

**For release only by the House Committee on Agriculture  
Subcommittee on Department Operations,  
Oversight, Nutrition and Forestry**

**Statement of  
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Forestry  
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Chairman Baca, Ranking Member Fortenberry, and Members of the Subcommittee, I appreciate the opportunity to update you today regarding Information Technology (IT) issues facing the Farm Service Agency (FSA), as well as the Agency's ongoing work to modernize IT infrastructure and systems.

Specifically, I would like to provide an overview of FSA's current IT systems and the challenges they present; outline for you ongoing efforts to modernize FSA's IT systems and related processes; and provide a description of the National Agricultural Imagery Program (NAIP) and its uses to FSA.

**Overview of FSA's IT Infrastructure**

FSA delivers conservation, commodity, credit, energy, and emergency disaster programs. Most of these FSA programs are delivered through a network of state and county offices that are located in over 2,200 rural counties. The offices are heavily dependent upon FSA IT systems to store, maintain and administer business data which is vital to the administration of FSA's programs.

FSA's IT infrastructure provides vital information and capabilities to more than approximately 15,000 staff in field offices and our customers. Each year, these systems and supporting processes serve approximately 1.7 million farmers and ranchers nationwide,

processing between \$15 and \$25 billion in program payments and loans. FSA's IT staff manage an extensive portfolio of IT systems and produce an average of one new processing application (an instance of software used to deliver programs to producers and automate processes for field staff) each week.

As you know, FSA relies on some of the oldest information technology systems, both in terms of hardware and software, within the Department of Agriculture, and systems are largely inaccessible to producers via the internet. While FSA's system for delivering Farm Loan Programs has been recently updated and represents a major success in modernization, FSA Farm Program payments to producers mandated by the 2008 Farm Bill and other legislation depend upon the continued viability of an antiquated system.

Outdated hardware remains one of the most pressing concerns. Currently, FSA administers IT operations using a computer system known as the AS400. FSA's vendor contract was awarded in March 2008 with four option periods to provide maintenance support through March 2013. FSA has been informed that the contract cannot be extended beyond this date since the human resources are becoming increasingly more difficult to retain and find in today's market. These skill sets are no longer taught in universities and the workforce who has them are retiring or moving to other skill sets at an increasing rate.

The AS400 platform supports critical FSA business processes, which are key to FSA's ability to provide payments to producers. At best, based on current modernization efforts, FSA will continue to be dependent on the AS400 through 2013. It is essential that these computers remain operational until modernization can be completed. In addition to our risk in retaining the necessary software and operating system support resources, it is also extremely difficult to find replacement parts for these computers that are now more than 10 years old and are no longer being manufactured.

These FSA hardware systems pose a significant risk of critical failure. While average life spans for IT system components are in the 3 to 5 year window, depending on type, FSA is now running some hardware which has been actively deployed since 1984 (26 years) with the life extension made possible by the migration to slightly newer AS400 systems in 2000 (10 years

ago). Thus, FSA hardware is operating well beyond End-of-Life (EOL) by any reputable technology standard.

The inherent disruptions caused by antiquated hardware systems affect producers' experience with FSA in a variety of ways. Decreased processing capacity results in increased time frames between producer applications for program benefits, and the distribution of those benefits. Acreage reporting remains complicated, and producers remain limited to doing business in specific local offices. With limited web-based services, both FSA staff and producers continue to experience inefficiency in the delivery of programs. Producers continue to make more trips to county offices and endure longer wait times than they would need if using a more modern, web-based system. Producers are similarly limited from tracking their program participation and program payments online.

While these legacy systems present major challenges in administering FSA Farm Program payments, I am pleased to report that FSA is already moving away from dated systems in the delivery of Farm Loan Programs. FSA has invested in, and is implementing, the Farm Loan Program Information Delivery System (FLPIDS) to modernize and improve the automated systems supporting the delivery of Farm Loan Programs. FSA has migrated or replaced applications from the AS400/S36 environment with the initial Direct Loan Servicing web-based application of FLPIDS (which represents a portfolio of many applications in various stages of implementation).

The new and updated automated processes which have deployed to date have supported a number of improvements in the delivery of FSA Farm Loan Programs. The average processing time for loans has been reduced from 41 days to 25 days, a reduction of 39 percent from processing time before implementation of FLPIDS began.

In 2009, improvements as a result of investments in FLPIDS enabled FSA to support rapid delivery of American Recovery and Reinvestment Act (ARRA) funded Farm Loan Programs for Small and Disadvantaged Farmers. The modernization improvements and rapid updates to the existing software enabled FSA staff to obligate \$173 million in Direct Operating Loans to small and disadvantaged farmers within 48 hours of funds apportionment. These improvements in the

automation for Farm Loan Program delivery also resulted in the timely reporting of ARRA accomplishments and the delivery of web-based reports for informed decisions on loan making and loan management.

