

1998
FEDERAL
RESERVE
BANK
OF
PHILADELPHIA
ANNUAL
REPORT



The Switch
To Electronic Payments



The Switch to Electronic Payments

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As I write this, the current economic expansion enters its ninth year. It is already the longest peacetime expansion in our history, and I believe it still has a long run ahead.

Each phase of this expansion has brought its own challenges. In 1998, it was responding to international economic weakness, and investors' growing concern about exposure to risk. The Fed moved decisively to reduce short-term interest rates, restoring confidence to financial markets and helping sustain a healthy pace of economic activity in the U.S. The year ended with the economy turning in a solid performance and good prospects for continued growth. If there is one thing our recent experience has demonstrated, it is how small the world has become. Instantaneous global communication is a reality. Financial market activity flows continuously around the world in what amounts to a 24-hour business day. And the digital technology that makes all of this possible will continue to transform commerce and the worldwide economy in the years ahead.

While electronic capabilities are still expanding, and the possibilities are exciting, we are faced with the prospect of adapting to rapid and ongoing change. We at the Fed are very much aware of this in our role as a provider of payments services. While we see more and more money moving electronically, we also know that people still pay for most things in cash or by check. This presents us with a significant challenge: helping the payments system achieve the efficiency and convenience offered by electronics without compromising the confidence and comfort people have with more traditional means of payment.

Early in 1998, the Fed reaffirmed its commitment to work with payments providers, large and small, old and new, to move decisively toward electronic payments. As you will see in this report, the Federal Reserve Bank of Philadelphia and the depository institutions in the Third District are actively engaged in bringing about this transition.

President

An important part of the Federal Reserve's mission is to ensure that the nation's payments system evolves to meet the needs of a dynamic economy. One of the reasons Congress created the Fed back in 1913 was to help establish a coherent national system for clearing checks. Today, our priority is fostering an orderly transition from such paper-based systems to electronic payments.

Actually, the movement to electronic payments has been underway for some time. Some electronic services, such as direct deposit of payrolls, have caught on and are quite common. Now it seems that electronic payments are poised for rapid expansion in many more areas. The basic infrastructure is in place and new capabilities are being developed.

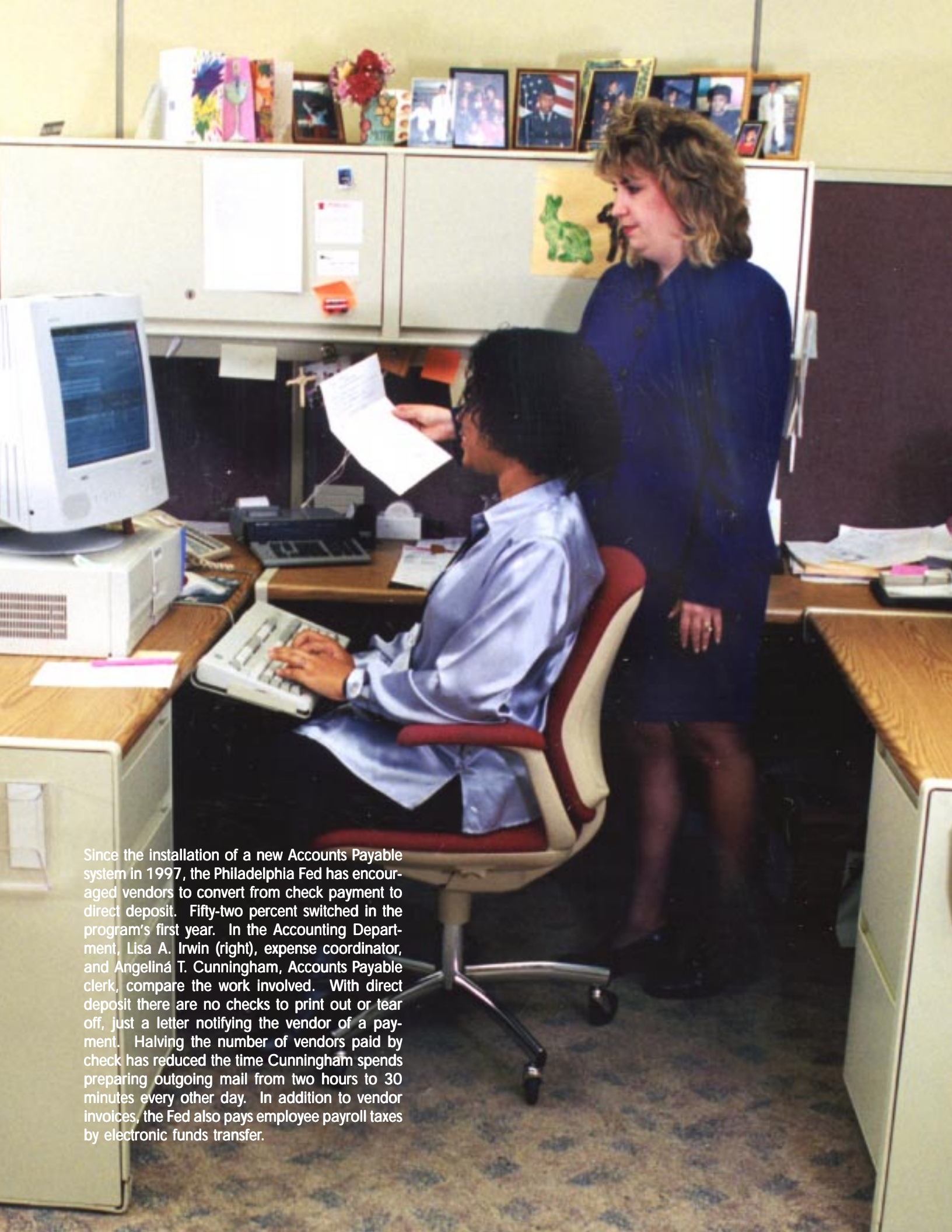
What we must do now is familiarize people with electronic payments, build people's confidence in them, and increase their awareness of the possibilities they offer. It is not up to the Fed to choose the particular constellation of payments services that emerges. That will be decided in the marketplace by banks and other service providers, in consultation with consumers and businesses. Our job is to create a positive environment for that process.

