the standards to be employed over the slow evolution path currently underway. In reality, any successful national payments system will require a close cooperation from both the private and public sectors in order to realize the vision. The public sector can certainly develop innovations and solutions as are underway currently but these will be less effective due to the relatively small market niches involved, closed loop infrastructures that will not be interoperable and will, like the ATM revolution of a prior generation, eventually be consolidated and privatized until sustainable scale is achieved A purely public sector led initiative is out of step with the trends globally that is underway and are not focused on achieving a core set of desired outcomes to benefit the nation or economy as a whole, if that is the goal of the transformation program. It is unquestioned that many recent innovations by depository institutions are worthy innovations developed to differentiate services among a sea of existing payments and are mostly convenience based versus necessity based. Others are niche innovations focused on tapping and making available convenience at a very common , everyday level and are focused on inclusion, but inclusion into existing payments systems that are at heart inefficient to their constituents, a block on the rate of flow of money in our economy and represent perpetuating a paradigm supported by upwards of 50 year old technology design that can easily be replaced with modern technology to achieve the second desired outcome: ubiquitous participation; sender doesn't need to know the bank account number of the recipient; confirmation of good funds is made at the initiation of the payment; sender and receiver receive timely notification that the payment has been made; funds debited from the payer and made available in near real time to the payee The mechanism for achieving this desired outcome is deployed today by several large, universal banks on behalf of their largest corporate customers within their own, proprietary closed loop networks and is central to cash management service offerings. These ubiquitous and are often referred to as Virtual Accounts that are held and controlled entirely within the bank infrastructure environment as house accounts representing the clients portfolio of real deposit accounts. This internal Shadow account view can easily allow a central authority to process near real time transactions as agent or simulation settlement accounts where insight into availability of good funds can be accessed immediately without knowledge of the accounts details between the consumer and the merchant, for example.

4ii. What other perspective(s) should be considered?

A perspective to be considered is the adoption of centrally manged virtual accounts representing actual real deposit accounts held at any number of depository institutions in a national system - or could even be extended to represent disenfranchised and unbanked citizens - These virtual accounts are held and managed by a central authority that receives updated 'real account' position movements from the real account balances in near real time and can act as the legal and liable authority (or by agreement the depository institution responsible for providing updated data) for committing good funds for a transaction exchange at the time of a transaction commitment, after authentication of the buyer and seller is established. A real world example of the need for private and public sector

cooperation to achieve a national cashless society national desired outcome objective, this was recently implemented in Sweden : In the case of Sweden's Immediate Payments scheme, the initiative was driven by the private sector rather than by regulatory mandates. As the only clearing house for mass payments in Sweden, Bankgirot saw offering Immediate Payments as a natural step forward. They conducted significant market research, in consultation with participating banks, and then developed a business case before moving ahead with the scheme. In addition to satisfying the demands of consumers, the initiative was also in line with the country's national goal"to become one of the first countries in the world to become a cashless society. In March, 2013, Bankgirot put out a press release that began with For the first time since 1959, Bankgirot is now launching a new payment system in the shape of Payments in real-time. Notable features of the real-time system are the ability to process (account to account) payments in seconds and constant availability 24/7. Last week, six Swedish banks launched Swish, and a prerequisite for Swish is our new payment system, Payments in real-time. After experiencing a 64% month-over-month increase in January 2013, growth has stabilized at 10% per month. The design and architecture of the new payments system must make commercial sense to induce participation from all the constituents at the national down to the individual level to achieve scale required to be economically justified to undertake, represent essential versus convenience benefits for stakeholders and must be realized via a cooperation of public and private sector participants against a defined set of quantifiable Desired Outcome objectives. A secondary benefit is an actual strengthening of the financial system as the 2008-2010 financial crisis proved that banks holding significant deposit account numbers subject to freeze in the case of federal or state intervention had negative ripple effect on significant portions of the economy whose cash flow depended on the free flow of remittance orders registered to those accounts. In a virula - real account scheme these payment credits could continue to flow to the corporation account balances (even if physically settled at a later time) in the event of crisis without negative impact on teh greater economy

5. The second desired outcome articulates features that are desirable for a near-real time payments system. They include:

a) Ubiquitous participation
b) Sender doesn't need to know the bank account number of the recipient
c) Confirmation of good funds is made at the initiation of the payment
d) Sender and receiver receive timely notification that the payment has been made
e) Funds debited from the payer and made available in near real time to the payee

5i. Do you agree that these are important features of a U.S. near real-time system? Please explain, if desired.