Regarding the major IT shortcomings FSA currently faces in delivering non-Farm Loan Programs, the Agency is committed to modernizing all aspects of the IT systems and processes. FSA's modernization plan is a broad approach which includes a commitment to centralize data and update systems and processes, in concert with a move away from outdated hardware technologies. I believe current FSA efforts to modernize aging IT systems, when completed, will work in concert to successfully modernize FSA IT systems and ensure the viability of our payment processes moving forward – and I would like to outline that plan for you today.

### **FSA Modernization Initiatives**

FSA is committed to mitigating the long-term risk inherent to such an outdated infrastructure of hardware and software. FSA's work to modernize the IT infrastructure consists of two broad components.

The first, termed "Stabilization," involved securing web-based platform systems and putting in place systems which will work in concert with new technology to achieve the aforementioned results. The second, the Modernize and Innovate the Delivery of Agricultural Systems (MIDAS) project, represents the new technology, and the processes that will ultimately bring FSA IT up to speed with 21<sup>st</sup> century IT norms.

### **Stabilization and Resulting Service Delivery Improvements**

The Stabilization project was initiated in 2007 to address infrastructure problems that had adverse impacts on producers' day-to-day business dealings with FSA in a time of unusually high farm reconstitution activity. There were two outstanding issues that required action. First, there was an urgent need to immediately respond to an unstable web based environment. Beginning in November 2006, FSA began experiencing service outages for some of its web-based applications that support some farm programs. Several FSA business application software systems, operating on USDA's Common Computing Environment (CCE) web farm, began

experiencing partial system outages. Problems with application software performance and telecommunications session connectivity continued to escalate through mid-January 2007.

Second, as a necessary step towards IT modernization of the FSA program delivery environment, a contingency computing platform was required to provide for sustained business delivery if a catastrophic failure ever occurs on FSA's aging and obsolete computing platform.

FSA work on the Stabilization program and the 29 initial Stabilization projects were completed in FY 2009. One of the projects, the Enterprise Reporting Performance Capability task, has been closed out in FY 2009; however, in FY 2010 it has been re-initiated as a new stand-alone project, Enterprise Data Warehouse (EDW). The EDW's key objective is to provide a consolidated source for data across the disparate legacy systems. Satisfying this objective will help the FSA improve management visibility across programs and provide local office staff the data necessary to better serve producers.

The Stabilization work has resulted in a lower number of work stoppages, along with a significantly lower risk of stoppages occurring in the future. The projects completed under the Stabilization project mitigate the risk of catastrophic failure before the replacement of aging hardware in FSA. They also set the stage for a number of modernization initiatives which I will outline shortly, and ensure the viability of projects under MIDAS.

It should be noted that in addition to the Stabilization efforts it will be necessary to modernize and upgrade the Department's Common Computing Environment (CCE) for the Service Center Agencies (FSA, Rural Development, and the Natural Resources Conservation Service). USDA needs to replace outdated components of the IT infrastructure, many of which have exceeded their expected life cycles, in order to reduce system vulnerabilities to failure and improve the performance and effectiveness of the shared infrastructure. These improvements will allow the SCAs to better serve program participants with a more flexible and reliable IT infrastructure. It will also allow for the first system-wide refresh of the CCE since the infrastructure was implemented in 2000. In addition, as the components of the CCE are replaced, USDA will implement a right-sizing process whereby configuration changes will be made to better support the delivery of current and future programs. As part of this process, the

Department will strive to improve system security, reduce the long term cost of infrastructure services, and improve service reliability.

### Modernize and Innovate the Delivery of Agricultural Systems

MIDAS targets the IT systems used for FSA farm program delivery, specifically the streamlining of FSA business processes and development of a modernized long-term IT system and architecture supporting FSA farm program delivery. MIDAS will build from the initial groundwork laid under the Stabilization project. The two are not mutually exclusive, and will work in concert to transform FSA's delivery of Farm Program benefits, on behalf of the Commodity Credit Corporation (CCC), into a 21st century business model. FSA has created the MIDAS program to meet the needs of our customers and employees. The objective of MIDAS is to streamline FSA business processes and to develop an effective long-term IT system and enterprise architecture for CCC farm program delivery.

This project will:

- Provide capability to meet the increasing demand for customer self-service,
- Remove all of the legislatively mandated farm program delivery software applications from the outdated AS400/S36 computing platform and put them on a suitable web-enabled common business platform,
  - Engineer common business practices and centralize data assets to support all farm programs,
  - Eliminate program-specific duplication of functionality and non-integrated data; and
  - Accomplish increased compliance with modern internal control structures and effectively implement improved IT security.