That is why we at the Federal Reserve Bank of Philadelphia are committed to quality, innovation, and responsiveness in the services we provide for our depository institution customers. We want to help them position themselves to offer the finest and most progressive payments to their customers in the Third District and across the country.



First Vice President





Since the installation of a new Accounts Payable system in 1997, the Philadelphia Fed has encouraged vendors to convert from check payment to direct deposit. Fifty-two percent switched in the program's first year. In the Accounting Department, Lisa A. Irwin (right), expense coordinator, and Angelin  T. Cunningham, Accounts Payable clerk, compare the work involved. With direct deposit there are no checks to print out or tear off, just a letter notifying the vendor of a payment. Halving the number of vendors paid by check has reduced the time Cunningham spends preparing outgoing mail from two hours to 30 minutes every other day. In addition to vendor invoices, the Fed also pays employee payroll taxes by electronic funds transfer.

Introduction

The payments system is changing. There are new ways to exchange money, and they don't involve the familiar crinkle of cash or checks. The payments system is becoming electronic.

A manufacturer with facilities across the state taps a keyboard and her payroll is done. On payday, the funds are waiting in employees' accounts as soon as banks open...

A homeowner looks at the calendar and knows his mortgage payment is on its way, automatically...

A traveler about to board a plane calls her bank to pay a last-minute bill...

A college student, late for class, leaves his dorm room without money, but easily purchases coffee with his student identification card.

These increasingly familiar examples demonstrate just how plugged in payments have become. Direct deposit has made paychecks a thing of the past for many of us. A growing number of us pay bills without writing checks or licking stamps. More of us make purchases with the swipe of a card.

Will paper money disappear completely? Probably not. But electronic transactions are gaining, mostly because of the speed and convenience they offer. The Federal Reserve — particularly the Federal Reserve Bank of Philadelphia — is doing several things to smooth the transition from paper to electronic payments.

Electronic transfers actually have been around for quite a while. The Federal Reserve has been moving large-dollar transactions for banks and the government over its Fedwire network since the 1920s. What is new is the viability of electronic transfers on a broad scale, for everyday transactions. New computing and telecommunications technologies are making moving information — and money — easier and cheaper all the time.

Improving technology is only one part of the story. E-payments might have remained invisible to the general public except for one thing: Uncle Sam decided to bank electronically. In 1996, Congress enacted legislation requiring most federal payments to be made electronically, including things such as Social Security, federal pensions, and veterans benefits.

For the federal government, cost is a primary incentive. Each e-payment saves 41 cents compared with issuing a check. Because of the volume of payments made by the federal government, use of e-payments is expected to save \$500 million over five years, and that benefits not only the government but everyone who pays taxes.

Electronic payments offer other, more immediate advantages to the rest of us. They reduce fraud, since they are less vulnerable to theft, forgery, and counterfeiting. Besides being safer, transferring funds electronically is also more convenient. E-payments are not subject to delays associated with mailing and collection time.

Recipients can direct e-payments to one or more accounts as they avoid bank lines, and they can access their deposits earlier, all of which enables them to manage their money more efficiently.

Even with these clear advantages, there are several challenges to winning wide acceptance for electronic payments.

Initially, people need to be made aware of what they are. They need to be informed of the benefits. And they must become used to handling finances electronically.

Perhaps the most significant challenge, however, is the inclusion in the electronic economy of some 10 million

Americans who do not have bank accounts. All of these issues must be addressed if electronic money is to achieve the same accessibility and integrity as existing forms of currency.

This is where the Federal Reserve becomes involved in the transition

to electronic payments. Part of our mission is to ensure that the nation's payment system is efficient, reliable, secure, and accessible. The Fed itself processes 25 percent of all checks written in the U.S. and 80 percent of all e-payments.

In 1997, a committee headed by Fed Vice-Chairman Alice Rivlin thoroughly reassessed our role as a payment processor. After consulting a broad array of financial institutions, businesses, consumer groups, trade associations, and payments experts, the Rivlin Committee

laid out the Fed strategy for smoothing the switch to an electronic economy.

Foremost among the committee's recommendations was that the Fed continue to improve the efficiency, effectiveness, and convenience of both its check clearing and automated clearinghouse services, and ensure access

to these services for all depository institutions.

