

Collections and Cash Management Modernization (CCMM): Changes to How FMS Collects Revenue and Reports Transactions for Agencies

Payment Management Customer Conference

August 27, 2008

Agenda

- Introduction and Background
- As-Is
- To-Be
- Recent Accomplishments and Upcoming Milestones
- Questions and Answers

Introduction

- Changes are underway that will impact how our office within FMS (Federal Finance) does business with other FMS and Treasury offices, our banks, and Federal agencies
- The changes fall under the banner of Collections and Cash Management Modernization (CCMM)

Three Recurring Themes

- FMS will re-organize the programs it uses to meet agency collection needs
- FMS will consolidate transaction reporting with one system and standardize the way in which reports are provided
- FMS will consolidate deposit reporting with transaction reporting

Presentation Goals

- **Explain** the changes
- **Persuade** as to the need for and desirability of the changes
- **Update** on the current status of the changes

Business Scope

- Within FMS, Federal Finance (FF) has three main responsibilities
 - Collect the revenue
 - Assist Treasury in its forecasting duties
 - Invest excess operating balances
- Meeting these responsibilities requires that FF perform other functions as well, such as:
 - Provide reports to agencies
 - Concentrate and account for the revenue
 - Ensure that collections and investments are collateralized
 - Manage the banks that run these programs
- Extensive use of depositaries and agents

Statistics Showing Business Scope

- \$3.1 trillion in annual gross revenue collections
- 400 million revenue transactions
- \$19.8 billion average daily investment balance
- Hundreds of agency office customers
- Extensive use of depositories and fiscal and financial agents:
 - Nine FRBs
 - Over 20 commercial financial institutions
 - 135 TGA depositories
 - Thousands of TT&L depositories
- Over two dozen programs, each comprised of one or more services or systems
 - Some programs serve multiple functions, especially CA\$HLINK II and TT&L
- \$500 million in expenses

Examples of Revenue Collections

- Taxes (over \$2 trillion)
- Student loan repayments
- Customs duties
- National Park entrance fees
- Defense commissary retail sales
- U.S. Mint coin sales
- Donations to U.S. Battle Monuments Commission
- SEC filing fees
- FCC airwave auction fees

- Note: In most instances, the services and systems handle not only the financial information, but also the program information

CCMM Defined

- Collections and Cash Management Modernization (CCMM) is a major new initiative to streamline and modernize FMS's and Treasury's collections and cash management programs.
- CCMM describes the business functions that will be part of our end state architecture, the boundaries of the programs that will serve those functions (and their connections), and the path for achieving the end state
 - Emphasis is on business architecture, as opposed to data architecture or technical architecture
 - An end state with a high level roadmap, not a new management structure
- Re-architecting of functions and programs that have accumulated over decades
- Applies to most, but not all, of Federal Finance's collections and cash management programs
 - Some specialized lockboxes are left out
- Impacts other major business areas (Government-wide accounting, payments)
- Re-architecting existing functionality and changes in agents will slow down development of new functionality

Reasons

- Cost savings
 - Current operations are highly effective, but not efficient
 - Reduction in number of systems and processes
 - Elimination of duplication of data, applications, products, interfaces, and technologies
 - ACH debit example: 8 programs, 10 banks
 - Eliminate costly dependencies on particular banks
- Risk mitigation
 - Complexity of the As-Is model and systems architecture is a growing operational risk to the Government
 - As-Is model lacks economies of scale
- Root cause is too many programs with redundant functionality

History

- 2003
 - FMS Collections Enterprise Architecture
 - First review by McKinsey & Co.
 - TT&L collections and activities excluded
- 2004
 - TT&L Enterprise Architecture study
 - Second review by McKinsey & Co.
 - FMS Commissioner Gregg attended most of the McKinsey briefings
 - Initial focus was on TT&L, but expanded to become comprehensive review of collections, investments, forecasting, collateral management, and reporting
 - Federal Finance realignment
- 2005
 - Concept of Operations for Collections and Cash Management
 - SES officer detailed by the Commissioner to coordinate CCMM efforts in October

History

- 2006
 - Office of Cash Management Enterprise Architecture (CCM) (2006)
 - Collections and Cash Management Modernization coordination is the principle responsibility of this office
 - CCMM implementation work begins
- 2007
 - Several banks named
 - TRS infrastructure completed

Notional Diagram

Showing Straight-Through Processing



Collection Channels	Settlement Mechanisms
OTC	Card
Mail	Check
Phone	ACH Debit
Internet	ACH Credit
Online Banking	Wire
Bank	