Through MIDAS, FSA has established a program management office to provide the capability to acquire, manage, and deploy the MIDAS system. The program management office has been staffed with government employees and project management contractors to manage the

requirements, system development, and organizational change management needed to implement MIDAS.

MIDAS has improved business practices by analyzing farm program processes and identifying areas where immediate changes could significantly reduce processing time; implementation of a small number of these changes has already resulted in increased business efficiency for FSA staff. Additionally, FSA has expanded process improvement work by forming new integrated teams composed of program business analysts, field office users and technical staff to develop detailed requirements for the initial MIDAS deployment.

FSA recently awarded the largest contract for development and implementation of the MIDAS system. This contract was initially awarded in December of 2009; however, a protest of the contract award was made to the Government Accountability Office (GAO). The protest was resolved successfully on February 25, 2010. The resolution of this protest will enable detailed project planning to be completed during FY 2010, as planned. One major contract remains to be awarded that will provide independent technical oversight over the development of the MIDAS system. FSA has received and is evaluating proposals for this contract, and expects it to be awarded during Spring 2010. These independent technical contractors will review the deliverables provided by development teams and will provide MIDAS, FSA and the Department with a check and balance mechanism to better ensure that the systems developed meets the farm program requirements and integrate with USA enterprise systems.

When complete, FSA's IT transformation will produce an environment that is better, faster, safer and more flexible in supporting FSA program management and information delivery. FSA believes transformation of IT will ultimately equip and empower FSA employees to effectively and efficiently deliver services and support FSA programs.

This transformed and modernized business environment will provide our customers with real time access to reliable and secure information, and bring about opportunities to perform business transactions when and where they want it. Systems will be faster and timely processing of applications will be assured. IT systems will be able to provide more quality data at a faster rate, thereby improving service delivery across the board.

## **Other IT Modernization Solutions**

While MIDAS is our most pressing IT modernization need, FSA is engaged in several other IT modernization initiatives which are beginning to bear fruit. In particular, at the end of the past crop year, FSA implemented the National Receipts and Receivables System (NRRS) in support of the Federal Management Modernization Initiative (FMMI). This effort was designed to minimize improper and inaccurate payments, reduce administrative resources, and speed payments to producers.

NRRS is a web-based application for managing payments under various FSA programs. This modernization initiative streamlined three previously separate legacy system processes allowing more effective disbursement of program payments. The implementation provided significant benefits to the producer through more timely and accurate payments. In addition, moving applications off the legacy system and into the web-based environment lays the foundation for MIDAS to further streamline business processes.

This initial phase of NRRS fully migrated two FSA programs (Direct and Counter-cyclical Payments and Conservation Reserve Program) off the outmoded legacy system. The deployment of the web software releases was significant in scope. Initially, FSA experienced data integration problems between our new software and our legacy systems in the field. This registered some payments incorrectly and caused the FSA computers to suspend those payments for correction or validation, delaying them being sent to some producers. Some producers also received letters from FSA which presented incorrect information.

FSA staff worked long hours to correct the errors, and payments were ultimately delivered to producers. We do not anticipate this problem in future years, although the integration problems we experienced do highlight the complicated nature of modernization. While we certainly may encounter other challenges in modernizing systems, it's important to understand that these challenges will be relatively small when compared to the issues that will arise if FSA continues using outdated systems and processes indefinitely.

FSA has also been able to successfully deploy and implement new applications and services needed to implement the Farm Bill. These implementations include, for example, the Direct and Counter Cyclical Payment programs (DCP), Conservation Reserve Program (CRP), Average Crop Revenue election (ACRE) enrollments, Supplemental Revenue Assistance Program (SURE) program payment processing, Milk Income Loss Contract (MILC) program, and Dairy Economic Loss Assistance (DLAP). In addition, applications have been deployed for the permitted entity, adjusted gross income (AGI), direct attribution, payment limitation, combined producer, and producer eligibility services.

As just one example of the benefit provided by this modernization of payment programs, FSA automation cut the time taken to process payments on the Tobacco Transitional Payments Program (TTPP) from 22 hours in 2009 to 5 hours in 2010; and significantly cut down instances of payment issues following automation of the payment processes.

While these projects are separate of Stabilization and the MIDAS project, it is crucial to note that without the foundations laid by Stabilization, these improvements in FSA payment processes would not have been feasible. As the MIDAS project builds on the initial Stabilization work, a modernized FSA will enable significant software deployments such as these, resulting in time and cost savings moving forward – in addition to the long-term network viability FSA badly needs.