Equally important, the committee emphasized that the Fed should work actively with payments providers and users to move the payments system forward, from creating greater public awareness, to providing education and training for bankers, to encouraging creative partnerships between banks and businesses.

Essentially, the Rivlin Committee directed the Fed to help move the payments system toward electronics through a two-pronged approach: by continuing to adopt new technologies

internally and by working with those who provide and use payments services.

At the Federal Reserve, the transition to electronic payments involves four services: Automated Clearinghouse; FedLine; Financial Electronic Data Interchange; and Electronic Check Presentment. At the Federal Reserve Bank of Philadelphia, we are working with Third District depository institutions and others to expand the use of these services.

EFT99: UNCLE SAM GOES ELECTRONIC

What: In 1996 Congress formally endorsed the federal government's usage of electronic payments with the passage of the Debt Collection Improvement Act, commonly known as EFT99 (for electronic fund transfers by 1999). The law requires that whenever possible, federal departments and agencies make payments electronically.

Why: Electronic payments are safer, more convenient, and less expensive than checks. E-payments also greatly reduce the opportunity for theft, forgery, and counterfeiting — problems that cost the government \$65 million in an average year.

Who: Almost everyone who receives a payment from the federal government is affected. EFT99 has meant a quick introduction to direct deposit for millions of Social Security recipients, federal retirees, veterans, and vendors who do business with the federal government.

How: Though the federal government has scaled back its original goal for EFT99 — that 100 percent of payments be made electronically by 1999 — much progress has been made. By the end of 1998, 75 percent of the one billion payments made by the federal government annually were being made electronically.

Automated Clearinghouse

Like checks, electronic payments must be settled. Automated Clearinghouse (ACH) is the mechanism through which electronic payments are debited and credited. ACH, established in 1972 through the joint effort of the Fed and the private sector, specializes in low-dollar transactions, the kind for which many people still write checks.

And, though people still write 65 billion checks a year, electronic payments are growing — currently they number about five billion a year. At present, most ACH payments involve businesses: the real potential for growth lies with consumers. If individuals' mortgage, utility, insurance, and other recurring payments were made electronically, ACH usage would skyrocket.

Direct Deposit Is Best Known

Most ACH transactions can be categorized as direct deposits or direct payments. Direct deposit, by far the better known, refers to the automatic deposit of funds into bank accounts. For most people, the direct deposit of

salary or retirement benefits is their first contact with electronic payments.

Employers find direct deposit to be a less expensive, more secure way of handling payroll, particularly for employees who are geographically dispersed. In 1997, 725,000 employers gave workers the option of having their pay deposited directly. The National Automated Clearinghouse Association indicates that about half of payroll payments in the United States are made electronically. Thanks to the impetus of federal legislation, 95 percent of federal government workers were paid by direct deposit by mid-1997.

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Tom Lombardo and Steve Hart, managers in the Philadelphia Fed's Retail Payments and Business Development departments, criss-crossed the Third District during 1998 to discuss automated clearinghouse services with bankers. Last fall, Hart (left) and Lombardo (second from left) were invited to talk about ACH operations and marketing at Delaware National Bank in Georgetown, DE, where management was preparing to institute direct deposit and other ACH services.

FYI

- Half of all payroll payments are now made by direct deposit. (NACHA)
- Six out of 10 households receive at least one payment through direct deposit. Three out of 10 households make at least one direct payment a month. (Federal Reserve Bank of St. Louis)
- Ninety-nine percent of consumers say they understand direct deposit well. (Federal Reserve Bank of St. Louis survey)
- The ACH Customer Service Unit, (215) 574-3798, can trace items, remake files, research balance problems, and provide technical assistance. It operates from Sunday, 5:30 p.m. through Friday, 11 p.m.
- Processing a loan payment made by check or coupon costs a bank 35 cents, while a loan payment made by ACH direct payment costs 3 cents. (NACHA)

Direct Payment Has Most Potential

Direct payment is the flip side of direct deposit. Here, bank customers pay bills through electronic account withdrawals. These can be initiated by the account holder or by a creditor the account holder authorizes. For example, a homeowner can authorize his mortgage company to initiate direct payments on a designated day each month. The homeowner receives a statement, but does not have to take any action to pay the bill. When direct payments are initiated by customers, however, the customer receives a statement of the amount due and then has to release the funds by telephone or computer.

Growth of direct payment has been slow compared with direct deposit, in part because of consumers' reluctance to allow creditors to dip into their accounts. That reluctance has led companies to refine direct payment, enabling customers to question bills before payment takes place, to delay or stop direct payments, and to make partial payments if they wish.

Direct payment offers many advantages. Consumers are assured of paying right on time without checks or stamps. They can also use automatic fund transfers for other purposes, such as saving and investment. For businesses, receiving direct payments improves cash flow, reduces delinquencies, and represents a convenience that can attract and retain customers. Businesses that pay their own bills through direct payment take advantage of the



One-on-one visits permitted more personalized discussion. Delaware National already had a FedLine connection and was receiving ACH items from the Fed, but wanted to originate ACH payments to enhance corporate services. There, Steve Hart and Tom Lombardo talked about testing, selecting a client for a pilot program, risk issues, and legal questions.

same convenience and cost savings individuals enjoy. The Federal Reserve Bank of Philadelphia now pays most of its suppliers electronically.