Infrastructure: Bank Management, Collateral Management, Customer Service Center

Business Lines

Commercial Banks

- OTC & Terminals Channel
- Mail Channel
- Card Gateway & Settlement
- ACH Credit Settlement
- Fedwire Settlement
- Transaction Reporting
- Phone Channel
- Image Archiving

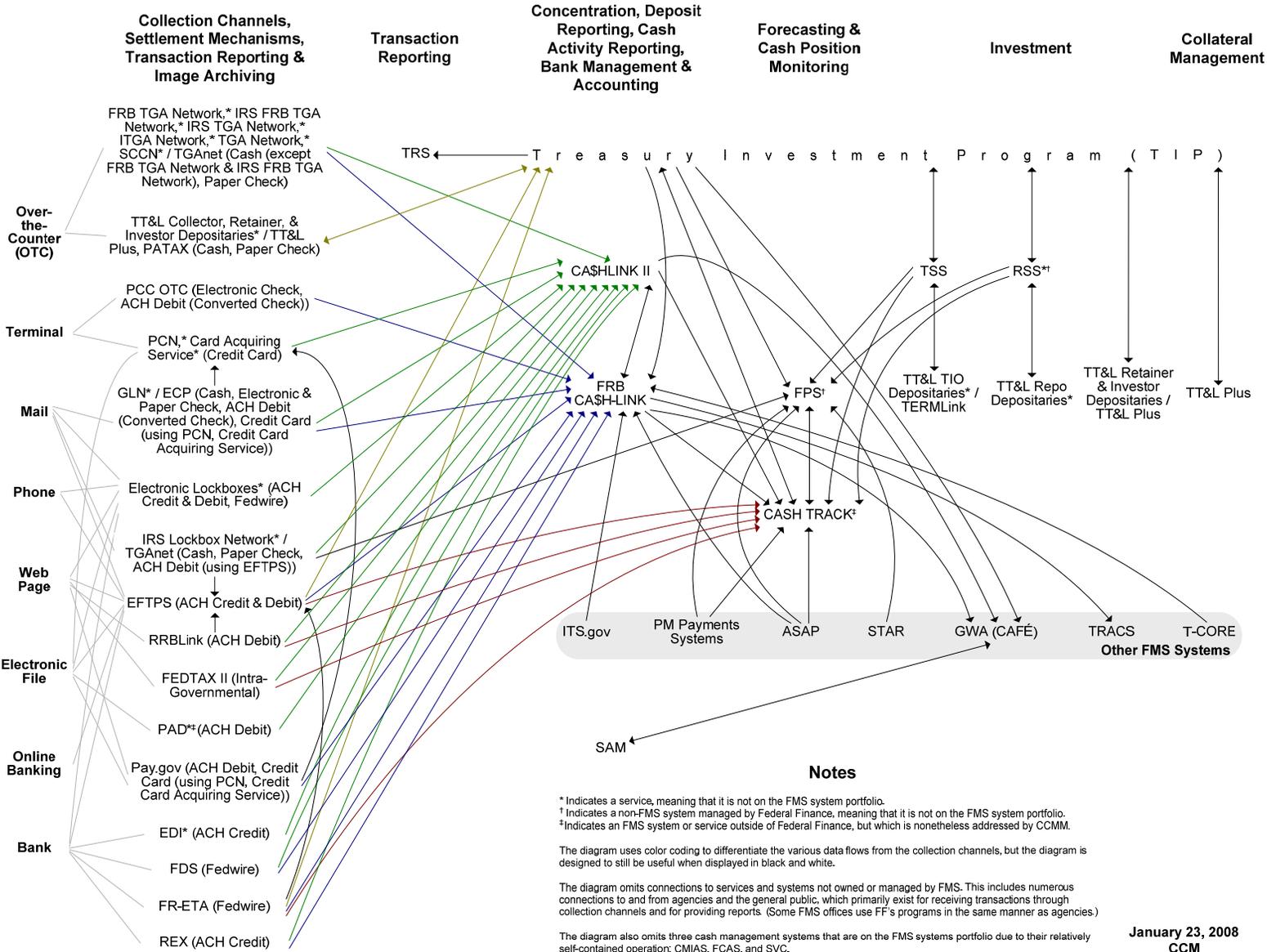
* Commercial banks will continue to run their own customer service centers as part of the programs they operate on our behalf

