



USDA DATA MODERNIZATION PLAN

*A Working Plan to Reduce Producer Burden,
Strengthen Statistical Quality, and Build Trust*



My Fellow Patriots:

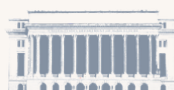
Since the creation of the U.S. Department of Agriculture (USDA) in 1862, the collection, analysis, and dissemination of agricultural statistics have been a key part of its mission. In the Act of May 15, 1862, that established USDA, President Lincoln and Congress directed the then Commissioner of Agriculture to “procure and preserve all information concerning agriculture which he can obtain by means of books and correspondence, and ... by the collection of statistics, and by any other appropriate means within his power.”

And when Isaac Newton, the first Commissioner of Agriculture, established objectives for the newly created USDA, his first and arguably most important objective reflected this commitment to providing statistics to farmers, policymakers, and the public.

“1. Collecting, arranging, publishing, and disseminating, for the benefit of the Nation, statistical and other useful information in regard to agriculture in its widest acception.”

Today, USDA conducts numerous surveys and publishes hundreds of reports that producers rely on to make informed decisions about their operations. Historically, USDA data have been considered the gold standard; however, many producers now view the surveys used to collect these data as burdensome, especially given the rapid development of technology that could be utilized along with the prevalence of administrative data collected by other USDA agencies. As a result, response rates have been steadily declining over the past couple of decades, leading to some reduction in producer confidence in the reports.

While both USDA and the agriculture industry may look vastly different today when compared to 1862, one thing remains constant: the need for timely, accurate, and useful statistics in service to American agriculture.





As President Trump and I seek to reorient USDA and put Farmers First in everything that we do, there are few things more important than one of the original objectives of the Department. That is why earlier this year, USDA published a *Request for Information on Opportunities, Challenges, and Emerging Areas in Statistical Data, Analysis, and Research* to seek public comment on opportunities for improvement in this process. And over the past month, we have heard directly from hundreds of producers as we held USDA Data Modernization Listening Sessions at state fairs and farm shows across the country.

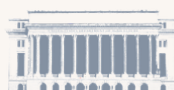
Based on this feedback, USDA has developed this *USDA Data Modernization Plan* to put Farmers First, restore producer confidence in our data, and increase survey response rates by implementing actions across the following pillars:

- Modernize the Data Reporting Experience
- Enhance Acreage and Yield Estimation
- Integrate Data and Technology Platforms
- Expand Trust and Transparency with Producers

Under my leadership, USDA will never stop putting Farmers First and will rapidly implement these actions in the coming months and years. Our farmers and ranchers work from dusk till dawn to provide American consumers with the safest, most abundant, and most affordable food and fiber supply in the world, and they deserve a USDA that works for them.

A handwritten signature in black ink, appearing to read "Brooke L. Rollins".

Brooke L. Rollins
Secretary of Agriculture





MODERNIZE THE DATA REPORTING EXPERIENCE

For decades, USDA has primarily collected data from producers through surveys in the mail followed by calls and site visits from enumerators. Over time, this has expanded to include the use of some administrative data from across USDA agencies, web-based reporting, and even satellite imagery. As society has moved into a more digital world, there are significant opportunities to modernize how USDA interacts with producers to collect information while preserving the reliability and integrity of statistics, ultimately reducing producer burden and eliminating unnecessary contacts.

ACTION

Improve use of administrative data from the Farm Service Agency (FSA), the Risk Management Agency (RMA), the Natural Resources Conservation Service (NRCS), and other USDA agencies to avoid NASS requesting duplicative data from producers once it has already been submitted to another USDA agency.

ACTION

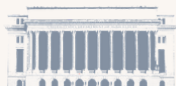
Evaluate more user-friendly mobile surveys with shorter question sequences and simplified navigation, including an assessment of a mobile application and the use of SMS-based communication where methodological and privacy requirements can be met.

ACTION

Continue improving the NASS Online Respondent Portal through a cleaner interface, mobile-responsive design, simplified authentication, clearer progress indicators, accessibility improvements, and contextual help.

ACTION

Review high-burden surveys and identify opportunities for redesigning surveys to be more user-friendly. USDA will conduct an enterprise burden-reduction inventory that identifies repeated questions, duplicative contacts, high-effort instruments, and opportunities for administrative substitution. To ensure continued progress, USDA will establish burden-reduction targets for priority programs and report progress annually.





MODERNIZE THE DATA REPORTING EXPERIENCE

continued

ACTION

Explore opportunities to expand pre-filled survey fields by utilizing administrative data and previously reported information to reduce the time and effort it requires to fill out surveys.

ACTION

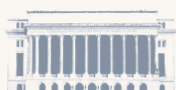
Standardize surveys and unify data collection workflows through the Reimagined Enterprise Application for Data Integration (READI) to better support real time operational monitoring and reduce redundant processes.

ACTION

Evaluate whether carefully designed pilot programs that incentivize respondent participation could increase the survey response rates in unusually burdensome collections.

ACTION

Convene external methodological experts, including land-grant university partners, to review data collection practices and recommend evidence-based improvements.





ENHANCE ACREAGE AND YIELD ESTIMATION

In addition to survey-based data collection, USDA has relied on field observations, sample plots, satellite imagery, and administrative data to establish acreage and yield estimates. While these methods have historically been sufficient, recent advances in technology—including remote sensing, precision agriculture, and better administrative data—provide a unique opportunity to further enhance these estimates, increase the accuracy of USDA data, and reduce producer burden.

ACTION

Conduct a structured parallel-testing pilot to evaluate whether administrative records, geospatial observations, and modern modeling can serve as a stronger foundation for acreage and yield estimates while preserving essential producer-reported information.