Yes.

5ii. What other characteristics or features are important for a U.S. near real-time system?

In general these are agreed to be important features for a real-time or near real time US payments system " but it is not agreed that these are the most important features required as the most

important features include the bullet proof execution of any such scheme and those important aspects are in the details behind the happy path points included in the question. The challenge may not be in achieving ubiquitous participation, anonymous account identifiers, confirmation of good funds, timely notifications or the near real time debiting and crediting of real deposit accounts. Rather the realization challenge will be primarily in the areas of: Standards definition Security Authentication Credit administration options and elections on accounts with insufficient balances Reconciliations Transaction data privacy Rollback, returns , rejections administration Payment standing order mandate management and self service Disputes and maintenance service responsibilities New scheme legislative framework integration with existing scheme legislation Depository institution (and others) participation and ability to provide real-time or near real-time data to the centralized virtualized account environment to commit transactions without recourse Ease of participation Uniform participant SLA terms compliance, penalties, enforcement All of these aspects must be considered in the initial vision and design of the new national payments system. What must also be considered is the unquantifiable need for absolute trust and belief in unchanging integrity of the central administrative agency, such as the Federal Reserve Financial Services enjoys today. The trust in the public and a large number of private sector participants that have the capacity and capability to provide such services are to a large extent suffering from the distrust lingering from the financial crisis of 2008; or many are geared toward interest in only high end device based solutions that are by definition not inclusive or meeting the societal desired outcomes of the program.

6. Near-real-time payments with the features described in the second desired outcome could be provided several different ways, including but not limited to:

a) Creating a separate wire transfer-like system for near-real-time payments that leverages the relevant processes, features, and infrastructure already established for existing wire transfer systems. This option may require a new front-end mechanism or new rules that would provide near-real-time confirmation of good funds and timely notification of payments to end users and their financial institutions.
b) Linking together existing limited-participation networks so that a sender in one network could make a payment to a receiver in another network seamlessly. This option may require common standards and rules and a centralized directory for routing payments across networks.
c) Modifying the ACH to speed up settlement. This option may require a new front-end mechanism or new network rules that would provide near-real-time confirmation of good funds and timely notification of payments to end users and their financial institutions. Payments would be settled periodically during the day.
d) Enhancing the debit card networks to enable ubiquitous near-real-time payments.
e) Implementing an entirely new payment system with the features described in the second desired outcome above.

6i. What would be the most effective way for the U.S. payment system to deliver ubiquitous near-real-time payments, including options that are not listed above?