Federal Reserve Banks

- Internet Channel (except EFTPS)
- Online Banking Channel (except EFTPS)
- Check Gateway & Settlement
- ACH Debit Gateway & Settlement
- Cash Concentration
- Collateral Management
- Forecasting
- Investment
- Shared Accounting
- Bank Management
- Customer Service Center (for programs run by FRBs)*

19 Business Lines

Collections & Cash Management Modernization: "As Is"



January 23, 2008
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Collection Channels (As-Is)

- A channel is the medium through which FMS first acquires a transaction
 - The channel refers to how FMS receives a transaction, not how the agency receives it
 - If an agency receives a call from the member of the public and the agency enters that information on an FMS web page, the channel is not “phone,” but “Internet”
- There historically has been no notion of “channels” or channel management, only “collection systems.” This has resulted in:
 - Duplication of functions
 - Each channel is served by at least two major programs
 - Collection systems perform multiple functions
 - Acquire transactions, settlement, reporting, archiving
- Current approach involves unnecessary redundancy
 - We’re effective but not efficient

Settlement Mechanisms (As-Is)

- Settlement mechanisms refer to the means by which transactions are settled
 - Cash, credit card, check, ACH debits, ACH credits, wire
- There historically has been little notion of having programs that handled settlement exclusively; instead, we've had multi-function "collection systems." This has resulted in:
 - Duplication of functions
 - ACH Debits are performed by eight programs and ten banks
 - Collection systems perform multiple functions
 - Acquire transactions, settlement, reporting, archiving
- Current approach involves unnecessary redundancy
 - Again, we're effective but not efficient

Transaction Reporting, Deposit Reporting & Image Archiving (As-Is)

- Reporting is needed to provide information to agencies about collection transactions
 - Financial details & program details
 - (Individual) transactions & (summary) deposit reports
 - Data & archived images
- There historically has been no notion of a centralized reporting service only “collection systems.” This has resulted in:
 - Duplication of functions
 - 20+ programs providing transaction details
 - Deposit reports separately provided CA\$HLINK II
 - ECP, PCC OTC, various lockboxes perform image archiving
 - Collection systems perform multiple functions
 - Acquire transactions, settlement, reporting, image archiving
- Multiple problems arise from the current approach
 - Reconciliation headaches for agencies
 - Difficult to replace banks
 - No standardization of file formats
 - Many hard-coded point-to-point connections

Concentration & Accounting (As-Is)

- Concentration is needed to get funds to the Treasury General Account (TGA) from the many banks that collect revenue for Treasury
- Three concentration systems
 - Commercial banks—(PNC) CA\$HLINK II
 - FRBs—FRB CA\$H-LINK
 - Tax deposits from commercial banks—TIP
 - Concentrates paper FTD tax collections from TT&L depositories (commercial banks) to FRB St. Louis, before invoking FRB CA\$H-LINK for FRB concentration
- Systems use different methods for concentration
 - CA\$HLINK II—ACH debits and Fedwires
 - FRB CA\$HLINK and TIP—IAS
- Concentration is based on summary level details provided by collection programs

Concentration & Accounting (As-Is)

- Not only are there multiple concentration systems, but these systems serve other business lines as well
 - (PNC) CA\$HLINK II
 - Bank Management (commercial bank controls and compensation)
 - Restorations (for International TGA banks)
 - Remittance Express (for non-tax ACH credits)
 - Fedwire Deposit System (FDS) (for non-tax wire collections)
 - FRB CA\$H-LINK
 - Transcript reporting
 - Goes well beyond deposits; includes payments, sale and redemption of securities, Food Stamps, Postal Money Orders
 - Needed for accounting
 - TIP
 - Forecasting (through its so-called dynamic accumulator)
 - Investments
 - Collateral monitoring
- Current concentration approach is based on summary level information provided by programs, and leads to deposit reports provided separately to agencies
 - Reconciliation headaches

Concentration & Accounting (As-Is)

- Accounting is needed for all these transactions; generally, that is provided by GWA, but FF has a couple system that is used for this purpose as well: SAM & FRB CA\$H-LINK
 - SAM
 - New accounting system
 - Converts C-keys identifiers to TAS and BETC details
 - Will continue in the end-state
 - FRB CA\$H-LINK
 - Transcript functionality (mentioned in previous slide)

Forecasting (As-Is)