ACTION

Continue and expand work with external partners, including the National Aeronautics and Space Administration (NASA) across remote sensing, soil moisture, crop yield modeling, satellite mission planning, and joint research programs while expanding partnerships with NASA Earth Science, NASA Acres, and other NASA experts. These collaborations will allow for the continued advancement of shared agricultural monitoring tools like CropCASMA, VegScape, and CropScape.

ACTION

Create an integrated NASS-FSA-RMA plan for acreage and yield data flows, coverage adjustments, validation, and operational timing to reduce latency and improved consistency.

ACTION

Continue improving the Cropland Data Layer and geospatial disaster assessments. Recently, the Cropland Data Layer increased from 30-meter to 10-meter, improving the quality of geospatial data that USDA utilizes.



ENHANCE ACREAGE AND YIELD ESTIMATION

continued

ACTION

Expand geospatial applications for acreage estimation, crop monitoring, yield analysis, disaster assessment, and other agricultural statistical needs.

ACTION

Continue advancing yield research through NASA, universities, and machine-learning partnerships.

ACTION

Collaborate with land-grant universities to evaluate evolving best practices, explore new analytical methods, and enhance the scientific foundation of data products, ensuring they continue to meet the information needs of producers, policymakers, researchers, and the public.

ACTION

Assess optional field inputs such as photographs, geolocation-assisted information, or other observations that can be used to enhance yield estimates based on input directly from producers while ensuring proper review for privacy, confidentiality, security, and statistical accuracy.



INTEGRATE DATA AND TECHNOLOGY PLATFORMS

Information technology systems across USDA have evolved over decades; however, these systems are not fully integrated, and it is often difficult for one USDA agency to quickly share information previously reported by producers with another agency. By utilizing artificial intelligence, cloud-based data pipelines, and other emerging technologies, USDA can further reduce producer burden and improve data usability.

ACTION

Incorporate the responsible use of artificial intelligence, machine learning, and advanced analytical methods to improve efficiency and access while maintaining data privacy, scientific rigor, human oversight, and accountability.

ACTION

Advance cloud-based data pipelines and shared analytical environments across USDA that reduce redundant processing and support cross-agency data use, improving secure internal access to more timely administrative data.

ACTION

Invite qualified academic institutions, technology providers, and public-sector partners to propose solutions to defined agricultural data challenges.

ACTION

Pilot machine-learning applications for workflow automation, data integration, anomaly detection, geospatial analysis, and other high-value use cases to enhance accuracy of data. Further, USDA will develop pathways for moving successful pilots from research environments into supported production systems.

ACTION

Evaluate secure mechanisms and appropriate incentives or frameworks for voluntary access to precision agriculture information.



INTEGRATE DATA AND TECHNOLOGY PLATFORMS

continued

ACTION

Continue developing AgStatBot and other related conversational tools to help users find and interpret published NASS data.

ACTION

Release AgInsights as an interactive platform for curated data access, charts, maps, and more flexibility of NASS information. Additionally, NASS will create a clearly identified beta environment for experimental products, prototype visualizations, and early-stage geospatial outputs.



EXPAND TRUST AND TRANSPARENCY WITH PRODUCERS

As USDA seeks to modernize the data collection, analysis, and reporting process, it is imperative to expand transparency with producers to restore their confidence and trust in data products that utilize the data they provide to USDA. Throughout this process, it is especially critical to provide transparency in how these data are utilized and to communicate that the data provided are subject to strict privacy and confidentiality protections. A key part of expanding this trust and transparency will be through engagement directly with producers across the country through continued listening sessions and discussions.

ACTION

Maintain and protect privacy and confidentiality by ensuring all data collection, analysis, and reporting meets applicable legal, statistical, cybersecurity, and confidentiality protections, including those protections guaranteed under the Confidential Information Protection and Statistical Efficiency Act (CIPSEA).

ACTION

Continue conducting listening sessions, commodity discussions, demonstrations, targeted roundtables, and other engagements with producers and data users to explain modernization efforts, demonstrate new tools, and continuously gather feedback for improvement.

ACTION

Engage and better develop relationships with state departments of agriculture, producer organizations, land-grant universities, and other trusted agricultural partners to support engagement.

ACTION

Expand collaboration with the Cooperative Extension System so county agents and extension educators can explain survey purposes and assist producers in completing surveys.



EXPAND TRUST AND TRANSPARENCY WITH PRODUCERS

continued

ACTION

Continue working with National Association of State Departments of Agriculture (NASDA) enumerators, NASS staff, and FSA field offices to support producer contact and field operations. This includes expanding the NASS-NASDA Trust and Response Initiative to strengthen producer awareness, survey participation, communication consistency, transparency, and two-way information sharing.

ACTION

Establish a feedback mechanism to allow continuous dialogue with producers about data collection, analysis, and dissemination. This will include the launch of a quarterly Survey Chat to build understanding of surveys, make participation easier, strengthen trust, improve producer experience, and allow a space for dialogue with USDA.

ACTION

Develop an annual Crop Season in Review report that compares estimates and forecasts across the season with final estimates and describes the data sources used. As an initial demonstration of this new report, NASS will prepare retrospective Crop Season in Review reports for the 2024 and 2025 crop seasons.

ACTION

Publish performance measures, lessons learned, and validation results for major modernization pilots. Additionally, NASS will continue publishing methodology and quality-measure documentation for key statistical releases.

ACTION

Improve communication about why each survey is important, what reports each survey contributes to, how producers are selected for surveys from the list frame, and the methodology and data sources used for each report.