In 1997, consumers paid 283 million bills electronically, an increase of 150 percent from 1996. In all, about a billion direct payments are made each year, and the National Automated Clearinghouse Association estimates that the potential could be as many as 20 billion.

Fed Encourages Adoption of ACH

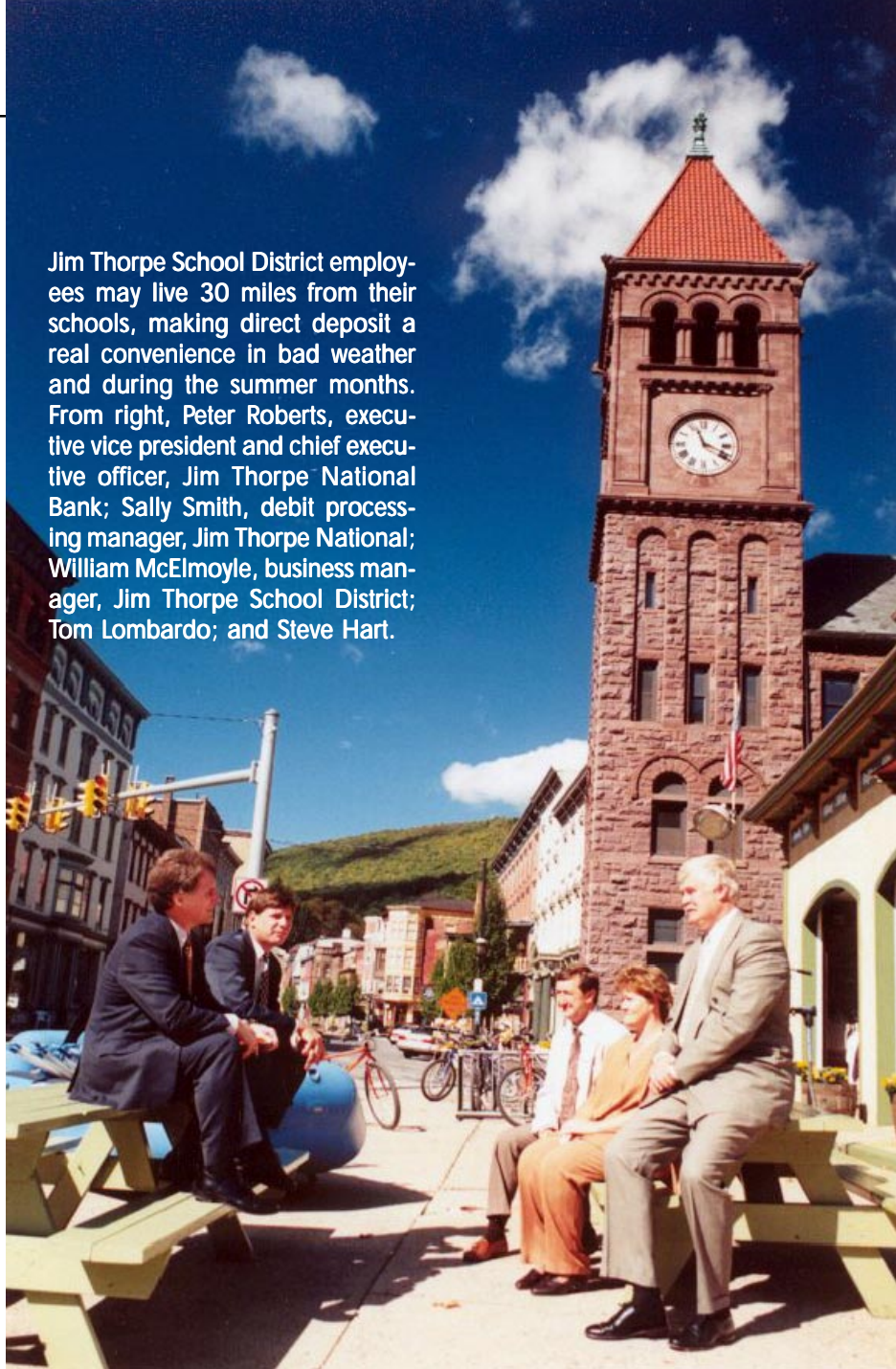
Recognizing the efficiency of electronic payments and their market potential, the Federal Reserve actively supports the adoption of electronic payments by financial institutions and their corporate and individual customers. To facilitate the adoption of ACH in the Third District, the Philadelphia Fed provides information, technical assistance, and training.

Beginning in 1997, the bank presented a series of interactive workshops on ACH throughout the Third District. More than 300 bankers attended the workshops, conducted by Retail Payments

Manager Thomas Lombardo and Business Development Manager Stephen G. Hart, who outlined the requirements for an ACH operation and offered suggestions for marketing it to customers. Hart and Lombardo's presentations employed a flexible, informal approach in which content was driven by participants' concerns, so that the bankers got exactly the information they wanted.

