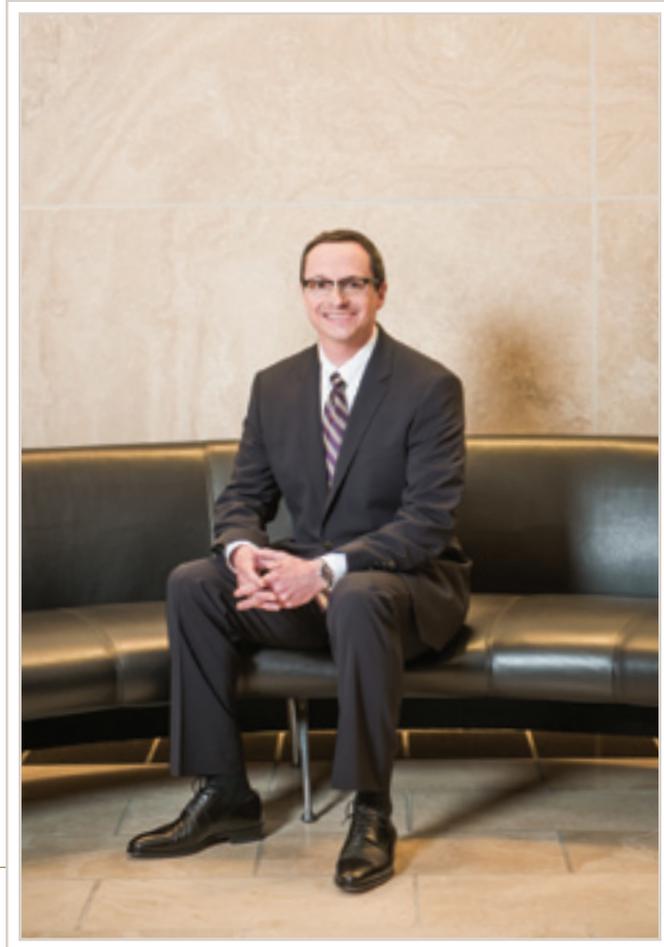


Operations **Evolution**



Gregory L. Stefani
First Vice President and Chief Operating Officer

The Federal Reserve Bank of Cleveland's many duties as a central bank include providing payment services, supervising banks, and setting monetary policy. Over the past century, our Bank has continued to adapt, evolve, and learn, resulting in changes in how we do our work. While these changes are evident across all areas of our organization, they are most striking in the area of payments.

From paper to electronic, from manual to automated—in many ways, the evolution of payments processing represents the evolution of all of our operating and support roles.

In what seems to be a blink of the eye, paper-based services like check processing became electronic. But what now seems so natural—we check our bank account balances online, we use our debit card instead of a checkbook—was decades in the making. Until fairly recently, check processing, clearing, and settlement were predominantly manual tasks performed by throngs of workers. At its peak, hundreds of workers at the Federal Reserve Bank of Cleveland processed literally 10 million checks per night.

Cleveland Fed Operations: **Then** and Now



In 1943, check collection employees worked five shifts around the clock to meet the rising tempo of the war.



Currency sorting at mid-century was much as it had been in the 1920s, when the task was first mechanized by introducing the federal bill counter.

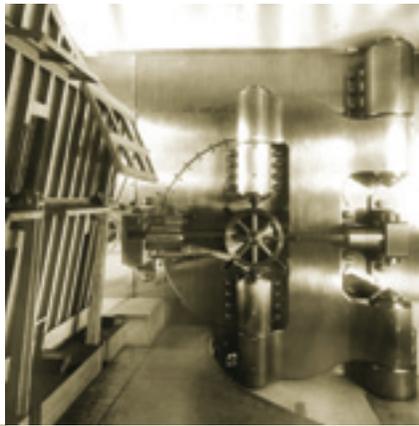
While still much of a manual process, using rotary perforators in the mechanical cancellation of securities, shown here in this photo from 1951, was much safer.



But the work of processing checks is costly and labor intensive. For that reason, the Federal Reserve sought ways to improve the efficiency of its check operations—to modernize its factory, so to speak. In 2003, the Federal Reserve completed its four-year Check Modernization initiative, which overhauled the systems and infrastructure for processing checks. A leader in reducing the Federal Reserve’s check footprint, the Federal Reserve Bank of Cleveland, working in partnership with the Federal Reserve Bank of Atlanta, led the development and implementation of this ambitious project. It standardized check processing at all Reserve Bank offices, adopted a common software for processing and researching check-adjustment cases, created a national check-image archive and retrieval system, and delivered check services to customers on a web-based platform.

The challenge of handling stacks of paper checks remained, however, until we adopted image technology, which helped transform payments from a paper-based, hand-delivered process into an electronic process. This helped establish the basis of what eventually became the Check Clearing for the 21st Century Act. Check 21, as the Act is commonly known, was designed to help banks handle more checks electronically by allowing a check’s image, rather than the physical check itself, to be moved between banks. The Cleveland Fed, working on behalf of the System’s Retail Payments Office, once again took a leadership role by preparing for the requirements of Check 21, designing a new suite of products and services, and overseeing the project’s implementation.

Since Pearl Harbor, every director, officer, and employee of the Federal Reserve Bank has been fingerprinted. This photo is from 1943.



The Treasury authorized Federal Reserve Banks to cancel and destroy silver certificates and US notes in 1953 and unfit Federal Reserve notes in 1966. Here, Federal Reserve Bank of Cleveland Cash Department employees throw bundles of unfit currency into the gas-fired incinerator.