From the options listed above, the options most agreed with are e. Implementing an entirely new consumer payments system with features described in the second (and first, third through fifth) desired outcomes. Any system that attempts to leverage any existing payments infrastructure linking limited participation loop schemes (b) , improving ACH settlement times (c) or enhancing Debit Cards networks to near real time capability through existing mechanisms or new direct connect entity to entity architecture will not achieve the desired outcomes and benefits stated, will be costly for the depository institutions to adopt and will not benefit the consumer, merchants or the economy through any increase force of money flow. What the developed western countries can learn from the MPESA/Safaricom case study in Kenya is that any new payments infrastructure must fulfill 5 key needs: 1. Think essential not convenient. The desired outcomes, once fleshed out into concrete business case worthy definition and metrics will reveal the types of services required to be Essential to the ultimate primary stake holders of a new payments system " consumers & merchants 2. Share the burden There is a limit to how far one bank can push its ambitions for pan- or regional (or segment) market penetration. Past experience shows that cooperation is the only way to achieve lasting scale and profitability. 3. Open up for interoperability, close up around authentication and secuirity To create interoperability, accelerate acceptance and gain trust, immediate payments service providers should leverage existing payment mechanisms or trusted brands commonly used in mature markets for payments currently. However, if the existing entity supplies less than 70% of the requirements needed, it would be best to build new vs enhance old technologies in use today out of expediency 4. Scale is king Depository institutions in mature markets will need to focus their initial services on areas of high volume, recurring existing demand, to quickly achieve scale and attract and retain customers through offering of essential services supported by the new scheme and re-plan its revenue and cost structures around a post check and possibly/eventually post credit card future 5. Embrace the essential role of government in the payments process Early, continuous collaboration with central authority will allow the industry to influence scheme design, insure against government over-reach of control and create joint responsibility and defer costs for regulatory burdens that historically have been imposed by central authorities who have no access or transparency into the internal systems of the depository organizations

6ii. What are the likely pros and cons or costs and benefits of each option? What rule or regulation changes are needed to implement faster payments within existing payment processing channels?

The pros and cons of each option broadly are as follows: a. Creating a separate wire transfer-like system for near-real-time payments that leverages the relevant processes, features, and infrastructure already established for existing wire transfer systems. This option may require a new front-end mechanism or new rules that would provide near-real-time confirmation of good funds and timely notification of payments to end users and their financial institutions. Pros: proposes to leverage existing infrastructures and will speed deployment and reduce costs to depository institutions Cons: most depository account systems are not near real time nor real time designed and capable, resulting in incomplete data, unclear lines of liability and address the payment part of the process that is not the high value add of the process. Thus, while the option is viable technically, will not meet the majority of the desired outcomes stated as program objectives b. Linking together

existing limited-participation networks so that a sender in one network could make a payment to a receiver in another network seamlessly. This option may require common standards and rules and a centralized directory for routing payments across networks. Pros: Can be achieved in limited scope and design. Cons: Will lack scale to become economically viable or produce broad impact of value to the desired outcomes scope. The proposition of creation of private network centralized directories is less than ideal to achieve efficiency in the payments systems as this translates to additional cost for members, is a possible cost restricting barrier to entry and the limited membership will most likely not provide a suitable input base of scale to validate the standards and interfaces the user group would agree upon c. Modifying the ACH to speed up settlement. This option may require a new front-end mechanism or new network rules that would provide near-real-time confirmation of good funds and timely notification of payments to end users and their financial institutions. Payments would be settled periodically during the day. Pros: Can be achieved technically and addresses the near real term settlement of transactions Cons: Does not address the end to end requirements and is building around legacy systems that may involve up to 50 year old infrastructure and batch process capabilities that can not meet actual real-tim or near real time requirements d. Enhancing the debit card networks to enable ubiquitous near-real-time payments. Pros: Existing system Cons: the cards infrastructure historically was developed separately with separate message formats and involving specialist 3rd part processors out of necessity as the speed and latency technology was not available at the time these capabilities were created. Additionally, the system relies on cost attracting POS devices and high fee environment infrastructure. Many depository institutions have begun to merge these the traditional branch front office and ATM network technologies to achieve significant cost savings with more efficient operations and superior client centric offerings globally. The perpetuation of the Debit Card networks seem to be to the benefit of protecting existing payments system niches and market positions versus taking a next generation view and is seen as less than ideal. e. Implementing an entirely new payment system with the features described in the second desired outcome above. Pros: This is seen as the best option based on several factors and has been borne out by trends globally in the immediate payments and faster payments space. Cons: Time, cost, change, uncertainty. This is why the program goals, including potential winners and less than winners need to be clearly articulated as part of the program goals to accelerate the demise of less efficient retail payments processes , e.g., checks, and free up investment in and interest around the new scheme processes.

6iia. What rule or regulation changes are needed to implement faster payments within existing payment processing channels?