The workshops continued into 1998 and generated enough interest to warrant a series of follow-up visits to individual institutions. Lombardo and Hart

Jim Thorpe School District employees may live 30 miles from their schools, making direct deposit a real convenience in bad weather and during the summer months. From right, Peter Roberts, executive vice president and chief executive officer, Jim Thorpe National Bank; Sally Smith, debit processing manager, Jim Thorpe National; William McElmoyle, business manager, Jim Thorpe School District; Tom Lombardo; and Steve Hart.



talked one-on-one with people ranging from chief executive officers to the staff who would implement ACH, answering their questions and addressing their concerns.

Combined with the federal government's initiative, the Philadelphia Fed's activities to build interest have boosted the growth of ACH in the Third District. In 1998, ACH originations here increased 20 percent, compared with a 16 percent rise in 1997, making ACH the fastest growing method of payment in the District, as it is across the nation.

FedLine

FedLine is the connection for Automated Clearinghouse (ACH) and all other electronic transactions between the Federal Reserve and depository institutions. Since the mid-1980s, FedLine's personal computer-based software has linked banks directly to Fed computers, and services have expanded rapidly.

Doing Fed Business Electronically

Initially, FedLine was a conduit for the electronic transfer of funds and securities among Federal Reserve Districts, the U.S. Treasury, and financial institutions. This continues to be one of its primary functions. ACH transactions also travel over FedLine, as do U.S. Savings Bond orders. FedLine is also a channel of communication between the Fed and its customers: banks order currency, send notification of incoming deposits, alert the

Fed to check processing errors, and request adjustments. Many businesses submit federal withholding tax payments by FedLine as well.

FedLine is an optional service; institutions gain access by paying a monthly connection cost of \$75, an amount that is quickly made up in savings on transaction fees. Besides being an economical alternative, FedLine is flexible and secure. Institutions select just the services they need, and all transmissions are protected by

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Tawana Smith and Albert A. Primus assist callers to the FedLine Help Desk. The desk averages 30 to 40 calls daily, a figure that can double during peak periods. The Help Desk operates Monday through Friday, 8 a.m. to 5:30 p.m., and can be reached at (215) 574-6262.

encrypted language and a password system. Currently, more than 300 financial institutions in the Third District maintain a total of 425 FedLine connections. Of those, 44 institutions also have a computer interface connection to the Philadelphia Fed, a higher-speed link to handle larger transaction volumes.

Efficient, Economical, and Secure

FedLine is a source of valuable statements and reports for banks, which they can use to verify transactions, reconcile accounts, update records, and more efficiently manage Fed business. For example, when institutions transmit currency orders and deposit notices over FedLine, they receive printed acknowledgements within seconds of transmission, providing instant confirmation. Other reports are available overnight, avoiding the delays to which physical deliveries are subject. These include the Reserve Account Statement, a daily record of an institution's Fed accounts, and the Monthly Billing Statement, used to track service fees. The Account Balance Monitoring Service, an on-line inquiry function, helps banks avoid overdrafts on Fed accounts.

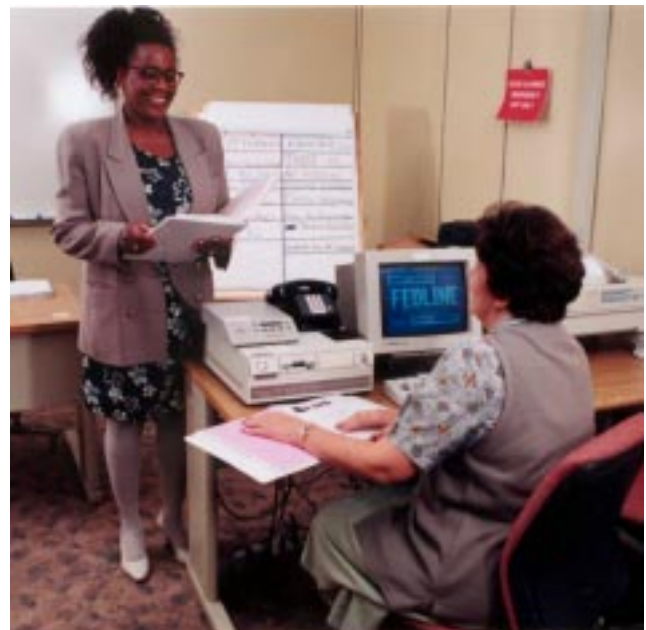
Support Services Make FedLine User-Friendly

Accessibility has been key to FedLine's success, and that is the responsibility of FedLine Support, a 12-member staff led by Dawn Karlyn. These are the people who help new users get connected and learn how to use



The FedLine and Electronic Access Support management team includes (from left): Supervisor Berthienna E. Ogden; Manager Dawn Karlyn; Coordinator Sal Giafaglione; Vice President Jay Bowman; and Supervisor Jennifer I. Wellington.

FedLine, who help experienced customers solve problems and expand their skills, and who respond to technical challenges and emerging issues, such as preparations for the year 2000.



FedLine user training is provided in many formats and locations. New users and those who want to learn more about FedLine applications can attend full- and half-day sessions conducted by trainers like Margarette C. Taylor (left). Periodic conferences help FedLine customers stay current on pertinent issues.

Financial Electronic Data Interchange

Encryption keeps electronic transactions secure — so secure that even recipients may not be certain what payments represent. Though funds transfers usually are accompanied by documentation, it is written in a standardized coded language known as financial electronic data interchange (EDI), which scrambles information so well that when payments reach their intended destination, bankers and their customers may not be able to decipher the explanatory messages.

