

Interview with Cynthia Clark

By Kirsten West (kirsten.k.west@census.gov)



Dr. Cynthia Clark is the Administrator at the National Agricultural Statistical Service (NASS). Before joining NASS in 2008, Dr. Clark earned her PhD in Statistics at Iowa State University. After receiving her PhD, Dr. Clark worked extensively in government agencies in both the United States and the United Kingdom. She is the mother of 6 children.

During an interview after joining NASS as the Administrator, Dr. Clark mentioned a need for the restructuring of the National Agricultural Statistical Service when she said, “it will be structured differently than it has been in the past 40 years.” Throughout her tenure she has worked diligently to ensure that these changes would occur and they have not come easy. She faced challenges from many different angles – budgetary concerns, non-transparent estimation procedures, a comfortable and stable employee base, outdated technology and survey procedures, and others. Through her statistical and administrative knowledge,

her leadership skills, and vision Dr. Clark has transformed the agency – transformations that have earned her the Presidential Rank Award.¹

[NOTE. In April 2014 Dr. Clark was recognized by Iowa State University with the Distinguished Alumni Award. It is the highest honor given to alumni by the university and honors alumni who are nationally and internationally recognized for preeminent contributions to their profession or life work. Only 4 graduates of the ISU Statistics Department have been so honored since the award’s inception in 1961.]

This brief report summarizes an interview that discusses the development of both Dr. Clark and NASS. It discusses specific challenges that she faced and how those challenges were addressed and overcome.

Interviewer (I): *When deciding to study statistics/mathematics, how did you feel competing in a highly technical field such as statistics where the share of women was not too high?*

Cynthia (C): I didn’t go into statistics directly. I majored in mathematics as an undergraduate, got a master’s degree in mathematics, and started a doctoral program in mathematics. So statistics was not the track I was going on. I always felt comfortable in mathematics, my mother was a chemist finishing college in 1938 when it was pretty unusual for a woman to be in a scientific field. My father was in agriculture and banking so it didn’t seem unusual for me to be in mathematics. I explored my mathematical interests through a competitive high

¹The Presidential Rank Award is the ‘most prestigious award in the Federal career civil service’ awarded to executives and professionals for truly exemplary performance and impact in their respective agencies.

school course load where there were other women taking higher-level mathematics courses with me, which also made me feel more comfortable in the sciences. Then I went to a women's college. There were mathematics majors and science majors, so I continued to further my interest in mathematics. I got a master's degree thinking that I would teach undergraduates.

I taught mathematics as an instructor at the University of Denver for a couple of years. I taught courses leading through the third semester of calculus but I soon realized that was the limit that I would be able to teach without a PhD. After three years of teaching I left to pursue a doctoral program in mathematics at the University of Colorado in Boulder. Partway into the degree program my husband accepted an academic appointment at Drake University in Des Moines, Iowa. I wasn't far enough along with my doctoral program at the University of Colorado to complete it, so I transferred my credits to the mathematics department at Iowa State University. This was in the 70's. I soon learned that there were few academic positions in mathematics so I didn't have a clear career path. Furthermore, the department was not passing anyone in their qualifying doctoral exams (which probably made sense because there were no jobs). I told myself 'I have a lot of mathematics so there must be something else I can use mathematics for.' So I went shopping for a department in which I could apply my mathematics background at Iowa State University.

First, I went to the computer science department because a lot of my math colleagues were transferring to computer science. This is where I first felt some discrimination as a woman. The chairman of the computer science department was going to make it very difficult for me to become a graduate student in the department. I had a solid math background but I had three children and lived in Des Moines – 40 miles from the university. I thought 'I don't need another barrier to overcome,' so I kept on shopping, proceeding to the statistics department where I met with the chair of the department. He reviewed my transcripts and said that I could come to statistics, that I didn't need any more mathematics (they had a very heavy mathematics requirement), but would need a senior level statistical methods course. So, basically, I just walked into the department and that's how I ended up in statistics. It was a very nice accident.

(I): Do you think not getting into the computer science department was a woman's issue or a computer science issue?

