

Advisory Committee On Agriculture Statistics

SUMMARY AND RECOMMENDATIONS

Annual Meeting, November 14-15, 2018



U.S. Department of Agriculture
National Agricultural Statistics Service

Meeting of the Advisory Committee on Agriculture Statistics (ACAS)

November 14-15, 2018

The Wyndham San Antonio Riverwalk

111 East Pecan Street
San Antonio, TX 78205

Members Present

Shawn Boyd
Kellie Bray, Committee Chair
Jennifer Brown
Jennifer Dempsey
Zachary Ducheneaux
Ben Duncanson

Mark Hodges
John Newton
Juli Obudzinski
Nick Orsini, (Census Bureau *ex-officio*)
Gregory Pompeli, (Economic Research Service *ex-officio*)
Marvin Miller

Members Absent

Barbara Foltz
Kim Brackett
Juan Tricarico

Peter Wright-Clark
Sylvia Jensen

Advisory Committee Officers

Kevin Barnes, Executive Director
Bryan Combs, Designated Federal
Officer

**United States Department of Agriculture
National Agricultural Statistics Service**

NASS Senior Executive Service Attendees

Huber Hamer, Administrator
Kevin Barnes, Associate Administrator
Jay Johnson, Director, Eastern Field Offices
Dan Kerestes, Director, Statistics Division
Joe Parsons, Director, Methodology Division
Joseph Prusacki, Director, National Operations Division
Barbara Rater, Director, Census and Survey Division
Ron Thompson, Director, Information Technology Division
Linda Young, Director, Research and Development Division

Speakers

Kevin Barnes, Associate Administrator
Wil Hundl, Director, Southern Plains Regional Office
Hubert Hamer, NASS Administrator
Barbara Rater, Director, Census and Survey Division
Jay Johnson, Director, Eastern Field Offices
Joseph Prusacki, Director, National Operations Division
Dan Kerestes, Director, Statistics Division
Linda Young, Director, Research and Development Division
Joe Parsons, Director, Methodology Division

Scribes

Jackie Ross

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MEETING SUMMARY

1. Introduction

The Advisory Committee on Agriculture Statistics (ACAS) annual meeting was called to order by Committee Chair Kellie Bray on Wednesday, November 14, 2018, at 8:05 a.m. Present were 10 of the 17 ACAS members, two Committee *ex-officio* representatives, and 9 Senior Executive staff members from the National Agricultural Statistics Service (NASS).

Bryan Combs, Designated Federal Designated Officer, provided the Meeting Overview. Housekeeping items were discussed regarding the agenda for the next two days and receipts information.

Kevin Barnes, who serves as the Advisory Committee Executive Director, offered a historical summary on the roles and responsibilities for the Advisory Committee. All members are appointed by the Secretary of Agriculture. Mr. Barnes emphasized the Advisory Committee mission, which is not to set policy, but to provide recommendations as representatives of the views and needs of both users and suppliers of agricultural statistics. The Committee is also charged with advising the Secretary on the periodic Census of Agriculture, other surveys, and the types of information to obtain from survey respondents. The Committee also makes recommendations regarding the content of agricultural reports.

Wil Hundl, NASS Southern Plains Regional Director offered the welcome to Texas discussion and introduced Assistant Commissioner of Water and Rural Affairs of the Texas Department of Agriculture, Dan Hunter. Mr. Hunter welcomed the group. Identified that Texas is the leading States in farm grown shrimp. Texas, like many other states, is an urban legislature where 70% of the population live in non-rural areas. Education is their biggest tool and the data that NASS provides allows them to give accurate information. The State economy is driven by oil and gas, and agriculture is number two. During 2018, the rain effected the cotton crop. Diversity of crops allows Texas the opportunity to pick and choose different markets to get into. The biggest challenge is that the number one priority should be water, but rain has been a curse. When it is not a crisis it gets no attention, but when it is a crisis it is a bad thing. The way they get energy is through fracking. The challenge is how to keep the water supply. Texas has one natural lake in the State, all the other lakes were built to reduce flooding.

2. State of NASS

Hubert Hamer, NASS Administrator, thanked the group for taking the time to give feedback and advice, and for being a third party endorser. Hubert emphasized the importance of the NASS mission. NASS is a part of a broader statistical community that support each other and share ideas. NASS footprint out in the field is important. NASS today has more than 900 personnel servicing 50 states and Puerto Rico. NASS has to figure out how to do business as the footprint has changed from individual states to a regional structure. Everything is budget driven, staffing is at 55% in the field and 45% in HQ. Our core values include policy

relevance, objectivity, credibility, trust and commitment to customer service. One of NASS biggest partners is the National Association of State Departments of Agriculture (NASDA). They are the spokespersons within the State Department of Agriculture. NASS does not compete with the State Departments of Agriculture; NASS partners with them. Mr. Hamer identified the data from the farmers and ranchers are extremely important, as well as available administrative data, which is consistent and dependable. NASS serves our data users. NASS biggest expenditures are data collection and salaries and budgets. Mr. Hamer also reported that the Census of Agriculture will be released on February 21st. The Agency sights are turning back to the Puerto Rico Census of Agriculture. Farm labor is a big deal and one of the Secretary's priority. NASS is looking at the program and making sure wage rates are covered. Census response rates is nearly 72 percent, which is good in the current environment of response rates. Several recent changes and initiatives in NASS were mentioned, such as census website integration, NASS Innovation Award, New Associate Administrator, and Press removed from Lockup.

NASS will email the committee members a copy of the *Talking About NASS* booklet. This book is used to provide information that our stakeholders can use to speak to their constituents about NASS. As our partners help us spread the word to the farmers and ranchers about the importance of responding to NASS surveys, NASS needs to make sure they can reference the proper themes and information about NASS.

NASS budget presents some challenges, just like other agencies. NASS wants to continue to be efficient with resources. Some major reductions must take place in order to make sure that NASS maintains a program that will serve our customers. The reimbursable programs have taken a slight hit as a result of other agency budgets being tight as well. NASS is looking at more ways to become more digital and technologically efficient.

Discussion: Some committee members stated that not very many industries have a great surplus, but farmers and ranchers make up only about 2% of the population so how much power do they have? They expressed there seems to be an issue between the upper leadership (politicians) and agency level versus the farmers making recommendations, but everything is budget driven. Mr. Hammer's advice is to go talk to the departmental level, to explain why the data is important to them. The farmers and ranchers must let the department know what data is important to them, so that USDA can go to the Hill and speak on the farmers and ranchers behalf. NASS strives to go out and make good relations with Congress, so they can understand what the agency does and how important our information is.

