Practical Significance | Episode 59: The Data We Need: The State of Federal Statistics



Donna LaLonde: Welcome back and thanks for joining us for the November edition of *Practical Significance*. Ron and I

are truly honored to have two remarkable individuals joining us as guests. Their work has contributed to our profession in profound ways and so particularly delighted to ask Nancy and Connie to tell us a little bit about themselves and their backgrounds in government service. And Connie, I'll start with you.

Connie Citro: Well, my doctorate is actually in political science. My dissertation used census data and when my husband and I moved to Washington D.C. in 1967 for his research, I needed a job and I fell into one at the Census Bureau out in Suitland, Maryland in the old buildings.

I was in a unit that was working on helping data users effectively use computer summary files and microdata files, which for the first time were going to be like official products of the 1970 census. In addition to the traditional printed reports then, I was at an organization that expanded on training and education and software writing. We trained the first generation of data librarians, universities and in state and local governments. I was then at Mathematica for 10 years working on income and poverty data and analysis.

In 1984 I went to the Committee on National Statistics at the National Academy of Sciences to direct a study that was going to look into the possibility of statistical adjustment for the undercount in the upcoming 1990 census.

I stayed there, have been there ever since, doing studies on various aspects of federal statistics. Not in the federal government, but evaluating, advising, et cetera. Just a whole variety of statistical programs, particularly the Census and poverty measurement, but other programs as well. I was the staff director for a number of years. I am now a part time senior Scholar with the Committee on National Statistics and, I'm happy to say, doing projects with ASA.

Donna LaLonde: See folks, I didn't lie: "profound ways!" And Nancy, over to you. Tell us a little bit about your background in government statistics and the profession.

Nancy Potok: I've actually worked in all three branches of government at some point in my career. And I've also been a political appointee and a career appointee. And I have worked outside of the statistical arena and inside the statistical arena. And I've worked in the private sector and in the nonprofit sector related to social science research.

So in the government, probably what's of most interest to people were my last two jobs before I left government and started consulting, and that was being the deputy director of the Census Bureau and then moving over to the executive office of the president and OMB and being the chief statistician of the U.S. I did in some way work on three decennial censuses, 2000, 2010, and 2020. But in 2010, I was a deputy undersecretary at the Commerce Department during that census. So, a little of this and a little of that.

Ron Wasserstein: So, neither of you have been on the US Olympic team, but it seems like you've covered about everything else between you. And I wanted to say to you, Connie, that thanks to Fritz Sher and I have a brick from the old census building.

Connie Citro: I had a brick.

Nancy Potok: I had that brick, too.

Ron Wasserstein: Fritz made sure I had one. So, I want to talk to both of you about the project, the nation's data at a crossroads. You were members of the team that released that report. And I'm going to ask what keeps you up at night when you think about the future of federal statistical agencies and what are your biggest concerns based on what you saw in that assessment? Nancy, let's start with you.

Nancy Potok: From an overarching standpoint, the big picture, I really worry about the ability of the statistical agencies to modernize and stay relevant in the current rapidly changing data environment that we're in, particularly because there's so many sources of information that are now competing in a way, with the statistical agencies.

And people have choices about how fast they want the data, how granular they want the data, and how important it is that it's the gold standard, which is what the federal statistical agencies have always relied on. So, I worry about that future in the position and the importance of the statistical agencies in that kind of environment. And so, the pieces of that are critical to the people at the statistical agencies in their leadership.

Right now, we see a situation, and why we're at the crossroads is because we're seeing lots of people leaving across the federal government.

But it's hitting some of the statistical agencies particularly hard where they're losing key staff and institutional knowledge at the same time. I think right now it's really difficult to recruit mathematicians and statisticians and data people into government. I mean, why would you really?

You would just have to be really willing to take the long view. And I am not sure recent graduates and others are going to do that. Plus, there is a hiring freeze. So, I worry about losing people, not being able to replace them. And then they are resulting in a loss of trust

from the users, from the public, researchers, Wall Street, everyone who is dependent on those numbers, policymakers. And I think once you get to that point, it becomes difficult to recover.