6iii. Is it sufficient for a solution to be limited to near-real-time authorization and confirmation that good funds are on their way, or must end user funds availability and/or interbank settlement take place in near-real time as well?

Ideally the funds would flow upon transaction commitment by consumer and merchant (without the consumer losing any return, dispute or refund rights is a given). Given that the timing current credit card dominated consumer credit transaction settlement systems are not offering immediate physical settlement of funds to transaction counter parties today, a near term crediting and debiting will be a significant improvement from what is in effect today , but perhaps should be a goal. Therefore, the

requirement for immediate funds settlement at time of transaction conclusion should not be a day 1 requirement at this stage as there is still detail to be decided upon the scheme rules, translation of existing commercial and consumer legislation that will need to be converted into the new scheme set up. One area not touched upon in the FED paper is the discussion of credit extension directly to accounts and even multiple accounts, possibly involving multiple depository institutions as well that could be used to conclude any transaction and the audit trail and non standard internal depository institution rules around overdraft facility invocation versus the well codified and standardized consumer credit card legislation in place today that need to be complied with may invoke a whole new round of legislative action and cries of regulatory burden on deposit institutions if not anticipated and addressed as an industry initiative in parallel with the new scheme introduction

6iv. Which payment scenarios are most and least suitable for near real-time payments? (B2B, P2P, P2B, POS, etc.)

All of the payment scenarios ideally would benefit from the new payments system. However, success will depend on scale and acceptance and the clearest ways to achieve that would be to target the roadmap for real time or near real time payments starting with the most complex first and extending to general business use as follows: 1) POS 2) P2P (as many depository organizations have taken steps to offer this now within their networks) 3) P2B 4) B2B given the large investment that exists between businesses today it will give them time to plan for the cost of change.

7. Some industry participants have said that efforts to make check payments easier to use, such as by enabling fully electronic payment orders and/or by speeding up electronic check return information, will incrementally benefit the payment system. Others argue the resources needed to implement these efforts will delay a shift to near-real-time payments, which will ultimately be more beneficial to the payment system. Which of these perspectives do you agree with, and why?

I agree with the latter argument. I see no productive rationale in the continued investment in technology and processes designed for a different age and capability requirement. The extension or improvement on existing check payments will not dramatically achieve the Desired Outcomes stated, e.g., inclusion, and further investment of capital in it will detract from investment in and full focus on transforming the US payments system into a world leading example for other counties and foster closer central bank to central bank integration generally.

8. How will near-real-time payments affect fraud issues that exist with today's payment systems, if at all?

Near real time payments and the vast array of technological improvements that can improve authentication probability from multiple sources can be designed into the payments system to dramatically improve upon incidences of fraud that exist today in a check and credit card dominated consumer payments system that in itself will help pay for the not inconsiderable investment that will be required for the US to ultimately spend to convert to. The key component will be to segregate the first line of defense in the authentication process that , ideally, should be a service completely separate from the account insight service that is again segregated from the ultimate crediting and

debiting and reconciliation of account movements With sophisticated participants in the payments system today already comfortable with smartphone the use of (for example, not limited to) a combination of biometric readers, facial recognition and location based triangulation of data points at the point of sale alone combined with near instantaneous spending pattern analysis, registered and analytic based preference matching probability score technology delivered by innovation as "Watson" showcased and launched by IBM can result in highly accurate and legally validated result probabilities that can dramatically reduce fraud

8i. Will near-real-time payments create new fraud risks? If yes, please elaborate on those risks.