3. Census of Agriculture (COA) Program Update

Barbara Rater, NASS Director of Census and Survey Division thanked the group for getting the word out to stakeholders. An update was given on what has happened in the last 12 months and what the anticipations for the future will be. The COA is conducted in a 5-year cycle and a lot has been accomplished and results will show how agriculture has changed. In February 2019, NASS will release the census, and for the next 18 months, NASS will put out various reports using the census data. The goal is to remain on schedule, so that NASS can get the COA out on time.

An update was made on the mail list and data collection process. With a few efficiencies made, NASS was able to realize a few cost savings. NASS is currently in the data editing, analysis and summary phase. By November 27, NASS should have every number signed off down to the county level by each region. Then, planning for the 2022 Census of Agriculture will begin. NASS has a formal evaluation process where our Regional Field Offices can provide feedback on how they thought processes went during the 2017 Census of Agriculture in preparation for the 2022 Census. NASS has a content team looking at the content of the questions and whether there is a need to reduce the magnitude or scope of the questionnaire. NASS is going to rely on our stakeholders to help us with this process. NASS also have a data collection strategy sub team to examine how the respondents are responding to the physical questionnaire or the online questionnaire. NASS is looking at gaining efficiencies based on how producers respond.

Our goal is to improve or make the experience better for the producers and all data users. Barbara shared the *Census of Agriculture Products Release* timeline. Resources prohibit us from putting out all of the reports on the same date as well as an attempt to not overwhelm everyone with a sea of data at one time. Along with the COA allocations, NASS was appropriated funds to have *Follow-on Special Studies*.

Discussion: The Committee had questions regarding if NASS is using the same disclosure technique as in the past? Joe Parsons, NASS Director Methodology Division explained NASS is using the same basic disclosure, similar to the decennial census. There was also a question on what is the process for the follow-on surveys? Mrs. Rater gave an update on the process and where NASS stands on each follow-on survey, as some were in the early stages. Ms. Rater offered the contact for the survey administrator for additional information. A question was asked on how can NASS judge the broadband access for those who fill out the census on-line versus on the paper and if they have broadband access. Linda Young, NASS Director for Research and Development Division explained that based on 2017 data, NASS will be able to map where they have broadband and that was something NASS can look into. Mrs. Rater stated that Rural Development was preparing to do a survey on Broadband. Mr. Parsons expressed the request will be taken back to see if NASS can do a special tabulation on the subject.

4. Strategic Planning Update

Mr. Barnes offered an overview on how the strategic initiatives originated. During a senior management team building discussion, senior managers were asked regarding the top three items they thought would move NASS forward in the future. The challenge was to focus on the “What” rather than “the How”. NASS worked with Accenture and their Rumble Room to work through that process. There were three main key takeaways: Improve our online platform (data visualizations/customized reports), incentives for producers response (personal dashboards), and expand surveys (reinstate/expand geographic scale).

Farmers.gov, GSA Centers of Excellence, and USDA Data Lakes were initiatives already taking place at USDA and that sort of created the right conditions for NASS to move forward

with the strategic initiatives. These USDA initiatives are moving items into more of a cloud based environment.

The three NASS strategic initiatives were:

S1. Data Collection Dashboard

S2. NASS Operating Model reimaged: Looking at how we do business. A look at all of our processes and make sure we are streamlining our processes.

S3. Customer Experience: Improving the Ag Data User Experience: Provide better decision making tools.

The challenge that NASS has in kicking off the initiatives is that it takes financial investments to get the job done. NASS has established teams around each initiative that include the executive sponsors, project champions, and project managers to drive the programs to make the project work.

Strategic Initiative 1: Data Collection Dashboard

Jay Johnson, NASS Eastern Field Operations Director, explained that without the data we get from the respondents, NASS is not able to do our job. Some of the challenges in collecting data for NASS surveys are: we hear a lot of things like we gave our data to FSA already, get it from them, RMA has my yield information, I don't do surveys...we utilize the administrative data at the aggregate level not at the individual level. We have complex operations, farmers are becoming fewer and larger.

Objective: to modernize our relationship with data providers who prefer to use an online tool to provide survey data. Goals are to provide a central Point of Contact (POC) with NASS that allows for survey completion and additional information for better informed decisions. NASS is using for our current electronic data collection efforts: EDR, CAPI and the Census Web tool, Administrative Data for estimation, Previously Reported Data (verification approach), and Crop-land Data layer.

NASS is visualizing some type of data dashboard. NASS is also looking into a further use of adaptive design in electronic data collection and utilizing administrative data more to reduce response burden.

Discussion: How big of a lift is it to use data from all agencies within the Department across the board? A very huge lift as our frames are different. It will require rethinking the NASS sample scheme. There are timing issues as our data is time-sensitive. NASS has a wealth of opportunities to leverage other agency data. NASS must consider how a farmer will feel if they pull up a dashboard and see all of the data they provided other agencies in one place. A lot of opportunity for passive data collection but how do NASS get there is what needs to be research and addressed.

Farmers.gov is an initiative by the Department to go to one place for all of the ONE USDA information. Previously we have had a LOGIN.gov, but USDA farmers.gov initiative is the first push to get us there. NASS is trying to figure out details such as, should our dashboard be a stand alone? Will it be beneficial to have a space on farmer.gov? What will cause

people to want to come to the dashboard and provide the data? NASS needs to consider what should the layout and design be, what will the content be, should we have links to other sites, should there be an ability to personalize, and how should NASS communicate from the site: user to site, site to user, or user to user (should there be discussion boards on it). Where do we find out what farmers want to see?

Anticipated Benefits from adopting this dashboard concept are: decreased respondent burden, reduce data collection cost, increase relevance and adaptability.

A recommendation was made that graphical data will be a huge benefit. Visuals from the user side working with Quick Stats. Provide a different look at the data, which will allow the users to approach and visualize it from a macro level. The question was asked on what are the requirements for confidentiality rules when supplying data to ONE USDA? NASS follows the same confidentiality rule, but if it goes to the Farmers.gov, there should be a consent form that will allow them to share data amongst the agencies.

Strategic Initiative 2: NASS Operating Model reimaged

Joe Prusacki, NASS Director for National Operations Division, stated he was directed to think big, so in an ideal world:

NASS would want processes efficient and easily changed, people engaged, knowledgeable, willing to share, and take ownership; data shared once, or a few times and does not require movement from system to system, and there is little or no duplication effort. Ron Thompson, NASS Director for Information Technology Division discussed the various systems NASS had in place to operate when he first arrived: over 300 databases, a lot of ETLs; NASS is looking to move away from that complex structure.