So that's why we say we're at a crossroads because we are either going to take some pretty drastic action now and say we care about this and we're going to address it or, or we're just going to let people bleed out of the system, not replace them and really put the agencies in a position where even the best leadership in the world would have trouble recovering from that in a reasonable amount of time. So that is what keeps me up at night.

Ron Wasserstein: I hear you, Connie.

Connie Citro: Yes, my biggest concern is the loss of staff. Both the new people with the new skills, many of whom came in as recently into federal service and they were the first to go because they were still in probationary status, and then the experienced folks who are taking these buyouts because why would you not. You cannot trust this government to keep its promises about employment, whether you are going to get paid during the shutdown, et cetera, et cetera. The statistical agencies are very labor intensive.

It is not like an organization like NSF where the staff are giving out research grants to other people who are doing the research.

The statistical agencies are production shops, and they need a lot of people and talented people willing to work hard and selflessly for the public good. And they have been staffed by great people. But again, trying to keep people and recruiting people is hard and again the loss of trust.

Also the agencies have been the victims of, I would say neglect on the budget front with declining budgets for many of them starting before this administration, when you adjust for inflation and the loss of purchasing power and also as part of being the gold standard, they have long running data series and, and because of things like businesses and households don't want to answer surveys anymore. And this is true worldwide; it is not just true here.

There is a real need to modernize and improve and use blended data and other techniques for some of the major data Sets that underlie principal economic indicators like the inflation rate and the unemployment rate.

But for that you must have money not just to reinvent your program, but to keep the old one running until you have really proven in the new one. In other words, you cannot just drop in a new one overnight and then find out there are problems and glitches and go back to the drawing board. You can get away with that in the private sector.

So, with these staff losses, with budgets tightening and having been on downward slopes in inflation adjusted terms for a long time, the statistical agencies are in a tough place.

Ron Wasserstein: So, thanks for that. Connie and Nancy, I want to go back to you because you mentioned the need to modernize, and you and Connie are part of a team that is working on a project called Modernizing the Federal Statistical System. Could you tell us how that project came about and what its primary goals are?

Nancy Potok: The need to modernize the system has been recognized by a number of people for a while. And over the years there has been a lot of groups that have studied the federal statistical system in particular because of its decentralized nature and looking at structurally, are there better ways to have an efficient system that in an era of reduced resources can still move forward?

And so, I have been thinking about that for a long time. It was a very high priority for me when I was chief statistician to try and move that effort forward.

And I was a commissioner on the Evidence Based Policymaking Commission during that period. And we recommended a lot of things that really went towards some of the things that Connie mentioned. More combined data, easier data sharing, really looking at the system as a whole to create data that answered the questions that people wanted answered.

We were able to accomplish some things while I was chief statistician but mostly identifying all the many things that had to be done in the future. But then of course, as I think some people know who pay attention to this, after I left government, the position was vacant for a long time, and so things did not really get off the ground. And when this new administration came in this year, we saw a lot of disruption. And disruption can be destructive, but it also creates opportunities.

And I'm a very optimistic person and I think there are others like that where when you see radical change happening, that's an opportunity to get involved and to say, well, since everything looks like it's changing anyways, maybe there's a way to help direct or structure or recommend ways that that radical change can actually accomplish these goals that we've been looking at and many people have been looking at for a long time. So, a group of us got together and said, can we put together a white paper for discussion that takes advantage of this radical change? W

We're in that environment disruption. And a lot of the things that we want to do require technical changes in technology, in use of AI and different ways of gathering and using data. So, you can do those in a disruptive environment. Can we take what looks like destruction and make it positive? S

So the group started meeting and we have held two, what I would call focus group conversations so far with people who are data users and people who think about structure in government, who are very familiar with the structure of the federal statistical system to try to get ideas. What do people think are priorities? What's important? What should this look like at the end?

Going to have another group like that to meet and talk about strategies. But in the meantime, what we're trying to do is come up with a set of recommendations that can accomplish a positive realignment and restructure across the system in this very disruptive environment that will meet the needs of people and be out there as a discussion point that has really solid actions.