Yes. Yes, fraud attempts will never be eliminated and this will especially be true in the interim period between launch and acceptance in the market. In discussing this paper response, A Japanese colleague expressed concern about over reliance on biometric readers and resulting in people's digits being removed to commit fraud. My son asked what would prevent someone from opening multitudes of accounts and writing programs to continuously move money 'at the speed of light' to give the allusion of there being funds everywhere at once creating electronic 'kiting' schemes and of course there is the ever present hacking that is a threat everywhere from foreign and domestic sources. Anyone with children can attest to the fact that the any new system will be tested using new and old tricks to find flaws. There will be flaws and that is why the design must include stringent closed authentication and security/encryption standards combined with a broadly accessible infrastructure backed by constant monitoring , analytic introspection with design that will allow rapid fix to breaches at any component level without compromising teh 24 x 7 operation of teh system as a whole

9. To what extent would a ubiquitous near-real-time system bring about pivotal change to mobile payments?

The rise in 'mobile' payments has too often been centered on the device itself and I think this is an industry wide mistake, possibly driven by fad and the incredible valuations given to start ups developing very narrow niches of capabilities involving devices that are convenient and clever versus actually providing essential services. Many of these are designed to add cost on to existing charge mechanism that are actually more expensive than traditional card based payments and their value s more in disinter-mediating the POS rental or purchase costs businesses face rather than put a higher net settlement in their account. The phone or tablet or any devise should have full and free access to the new payments infrastructure through the easy download of 'apps' enabling connection and participation to the new payments scheme. With a central scheme orchestrating virtual; account movements between institutions that can be easily accessed , with high probability authentication, DOD or higher grade encryption and truly benefiting consumers with convenience and merchants with higher net yields on sales transactions, my personal belief is it will unleash a torrent of new innovation around that trusted central core that will benefit - really benefit - the US economy and new business growth

10. What would be the implication if the industry and/or the Federal Reserve Banks do not take any action to implement faster payments?

The US will continue without any doubt regardless of the introduction of faster payments or not. Without it, the industry and private sector will continue to innovate in small increments and deposit institutions will split capital spend between the way too many settlement systems to support and will fall behind in competitiveness against more cost ratio efficient banks and may lead to the continued trend in acquisitions by foreign banks competing for the still attractive US corporate and SME business. Overall change is needed for the US banking industry to remain competitive, the US banking industry know this and yet lack the cohesion - or political will - to change it on their own and need a catalyst introduced to force change combined with clear elucidation of the benefits and supported by legislated economic tax incentives to effect the change. A personal opinion is the the US during the 'bailout' lost a tremendous window of opportunity to effect change as it injected billions into the banks without any requirement to invest any of the funds in next generation groundwork capabilities (with US based consultancy suppliers and resources)to begin this change under guidance of the FED. With the funds mostly repaid this window and 'bully puplit' catalyst has unfortunately closed and the bailout funds for the most part distributed toward little long term productive improvements being made

10i. What is the cost, including the opportunity cost, of not implementing faster payments in the United States?

Loss of competitiveness, increased cost of operations and erosion of cost-income ratios in banks, being out of step with the rest of the global financial community instead of being a traditional leader. Continued redundant individual expenditure by industry, businesses and consumers in proprietary electronic solutions all competing to present convenience solutions in search of a problem as none will have the scope and scale to effect real change. Potentially the large banks could form consortium, like they have around bill pay solutions and check imaging utilities to bound 'necessary evil' costs but these will be defensively driven and not forward thinking and will not be developed in the majority of cases around teh Desired Outcomes as defined by the FED

11. To what extent will the industry need to modernize core processing and other backend systems to support near-real-time payments?

Almost all depository institutions will need to modernize to some extent their core processing systems that remain batch oriented, un-integrated, based on disparate message standards and are for the most part are not designed for real-time or near real time due to the age and technology available at the time of their creation

11i. What is the likely timeframe for any such modernization?

Core system and payments back office modernization can take as little as 12 months to deploy but the strategy required around the architecture, messaging, integration, build versus buy and procurement can stretch a typical modernization program to 2-3-5 years depending upon the complexity of the

institution, experience with modernization and number of systems to modernize, capital availability and extent of the modernization required. A best practice is not only to look at the modernization effort but to create a target operating model (TOM) that the modernized systems will support. These strategic (TOM) initiatives typically take place 1-2 years prior to any actual modernization program is announced and will include a business case for the change to justify the expenditure

12. Some industry participants suggest that a new, centralized directory containing account numbers and routing information for businesses and/or consumers, to which every bank and other service providers are linked, will enable more electronic payments. A sender using this directory would not need to know the account or routing information of the receiver.