(C): The chairman was basically the issue, and actually if I had shopped further, I might have found economics. I think I would have enjoyed economics but I never got there, because I found the statistics department first.

(I): Would you say your way of dealing with the computer science department was recognizing that the 'woman issue' was something you didn't want to get caught up in so you distanced yourself from it?

C: I think that's true and I was also being pragmatic about my graduate program in terms of how much time I would have. I never went to graduate school full time. It was really an avocation, an interest. I wasn't so focused on a career goal. I had a family, and I thought it would be easier for me to integrate my family life with academics than with another kind of job. That was as goal focused as I was at the time.

Around the time I was close to completing my degree, my husband took a job in Washington (D.C.). I had thought I would be going into academia, but academia is not a great option in the D.C. area because there are not many tenure track positions at the local universities. So I didn't pursue academia.

C: Ultimately, I evolved into a different goal. At the time I had five children. I had a baby that was six months old and I knew that I couldn't work full time. I also had children that were in elementary school - my oldest child was 12 at the time. I knew we would need additional income in several years to support college education costs. I realized that since I was in a technical field if I needed a job in six years to support my children's educational costs, I would need to go into the work force then (as opposed to waiting six years). So I looked for the job with the least commitment that I could make.

Commentary: Dr. Clark met the experiences of moving from one state to another, realizing that the math department was not passing its graduate students, and the obstacles encountered at the computer science department with grace, determination, and adaptability. While many people would get discouraged and quit in similar circumstances, Dr. Clark demonstrated a strong will coupled with a pragmatic mind. She met her challenges and, in her husband's words, made 'lemonade out of lemons.' These early potential road-blocks provided Dr. Clark valuable experience to help mold and shape her character. The traits she developed and matured in her early academic career would prove very beneficial to her in her future career and ultimately as the Administrator at NASS.

I: That transitions nicely to our next question . . . Professional women sometimes struggle with balancing career and family. How were you able to manage it and what insights do you have for other women with those challenges?

C: I think the first advice is that I have a supportive husband and that he was willing to let me make my own decisions. I think there was only one time in our married life when I said ‘ok this is my turn and I am not going to follow you for a job.’ But in most cases, I went with him, Iowa and Washington being examples.

So you are asking about balance? I guess one thing is to have a supportive husband and the other question is ‘Do you want to have children?’ which I did. If you have children you need to ask ‘When are you going to have children and how do you manage that with a career?’ In many respects it might have been easier for me because I went to school when my children were young and then I entered the work force at an older age. I was 35 when I started working for the Census Bureau in ‘77 and I was not in a supervisory job until my youngest child was in first grade. I have colleagues that were in jobs at a very senior level who had children in intermediate and high school. That is very hard. In fact my first senior executive job was at NASS in 1990. At the time I had a 12 year old and a 14 year old. I didn’t go to the executive leadership training offered to most senior executives because it was going to be too difficult for me to be gone four weeks from my children. So I never took that opportunity. I figured out another way to obtain leadership training.

Another thing I found helpful for me was a strategy that I used first when I was a graduate student. I learned how to separate graduate school from my home life.

I: How did you do that?

C: I often got a babysitter when I needed to focus on schoolwork. I found it too difficult to pay attention to schoolwork and my children at the same time. When I had children I didn’t bring work home. I also had daycare outside my home so that I found my home as I left it going to work.

Commentary: It is evident that having a family was very important to Dr. Clark. For many women, the challenges they face taking on maternal and professional roles are difficult. Dr. Clark recognized those challenges but did not let them deter her. She knew that having a family was important and allowed that desire to be a guiding force that helped shaped her decisions and direction in life. Once that desire was established, goals and plans were set.

Again, we see that Dr. Clark possessed a strong will and a pragmatic mind.

After moving to DC and after her academic work was completed, Dr. Clark entered the job market. The next couple questions address this transition.

I: How did you feel about your focus moving away from purely academic research, to the management of big institutions such as the Census and NASS?

C: My first job was not that far removed from what I was doing in academia. I was in the Statistical Research Division at the Census Bureau, working part time. The specific field that I got my dissertation in, I never worked in. Basically, I was working in statistical surveys. The projects were very similar to academic projects.