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Taking the Paper Out of Paperwork

That's why electronic transactions have required a paper trail of documentation. Last fall, however, the Federal Reserve helped banks crack the code on-line. Specialized software to translate financial EDI was made available by the Fed, so that the people at either end of electronic transactions understand what's going on as well as the computers do.

With financial EDI software, files received over any electronic connection to the Fed can be translated and copied to paper, disk, or another electronic file, enabling recipients to see not only payment amounts, but

any accompanying documentation, including invoices, shipping data, billing records, and purchase orders.

Banks can use financial EDI to provide additional information to customers who receive or make payments through Automated Clearinghouse, FedLine, or any electronic medium.

Financial EDI software is available at no additional charge to all banks that have an electronic connection to the Federal Reserve. Training and software updates are included in institutions' monthly electronic access fee.

Electronic Check Presentment

Electronic Check Presentment (ECP) bridges the gap between paper and electronic transactions. With ECP, a payment initiated by paper check moves ahead electronically. The check, having served its purpose, can follow the electronic information, be sent to storage, or be disposed of altogether. The check writer receives more timely account balance information from his or her bank. The bank achieves lower processing costs, accelerates validation and correction of rejected items, and reduces exposure to fraud.

When the Fed sorts incoming checks, it routinely captures the information encoded at the bottom: the bank identification number, customer account number, and the dollar amount. With ECP, this data is forwarded

electronically to the bank on which the check is drawn. Transmission of check information, which constitutes legal presentment, takes place by nine in the morning after the check is received by the Fed. This allows paying

Imaging saves Mary C. Martin (left), operations specialist at Sterling Bank, Mount Laurel, NJ, two to three hours a day. Martin is responsible for researching unposted items, a task made much easier when she refers to computer images of checks instead of the checks themselves. Here, she reviews a list of unposted items with Deborah P. Williams, Sterling operations manager, and Raymond J. Lieb of Legato Software, who developed the software that allows the bank's computer system to work with information from the Fed.



banks to begin processing earlier than physical presentment would permit — how much earlier depends on a bank's location, but it can be as much as five hours sooner for institutions located at the edges of the Third District.

Earlier posting enables paying banks to provide more accurate account information to customers, so that they can better manage their funds. Fraudulent and insufficient-funds items are identified earlier, providing extra loss protection throughout the payment system. Checks are returned to paying banks after electronic

presentment, usually later the same day.

In addition to being faster, ECP is more accurate than manual check clearance. The encoded line at the bottom of checks is read automatically, avoiding re-keying errors. Because data is sent electronically, there are no delays due to misdirection or transportation problems. ECP also reduces paper handling for paying banks, frees up personnel and equipment, and lowers processing costs. In 1997, about 14 percent of the checks processed by the Federal Reserve were presented electronically.

ECP CUSTOMER PROFILE

STERLING BANK

Description: Sterling Bank, a community bank with \$100 million in assets, is located in Mount Laurel, NJ, about 15 miles from Philadelphia.

Fed Service: Electronic Check Presentment with Imaging

Experience: Sterling Bank has used electronic check presentment since August 1995 and added imaging in June 1998.

Before they used imaging, the staff at the bank had to manually search through the 2,000 cancelled checks received daily from the Philadelphia Fed for those that were not posted because of unreadable account numbers or other problems. Locating, inspecting, and resolving unposted checks took two to three hours every day.

With imaging, each batch of checks returned by the Fed is accompanied by a CD-ROM containing clear, digital images of every check. Images of unposted checks can be accessed easily from the CD-ROM and manipulated on screen: they can be enlarged, reversed, turned on their ends to inspect endorsements. The process now takes minutes, rather than hours.

When the CD-ROM and checks arrive at Sterling, custom-designed software compares the electronic presentment file (sent the previous day and used to charge customer accounts) with the CD file, to determine if any charged items are missing. As missing and unposted items are resolved, customer accounts are adjusted to reflect current balances.

Benefits:

- Faster resolution of unposted items
- Earlier awareness of missing items
- Check copies available in 5 minutes from CD-ROM, compared with 24 to 48 hours for microfilm copies
- Consistently clear images

Approximately 763 million checks being cleared through the Philadelphia Fed were presented electronically — 11 percent of checks handled.

Imaging Shrinks Paper Handling

Imaging, an enhancement of ECP, has the potential to make cancelled checks disappear. A digitized picture of each check is produced and assigned an identification number for easy

reference. Images, which are just as clear as originals, can be provided to banks in their choice of formats, with CD-ROM being the most common. The complete image — including the front and back of the original check — can be viewed on-screen and can also be enlarged and rotated for a closer look at endorsements, the encoded strip, or any other part of the check.

Sterling Bank in Mount Laurel, NJ, is one of the Philadelphia Fed's imaging customers. Each morning, the Fed sends Sterling an average of 2,000 checks drawn on Sterling accounts and a CD-ROM containing the corresponding images. Sterling has already charged the checks to customer accounts the previous day, when the Fed presented them electronically. The images are used to resolve unposted items. One by one, the items are inspected on-screen, a process that takes two or three hours less than manual retrieval would have.