12i. What are the merits and drawbacks of this suggestion?

The merits are legion and have been discussed throughout in this response and are more in favor of a 'virtual account' regimen that will allow smooth operation in the event of failure in the system. The benefits to consumers and merchants with a directory linkage or a 'virtual account' setup will be immaterial and assuming smooth operation will allow all teh benefits responded to already. Creating a near real time linked 'relationship' between businesses and consumers will yield all participants of the economy and create opportunities in data - and supply chain efficiencies - related services and employment that is not available today in the US economy. The drawback will be that a 'directory' based relationship will not provide a backstop to the banking system, will not relieve banks of increased regulation aimed at greater transparency and will offer absolutely no mechanism for improvement in the access and inclusion to the system for the under- and unbanked

12ii. What is the feasibility of this suggestion?

This is a feasible suggestion, assuming all goes well in teh economy forever and would be a lower cost option but do not see it as feasible if the desired outcomes are the filter by which be a starting point for any solution to be completed

13. Some industry participants say that check use is an enduring part of the U.S. payment system and that moving away from checks more aggressively would be too disruptive for certain end users.

13i. Is accelerated migration from checks to electronic payment methods a high-priority desired outcome for the U.S. payment system? (Accelerated means faster than the current trend of gradual migration.) Please explain, if desired.

No. I disagree and see checks aggressively being reduced will be a catalyst for change. I understand that the industry has significant investment and revenue tied up in its continuance but think this is perhaps a more myopic view of the real importance of checks in the economy and is far out weighed by the promise and benefits of account to account real time transactions

13ii. Should the Federal Reserve Banks establish a target for the percent of noncash payments to be initiated via electronic means, by a specific date? For example: "By the year 2018, 95% of all noncash payments will be made via electronic means." If Yes, what is the appropriate target lever and date?

Yes. This will require further study but certainly hard metrics are required for any program and whetrher it is 90% or 95% is immaterial to state at this time until more detail and desired outcome detail is defined

14. Business-to-business payments have remained largely paper-based due to difficulties with handling remittance information. Consumer bill payments also are heavily paper-based due to the lack of comfort some consumers have with electronic alternatives. In addition, many small businesses have not adopted ACH for recurring payments due to technical challenges and/or cost constraints. The payment industry has multiple efforts underway to address these issues.

14i. To what extent are these efforts resulting in migration from checks to other payment types?

Bill pay has made a tremendous dent in the traditional use of checks. However the administration of bill pay mandates and paper trail required is a cost and administration on banks that they would sooner be rid of I have been told by many in the industry. While these have been effective in reducing check volumes and usage , the barrier to further improvements is the manual nature , mainly through regulation, that can be streamlined and further electronified to speed further adoption of such electronic schemes.

14ii. What other barriers need to be addressed to accelerate migration of these payments?

The management of changing mandates for consumers also needs to be dramatically simplified and centralized in order to encourage use over the ever present fear of a lost/stolen card that needs replacement and forgoing the bill pay associated with it until a service is cut off or fines levied.

14iii. What other tactics, including incentives, will effectively persuade businesses and consumers to migrate to electronic payments?

With a stated public advertisement of goals and benefits coupled with a concerted effort of reduction and a schedule for elimination , say at the consumer level by 2018 the market driven cost for those preferring check usage should effectively incentivize adoption of alternate methods to checks

14iv. Which industry bodies should be responsible for developing and/or implementing these tactics?

Either centralized at the FED or through industry led consortium with oversight on standards, access and consumer fee protections should be the bodies driving and benefiting from their creation

Cross-border Payments

15. To what extent would the broader adoption of the XML-based ISO 20022 payment message standards in the United States facilitate electronification of business payments and/or cross-border payments?