- Forecasting is needed to predict the Government's financial needs, including the need to invest excess operating balances
- Three systems provide forecasting and cash position monitoring capabilities
 - FPS (long-term forecasting)
 - CASH TRACK (short- and medium-term forecasting and end-of-day cash position monitoring)
 - GWA system
 - TIP (intra-day cash position monitoring)
- A primary problem with the forecasting systems is the number and quality of data feeds
 - There are dozens of feeds into the forecasting systems
 - The same systems often redundantly provide data to the concentration systems
 - Many feeds are manual
 - Current approach requires database-level knowledge of multiple feeder systems

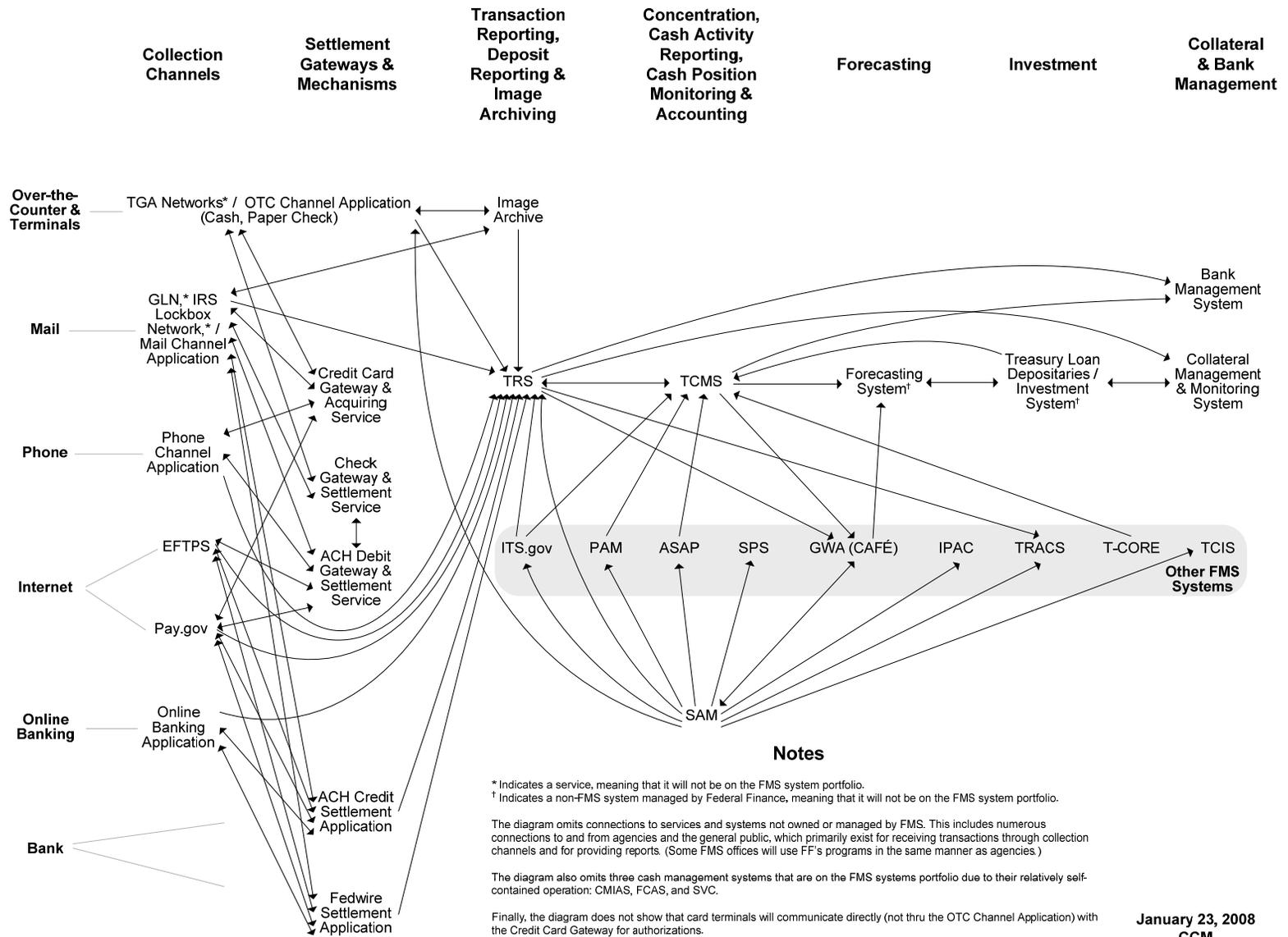
Investment (As-Is)