For the first couple years of my career I wanted to get involved in time series research. I actually moved to another job two years after I went to the Census Bureau to do that. I took a job at an office that is no longer around. It was at the Department of Commerce in the Office for Federal Statistical Policy and Standards – now the Statistical Policy Office at the Office of Management and Budget – where I went to work on time series methodology. I went from a research job, thinking I was going to do more research but it turned out to be a job consisting more of coordination, standard setting, and statistical policy formation. I was there for four years. Then I went back to a research job in the Agriculture Division of the Census Bureau, where I worked on research focused on the census of agriculture program. So my career roles up to that point consisted of academic research, then statistical policy, then research applied to the agriculture census. From there I moved into a supervisory and management job.

I was working part time for all of this period (from ‘77 to ‘84). At that point I was selected for a grade 14 supervisory position over methodology for the census of agriculture. A year later I was selected for the 15 position. I did not work very long in a technical position. Perhaps I have more management and leadership skills than I have technical skills so I was comfortable being in an organizational management role. That’s not what most statisticians aspire to do. . . most get a degree in statistics and then expect to be doing technical work in their field all their career. However, my technical knowledge from my doctoral program really helped me. During most of my career I have been directing research at fairly high levels at the U.S. Census Bureau and at the U.K. Office for National Statistics. So having my degree in statistics, keeping up with the field, reading the literature, finding the right people to con-

duct and oversee research has been my expertise in my most recent positions.

I: How is this job different?

C: I would be happy to oversee only the statistical research but you have the whole agency to worry about! [laughter]

I: What I am hearing is that it wasn't a very stark difference from one to the other. You went from your academic work to the research type roles. It was not too big of a transition?

C: I would say that is probably true.

Commentary: Similar to her gradual adjustment in her academic career, Dr. Clark gradually transitioned and advanced in her professional career.

I: Transitioning into your current career position, in a previous interview you mentioned a need for almost a restructuring of NAAS when you said, "it will be structured differently than it has been in the past 40 years". What prompted this endeavor/what did you find flawed with the system?"

C: That is a long answer. I became Administrator at NASS in 2008. I had previously been Director of the Survey Management Division at NASS from '90 to '96. Then I left and went to the Census Bureau as Associate Director for Methodology and Standards from '96 to 2004 and then to the U.K. Office for National Statistics as Executive Director for Methodology from 2004 to 2007. When I returned to the States I had expected to retire but people who I had worked with at NASS previously encouraged me to apply for this position. So I basically got recruited for the job.

One of the concerns that I had from my previous experience was with the lack of transparency in the processes that NASS used for its estimates. I was not willing to take the job unless I had the support of my undersecretary to review those procedures. I was hired in 2008 with that understanding.

Commentary: In the following dialogue, Dr. Clark discusses the challenges faced at NASS and how she addressed them.

In March 2011 we got a reduction in our budget. It was only 3 and a half percent but it was basically half way through the year so it was like taking a 7% cut during the year. So at that point we said 'we are going to have to worry about money and what are we going to do?'

Two years before we had discussed a proposal to regionalize our offices. At that time there was no support for this initiative so we didn't do anything. In

March 2011 with budget reductions imminent, I asked my senior executives, 'do you think we should consider this again?' We had previously chartered a long-range planning team and they had provided recommendations the previous September in a number of different areas. One of their recommendations was to look at the field structure. The senior management team hadn't seriously considered that recommendation. But with the budget not being very good, I said 'maybe we should have a group of people look at that structure again and think of change in 3-5 years.' So in March we chartered a team to review the structure. We had 2 senior executives and 3 people in our field offices conduct the review, providing a proposal in July. In June we got House marks for our 2012 budget that were 12% below our previous year's budget. When we received the proposal, we looked at it and said 'maybe we can't wait 3-5 years. We are going to have to think about the proposal now, and since we have a census coming, maybe we need to do it quick.' So we started something quick and the department has managed the process. It wasn't so quick extending over a two year period.

Commentary: Until recently forty-six different regional/field offices around the country were being used for data collection, preliminary analysis/cleaning of data, and data review. They were using varied approaches. This led to a lack of quality control (QC) and standardization. None of the field offices had enough volume for QC to be instituted.