This initiative is “everything in the middle”- how NASS operates and process data.

Parts of this initiative are:

1. People and organization
2. How does NASS processes work
3. How NASS manages resources
4. Realizing the culture of empowerment
5. Accessing the measures and motivators
6. Accessing the tools
7. technology needed to function

The current activities regarding this initiative include: drafting the business case, reviewing the most recent *Long Range Plan*, gathering information from the various operational groups, accessing where NASS stand in our current environment, establishing effective communication amongst the team and diving in to get early successes on the project. One of the goals is to get the word out across the agency to promote other people to provide ideas. Right now we are creating timelines for getting the project to completion.

Mr. Prusacki stated that this project timing is right as NASS is in a transitional period with challenging landscapes, in between censuses, and have a team of people who are looking

forward to the future of NASS. One of the things to consider, is NASS at a point where we can leverage on some of the initiatives taking place at the Department level.

Discussion: Some challenges NASS has is budget. A recent call for 5 percent reduction Department-wide will effect NASS. NASS has various operating model choices, creating buy-in from staff, numerous data handoffs, many projects going on simultaneously, and identifying what is perfect versus attainable.

Mr. Thompson posed the question to the group that if any of their organizations have undergone a change of this kind or organizational improvements, please share how you did it. Dr. Jennifer Brown, stated that we are on the right path. Right now her organization is having the people with the boots on the ground to go through their processes and identify where there can be efficiencies. Ron, Joe and Jennifer will reach out to each other to discuss barriers. Nick Orsini, from the Census Bureau, stated that we should identify one thing to tackle in the attempt to not tackle everything all at once. Look at granular processes. Ms. Kellie Bray stated that their organization is undergoing some changes that will require a change from a CEO of 30 years. Mr. Thompson said that they focused on one thing that they could put into the vantage point, which was the publication and dissemination. Looking for a quick win.

Mr. Prusacki identified that NASS understands that culture is not tangible. A huge component to tackle, but NASS must look at the strategic things. Mr. Barnes stated that it is good to keep in mind that NASS is not doing these things because they are just good to do, but they are necessary. Even if you cannot implement them now, but get a plan in place to focus on how to get them done down the road. Remember this is not a tomorrow solution. NASS is putting the plan in place to move forward, if you do not have a plan in place then you are dead in the water. Mr. Thompson shared an experience from the Census Bureau and the take away was that there needs to be some requirements established.

Strategic Initiative 3: NASS Customer Service Experience

Dan Kerestes, NASS Statistics Division Director, and Joe Parsons, NASS Methodology Division Director, provided an overview to the committee members on this initiative. A year ago, the Advisory Committee recommended modernizing our publications, but unless NASS can do everything, then do nothing at all. This was the motivation behind Strategic Initiative 3.

This project is divided into two tracks:

- a) Track 1: Census of Ag Data Visualization
- b) Track 2: Revamp of NASS Quick Stats

The first track is to establish visualizations around NASS February release of the Census of Agriculture. The goal was to wrap this up by the end of February with visualizations, the data in the USDA data lake and various releases with visualizations. Currently, NASS is looking at customer feedback, identifying the scope of the data, and working with the Department to get the project in line with what they have going on at the Department level. Risks include: availability of the 2017 COA data, verification of the data on the dashboard, comparability of the 2017 and 2012 data, and is the site able to handle the Census of Agriculture release load.

Track 2: Move the Quick Stats database to the cloud. The expected timeline is April 2019. Long term goal is to have additional data access and display tools, add additional data from external sources, improve internal processes used to generate and disseminate NASS data, and modernize our IT systems.

A few concepts are to use maps, stocks concepts, Google search concept, allowable personalized profiles, looking to be able to build searches and charts on the fly. NASS would like to have these tools and products to be more interactive. Mr. Hammer would like to see a NASS SIRI.

NASS would like it to have the ability to save data user searches and create PDFs.

Some of the related challenges to this effort are: NASS must keep current processes going, needs to understand what the customer want, needs to identify missing metadata in our current quick-stats, and NASS cannot change everything at once. Also, funding and staff resources are an issue.

Discussion: Dr. Jennifer Brown wanted to know if all of these initiatives are contingent on funding or already built in? Mr. Barnes stated that NASS is looking to obtain additional funding as well as leveraging the resources that are already going on at the Department level. NASS is looking to identify what can be prioritize. Each *NASS Strategic Initiative Team* has been challenged to create a business plan, so that NASS can utilize our current resources and identify what is needed to move forward.

Ms. Juli Obudzinski offered her services to help analyze the way things are, looking and what NASS would like to see going forward. Brian stated that NASS is working with the contractors to develop a prototype for the team to look at first, then reach out to our data users to get feedback. NASS expects to be able to circulate some of the prototypes to look at, around mid-December. Mr. Barnes stated that NASS is always interested in getting information from our power users on what they want to see from the NASS Quick-Stats data. Mr. Kerestes stated that NASS needs to make a tool that is universal, which can also meet the needs of all of our users. It should be flexible. NASS needs to make sure that the data is put into the database correctly.

Joe Parsons identified that it is hard to get data out of our current system, but NASS is looking to make it user friendly. NASS is looking for an MVP as soon as possible, so that NASS can get it to our users and calibrate it as we go. NASS will get advice on whether NASS has enough information attached to our data, so that data users can do something similar to a NASS GOOGLE or SIRI. NASS needs to have the correct tags that will allow the data user interface to be flexible in different environments. Mr. Barnes stated that part of the motivation is to promote the data users appetite for additional NASS data. NASS has assured that the initiatives are aligned with the Secretary's initiatives. NASS wants to be able to show how important our data is to the data users and the user community that it represents. The motivation for putting the Census of Agriculture out in this format is to get the users excited about what they can get from our data. This is our first quick win: the Census of Agriculture will have a lot of visibility.

The feedback side: a more focused effort on track 2 will be forthcoming. NASS needs to identify what people want. NASS knows it has power users and also know that farmers may

need something different. NASS is looking into how does evaluations should be tackled.

Discussion: Mr. Nick Orsini, stated that there are third party groups that utilized their data at the Census Bureau. The question is are they a data retailer or wholesaler? Mr. Kerestes stated that at the data industry meetings many people have identified that basic users have problems getting data from our current environment.