For Sterling Bank, imaging reduces paper handling and processing, makes check archiving and



Robert J. Vanderslice, president and chief operating officer of Pennsville National Bank, discusses enhancements to the bank's electronic check presentment service with Janet Rizzo, Philadelphia Fed senior account manager. Vanderslice says that he expects paper checks to virtually disappear during his career, and at his institution, at least, that expectation may not be so far-fetched: two-thirds of Pennsville's consumer checking account customers no longer receive cancelled checks with their statements.

retrieval much more efficient, and speeds account adjustments. In addition, imaging eliminates the time and expense of creating a microfilm reference file, an operation that required checks to be sent out of the bank for a day or more. Though Sterling only uses imaging internally at this point, it could extend the service to customers, substituting pages of check images in account statements for cancelled checks.

Truncation Eliminates Paper

If ECP strips information from checks, and imaging transforms them into digitized pictures accessible by computer, is the paper check necessary at all? Perhaps not, which makes truncation the next step in the evolution from paper to electronic payments.

Truncation, another ECP enhancement, has been available at the Philadelphia Fed since 1989 but has not been widely used, at least not yet. If you were a customer of a bank that truncated checks at the Fed, you

would not see your check after you put it in the mail, and your bank would not see it at all. When checks flow into the Fed and are truncated, the only thing that flows out is the information recorded on them. From that point, the transaction is strictly electronic: settlement takes place, and check images are made and sent to the paying bank, where they are stored for the next seven years. The paper documents are held at the Fed for 90 days and then destroyed.

Some institutions, however, use truncation internally, offering customers the option of receiving account statements without checks. At Pennsville National Bank in Pennsville, NJ, for example, 65 to 70

percent of consumer account holders have opted not to receive cancelled checks. The documents are held at the bank for the required 90 days, but all inquiries are handled using microfilm images, which are retained by the bank for years. In contrast to what might be expected, Pennsville customers don't miss receiving cancelled checks — they appreciate not having to store stacks of paper.

ECP Shapes the Payments Future

Without a doubt, Electronic Check Presentment makes check processing more efficient by short-circuiting the role of paper. Combined with imaging and truncation, ECP can ease the transition to payments that are completely electronic. However, because ECP improves the check system without eliminating paper, it could also forestall the conversion to completely electronic funds transfers. The Fed is monitoring how ECP is used and may adapt its product offerings if necessary, to ensure that this technology serves as a bridge, not as a barrier, to the evolution of the payments system.

ECP CUSTOMER PROFILE

PENNSVILLE NATIONAL BANK

Description: Pennsville National Bank, a community bank with \$126.5 million in deposits, is located in Pennsville, NJ, approximately 60 miles from Philadelphia.

Fed Service: Electronic Check Presentment

Experience: Pennsville Bank was one of the first institutions in the Third District to use electronic check presentment (ECP), beginning in June 1995. ECP enables the bank to receive check clearance information by 9 a.m. — three to five hours earlier than with physical presentment. As a result, account updates and other necessary work are easily completed within a regular business day, preventing the need for a night shift.

Benefits:

- Transmission received at start of business, rather than in mid-afternoon
- Current balances available sooner for customers
- No need for a second shift to process information
- No delays due to delivery problems, such as bad weather or heavy traffic

FYI

- The Philadelphia Fed has offered ECP since 1996 and currently has 17 customers.
- Imaging has been available from the Philadelphia Fed since 1997. At present, two Third District banks use this service.

Conclusion

New technologies are making global communication and commerce continuous and instantaneous. This process will undoubtedly affect the payments system. For banks, businesses, and individuals alike, electronic payments provide greater speed, convenience, and reliability in transferring funds. They also bring more efficient money management, easier and more timely bill payment, and less time spent on the repetitive tasks of cashing checks, preparing bills, and updating records.

No matter how useful technological change is, it must wait for people to catch up. For this reason, the switch to electronic payments will be evolutionary, rather than revolutionary. Eventually, we will all become comfortable with the workings of direct deposit and payment. And the shift will accelerate as young people who have grown up with computers, ATMs, and the Internet move into the economic mainstream. The process is inevitable, but the pace will be gradual.

Other challenges lie ahead. Privacy concerns and questions about the security of electronic transactions have yet to be fully addressed. Access to electronic transactions must somehow be extended to those whose

circumstances keep them out of the financial mainstream.

Clearly, payments system providers will operate both paper and electronic systems for the foreseeable future.

The Federal Reserve intends to facilitate the switch to electronic payments through education, technical assistance, and consultation with other payments system providers, financial institutions, and the public. At the same time, the Fed is committed to improving the effectiveness of existing forms of payment and to ensuring the integrity and accessibility of all methods of payment, old and new.

Board of Directors

Chairman Joan Carter (left), President & Chief Operating Officer, UM Holdings Ltd., Haddonfield, N.J., and Deputy Chairman Charisse R. Lillie, Partner, Ballard Spahr Andrews & Ingersoll, Philadelphia, Pa.



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Albert B. Murry (left), President and Chief Executive Officer, Lebanon Valley Farmers Bank, Lebanon, Pa., with J. Richard Jones (center), President & Chief Executive Officer, Insignia/ESG Jackson-Cross, Philadelphia, Pa., & Howard E. Cosgrove, Chairman & Chief Executive Officer, Conectiv, Wilmington, Del.