To initially address these issues, the agency identified five initiatives that would improve the effectiveness of its processes and improve the quality of its products. Beginning in 2010 the agency centralized its servers, installed videoconferencing, re-engineered its software applications to work in centralized and decentralized environments, introduced CAPI with Apple iPad tablets, and opened a data collection and processing center. In 2011 a goal to resize its 46 field-offices to 9 regional offices and 37 two person state offices was established. The regional offices were staffed in 2013. For this regionalization to go into effect, NASS leadership had to re-negotiate memorandums of understanding with all 50 State Departments of Agriculture during the spring and summer of 2012.

[NOTE. NASS had long enjoyed a collaboration in the production of agricultural statistics with state departments of agriculture. Negotiations with state cooperators increased the number of regional offices to 12 with 34 two person state offices.]

I: How did you come up with all of these ideas?

C: Early in 2009 I asked my senior managers and executives for proposals to make the agency more effective or to improve quality of agency products or processes. I arranged for an offsite with the agency senior executives. We came up with five ideas we felt that we could pursue to the stage of a business case. Did we get pushback? I got push back on everything. The field managers didn't want to lose maintaining the agricultural operator list in their state, which is the issue that received the most initial resistance. This centralization was to occur in the new data collection and processing center. This would reduce the number of staff that we need in each field office by 1–3 people.

So the ideas really weren't my ideas. It was a collaborative process that we came up with. They were ideas that came from the managers in the organization; things that they might do. I think the organization was pretty static. If NASS tried anything it would be one thing at a time. So there was resistance to putting all these things on our plate at one time. We had identified five large projects. This was a lot to tackle. That was one of the things that we fought initially. I don't think people thought anything would really happen. There was a lot of denial. It was only once we made substantial progress on the projects and things started to happen that more acceptances were found. I don't hear the issue, 'what is our priority anymore.' They know what the priority is and even if you put something out new, they don't say 'oh we can't do that.' That is something you would hear a lot about initially.

I: Do you think it is because they are getting used to the changes?

C: I think the first change was the hardest; now there are more acceptances. Maybe employees don't like it, but we are in a different environment and we are not going to be stable anymore.

I: How did you motivate your people? How were you able to overcome the pushback?

C: I engaged an executive coach to help me manage an environment of change. In the process of coaching me, he came in and worked with my team. Some of the people on the senior team who were not as committed to the impending changes left. So I was able to select new people who were willing to lead in a changing environment. We now have a team of people on board who are working together to lead transformational change. But we didn't have that for quite a long time.

I: It sounds like an adventure.

C: Yes, it's been an adventure. I was much more naïve when I initiated this transformational process. I

didn't have this picture. It has evolved; we've made a lot of progress in achieving our goals. [To review the goals] one is to become more efficient, also to improve data quality, to enhance the research program, and to increase the skill set of our employees.

I: What is the goal of increasing the skill set of the people?

C: It is really related to the fact that we would have more capabilities in organization. We could conceivably do more different kinds of work for other people. Previously, we had not been hiring PhDs. We now have been able to hire 8 or 9 PhDs into a small research group that makes a difference. I have seen the whole skill set of the research team go up tremendously in the last few years. In fact we got a compliment at the 2012 International Conference on Establishment Statistics (ICES) from the program chair who said that the level of what NASS is doing now compared to its role at the previous ICES conference is more improved than that of any other agency. We had quite a few people in that conference making presentations.

Summarizing, we have lot of new hires with doctoral degrees. Also, the overall skill set of our people in research has gone up because they have been working with academics, and they have other people with a higher level of expertise working with them so their level of competency has increased to be able to interact in a meaningful way.

I: What do you view as your greatest accomplishment at NASS?

C: I think it's a change in the whole environment and how people work and how they think about their job. It will still go on; hopefully these changes that are in progress will continue [after I am gone]. A lot of our application systems designs aren't complete because they take a long time to change. But we have completed the more critical ones to help us begin to work in a different way.