- Based on the Government's financial position, there can be a need to invest excess operating balances
- Investment options are evolving
- Systems: TIP, PATAX, TT&L Plus, TERMLink, TSS, RSS
- We use 9,000+ TT&L banks which collect Federal Tax Deposit (FTD) coupons and/or accept investment balances
 - We want to break the link (retainer processing) between collections and investments that is at the heart of the old TT&L program, which dates to WWI
- Not only are there many investment systems, but TIP serves multiple business lines: concentration, forecasting, investment, and collateral management
 - Need to separate these business lines

Collateral & Bank Management (As-Is)

- Bank management (compensating banks) and collateral management (to secure our collections and investments) is needed because of our use of depositaries and agents
- Bank management is part of CA\$HLINK II
- Collateral monitoring and management is part of TIP
 - 31 CFR 202 (Depositaries)
 - 31 CFR 203 (Investments)
 - 31 CFR 225 (Sureties)
- These business lines should be served by dedicated programs

Collections & Cash Management Modernization: "To Be"



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Collection Channels (To-Be)

- One system per channel
- Settlement separated out and handled by separate systems
- Transaction reporting separated out and moved to TRS, using XML schema, and images stored in image archive
- Reduction of unneeded duplication and complexity

Collection Channels (To-Be)

- OTC Channel—Make deposit process more like commercial deposits, as opposed to a Government-specific approach
- Mail Channel—Make greater use of scanning and OCR
- Internet Channel—Pay.gov and EFTPS stay separate, at least for now
- Other channels: Phone Channel, Online Banking Channel

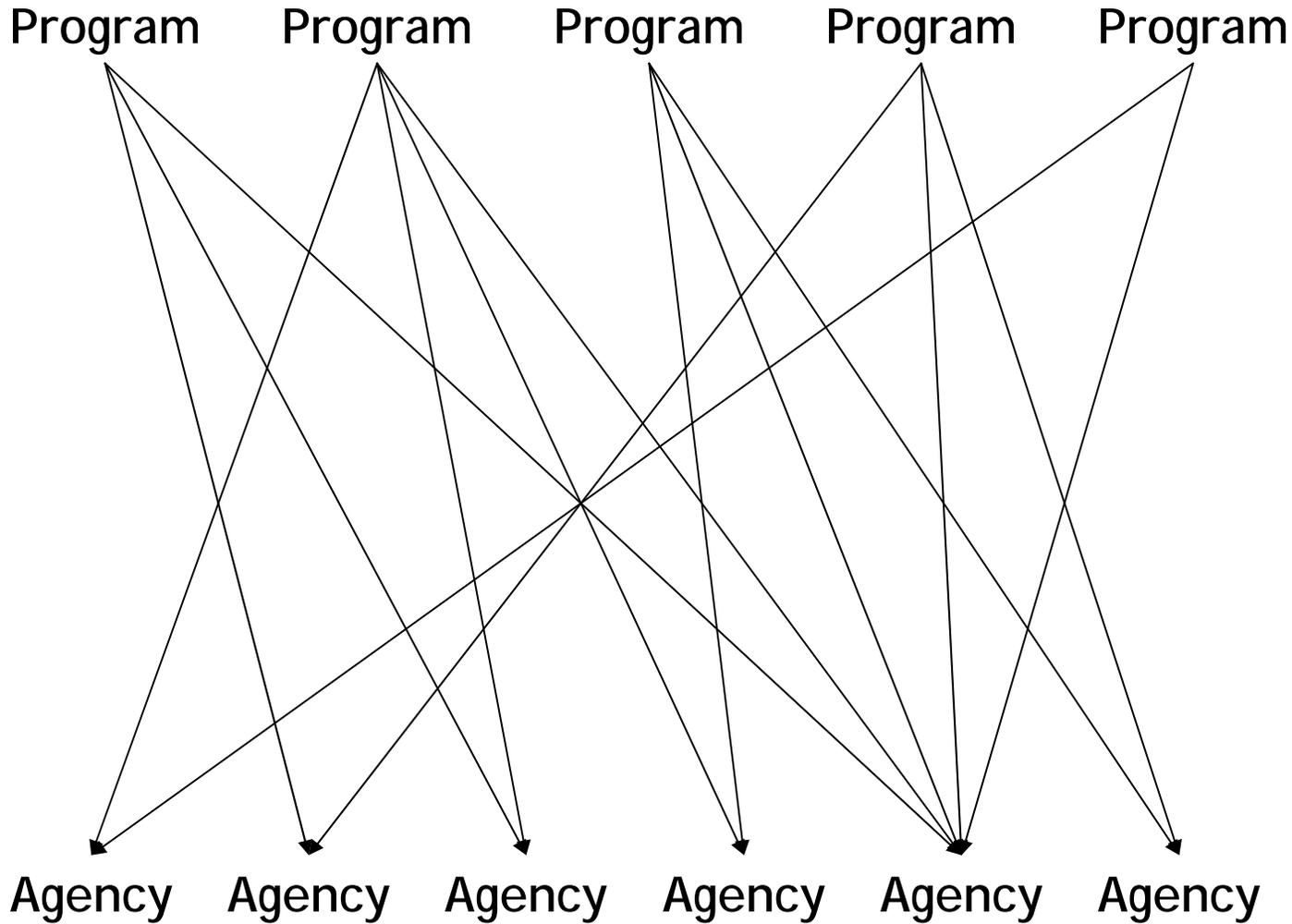
Settlement Gateways/Applications & Mechanisms (To-Be)