Glenn A. Schaeffer (left), President, Pennsylvania Building and Construction Trades Council, Harrisburg, Pa., and Harry Elwell, III, President and Chief Executive Officer, First National Bank of Absecon, Absecon, N.J.

Officers

In 1998, numerous promotions and administrative changes took place among the official staff. William A. Bonifield, Jr., was appointed Senior Vice President and Manager of the Cash/Fiscal Product Office. In the Legal Department, Jeanette Paladino became Assistant Vice President and Counsel and Stephen J. Smith was appointed Assistant Counsel. Mary DeHaven (Dede) Myers joined the Bank as Vice President and Community Affairs Officer in the Community and Consumer Affairs Department. In the Supervision, Regulation, and Credit Department, John J. Deibel was promoted to Vice President, Elisabeth C. Videira-Dzeng was appointed International Examinations Officer, and William L. Gaunt joined the Bank as Assistant Vice President.

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Linda K. Kirson

Treasury Services Officer

Thomas P. Lambinus

Assistant Vice President

Joseph L. McCannAdministrative Services Officer
and Security Officer**Alice J. Menzano**Assistant Vice President and
Cash/Fiscal Product Officer**Edward Morrison**

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Examination Review Officer**Patrick M. Regan**Assistant Vice President and
Information Security Officer**Richard A. Sheaffer**

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Stephen J. Smith

Assistant Counsel

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Assistant General Auditor

Elisabeth C. Videira-Dzeng

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Financial Services Officer

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Adams County National Bank
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Thomas F. Robinson
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Malvern Federal Savings
Bank
Paoli, PA

DEPUTY CHAIR

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President & CEO
Crest Savings Bank, SLA
Wildwood Crest, NJ

Rolf A. Stensrud
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First Republic Bank
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Chairman & CEO
Patriot Bank
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Third Federal Savings Bank
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Carnegie Bank N.A.
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Earl F. Sutton
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Shore Community Bank
Toms River, NJ

Barbara C. Jarvis

President & CEO
The Felton Bank
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W. Jack Wallie
President & CEO
East Stroudsburg Savings
Association
Stroudsburg, PA

Gerald A. Nau

President & CEO
Great Valley Savings Bank
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Robert C. Wheeler
Chairman
Grange National Bank
Tunkhannock, PA



Community Bank Council members (from left): Jay M. Ford, Gerald A. Nau, Ronald L. Hankey, and Robert C. Wheeler

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Vice President/CFO
So. Jersey Federal Credit Union
Deptford, NJ

Anthony R. Hinds

CEO
DPL Federal Credit Union
Newark, DE

John P. Kebles

CEO
Choice One FCU
Wilkes-Barre, PA

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Carlisle, PA

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Borinquen Federal Credit
Union
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Mercer County Teachers
Federal Credit Union
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Atlantic City Firemen's FCU
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WBRE-TV
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Center
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McManus
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Northfield, NJ

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Leidy's, Inc.
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Company, Inc.
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Small Business & Agriculture Council members (from left): Dennis E. Duffy, Steven J. Shotz, Joan R. Henderson, Peter Bylone, Rodney L. Metzler, Art Daube, Thomas K. Leidy, Cary S. Borish, Della L. Clark, Phillip B. Mitman, W. Gregory Wood

Operating Statistics

The pace and pattern of Bank operations in 1998 reflected the trend toward electronic payments and other shifts in payments processing.

The volume of ACH transactions processed increased dramatically in 1998, as it has in each of the past three years. Meanwhile, the volume of food stamps processed declined as the Agriculture Department's assistance program has moved into electronics.

Commercial check processing volumes rose as ongoing consolidation in the District banking industry shifted processing demands, at least temporarily. The Bank's government check processing volumes also rose as the result of consolidation of operations within the Fed system.

Greater reliance on armored carriers to redistribute coins in circulation both increased the efficiency of the distribution network and reduced the volume of coins processed at the Bank.

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	1998 Volume	1998 Dollar Value	1997 Volume	1997 Dollar Value
SERVICES TO DEPOSITORY INSTITUTIONS				
Wire Transfer of Funds	7.9 million transfers	\$23.2 trillion	7.2 million transfers	\$19.8 trillion
ACH:				
Government	220.2 million items	\$269.7 billion	161.7 million items	\$215.8 billion
Commercial	136.4 million items	\$391.1 billion	126.5 million items	\$331.0 billion
Check processing:				
U.S. Government	37.3 million checks	\$38.2 billion	23.1 million checks	\$23.8 billion
All other	909.5 million checks	\$1,338.4 billion	831.3 million checks	\$1,181.2 billion
Cash operations:				
Currency processed	1,360.4 million notes	\$21.4 billion	1,110.6 million notes	\$17.9 billion
Coin processed	55.1 thousand bags	\$6.5 million	143.2 thousand bags	\$69.3 million
Loans to depository institutions	212 loans	\$314 million	326 loans	\$766 million
SERVICES TO U.S. TREASURY				
Electronic book-entry transfers	1.5 million transfers	\$19.9 trillion	1.6 million transfers	\$21.3 trillion
Food coupons processed	91.6 million coupons	\$484.3 million	139.1 million coupons	\$718.6 million