I: So just a little bit of a follow-up, do you think you stayed because it was a challenge... because you wanted to do it... because you said you took this job after you had retired. Or was it that you felt that they needed you? Or possibly a combination of both?

C: A combination of both. I felt, when we went to this operation center, when we really decided that we were going to open this... the person I decided to ask to lead the center was one of our senior executives. He asked me 'if I would stay and support him?'. So I made the commitment that I would stay until we had transitioned to an operational division. How long that was going to be I didn't know. In the process we then got

into this other change with the field offices. It really affects a lot of people. . . but it has taken us a long time to get approval and people haven't known what is going to happen to them. So I can not leave when the situation is so uncertain for our employees. That is a personal commitment. Also I am a problem solver and I thrive on solving problems. I need to get through this uncertainty with my staff so they know what is going to happen.

I: So you mentioned you want to get the field offices up and running by the end of the year?

C: What we said was before the mail-out of the census in December 2012. [NOTE; That did not happen until almost the end of 2013.]

I: So going on, what drives you everyday? What gets you up in the morning?

C: I think it is the desire to make a difference and to make improvement in NASS. I am having fun. I am enjoying it. I have a great group of people to work with, so that makes life enjoyable. One of the reasons why I went to NASS was because my previous experience with NASS demonstrated to me that NASS had very committed employees. In terms of people to work with, they are responsive; if you ask staff to do something they come up with a way to do it. It was an organization that was motivated and customer oriented. Never mind they were fairly static. . . if you threw something at them they would probably come back with a way to do it.

So that is what I did. I threw some things out to the senior managers and took them a step further and said 'let's go ahead with this and see what we can do.' And I don't think anyone thought those business cases would go very far in 2009. I don't think the senior managers did. At the time probably only half of the senior managers were thinking about anything innovative or new.

I: You gave them the opportunity?

C: I gave them an opportunity and was quite surprised at what came out in a number of cases. I found someone to manage the system piece who was totally committed and was both a good people person and had the IT skills and knew the business. You don't often find someone like that who works on systems and knows enough to get people in the organization motivated and is willing to bump heads when one person says 'I want to do it my way.' That person said 'we will figure out the best way. We won't just let this go along.' That's the way it usually happens. We even bumped heads on data collection systems. We had three going and we said 'no, it was a waste of resources. Let's see what we can do and move it to one.'

So overall, finding a few people that were very committed and really understood where we were going was very helpful, a few senior people. And then the management coach was very helpful.

I: What was the role of coach?

C: The coach was engaged personally to help me, and then the coach found out who I was working with. Then we ended up doing some teamwork and he ended up coaching a number of my senior people. He gave me some insights in ways where I could work more effectively. I would recommend using an executive coach to any senior executive

I: Why did you try to involve your people in statistical societies outside of NASS?

C: I have tried to do that in all of my jobs. I would say that NASS is a little different than the Census Bureau in how people go through their career. People in NASS generally stay 30 years and they don't go anywhere else. They are hired by the organization after they are out of school and they stay with the organization in different jobs. Most of them are hired in the field office and they stay there for 5–10 years, then they go to headquarters. Most are agricultural statisticians or mathematical statisticians with a master's degree. Most are pretty well connected inside of NASS and within agriculture, but not outside of NASS in the statistical community.

As I mentioned earlier the organization had been pretty static. One of the things I recognized that would be helpful for them is to get out to see what other people are doing in official statistics and the survey community – to get involved with Washington Statistical Society, American Statistical Association, American Association of Public Opinion Research, Field Directors – a lot of different professional activities to help them link up with academics and other people in the survey community. One of the things we did in the research division is that we had an agreement with the National Institute of Statistical Standards at Research Triangle in Raleigh, North Carolina. We had three projects each of which had academics, post-docs, doctoral candidates, and NASS employees working together over two years. So NASS researchers were working with academics, which gave them some more exposure to statistical thinking.