Mr. Benjamin Duncanson asked how will this relate to special tabulations, would NASS has to still do special tabulations or should NASS data users be able to get them from the new Quick Stats? Hopefully, the data will be available to pull out, but there will always be some cross tabulations that will need to be created in the data lab. There has been a conversation about privacy of the data set. NASS has to make sure disclosure rules are covered, when thinking about the special tabulations. It was stated it was not too early to put in the special tabulation requests, so that NASS can already have them in the queue.

NASS does follow up on the recommendations that the committee members put out into account.

Strategic Planning and General Discussion

Quick Stats - Mr. Shawn Boyd expressed concern that the Quick-Stats change will make it more difficult. The name change will cause people to have a harder time finding it and may not know what to look for. Mr. Parsons stated that NASS will need to market the change properly. NASS will need to place a request for the users to provide feedback on the MVP. NASS would love to shut down the old system, but understands that there will be a transition period of running in parallel. Mr. Boyd wanted to know when NASS will begin implementing some of the change and Mr. Prusacki stated he will see the first portion in February, but the MVP around April.

Web Data Collection Mr. Barnes would like to hear the thoughts from the committee members on what NASS could do to drive people to use the web tool for data collection? Ms. Juli Obudzinski stated that broadband could be an issue. She thought that NASS should go to the people that filled out the paper survey and research why they chose to fill it out on paper versus online. Maybe promote the on-line option as a time saver. Mr. Hammer said NASS will be sending them the survey code to complete it online without a questionnaire and a survey letter. Mr. Mark Hodges said that he thinks older farmers would be a little more resistant unless they have an app. He believes that the easier you can make it for the older population the better, having an app will make it easier, because they are not going to go to a website. Marvin Miller said they deal with a lot of Amish, so technology may not make a difference. Mr. Hammer stated that we will maintain multiple modes of collection. Ms. Rater said that NASS will start working through our enumerators to build the relationships to transition the people to the Web version.

Mr. Jay Johnson stated that the enumerators are ambassadors, but the more people use the Web the less money they make, so they may not push it 100%. Mr. Johnson recommended maybe having a fetch method instead of showing their IRS data, but the fetch method would allow an opt-in approach that will not cause so much concern.

Previously Reported Data (PRD) - Dr. Linda Young asked do they think the respondents need to opt-in for Previously Reported Data (PRD). A few stated that it should not, as they are comfortable because they know they already gave us the information. Dr. Young asked what about FSA data, do they need to opt-in? Mr. Jay Johnson stated it may help if NASS uses the Fetch method and allow them to opt-in, that will eliminate the concern that they already gave the information to FSA. Mr. Ron Thompson stated that the last time NASS tried this was a challenge, fetching data may seem trivial at the technical level, but there are standards in place that will be cumbersome. Not to say it cannot be done. Maybe the approach will be to pull the data into a different container. May require a change in the law about how we handle cross departmental data.

Data Dissemination and User Experience - Mr. Barnes asked about the data dissemination piece and the user experience, based on how the committee members use NASS data, what do they look for and how they would like to see it?

Suspended surveys - Mr. Mark Hodges said he depends on a variety of surveys and he looks for quality changes. The data does not exist because maybe he does not know where to look. He finds out later that he cannot find it because it has not been funded. Mr. Hodges would like to see an explanation if a survey is not done or funded. Also, he would like to see lookup Fulton's in Excel.

Index Approach - Mr. John Newton stated we need a comprehensive list of what is available, an index. Need to be able to easily access the index on different commodities. The challenge is that the data users do not know what data USDA has. Sometimes he do not know different types of data exist. Data visualizations will also help, but a list of what is available will help a lot. Dr. Jennifer Brown uses the index for the census all the time. Also, to be able to hop from the index to the tables. Share different combinations available on a commodity. A good link will help.

Statistical Profiles - Ms. Juli Obudzinski use *the State Profiles* and *Congressional District Profiles*, and NASS data users do not have a researcher on staff, they are looking for canned stuff that they can just pull. Would like to see some of the data built out. For example, it would be helpful to go to a State and pull out a *State Profile* that is already put together for users that they can share with their constituents that do not require a lot of time. Dr. Marvin Miller gets a lot of calls from people who are new in the industry to people asking what they should be producing or what can be produced in an area. Dr. Miller asked is there a way to put out a profile that will allow people to see the average information for the State or for the commodities within the State. Is there a way to compare the respondents reported information in comparison to the average in his area? Maybe; by having the respondent access their data that they provided along with comparable producers in the same geographic area.

USDA Data Hub - Mr. Barnes stated that the comprehensive index has been discussed and it is on our radar. NASS has discussed being a data hub for USDA, and it is trying to pull all available data within the Department in one location. This is a long term possible strategy tied to Strategic Initiatives 1 and 3. Ms. Kelly Bray, one stop shop has been discussed before, with budget concerns if NASS propose to be the one stop shop, does that build your

importance or maybe make it available to allow NASS to get more money. Should the Advisory Committee members write a recommendation to try to make this happen. Mr. Hamer stated that sometimes great ideas cause people to say stop doing one thing to do this new great idea.

Ms. Kellie Bray stated that it would be a major undertaking, but it could definitely build NASS value. Dr. Miller said NASS could capitalize on the bang. Mr. Hammer stated that sometimes when working on the next year budget, NASS has all of these ideas but you have to figure our cuts. Mr. Barnes stated that sometimes NASS is directed to go do new things, but NASS has to reallocate the funds from somewhere else. NASS is the statistical arm of USDA, it would make sense for NASS to do it, but at the same time NASS has a mission to carry out. This would be something in addition that will require new funds.

Dr. John Newton, think about Market News, they have invested so much building the MARS system, there seems to be some duplication of effort. How do you break down the silos within USDA and think about the customer experience?

Drone Use - Dr. Linda Young stated that in SET meetings, NASS discussed using drones and got the clear picture it would be problematic, there have been some things that have come up about using airplanes to collect data, what do you think? Kellie wanted to know the expense. Joe Parsons stated it is not free but not overbearing, NASS had some people look into the cost, and it came up to about \$25,000, approximately. NASS looked into non-DOD remote sensing and NASS was not able to get a good resolution. Dr. Young stated that it would be done in clusters and the concentrated areas. Mr. Kerestes stated that NASS would not do it every month. Mr. Hammer clarified that NASS would look at operations that will not provide NASS data. NASS would calibrate by looking into the ones who gave information. Dr. John Newton stated that over 5,000 feet of altitude is public airspace and would not need respondent permission. Dr. Newton asked if NASS could use DOD to help. Dr. Young stated that NASS needs to explore the option, but mainly money is the issue. Highland Precision Ag in Highland FL is the contact for the DOD resolution. Mr. Parsons stated that most folks understand that FSA uses it for compliance. Mr. Barnes stated that in the spirit of disclosure, NASS has to disclose our methodology.