### **Overview of the National Aerial Imagery Program**

Finally today, I would like to discuss with you the usefulness of the National Agricultural Imagery Program (NAIP) to FSA, USDA and others in the public and private sectors.

NAIP provides digital aerial imagery to supplement ongoing efforts to utilize Geographic Information System (GIS) technology in administering programs. Since the early 1990's, FSA has used GIS to manage geospatial data and provide a means of linking geospatial data with tabular data. Under NAIP, FSA produces and stores digital aerial imaging to be used in concert with GIS data in the implementation of USDA programs. In addition to its use in FSA programs,

NAIP has become the de facto base imagery layer for the Nation, particularly for rural areas, and is praised by public and private users alike. In 2009, the program produced more than 148,000 digital aerial photographs of more than 2 million square miles of ground across the country. Imagery produced under the NAIP holds benefits for FSA, other USDA and Federal agencies, and private sector organizations.

Within FSA, the development of a national database of aerial imaging helps to ensure FSA compliance and land record management requirements are met. It serves as a critical communication tool for reporting of crops by farmers and ranchers, who can access the images via their USDA Service Center. The imaging ultimately assists FSA staff in determining eligibility and planning for conservation and other farm programs.

NAIP has also proven to be a cost effective means for other federal and state agencies to acquire a digital image base, and has become a de facto standard for a number of agencies and organizations at the federal, state and local level. A number of federal agencies cost-share in the acquisition of NAIP imagery, including USDA's Forest Service and Natural Resources Conservation Service (NRCS), agencies within the Department of the Interior, as well as state governments. NAIP acquisition and management is coordinated through a number of inter-agency planning bodies led by FSA, and with state governments through the support of FSA State GIS Specialists. In partnership with the vendor community, NAIP has allowed for technological innovation which has kept costs down, led to improvements in information content and quality and provided for the development of additional uses. FSA has seen a substantial increase in the number of programs that rely on the use of imagery for delivery since the inception of NAIP. The Common Land Unit (CLU) program relies on the NAIP product for maintenance of farm and tract records. The CLU and NAIP together provide a foundation for delivering programs consistently within the agency and across the department with NRCS, and the Forest Service and are critical to the Congressionally-mandated data reconciliation effort between FSA and the Risk Management Agency (RMA). Conservation programs are increasingly using geospatial data to determine applicant eligibility and contract rates and NAIP is vital to this activity.

Because NAIP is acquired in the public domain with no licensing restrictions, commercial entities and non-profit organizations are free to access the imagery and add value with a wide range of services in support of the agricultural community and society at large. Farmers and ranchers themselves acquire the imagery for analysis of their own lands.

Given this wide array of customers, it is important to note that NAIP serves as the United States Government's sole provider of digital aerial imaging. In USDA alone, NAIP is used by tens of thousands of staff, cooperators and approved insurance providers doing day-to-day operations in crop insurance compliance, conservation planning, forestry health evaluations, resource assessments and inventory management, assessment and monitoring of crop disease outbreaks, and crop statistical analysis. Without NAIP, FSA would not be able to perform acreage calculations for the delivery of programs nearly as quickly or easily, which would directly affect service to tens of thousands of farmers and ranchers. Federal staff in outside Agencies would be without a tool to obtain reliable and accurate aerial imaging for a variety of activities. Farmers and ranchers themselves, who utilize the imaging for similar assessment and cropland reporting, would be without a replacement source of information.

NAIP is a strong, well run, and cost effective imagery acquisition program. Each year the program is administered according to a rigorous project plan that manages and documents planning, acquisition, quality assurance, and product delivery and distribution. A comprehensive status and problem-reporting system is in place to identify and mitigate problems and risks. A formal program evaluation is held each year to review issues, recognize lessons learned, and implement improvements for the next year. Imagery provided under NAIP is vital to the efficiency of FSA operations and the good business practices of thousands of farmers and ranchers across the country. Without this program, FSA's customer service would be experience a significant negative impact. I am committed to the future of NAIP and excited for its benefit to American agriculture, and I believe farmers and ranchers would echo that sentiment.

## **Conclusion**

FSA works hard every day to deliver vital farm programs across the Nation. While that effort is hampered by an aging IT infrastructure, I know FSA staff are doing everything they can to get the job done, and get it done right. I am happy to see the initial benefits of our IT modernization efforts already taking shape, as I have outlined for you today. I am excited for what the future holds as the MIDAS project is fully implemented; and I am ready to work hard to use important technology such as that provided by the NAIP to benefit farmers.

Chairman Baca, Ranking Member Fortenberry, members of the Subcommittee, this concludes my statement. I will be happy to answer your questions.