- Separate channels from settlement
 - Cornerstone of the collections line EA
- One system per settlement mechanism
- Settlement as a shared service
- “Settlement gateways” will broker transactions from channel applications into settlement, using standard XML schema
- Fedwire and ACH credit settlement applications will send many transactions to channel applications for matching

Transaction Reporting, Deposit Reporting & Image Archiving (To-Be)

- Transaction Reporting System
 - TRS will warehouse daily transaction details (including images) from all collection programs and provide deposit reports as well
 - Standard XML schema used for reporting purposes
 - Central reporting hub replaces many-to-many reporting connections and breaks direct links between agencies and agent banks; single touchpoint for agencies
 - TRS will provide business analytics that will be useful for FMS and agency needs
 - TRS implementation is at the heart of the new architecture
 - Live as of 2007, but we need to connection systems to it
- Image archive (accessed by TRS) will provide images

(As-Is)

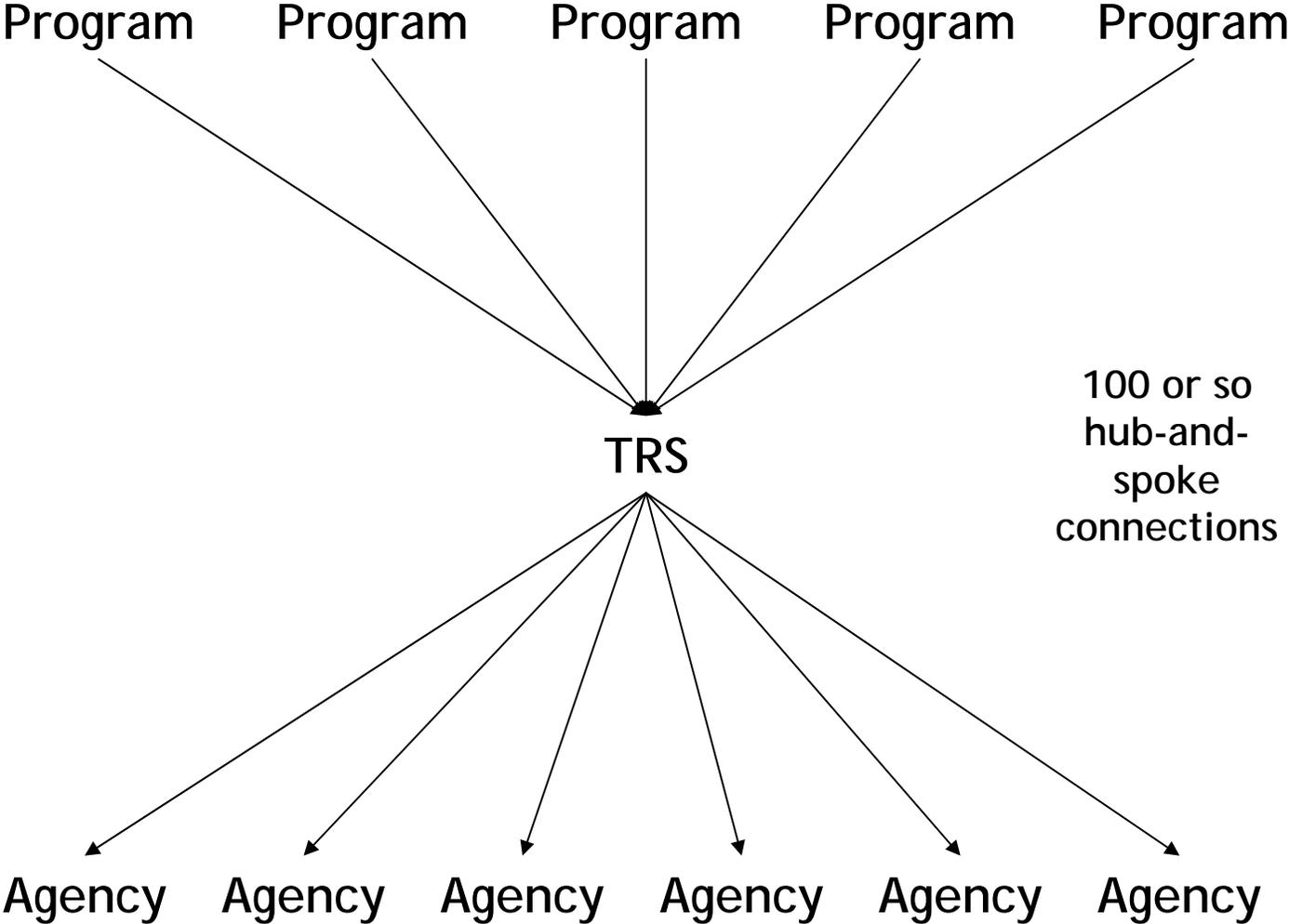


(Plus another 20 or so collection programs, some run by multiple banks)

Several hundred point-to-point connections

(Plus another 100 or so agency offices)

(To-Be)



100 or so
hub-and-
spoke
connections

Transaction Reporting, Deposit Reporting & Image Archiving (To-Be)

- Use of XML
 - Move away from proprietary file formats
 - Avoid lock-in issues
 - XML schema is designed for collections, payments, and other financial data
 - XML schema also accommodates agency-specific program data
 - XML schema includes space for agency-defined fields and allows agencies to have program data incorporated in a single block
- More information is available at: fms.treas.gov/eda

Concentration & Accounting (To-Be)

- TRS provides the opportunity for a new concentration model
 - No need for summary deposit tickets if TRS has all transaction-level detail
- Consolidate certain (PNC) CA\$HLINK II & FRB CA\$H-LINK functions in Treasury Cash Management System (TCMS)
 - Concentration
 - Cash activity transcripts
 - Critically important for accounting
 - Cash position monitoring
 - Critically important for forecasting

Concentration & Accounting (To-Be)

- Other CA\$HLINK II and TIP functionality will be disaggregated; this presents the biggest challenge in CCMM, given the amount of functionality involved
