

Beyond 2020: How Insights Evolve U.S. Census Bureau Counts

Advertising Research Foundation Conference, New York City

Director's remarks as prepared for delivery

April 25, 2023

- Good morning everyone!
- Let me start by thanking the Advertising Research Foundation and especially my good friend and former colleague Jay Matlin for this invitation.
- It's an absolute honor to address you.
- And I very much appreciate the mission of the ARF—that of using research to advance the scientific practice of advertising and marketing.
- I appreciate the focus of your Cultural Effectiveness Council on such topics as inclusivity and algorithmic bias.
- We at the U.S. Census Bureau also use research to inform the development of statistical data products on our nation's people and economy.
- We both realize the necessity of connecting with your audiences, your customers.
- And doing so in a way that is culturally relevant and adds real value.
- I'll tell you a priority of the Census Bureau is that of closer connections with our partners, our stakeholders, our data users, and the public more generally.
- We need to better understand the diverse needs of communities from urban and suburban neighborhoods, from rural counties, farms, and ranches, and even from tribal lands.
- And, yes, there are the needs of federal, state and local governments as well as the business sector, policymakers, scholars, and so on.
- As you know, we provide a huge amount of economic data on a continuous flow...
- These data are used by ARF members and many others to make important decisions.
- That's why understanding the needs of our diverse constituencies is important to me.
- I'll say a few words about that later.
- But first let me return to my original statement, that it's an honor to be here with you today.
- The ARF has been a valuable, long-time partner to the Census Bureau, and I want to personally thank you for your partnership.
- As we all know, the pandemic challenged our society and impacted our most vulnerable communities as well as the entirety of our economy.
- When the pandemic's grip on society was strongest, the Census Bureau still had to deploy hundreds of thousands of enumerators to knock on doors across our nation.
- And we did just that....but we didn't do it alone.

- Without your support, and the support from all our partners and stakeholders, we couldn't have achieved the measure of success we did attain.
- We recognize and deeply appreciate that.
- And we learned from it.
- That's partly why I'm here today.
- Not just to thank you for helping during an enormously challenging period, but to sustain and strengthen a mutually beneficial, continuous partnership.
- So, in the spirit of strengthening our partnership, I'm delighted to be here to talk about how insights evolve our Census Bureau counts.
- But I'll talk about it from a perspective that I'm hoping will surprise and maybe enlighten you, at least a little.
- I'll start by telling a story about something I saw in the advertising research world over a dozen years ago.
- And it has relevance to my topic to you today.
- It was about measuring the radio stations people listened to.
- You remember that?
- It offers an interesting glimpse into the adoption of new technology.
- Now, radio station ratings have been around for a long time.
- And up to that point, the legacy method had one of self-reporting.
- A sample of people were empaneled and regularly asked to report the stations they listened to and how often and how long they listened.
- But then came exciting new technology that was designed to collect more accurate data on listenership.
- Under this new method, panelists carried a small battery powered detection device on their person.
- It not only captured which radio stations were being listened to, but also recorded the date and length of the listening periods.
- The key to data capture was an inaudible signal that was being transmitted as part of all radio broadcasts.
- In principle, this method removed reporting bias. Who could ask for more?
- Unfortunately, a problem arose.
- Although this new method left most stations with listening ratings consistent with those of self-reported, it changed other ratings pretty dramatically.
- And not just some random stations.
- Specifically, this new approach significantly lowered listenership for Black and Hispanic stations.
- And that meant significant drops in ad revenue for minority radio stations.
- The industry scrambled to understand the phenomenon.
- There were many assessments and plenty of explanations to go around.
- Some focused on the sampling frame for the panel.
- Others were concerned with differential device compliance by panelists from various demographic subgroups.
- There even were concerns about sample sizes.
- As you might expect, there was lots of focus on the scientific and technological aspects of the methodology.