Because I don't think any of us are giving our time for this just to have one more report on a shelf. We want to see real actions come out of this. And so, we're trying to think very about things that can be done in the short term, in the medium term and in the long term.

Donna LaLonde: Thanks for that, Nancy. Following on that, Connie, Ron indicated that you have been serving as a key advisor to the project. So, what do you hope it will achieve for the federal statistical agencies?

Connie Citro: Thank you. Well, the recommendations that this effort is coming up with are in the weeds, nuts and bolts, but very important things like data sharing among the agencies. We are not Statistics USA like Statistics Canada, where they can use administrative data, for instance, across their whole portfolio.

We must negotiate among the agencies. And there are some forms of data, particularly tax data, that are very limited in which agencies can have access to them so that we have, like, duplicative business lists among BLS, Census, BEA, et cetera. And one of my big hopes is that if these recommendations are enacted then the agencies will be able to act more like an integrated Statistics USA.

I personally would not mind seeing an actual Statistics USA here. But that is clearly a step too far at this point. There are all kinds of laws and congressional committees and whatnot that would need to be dealt with.

But if some things like data sharing could genuinely again among the statistical agencies in secure environments can become routine and easy to arrange, my hope is that the agencies will go to town on creating blended data sets from surveys, administrative records, commercial data, what have you to improve the quality and the utility. And there are areas where this is desperately needed. Our measures of income are one of them.

There are many other areas the agencies should such legislation or regulations or executive orders or whatever make this possible, the leadership will need to step up and be willing to say yes to projects that work collaboratively with other agencies, or they're involved various kinds of data.

But I'm confident that they will once they genuinely see that this is going to be much easier than it is now where it can take years to negotiate mou or you just can't get the data at all, even though they're all statistical agencies, I'm hopeful that we will really see some major improvements in again quality and utility of key data sets.

Ron Wasserstein: So, thanks, Connie. So, these are big projects, and you are both really, busy. So, I think our listeners would like to know why are you doing this? What made you decide that you would work with ASA and take this on? And Connie, let's start with you first.

Connie Citro: Sure. Well, I've been a member of ASA for some decades. I personally benefited from the contacts I've made from ASA publications in a host of other ways. And ASA had its origins in critiquing the 1840 census, which I resonate too.

So, when Steve asked me to sign up for the assessment project first, this other modernizing project came along later, I thought it would likely be fun and interesting, and Steve would be great to work with, and he was signing up other great people and hopefully it would be impactful. I did not realize how it would broaden into well, the amount of work that was required to dig in to find out what was going on got to be quite something.

But it was so interesting and so important, particularly now when careful documentation of what is happening and the ultimate impact on the data that policymakers and the public use is so critical. So, I am glad that I signed up. Even though I have spent some weekends in midnight oil and so on to get our reports out. It has been truly rewarding.

Ron Wasserstein: We're glad also. And so, Nancy, I'll ask you the same question. I'm just going to word it differently. What were you thinking?

Nancy Potok: Well, I had a long affiliation with ASA and had chaired another group back after the 2020 census looking at the quality of the census. And Rob Santos and I had co chaired that Quality Task Force. And a couple of the people who put this project together had also worked on the Quality Task Force.

So, I knew what I was getting into in terms of volume of the work. But I felt like it was a really important effort and something that ASA was absolutely positioned to be sponsoring in terms of looking at the whole system, not just sort of one data product or the census, which of course is big, but really looking in monitoring on an ongoing basis, the whole system. So that intrigued me and especially the challenge of coming up with the metrics.

ASA has a reputation for being credible, for being objective, of being nonpartisan. It's a very important space that ASA represents and occupies and people listen when ASA says something. And I wouldn't put my effort into something that I didn't think that people were not going to pay attention to.

So, it wasn't just a couple of people who just decided to do this. It was an ASA branded and sponsored and supported activity. And that's why I did it because it was ASA. I really want to thank Steve Pearson. I worked with him both on the Census Task Force, the quality report, but also on these two projects. And he has just done a magnificent job of keeping us focused and organized and talking to the right people. So big thank you Steve.