 - CA\$HLINK II functionality disaggregated
 - Bank management is separated out and becomes its own application
 - Restorations are handled separately
 - Remittance Express and the Fedwire Deposit System are subsumed by new Settlement Applications
 - TIP functionality disaggregated
 - TIP's concentration functions will be unnecessary after the elimination of paper FTD collections in the TT&L program
 - Forecasting functions replaced by new forecasting system
- SAM will help provide FMS applications with certain required accounting information, including Agency Location Codes (ALC), Treasury Account Symbols (TAS), and Business Event Type Codes (BETC)

Forecasting (To-Be)

- Single system for all forecasting needs, replacing three systems used at present
 - Intra-day
 - Short-term
 - Long-term
- Centralize and limit the number of data feeds
- Standardize on connections used to obtain data
- Greater need for large dollar notification (LDN) data from agencies

Investment (To-Be)

- One investment application supporting multiple investment vehicles
 - Multiple investment systems eliminated
- Move collections, investments, concentration, collateral functionality into separate programs
 - FTD coupon collections (PATAX) are integrated with other Federal Finance collection programs or eliminated entirely
- Expand repo program, currently limited to financial institutions
 - Requires legislation
 - Would dramatically shift the mix of investments
- Eliminate retainer processing
 - Critical to breaking TIP's link between collections and investments
- In general, take greater advantage of commercial sector investment options, as opposed to government-specific ones
 - Use a mix of both to help provide protection in the event of a contingency

Collateral & Bank Management (To-Be)

- Systems/services dedicated exclusively to bank management and collateral monitoring and management
 - Removed from CA\$HLINK II and TIP, respectively
- Improved agency access to collateral information

Other Changes

- Centralize customer service center technology for FRB-run programs
- Update CFR, TFM, and FR Operating Circulars
- “Holistic approach” for dealings with agencies

Enterprise Impact

Remaining Systems

- EFTPS (Bank of America Platform)
- Pay.gov (TWA)
- TRS (PNC Bank Platform)
- SAM (TWA)