XNL based payments and ISO 20022 standards are already a reality between leading banks globally. It makes sense to extend these standards to the FED initiative for cross border payments. This is not a

hard assumption and it will be in the authentication and security standards where the complexity will lie.

16. What strategies and tactics do you think will help move the industry toward desired outcome four - consumers and businesses have greater choice in making convenient, cost-effective, and timely cross-border payments?

Again through education, attacking essential services consumers and businesses care about daily that directly benefit their net earnings from every sale will be incentive enough. Th US us based on the notion of self interest and serving these for merchants and consumers to achieve this is no different. More net settlement guaranteed to merchants, safety and security guaranteed for consumers coupled with an absolute ease of use accessible by all (ie not just smart phone and tablet users banking at the big 5 banks) backed by of use with proper - e.g., human or virtual human based support availability and a commitment to service excellence and determined on time on budget delivery is all that will be needed. Make the consumer and merchant feel they are part of something bigger they are contributing to through adoption (and even maybe tax breaks so all can by smartphones and tablets so more can access and participate) and receiving more direct benefit is all that will be needed. The Fed will need to consider what the tipping point will be , ie what is critical mass and when it will be achieved before the program and transition occurs. Once the tipping point is reached, the market forces will forces (eg increased costs to service smaller base) will take over to incentivize participation

Safety

17. Payment security encompasses a broad range of issues including authentication of the parties involved in the transaction, the security of payment databases, the security of software and devices used by end users to access payment systems, and security of the infrastructure carrying payment messages.

17i. Among the issues listed above, or others, what are the key threats to payment system security today and in the future?

Safety is paramount and all the issues listed above are critical to be bullet proof. The Disaster recover, system failover, the power supply and even the location strategy with all attendant connectivity and telecomm relay routes and junctions will pose a threat to a system that is running real time payments 7x 24 at the consumer level. The system simply can not go down. ever.

17ii. Which of these threats are not adequately being addressed?

The protection of data behind the firewall , eg the directory or virtual account services at the FED or the connections at the depository organizations are not as much a worry as the infrastructure residing outside this closed loop such as the telecom and power dependencies and probably - I am not aware of any 'national' threat mediation of these constituents as they apply to an end to end payments system delivery ecosystem underway today Similarly the consumer risks include lack of standards at

the devise level and during the handshake withe the national scheme authentication and commitment connections

17iii. What operational or technology changes could be implemented to further mitigate cyber threats?

This will require in depth study once the program goals and preferred solution is decided upon

18. What type of information on threat awareness and incident response activities would be useful for the industry?

alerts are plentiful and in use today. With real time analytic capability it would be ideal to track users with alerts at time of detection as a proactive benefit service as many banks advertise today and this practice should be encouraged. Incident responses with high probability of illegal actvity could deactivate access until contacted, etc. While the ubiquitous system will have an obvious extension to becoming a general vehicle for general threat awareness, this may concern many of 'big brother' evasiveness into their daily lives and - while useful - the usage of such system for non specific personal account risks or used for advertising or other general purposes should be the subject of study before commitment or planning around.

18i. How should this information be made available?

User preferences at the consumer level could define this as well as risk manager notification at the depository institutions. perhaps if there is a high probability of illegal activity and the consumer could be at risk alerts to authorities in proximity could be notified.

19. What future payment standards would materially improve payment security?

This will be best addressed and will require study once the target payments system solution is better defined and assessed by security specialists

19i. What are the obstacles to the adoption of security-related payment standards?

Performance and security are always a delicate balancing act. This will be best addressed and will require study once the target payments system solution is better defined and assessed by security and performance specialists from the industry

20. What collaborative actions should the Federal Reserve Banks take with the industry to promote the security of the payment system from end to end?

As in The FED enjoys trust and confidence from the public and should continue to drive the next generation discussion as a leader of change, including the leading US technology companies experienced in security, performance. resiliency, data and architecture who serve both the government and defense sectors as well financial services sectors as a core portion of their business

21. Please share any additional perspectives on U.S. payment system improvements.