The question was asked if NASS flew over and saw something that was not reported, do we have to report to other agencies. Mr. Combs stated that NASS is bound by our confidentiality. Mr. Hamer stated that remember everything NASS does is volunteer information. Jennifer stated that flying over is already happening by other agencies can we tap into that? Joe Parsons stated that we would use a contractor.

5. Public Comment Period

No public comments were submitted for this meeting.

6. Farm Structure Panel Recommendations

Dr. Linda Young shared that about 3 years ago, Mr. Joe Reilly and Ms. Mary Bowman stated NASS needs to come to grips with the complex farms. Complex farms and agriculture related business cause NASS to have to look into how to collect the data on these operations. The charge to the panel was to look at the way we collect data on the complex operations. NASS had to review existing information about the structure, seek and identify best practices for accounting for multi-unit operations. Across the US, we are very much engaged in agriculture, but there was a shift with more complex farms or large farms as far as production value. NASS data collection has not evolved with the change in farm complexity. Some of the complexity that was identified were farm size (the middle size farms are disappearing), geographic dispersion as farms tend to cross county boundaries and in some cases they cross States, multi-farm-multi business, farm connected non-farm output (wine cheese potato chips), use of hired farm and labor contracting, multiple and dispersed asset ownership, and management decision making structures. The slides in the committee member's books are from the National Academy of Science with a little tweaking.

When NASS collects data, it focuses on the response rate, often asking what is easiest way for respondents to report on. The conclusion stated that when NASS does this, it is blurring the lines. See recommendation slides on page 132-140. Basically, NASS needs to come to a clear definition what farm activities include. The panel wanted to make sure we counted everything, but only counted it once.

Find out what is being done on farms that supplement their income. NASS needs to look into the three types of statistical units: the business, the people and the land; and keep track of those three things.

Think of the NASS list frame as a farm register. Dr. Young stated that she thinks the recommendation is really stating that each farm should be registered, so that NASS knows how the farms are related to each other.

The panel recommended to restrict what NASS ask on the Census of Agriculture, and for ARMS, do not do it all at one time. Use more diverse data. The effectiveness will depend on being able to get the data from more than one place. Look into using the Federal Statistical Data Research Data Centers.

Discussion: Dr. Jennifer Brown thinks the discussion is good, and that this will be one way to reestablish relevancy. The part about other ways to link them to ARMs maybe a realistic approach. Dr. John Newton asked are there other sectors of the departments that have a farm register? Dr. Linda Young thinks the recommendation is trying to put us in line with the Bureau of Economic Analysis (BEA) and the Census Bureau. Thinking of where the Farm Data Act is, his people were deeply opposed. It is a matter of knowing what is really recommended versus rather than reading the report. It was stated that NASS needs to be careful how it uses the word register.

Dr. Marvin Miller would like to know if we talk about a farm being crop or livestock, if they happen to subcontract for hay baling that would be a farm activity. Dr. Miller hopes that whether it is contracted out or not, it is recorded as a part of the expense. Dr. Linda Young

stated it is a part of the expense, but when the report on employees come out, it is treated different. It was also stated that the committee's recommendation included why NASS captures that activity in some extent, all of the labor and other stuff helps better identify the farm activity. Dr. Miller asked to think about California produce, a lot of the work is field to field. A statistician will need to know all that is a part of farm activity.

Ms. Kellie Bray said she is glad to hear that NASS struggled with some of the panel recommendations as she is too. How do other business deal with how contracting activities out? Does NASS think that having the conversation with the Census Bureau will help with figuring out the process? The answer is yes.

7. NASS Data Lab Services

Mr. Joe Parsons, NASS Methodology Division Director, provided an overview of the NASS Data Lab services. In the census, NASS publishes several million data items, but sometimes our data users need additional information. In our data lab environment, all items are under *Title 7 and CIPSEA*. NASS has a process to review any data lab request. ARMS is done jointly with ERS and NASS makes sure the data will be fit for use after any request is made during our data lab review process. The special tabulations are requested when the data is not already published in our current publication. Census of Agriculture and ARMS are our largest request. (*Reference slides on page 145-150*)

Mr. Parsons identified the advantage and disadvantages of the Data Enclave. He is looking for discussion, should NASS allow access to the Census data from the Enclave? NASS and ERS has request to have NASS data in the FSRDC at a cost. NASS and ERS will still have to approve all of the data that come out of it. IF NASS were to put data in the FSRDC, it may present an opportunity to have some linkages. Maybe an opportunity for NASS to leverage information with other agencies in the FSRDC.

Discussion: Dr. John Newton wanted to know who the data users are that requested access. Mr. Joe Parsons stated lots of university researchers and associated organizations. Dr. Newton wanted to know do they get access to record level data. The answer is yes, but unidentified. The Ag Data act the senate has told us that researchers will not have access to record level data, but this may seem different.

Mr. Joe Parsons stated that in order to drill and do modeling, one would need record level data. Dr. Young asked would this be a problem, Dr. Newton said they are deeply opposed. Mr. Parsons stated that there is a rigorous vetting process before access is granted. Mr. Barnes stated that the data is scrubbed so that the data is unidentifiable. The concern is the use of the data to impose more regulations on them in some capacity and the impact of government regulations.

Dr. Jennifer Brown stated that she has seen what some of the data lab data provides and she think it is very informative. Dr. Miller stated that he saw where a peanut operation ran the risk of getting shut down because of some erroneous data that was presented. Proposals are being put out there that are not always in the producers best interest, but that is where the money is.

Mr. Ben Duncanson wanted to know what is the process used for vetting the data. Mr. Parsons said that the review process will deem whether it is fitting for the requested use and whether it is reliable. Any researcher will have a background check and the process for foreigners is lengthy. They will all have to sign the confidentiality statement and must work within the rules of the data lab. It may make more sense for NASS to do the special tabulation for them. If it is a descriptive tabulation, NASS will be able to run it through our disclosure process. NASS has a requirement that it must go through OMB about the respondent burden and how the data gets used.

Ms. Kellie Bray wanted to know why the group was hesitant in the past. Hubert stated that we wanted to make sure we protected the confidentiality of the producer. NASS wants to use the data to the full potential, but it also wants to make sure to protect our farmer's data. NASS will make sure to approve the output that goes out. Mr. Barnes stated that what is being addressed is the data that NASS produces, but this may include housing data from other agencies. The concern is about who will police that data. NASS has authority to legally protect the information. When one looks at this from a broader perspective, it becomes a huge challenge in managing the project.