Connie Citro: I totally agree. Steve is a great resource for ASA and the profession and the statistical agencies and everything else that he keeps track of and works on. He's really great.

Donna LaLonde: Well, we are grateful. Thank you for acknowledging our colleague, Steve Pearson, who is the Director of Science Policy. He is indeed wonderful to work with. So, we'll give Steve a shout out as well.

We have some traditions at *Practical Significance*, and this one is one of my favorites. And that is I always like to add to my TBR or my podcast listening or movie watching or music listening. So, Connie, I'm going to ask, what are you reading, listening to and or watching that I can take notes on?

Connie Citro: Okay, well, I am a reader, including podcasts. I tend to wait for the transcript.

So anyway, I've recently benefited from reading the *Autobiography of Malcolm X*, something I should have read many years earlier on *Twenty Lessons from the 20th Century* by Timothy Snyder, a doorstop but fascinating book called *Latino: A Portrait of the Nation's Largest and Least Understood Minority* by Marie Arata, and *The Doorman*, a novel by Chris Pavoni, which is a love letter to Manhattan, among other things. I also must confess that I look forward each year to the latest John Grisham thriller, which is supposed to hit my Kindle next week at about this time.

Donna LaLonde: That's great. Nancy, what about you? Reading, watching, listening. All the above.

Nancy Potok: Well, I'm very impressed by Connie's list. I have to say. I'm an escapist when it comes to reading- pleasure reading. Not that it isn't pleasurable to read a lot of white papers and reports like that, however. So, I spent the summer binge watching a few shows and watching old musicals on tv.

I saw the *Sound of Music*, *Mary Poppins*, although I did watch the *Enola Holmes* series, which I adore. I love *Enola Holmes*, I like *Sherlock Holmes*, and I have watched all the episodes so far of *Slow Horses*. It is a phenomenal show. I love it.

Reading wise. It's very eclectic. I read Primo Levi's *Chemistry*. I read Mel Brooks autobiography *All About Me* which was hilarious. I discovered Barbara Kingsolver. I hadn't read her books before, but I really wanted to read *Demon Copperhead* and I liked it a lot. So, I read the *Poisonwood Bible* and then there was a new translation of *The Odyssey* that came out. I was really interested in that because it was the first time a woman had done the translation, and it was great. I loved it. The story never gets old.

Connie Citro: Rosy Finger Dawn... Yes.

Nancy Potok: I did not do serious political science or social science reading. I just needed to like escape into the pages or the screen.

Donna LaLonde: Wonderful. These are all great recommendations and definitely have added to my TBR list. Thanks so much. This has just been fascinating conversation, and we are so appreciative of your time and talent.

We also have another tradition on *Practical Significance* and that is Ron's Top 10. So, I will turn it over to my colleague Ron for his Top 10.

Ron Wasserstein: Thanks Donna. Earlier this year at the Conference of Texas Statisticians, I listed the top 10 signs you are a Texas statistician. At a recent Houston Area Chapter meeting, I was offered the opportunity to do a similar list, one that recognizes that Houstonians are a breed of their own. I'll share with you what I shared with them. Herewith I offer "The Top 10 Signs You Are a Houston Statistician."

Number 10: When you talk about a flood of data, you aren't speaking figuratively.

Number 9: You can talk fluently about oil production efficiency, economic indicators of the space program, and analysis of electronic health records, sometimes in the same sentence.

Number 8: No matter what you are analyzing. You throw in humidity as a covariant.

Number 7: You don't know how far away anything is, but you know how long it takes to get there, accounting for day of the week, time of day and weather forecast.

Number 6: Hurricanes are not considered outliers. Number five. You can solve almost any numerical problem but can't figure out why the Katy Freeway still isn't wide enough.

Number 4: Team meetings begin with "Houston, we have a problem" and end with "Houston, the analysis is complete."

Number 3: You model home run distances while sitting in the Crawford Boxes.

Number 2: And speaking of baseball, as far as you are concerned, the Astros still play in the Juice Box.

And the number 1 sign you are a Houston statistician? You can have a rational database discussion about anything except barbecue.

Well, that's it for another episode of *Practical Significance*. We look forward to continuing the conversation next month.