- But I always wondered if there might another factor at play...one that wasn't explored much if at all...or at least I never heard about:
 - That factor was culture.
- I'll illustrate it by going back to my childhood, when I was a little kid, 3 to 5 years old growing up in San Antonio.
- Let's return to the days of the late 1950s. (Oops...I'm showing my age.)
- During that time, my abuelita, my grandmother, cared for my sister and me while my parents worked full-time at Kelly Air Force Base.
- From the moment she walked through our door in the morning, to the moment she left in the evening, she had the local Spanish language radio station of the day, KCOR—the good neighbor station—she had it playing in the kitchen.
- I can still hear corridos, rancheras, and mariachi music ringing in the recesses of my memory banks.
- The radio was on whether she was in the kitchen cooking, or elsewhere...like taking a quiet nap with us in the back bedroom, or hanging clothes outside in the backyard.
- Now, I'm no time traveler, but if I went back in time, and asked her what station she listened to and for how long, what do you think she'd say?
- I think she'd say she listened to KCOR all day, every day.
- And to me that would be a reasonable answer.
- In fact, to this day, I've seen similar patterns of radio usage with Latino work crews in Texas—from painters, roofers, construction workers, mechanics, even landscapers.
- And I wouldn't be surprised if they'd self-report the same thing, even if they sometimes weren't within earshot, or receptivity of a listening device.
- But it does beg the question: What does it actually mean to be “listening?”
- Perhaps culturally, listening means something different to different demographic groups—racial, ethnic, immigrant, and so on.
- We find ourselves dealing with these issues all the time at the Census Bureau.
- The concept of “work” itself is changing with a burgeoning gig economy.
- It challenges our ability to collect information about what we do for income as well as the amount of income generated.
- We're challenged in the measurement of race and ethnicity in a nation that is becoming beautifully more diverse.
- The same applies to measuring our economy with the continuous emergence of new industries.
- Historical lenses we use to formulate, design, execute, and interpret research deserve to be challenged.
- Returning to the cultural context of my earlier story, consider this:
 - How about we explore the benefits and limitations of multiple, culturally relevant measures that align with culturally distinct subgroups of our population.
- Perhaps it's a new way to envision segmentation—not just with separate studies, but with separate, culturally relevant ways of measurement.
- In the radio station case, a crazy idea would be to capture both self-report and listening device data.
- Then find the right culturally relevant combination that aligns with each segmented population you are considering.

- Yeah, that's kind of crazy. But maybe offering such a different perspective can spark more salient, cogent ideas.
- At the Census Bureau, we're looking to be creative in that way, to think differently about our challenges so that we can harvest new insights in a nation that is increasingly diverse.
- Those new insights can then help us develop better methods and products to serve the public.
- I do think it's worthwhile—even obligatory—to regularly ask ourselves questions like:
 - To what extent should cultural factors be considered when adopting a new technological approach?
 - Or creating a new measure? Or interpreting them?
 - Or even questioning long-held practices and measurements?
- We don't ask those questions enough. But I think we should.
- This gets to the heart of what insights we seek, for what purpose we seek them, and how we go about generating them.
- Now, this discussion on culture aligns well with the broader situation we're facing at the Census Bureau.
- So, let's talk about that.
- As most of you know, the Census Bureau is our nation's largest federal statistical agency.
- We generate trillions upon trillions of data points and statistics annually, both on our population and economy.
- Our mission is to produce quality data on our nation's people and economy.
- We conduct three censuses—population, governments, and economic.
- At any given point in time, we're working on multiple surveys on people and businesses.
- They total over 130 surveys annually.
- Now, our passion to achieve our mission compels us think differently about how we approach our work.
- So, what does that mean?
- Well, the way I think about it, the Census Bureau operates at the critical juncture of three intersecting dimensions—mathematical sciences, the social sciences, and society.
- *Mathematical sciences*—including statistics, economics, computer and data science—they're frequently used to reduce data into compact data products and statistical estimates.
- *Social sciences* offer frameworks to develop measures like poverty, or methods for fostering survey participation by using social psychology, sociology, demography, and so forth.
- And then there's *society*.
- As you know, we're in the midst of a technological and global renaissance where society is rapidly evolving before our very eyes.
- We're changing the way we communicate with each other.
- We're increasing our reliance on data and new technology.
- We're witnessing changes to our social networks, how we work and play, and even how we live our day-to-day lives.
- All this impacts how we do our work at the Census Bureau.
- Now, here's what happens when the Census Bureau operates at the juncture of mathematical sciences, social sciences, and society.
- Solutions to data and statistical problems are no longer just a matter of optimizing squared error loss in a statistical estimation model, or calculating a margin of error, or publishing p values.