All special tabulations are posted online, and if any want the data, it is made available. While NASS will vet the output, NASS does not stamp off on approving the final recommendation from the data. The researchers sign an AD-482 form to make sure they are sworn employees of NASS for the review of the data and they must follow the same rules as the NASS employees.

8. Agricultural Resource Management Survey (ARMS) and Chemical Use Program

Mr. Dan Kerestes, NASS Statistics Division Director, went over the ARMS program and the survey cycle (Reference page 157-163 of presentation). The ARMS data is valuable for international data users as well as domestically. When NASS considers budget cuts, it always tries to figure out how to fund ARMS.

Discussion: Bryan stated that we always speak about ARMS and Chemical Use is because, from the external review, it was recommended that NASS brings it to Advisory Committee and external shareholders for recommendations.

Mr. Joe Parson, NASS Methodology Division Director, stated that NASS will try to create some linkage from the farm services survey to reduce respondent burden. Ms. Juli Obudzinski stated that ARMS is a great example of the partnership of NASS and ERS, what are the potential implications of the reorganization of ERS? Is there a recommendation that need to come from the committee?

What will have to change due to removing ERS from the mission area?

Greg stated there is still some uncertainty of location of ERS. The plan of the reorganization continues to transition. The fundamental business operations will continue with NASS. The plan of the work getting done has to get done by ERS and NASS as it is fundamental for us to understand agriculture. The biggest question is staff to do the job. Greg stated that it will be

interesting to see if the research questions will change after the move is final, but something to see down the road.

Ms. Kellie Bray stated that a recommendation was warranted to make sure that the partnership still needs to be clear and continuous. Mr. Kevin Barnes stated that NASS does not expect anything to change, but there may be some challenges. NASS has a strong ARMS team and the ERS changes will be an adjustment. The groups meet on a regular basis and the location change may cause NASS to do more to facilitate the working relationship.

Juli's concern was that there has not been a lot of stakeholder input and it was happening so quickly. Ms. Barbara Rater, NASS Census and Survey Division Director, said she does not see much changing. NASS will continue to use technology to get the job done. NASS may have to reschedule the way it meets with ERS, but she felt optimistic that the relationship is so strong, that it will withstand the transition. Ms. Rater will go back and ask the NASS ARMS team if there are any concerns. Training will take place in St. Louis during the third week in January.

9. Discussion and Drafting of Recommendations

The Advisory Committee spent much of Thursday, November 15, developing the committee's recommendations. The seven recommendations passed by the Committee are shown in the following section, along with NASS responses. Committee elections were held where Ms. Kellie Bray was elected as the committee Chair.

10. Closing Remarks

After the Committee discussed and passed its recommendations, Mr. Barnes and Mr. Hamer thanked the members for volunteering their time to attend the meeting. Ms. Bray, as Committee Chair, called the meeting officially adjourned at 11:45 a.m. on Thursday, November 15, 2018.

ACAS 2018 RECOMMENDATIONS

Recommendation No. 1. The committee recommends that NASS should increase reporting and explore the possibility of additional data collection on beginning, socially disadvantaged, veterans and women farmers in both existing and future census and survey products, which may include follow on surveys, collaborating with ERS on a special study, and making available predefined queries and special tabulations.

Recommendation No. 2. The committee recommends that NASS should incorporate the Tenure, Ownership and Transition of Agricultural Lands (TOTAL) survey into future data collection efforts and explore the possibility of increasing frequency, and continue to build additional data collection and reporting on farmland ownership, tenure, farm transition, and demographics into existing activities.

Recommendation No. 3. The committee recommends that NASS should provide the ACAS an analysis of the cost to the taxpayer attributable facilitating participation by operators who are reluctant, unwilling, or refuse to participate in the mandatory census and surveys conducted by NASS.

Recommendation No. 4. The Committee supports NASS's three primary strategic initiatives, and encourages the Secretary of Agriculture and/or budget determining body to include sufficient funding in NASS's budget to fully execute these strategic goals that will ultimately increase customer service while also increasing efficiency.

Recommendation No. 5. The Committee recommends the Department evaluate and address any potential impacts a relocation or realignment of ERS would have on NASS's data collection activities, including the allocation of additional resources needed to ensure an effective partnership is maintained and strengthened between both agencies in the future.

Recommendation No. 6. The committee recommends that NASS consider working towards implementation of the summary of recommendations as presented at the ACAS meeting by the National Academy of Sciences report: Improving Data Collection and Measurement of Complex Farms. The committee recommends clarification of what is meant by farm registry. The committee would like an update at the 2019 ACAS meeting.

Recommendation No. 7. The committee recommends that NASS expands the availability of the Census of Agriculture data and other data sets as appropriate to the Data Enclave reaffirming that request should go through the full range of current and future qualifications and NASS disclosure processes.

APPENDICES

- A. Agenda: 2018 ACAS Meeting
- B. 2017 Recommendations and NASS Response
- C. Summary of the National Academies of Sciences' Report: Improving Crop Estimates by Integrating Multiple Data Sources
- D. Public Comments

13. Appendix A

Thursday, November 14, 2018		
Time	Agenda Item	Presenter
8:00 am	Call to Order and Welcome	Kellie Bray
8:05 am	Introductions and ACAS Committee Overview	Kevin Barnes
8:30 am	Meeting Overview	Bryan Combs
8:40 am	Welcome to Texas	Wil Hundl
8:55 am	'State of NASS' Address	Hubert Hamer
9:30 am	Census of Agriculture/Census Programs	Barbara Rater
9:50 am	Discussion	
10:00 am	Strategic Planning Update	Kevin Barnes
10:15 am	Break	
10:30 am	Data Collection Dashboard	Jay Johnson
11:00 am	Discussion	
11:15 am	NASS Operating Model Reimagined	Joe Prusacki
11:45 am	Discussion	
12:00 pm	Lunch	
12:45 pm	Improving Ag Data User Experience	Dan Kerestes
1:15 pm	Discussion	
1:45pm	Break	
2:00pm	Depart Hotel for Tour	Wil Hundl
4:30 pm	Return to Hotel from tour	Committee
5:00 pm	Day 1 Wrap-up	Committee

Thursday, November 15, 2018

Time	Agenda Item	Presenter
8:00 am	Recap and Review of Previous Day	Kevin Barnes
8:15 am	Public Comment	
8:45 am	Farm Structure Panel Recommendations	Linda Young
9:15 am	Discussion	
9:30 am	Allowing Census Data in the NORC Data Enclave	Joe Parsons
10:00 am	Discussion	
10:15 am	Break	
10:30 am	ARMS/Chemical Use Program updates	Dan Kerestes
10:50 am	Discussion	
11:00 am	Drafting Recommendations	
11:45 am	Presentation of Recommendations	Kellie Bray
12:00 pm	Committee Chairperson Elections	Committee
12:20pm	Closing Remarks	Kevin Barnes
12:30pm	Adjourn	

14. Appendix B

ACAS 2017 RECOMMENDATIONS and NASS RESPONSE

Recommendation No. 1. The committee recommends that NASS Continue developing data visualization and other modernization efforts of their publications while maintaining current data products until databases, etc are updated. NASS should also ensure that products continue to be available for less tech savvy users.