Through all of this, the NASS staff have gained new ideas. One of my senior people attended the fall 2012 International Association of Official Statistics meeting just to learn what is going on in the world. I have people just getting out to international conferences, ASA or JSM. There was some previous participation

in JSM – the first year I was at NASS we had 4 or 5 staff at the meetings in Denver in 2008. At the 2012 International Conference of Establishment Surveys that I just mentioned, we had 20 people there all giving presentations – a huge difference between 2008 and 2012. Professional meetings are a way to get staff connected with others who are working in their area. Now that staff are starting to see the benefit I haven't had to push things, but if I see that there is something someone might benefit from, I suggest they participate.

I: Optional?

C: Yes it's just optional, but staff need to present or have an official role to attend most meetings. Recently, we have had to be more selective because cuts in our travel budget has made such participation more difficult.

I: How do you think you were able to make all of these changes?

C: There have been a few people who wanted to make changes at NASS but I think in an organization that is as internal as NASS, where people come up through the ranks, it is very difficult for someone in the organization to initiate change. It was easier for me to do that than somebody within the organization. I didn't know as much about the details of NASS' operations, but I knew enough. I knew the people and I knew the organization. I also had established credibility because I had been to other places. Someone from within the organization would have had difficulty making these changes because they would have been met with resistance from their colleagues in the organization. I just can't see how anyone internally could have made these kinds of change in the past few years, because the organization had a very strong culture.

It is similar to what happened in the Census Bureau with Bob Groves. Bob came in and made a lot of changes (he now has gone on to Georgetown). He had been at the Census Bureau once before for just a couple of years. So he knew a little bit about the Census Bureau but he's very recognized there. He came in and started a lot of change in the organization similar to what an associate director had started and accomplished, but it had taken the associate director 20 years. Bob got things going in 3 years. The associate director had to work within the organization all the way up. Bob came in and said, "hey we need to do this and this is how are we going to do it." Not in the way they had been working. So there is some leverage to coming in from the outside.

[A side note:] I told my undersecretary that I don't think the next administrator should be an external per-

son because I think we need to get through this transition before the agency has an administrator with a different direction. NASS needs to bring the current projects into a steady state before it will benefit from somebody with new ideas and another vision.

I: What more do you see for NASS? What more would you like to accomplish?

C: Well there are many smaller things that will support the transition here. I don't think there is much else that I would strive for. I would like to get some estimates released using the statistical models that have been developed through the research program. I would like to publish some estimates with statistical documentation, measures of variability and quality that describes our process so that a statistician might be able to replicate it with appropriate data. I would like to make sure we can recruit individuals whose skills will endeavor to lead the organization into the future.

[NOTE. A big step forward occurred with the May 2, 2014 release of the 2012 Census of Agriculture that provided a model-based capture-recapture adjustment for undercoverage, nonresponse, and misclassification with estimates of percent adjustment for each error and also cvs at national, state, and county levels.]

I: Is there a timeframe for how long it will take?

C: I think it is going to be several years. First of all the people that are most resistant are those who have been here the longest. The people that we hired recently are all very excited. A lot of it is up to the senior managers to make sure their people understand the changes that are needed. For instance, I have been reading the survey procedures just to see if people are thinking in a new way. If they are not I ask questions. I know that staff may not understand the organizational changes if their role or impact is not reflected in the survey procedures. Some staff are still thinking we are doing things the way we used to do things. They are not recognizing our new capabilities. So that is generally at the 12/13 levels. So it will take a while for people to really understand change. Change is hard for people at all levels. Hopefully everyone will get the picture and recognize the new capabilities that the organization has. We keep trying.

I: Is there anything you feel impressed to talk about?

C: Actually one thing I forgot to mention that is critical in government is to get your superiors on board and it is not just your direct boss, it has to be as high up as the secretary's office. We were able to get the secretary's office on board in our initial effort in the spring

of 2010 to establish a National Operations Center. It was the first time we were able to let the office know that we had something that we wanted to do that was transformational. Since then they basically have been supportive, but there have been obstacles that were put in our way – many because of government regulations.

There has also been help. For instance in our 2012 budget, I mentioned we had these terrible 12% cuts in our House and Senate marks. We told the department we will need to cut some of the programs now because if we didn't do it now we would have to do more cuts later as we didn't have an adequate budget. The department wouldn't let us eliminate the programs. So finally the Secretary said 'I will go to Congress and tell them what programs we are going to eliminate.' He sent a letter in October 2011. What happened was we got a 6% cut instead of 12%.