New Systems

- OTC Channel Application (FI) (Platform?) (2009)
- Mail Channel Application (FI) (Platform?) (2008)
- Phone Channel Application (FI) (Bank of America Platform) (2009)
- Credit Card Gateway (FI) (Platform?) (2009)
- Check Gateway (FRB) (Platform?) (2009)
- ACH Debit Gateway (FRB) (Platform?) (2009)
- ACH Credit Settlement Application (FI) (Platform?) (2009)
- Fedwire Settlement Application (FI) (Platform?) (2009)
- Image Archive (FI) (TWA) (2009)
- Treasury Cash Management System (FRB) (Platform?) (2009)
- Forecasting System (FRB) (Platform?) (2010) (owned by Dept.)
- Investment System (FRB/Internal Treasury) (Platform?) (2009) (owned by Dept.)
- Collateral Management & Monitoring System (FRB) (Platform?) (2009)
- Customer Service Center (?) (FRB) (Platform?) (TBD)

Platform(s) for most new systems have yet to be determined.

Expiring Systems

- TGAnet (TWA) (2008)
- PATAX (FRIT Mainframe) (2010)
- TT&L Plus (TWA) (2010)
- PCC-OTC (TWA) (2009)
- RRBLink (US Bank Platform) (2008)
- FEDTAX II (Bank of America Platform) (2009)
- ECP (TWA) (2009)
- FDS (PNC Bank Platform) (2009) (part of CASH-LINK II)
- FR-ETA (FRIT Mainframe) (2009)
- REX (PNC Bank Platform) (2009) (part of CASH-LINK II)
- CASHLINK II (PNC Bank Platform) (2010)
- TIP (FRIT Mainframe) (2010)
- FPS (Public Debt) (2010) (owned by Dept.)
- TERMLink (FRIT Mainframe) (2009)
- TSS (FRB St. Louis internal system) (2009)
- RSS (FRB St. Louis internal system) (2009) (owned by Dept.)
- CASH TRACK (FRIT Mainframe & TWA) (*Under discussion—some or all of this system may remain*)

Principles

- Separate collection channels, settlement mechanisms, reporting and image archiving into distinct business lines and systems
 - Settlement as a shared service
 - Reduction of reporting touch points to agencies
 - Visibility into reporting transaction details (vs. summary level), allowing for new concentration model
- Push toward one system per business line
 - Elimination of conglomerate, monolithic systems that span multiple business lines
 - Consolidation of redundant systems that serve individual business lines
- Increase use of commercial processes instead of Government-specific processes
 - Over-the-Counter (OTC) deposit reporting, investments
- Use an open XML schema for settlement and reporting interfaces (no proprietary formats)
- Reduce the number of systems and agents
- Achieve one straight-through process for all collections transactions
 - Instead of processes for FRB v. commercial banks, TT&L v. non-TT&L, tax v. non-tax

Upcoming Milestones

- Continue selecting agents (many are already known, especially for FRBs)
 - This will impact agencies
- Finish rollout of ECP at GLN banks
- Change reporting cutoff for PATAX
- Finish conversion to new Card Acquiring Service
- Connect Card Acquiring Service and Fedwire Deposit Service to TRS
- Determine specific approach for forecasting
- Determine specific approach for investments
- Obtain legislative authority for expanded use of repos
- Complete infrastructure analysis for where future applications should be hosted
- Obtain approval for and building of new applications (TCMS, gateways, settlement applications)
- Analyze of long-term future of Pay.gov and EFTPS
- Identify approach for customer service center business line

Recent Accomplishments

- Selected agents for most business lines
- Separated restorations from CA\$HLINK II
- Continued to reduce the number of TGA banks
- Deployed enhanced TRS data warehouse & infrastructure
- Completed preparation for transition of reporting to TRS
- Connected PATAX, ECP, TGA.net, Pay.gov, EFTPS (w/ FR-ETA), and SAM to TRS
- Began limited reporting from TRS to GWA “the GWA Way”
- Transitioned E-Lockbox web & electronic file tax [E-Lockbox/DDIA] functions to EFTPS
- Transitioned RRBLink web tax functions to EFTPS
- Transitioned RRBLink web non-tax functions to Pay.gov
- Eliminated non-value Fedwires in FR-ETA
- Identified the approach for the Image Archive
- Defined the XML schema for reporting and settlement
- Developed comprehensive reports to track CCMM costs and savings

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