Background: NASS has provided data to users via QuickStats and published reports for many years. However, since its conception new products and approaches have been developed that demonstrate the need for improvements to QuickStats.

NASS Response: As NASS works towards the goal of improving data visualization, stream lining publications, and improving QuickStats it will make sure that all data users have the products and information they need.

Recommendation No. 2. The committee recommends that NASS should provide the ACAS an analysis of the cost to the taxpayer attributable facilitating participation by operators who are reluctant, unwilling, or refuse to participate in the mandatory census and surveys conducted by NASS.

Background: Achieving adequate responses to surveys and the census is always a primary objective for NASS. A recent report by the Committee on National Statistics of the National Academy of Sciences documented declines in response rates. Declines were not universal, and some surveys experienced greater declines than others, but the phenomenon of declining responses is sufficiently widespread that it has generated growing concerns about the potential impacts. Along with other Federal Statistical Agencies, NASS has realized reduced response rates. The declining response rates for NASS surveys has led to increased analysis and research into determining the contributing factors, including costs. In 2016, NASS formed an internal team to address the many factors believed to be contributing to a general decrease in responses. The Response Rate Research Team has grown in scope to focus sub-teams on specific factors which include respondents' perspectives, opinions, beliefs, and attitudes about NASS surveys, services and promotional materials.

NASS Response: NASS is aware of the rising cost of non-response and have taken action to better understand and address this trend. For example, the Agricultural Resource Management Survey (Phase III) is one of the most costly surveys NASS administers because of the complexity and length of the study. Over the last 4 years, the average non-response rate for the ARMS Phase III survey is approximately 40%. The average data collection cost for those unwilling or refusing to participate in the survey is on average \$140 per sample. By

contrast, the average data collection cost for completed surveys is approximately \$460 per sample. We are exploring different, more efficient sampling techniques and leveraging technology across all our census and survey programs that will help us achieve cost efficiencies, with better precision and smaller sample sizes.

Recommendation No. 3. The committee recommends that NASS should provide a map that includes estimated response rates at a state and county level as applicable for strategizing on targeted efforts to facilitate improved participation prior to the 2018 meeting.

Background: In recent years various NASS sponsored survey programs have experienced declines in survey participation rates. NASS implemented a Response Rate Research Team (RRRT) charged with identifying changes in NASS's processes that will lead to increased response rates and helping to move these changes into production. The RRRT serves an ongoing and active role in advising agency leaders with proposed improvements to systems/tools, survey preparation analysis, sampling procedures, and other appropriate aspects to improve survey participation rates.

NASS Response: NASS has identified four survey programs to create response rate maps for. These maps will be provided to the ACAS members for review and discussion at the annual meeting. In addition, a response rate map for the Census of Agriculture will be provided to the committee every 5-years.

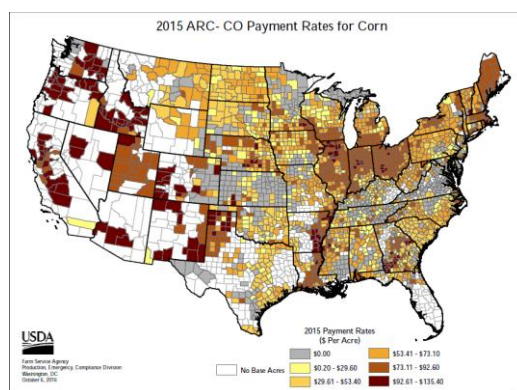
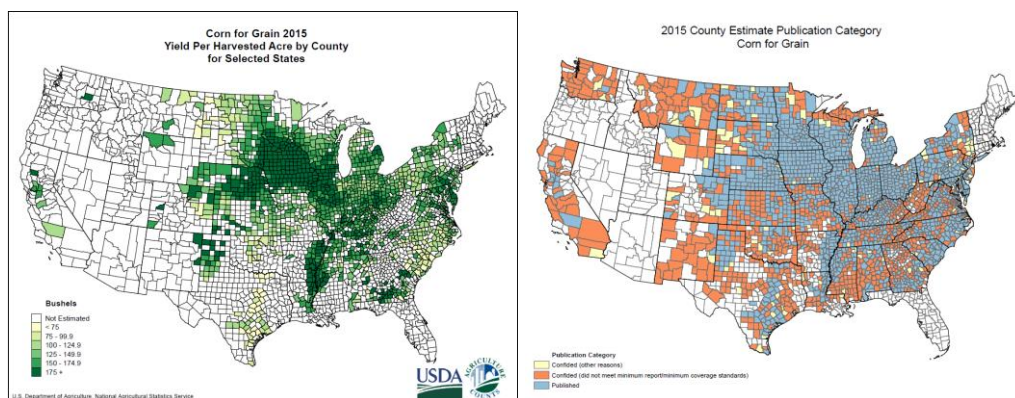
Recommendation No. 4. The committee recommends that NASS should provide an analysis or compilation of existing studies to the ACAS and for promotional purposes, to explain the impacts to individual producers and the industry as a whole that result from inaccurate, incomplete, or under-reported data. This analysis should include but not be limited to: market impacts, program payment impacts, insurance premium, and indemnity impacts, production planning impacts, and the impacts on consumer satisfaction.

Background: Within USDA, inaccurate statistics would have an adverse impact on policy evaluation and analysis. For example, the Economic Research Service uses NASS data extensively to provide official estimates of farm income, assets and debt of the farm sector. NASS data are also used to fulfill congressional mandates to report cost of production estimates for a number of commodities. Thus, NASS data are used to provide an accurate picture of the US farm economy. Using these data, farm programs can be evaluated, and economists can provide policy analysis to decision makers in the USDA, Congress and the White House. Inaccurate or incomplete data can result in either decisions made based on faulty information, or the inability to propose or initiate programs. The impacts are difficult to quantify.