The main vault, no longer used to store cash, is made of concrete and reinforced with an intricate, interlaced type of fabricated steel. The door is 5 feet thick and weighs 100 tons but is so precisely balanced that one person can swing it closed.



With the passage of Check 21, it became obvious that the Federal Reserve's infrastructure for processing checks was too big. As a consequence, the Federal Reserve has consolidated its check services, eliminated our extensive air- and ground-transportation network for paper check delivery, and built an infrastructure that moves billions of check images from collecting to paying banks. Check 21 reduced clearing time for consumers, businesses, and banks. It reduced costs for the banking industry. And it improved safety and security. The Federal Reserve Bank of Cleveland became the System's sole paper check processing site until the end of 2012, when the Federal Reserve Bank of Atlanta began processing the few remaining paper items.

Check processing is only one of the Federal Reserve services that the Cleveland Fed has had a hand in

moving from paper to electronic—our support for the US Treasury is also evolving. The Federal Reserve is the Treasury's fiscal agent, or, in other words, we work on behalf of the Treasury to make payments, collect funds owed to the government, and manage relationships with the government's creditors.

Historically, the Federal Reserve Bank of Cleveland has supported the Treasury primarily by issuing, redeeming, and servicing savings bonds and marketable securities. As with paper checks, hundreds of employees, in our Pittsburgh Branch in this instance, worked several shifts to process paper bonds. Over time, however, we have evolved into much more than bond processors.

As we moved into the twenty-first century, the Cleveland Fed saw an opportunity to fill a gap. In 2001,

Cleveland Fed Operations: Then and **Now**



Changes in the building have been based on productivity, efficiency, and sustainability. We undertook a major mechanical/electrical renovation in 1956, completed a full remodel and restoration in 1998, and achieved Leadership in Energy and Environment Design (LEED) certification in 2011.



Bank employees named the four robots that now transport the cash: TT's Little Squirt, BIP, Bumble Bee, and shown above, Farina.



In the wake of riots in Cleveland on May Day 1919, Bank leaders took precautions in anticipation of opening the Federal Reserve Bank of Cleveland's new building. The Bank hired, organized, and trained roughly 60 guards. Over time, security staff has become a federally commissioned police department, now known as the Bank's Law Enforcement Unit.

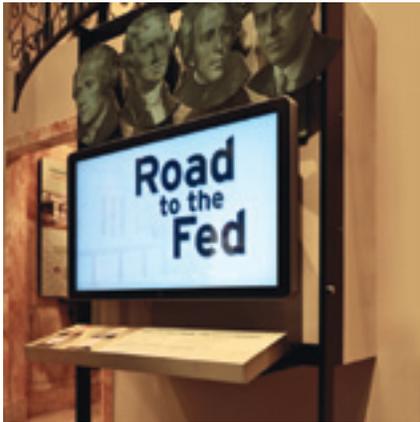
the Cleveland Fed took a lead role in developing two new electronic payments initiatives for the Treasury—Pay.gov and Paper Check Conversion. Pay.gov used then-state-of-the-art payments technology to authorize and settle government payments over the internet. Paper Check Conversion allowed the Treasury to move checks into the more efficient automated clearinghouse.

This was just the start. The Federal Reserve Bank of Cleveland's eGovernment Department (eGov) is now solely responsible for two key areas of the Treasury's revenue collection management. The visible side of collections is still Pay.gov, the Treasury's online platform for nontax payments to federal agencies, and a key component of the Treasury's all-electronic initiative. The other side is the Debit Gateway, the Treasury's system for settling all check and electronic payments to those agencies. eGov continues to adapt to significant volume

increases, expand its expertise, and deliver advanced software. What started out as a payments collection concept has now grown to processing over 250 million transactions valued at over \$550 billion annually. With a focus on scalability and quality improvements, eGovernment's operating platform is being designed to accommodate future growth and new or emerging payment technologies.

The Federal Reserve Bank of Cleveland has supported the evolution of financial services in many ways throughout our existence. Our President and CEO, Sandra Pianalto, in her role as chair of the Financial Services Policy Committee (FSPC), continues this tradition. The FSPC is responsible for the overall direction of financial services and related support functions for the Federal Reserve Banks, as well as for providing Federal Reserve leadership in dealing with the evolving US payments

The Bank's Learning Center and Money Museum underwent a refresh in 2012. A new animated, interactive game tracing the origins of the Federal Reserve is shown here.



Unfit, shredded notes that used to be burned are now composted at Rosby's Berry Farm in Brooklyn Heights, Ohio, as part of the Bank's waste management initiative.

Spaces that were once used for production are now open work spaces that allow for quick lines of communication and are designed for project teams to work collaboratively. eGovernment employees are shown above.



system. In October 2012, the FSPC unveiled its financial services strategic direction, a bold change in direction focused on improving the speed, safety, and efficiency of the payments system.

Historically, the Federal Reserve's focus when it came to financial services has been on the interbank market, but its strategy today is to place greater emphasis on the entire payments supply chain and end users. To put it simply, our strategy is to focus on payments from end-to-end in order to continue to support transformative payment innovations.

For almost a century, we have adapted to changes in our environment and have learned to take the initiative in responding to them and planning for the future. So while our role in processing traditional payments has declined, our role in helping shape the future of payments continues. We remain actively engaged

in adjusting our planning, product development, and resources to capitalize on innovation in the marketplace. And as a greater percentage of our workforce moves from manual operations-focused work into more knowledge-based roles supporting departments like eGov, Research, and Supervision and Regulation, we, as always, continue to adapt, evolve, and learn.

► Watch a 16 mm motion picture from 1950 depicting operations during a fictional day at the Federal Reserve Bank of Cleveland at www.clevelandfed.org/annualreport.