Then we had to get approval of what we were going to reinstate, which programs we were not going to cut. So we put forward what we were going to do and the department came back and said 'are you still going to be able to do the CAPI initiative you are working on? Make sure you have money to do that.' So that is one example of their support.

Through her dedicated service and professional expertise, Dr. Clark has dramatically improved many components of the National Agricultural Statistical Service. She has improved the statistical estimation process and transparency. She has faced budgetary challenges with poise. She has demonstrated great vision with the regionalization of the field offices. Her dedication to her employees, both in challenging their skill sets and encouraging them to participate in organizations outside of NASS, has been exemplary. She has displayed great leadership skills in building teams. It was through these teams that her vision could be dispersed to all within the organization.

It was a pleasure interviewing Dr. Clark. She certainly has demonstrated courage in her statistical career.

Bibliography

- J. Berry, Fiscal Year 2011 Presidential Rank Awards Program. CHCOC. N.p., 26 Apr. 2011. Web. 12 Apr. 2013.
- M. Couper, R. Baker, J. Bethlehem, C. Clark, J. Martin, W. Nicholls and J. O'Reolly, Computer Assisted Survey Information Collection. Wiley and Sons Publishers. <http://www.wiley.com/WileyCDA/WileyTitle/productCd-0471178489.html>. October 1998. [This is accurate and an article that I co-authored is in this book is listed below.]
- Meet NASS Administrator Cynthia Clark | Amstat News. *AMSTAT NEWS*. N.p., 1 Dec. 2011. Web. 9 Oct. 2012.
- News and Announcements. Iowa State University. <http://www.math.iastate.edu/News/News.html>. 2011. [NOTE: This doesn't provide any new information].
- Newsletter | Volume 41, No 3: Fall, 2011. Caucus for Women in Statistics. <https://www.caucusforwomeninstatistics.com/wp-content/uploads/2010/05/CaucNewsletter11-Fall-2011.pdf>. Fall 2011. [NOTE: More complete information on the activity noted is in the ISI article noted below. This may be redundant.]
- Activities of the ISI Committee on Women in Statistics in Dublin. International Statistics Institute. <http://www.isi-web.org/component/content/article/14-news/news/438-2011-july-cws-news>. Jul. 2011. [This gives a good picture of my professional activity as chair of the ISI Committee on Women in Statistics from 2008–2011].
- NOTE. I don't know what your organization principle is. I have added a few publications in areas in which I have contributed where there is a publication. You may want to re-organize.
- Official Statistics: Diverse Opportunities and Challenges/Amstat News. *AMSTAT NEWS*. Oct 2008, pp. 39–40.
- The Joint Program in Survey Methodology and its Impact on the Federal Statistical Agency Workforce (with G. Donnalley and R. Tourangeau), 2004 Proceedings of the Section on Statistical Education, American Statistical Association, Toronto, Canada, 2004.
- Quality Profiles and Data Users (with P. Doyle), Proceedings of the International Conference on Quality in Official Statistics, Stockholm, May 2001.
- Quality Program at the U.S. Census Bureau (with C. Landman, G. Donnalley), Proceedings of the International Conference on Quality in Official Statistics, Stockholm, May 2001.
- Research at the United States Bureau of the Census (with C. E. Hoy), Research in Official Statistics, Eurostat, Luxembourg, Belgium, December 1999.
- Training for the Future: Addressing Tomorrow's Survey Tasks, (lead author and editor), Statisti-

- cal Policy Working Paper 27, Subcommittee on Survey and Statistical Training in Federal Statistical Agencies, Federal Committee on Statistical Methodology, Washington, D.C., September 1998.
- Development and Implementation of CASIC in Government Statistical Agencies (with J. Martin and N. Bates), Chapter Four in *Computer Assisted Survey Information Collection*, Wiley, New York, New York, 1998.
 - Technical Academic Training for Employees of Survey Organizations, (with R. Schuhardt) 1994 Proceedings of the Section on Government Statistics, American Statistical Association, Boston, Massachusetts, August 1994.