NASS Response: If NASS statistics have unacceptably high levels of uncertainty or missing data, statistics may not be published. In some cases this may result in NASS being unable to publish statistics for small geographical areas. That is, state or national statistics may be available while county-level statistics may not be published. As an example, consider NASS county estimates program for corn, which provides point estimates that are

used in setting payments for USDA’s ARC-CO program. In Figure 1, the official map of corn for grain yield displays the county estimates published by NASS for the 2015 crop year. This information is contrasted with the map in Figure 2, which identifies counties as published or confided (not published—suppressed—to preserve confidentiality of the respondents). The counties shown in blue correspond to the 1,433 individually published counties shown in Figure 1. The number of published corn for grain counties is considerably smaller than the total number of counties where collected data indicate the presence of corn (2,490 counties). NASS did not publish county-level estimates for the orange areas in Figure 2 because the counties did not meet established publication standards due to an insufficient number of responses from sampled farm operations; these are primary suppressions.

In order to avoid disclosure of unpublished county estimates (through simple arithmetical operations), NASS practices complementary suppression; that is, county estimates that may be fit for publication on their own merits are suppressed to protect the confidentiality of counties subject to primary suppressions. Thus, nonresponse in one county may result in suppression of other counties as well. These complementary suppressions are shown in blue in Figure 2. USDA’s Farm Service Agency must administer local programs even in counties that NASS suppresses. Figure 3 shows 2015 ARC-CO payment rates per acre of corn (Source: USDA Farm Service Agency). In counties not published by NASS, FSA will use other sources of data to establish benchmarks and references for these payments. These other sources (RMA yield, NASS district-level yields, and yields established by FSA’s state committees) vary in their specificity and representativeness for that purpose.



Recommendation No. 5. The committee recommends that NASS pursue non-monetary incentives for producers to complete surveys by providing responders with comparison data via a data dashboard.

Background: In the past, data users have been provided with paper reports that provided summarized results of a particular survey. These reports typically contain data tables and graphics depicting the results.

NASS Response: NASS will explore a data dashboard approach to provide data responders with their own data and a comparison to summarized data. This approach will allow data responders to see how they compare to other producers in their respective

Recommendation No. 6. The committee recommends that NASS explore leveraging the federal statistical system and partner with external organizations to produce new and/or enhanced data products.

Background: NASS has traditionally provided data via paper publications and QuickStats. These two forms of data transfer have served the industry and NASS well over the years. NASS has experience partnering with the Economic Research Service to provide maps from data collected for the Census of Agriculture.

NASS Response: NASS will explore the different data products produced by other federal statistical agencies such as the Bureau of Census, Bureau of Economic Analysis, and the Economic Research Service. This could possibly be tied into the work being done for Recommendation No. 1.

Recommendation No. 7. The committee recommends that NASS should incorporate the Tenure, Ownership and Transition of Agricultural Lands (TOTAL) survey into future data collection efforts and explore the possibility of increasing frequency, and continue to build additional data collection and reporting on farmland ownership, tenure, farm transition, and demographics into existing activities.

Background: The Census of Agriculture Program is conducted on a five-year cycle. As part of this cycle, NASS utilizes the responses from the census of agriculture to identify subpopulations in order to collect more detailed information in a Census Special Study. Following the 2012 CoA, NASS conducted the 2014 Tenure, Ownership, and Transition of Agricultural Land (TOTAL) Survey. This comprehensive study of all land rented out for agricultural purposes, including both land rented out by those who are themselves farmers and ranchers (operator landlords) and land rented out by those who do not operate a farm themselves (non-operator landlords) was done in partnership with ERS. NASS collected data by mail, personal interviews, and online from over 40,000 landowners across the United States. The last time these type of data were collected was in 1999 in the

Agricultural Economics and Land Ownership Survey (AELOS). While the two surveys collected similar data, there were differences in how the surveys were sampled, conducted, and summarized.

NASS Response: NASS has plans to conduct the TOTAL Survey again in 2024. In consult with ERS and other stakeholders, it was determined that the span of 10 years between similar surveys would adequately reflect the changing landscape of farmland ownership. As with any Census Special Study, appropriate funding levels for the Census of Agriculture Program must be maintained to plan and execute the 2024 TOTAL

Recommendation No. 8. The committee recommends that NASS should increase reporting and explore the possibility of additional data collection on beginning, socially disadvantaged, veterans and women farmers in both existing and future census and survey products, which may include follow on surveys, collaborating with ERS on a special study, and making available predefined queries and special tabulations.

Background: NASS has strived to provide data on all facets of American agriculture. Following the 2012 Census of Agriculture, NASS engaged a panel of experts from across academia, government, and industry to provide input for the enhancement of demographic data for the 2017 Census of Agriculture. The current agricultural census collects information on beginning, veteran and women producers, and demographic data on up to four producers. The results from the enhanced demographic characteristics section will be available in February 2019.

NASS Response: NASS will investigate opportunities to expand the availability of beginning, socially disadvantaged, veterans and women farmer data products during the planning for the 2022 Census of Agriculture, and the follow-on survey work resulting from the 2017 Census of Agriculture. As data products are published, NASS will provide predefined queries to make data readily available for the demographic groups identified. NASS will continue to partner with the Economic Research Service to expand data availability through current, and potential future survey efforts.

Recommendation No. 9. The committee recommends that NASS continue to develop electronic data collection applications.

Background: NASS continues to be engaged in several initiatives to maximize benefits of technology to improve performance of applications, improve survey response rates, streamline business processes, improve engagement and user experience for respondents, and leverage Department IT Modernization efforts. NASS recently implemented a new responsive web data collection system for the Census of Agriculture. NASS saw an increase of over 62 percent in the total census forms received via the web compared to the 2012 Census of Agriculture. This new system provides an enhanced web experience for agricultural producers responding to the census and NASS surveys which reduces burden while also improving data quality. Responsive web designed forms improve usability, dynamically format the questionnaires to fit any device and embrace industry best practices

for survey questionnaires and website designs. The new web forms improve usability for smart phones and other mobile devices while maintaining Section 508 compliance.

NASS Response: The transition to responsive web forms using the new system is in full swing for all NASS surveys, with full implementation expected to be completed the summer of 2019. NASS is currently using emails for outreach and to promote select surveys. However, we are exploring ways to use the latest technology to streamline procedures for using emails and text messages to improve respondent engagement and data dissemination. This includes conducting pilot studies and working to leverage Department IT Modernization efforts.

14. Appendix C

Public Comments

No public comments were received in association with the 2018 committee meeting.