- We also have to account for social and even ethical factors.
- For instance, social factors can include different groups of stakeholders with competing data needs based on their own use cases. Right?
- Or laws that dictate confidentiality and privacy protections for the data we release.
- Or public trust that affects the extent to which quality data can be obtained through solicitation, as we do in our censuses and surveys.
- Or the availability of administrative records that call the question—perhaps naively—about the need to solicit data directly from individuals or businesses.
- All these factors influence the data we collect, how we collect it, and what we release.
- It's really quite fascinating when you think about it.
- And this is our reality as we prepare for the 2030 decennial census, and more generally as we continue with all our other censuses and surveys.
- It's an environment that requires us to think differently if we wish to achieve our mission.
- We need new insights, new approaches, creative solutions.
- Trying harder is not the answer.
- And how are we doing that?
- Through a transformation and modernization initiative.
- We're moving from our legacy approach that relies on a solicitation model that calls for asking people and businesses for their information.
- We are taking that model and flipping it on its head.
- Under our 21st century vision, the Census Bureau embraces a single-enterprise operation that uses common platforms to capture, process, and curate data.
- It features a data lake that ingests all sources of data, from administrative records from public and third-party sources to survey and census data.
- All these data sources will be linked to offer new, powerful, and unique data tools and statistical products.
- The systems that make up this single enterprise approach are well underway.
- But wait...there's more!
- A true transformation can't occur unless our staff similarly undertake their own personal transformation through a cultural change.
- That change is aimed at nurturing innovation and creative thinking.
- And that comes from infusing the principles of diversity, equity, and inclusion into our core values of scientific integrity, objectivity, transparency, and independence.
- And then using those in our daily work and to guide our decision-making.
- Doing this leads to better science, better designs, better methods, more accurate and relevant data.
- I know this because I have lived these values and principles over a 40-year career and seen firsthand the benefits that result.
- We're creating a value proposition that's fueled by diverse perspectives.
- And diverse perspectives are best produced by practicing inclusivity.
- And while inclusivity is necessary within the over ten thousand staff that make up our agency, it also applies externally.
- We realize from the pandemic that we can't complete our mission alone.
- We need external participation, external input, and ideas.

- We need continuous partnerships and a highly diverse partnership network...which, by the way, includes you.
- So how is the Census Bureau using insights to evolve Census Bureau counts?
- Hey, that's the title of my talk, remember?
- We're starting by rethinking how we do business.
- We're transforming from a silo-focused set of program areas to a single enterprise business ecosystem.
- We are turning our operational paradigm on its head from a solicitation-based set of censuses and surveys of people and businesses, to a data-centric organization.
- That means we switch from thinking "we have to do survey X to produce product Y."
- Instead, we say: "Let's produce Product Y using our data lake, which includes censuses, surveys, administrative records, and our master frames on businesses and households. Let's identify the gaps that prevent Product Y, and fill those in through a solicitation process—say a different type of Survey X or by acquiring a new data source."
- Ok, that was a mouthful.
- But it gets at the paradigm shift we seek, and it has implications for the 2030 Census as well as all of our data collections and statistical data products.
- Now, let me return to the notion of infusing the principles of diversity, equity, and inclusion (DEI) with our core values for one more important point.
- By embracing inclusivity and valuing diverse perspectives, we can tap the creativity and human capital of our internal staff as well as our external partners, stakeholders, data users, and the public.
- And we're doing that.
- For the first time ever, last November we invited the public to submit their ideas for how to conduct the 2030 Census with special emphasis on addressing historically undercounted populations.
- We received over 8,000 comments that are now publicly available.
- We're currently synthesizing them to feed into the development of our 2030 decennial operational design.
- And then there's our priority for outreach and community engagement.
- Almost immediately upon taking office, I launched a strategic, coordinated effort to engage with partners, stakeholders, data users, tribal nations, the government, and the public.
- This included the media, where I talked about a new vision of the Census Bureau that included embracing different ways of generating insights through the infusion of DEI principles.
- In fact, my first director's blog—which is on [census.gov](https://www.census.gov)—was on precisely this topic.
- It illustrated how a single diverse voice led to better science.
- Getting back to outreach, we're deliberately connecting human faces to the Census Bureau for the public to see.
- And how are we doing this?
- Through listening sessions.
- Through numerous conference speaking engagements, like this one.
- I've also been out on multiple field observations.
- I've met with tribal leaders from around the country.
- Throughout these engagements, we listened carefully, we strengthened existing ties, and we established new relationships.

- I must say: the experience has been profound.
- I engaged with rural America and witnessed firsthand the struggles and joys of the lives of farmers and small-town businesses.
- I visited inner-city neighborhoods; I spoke to local community leaders and pastors who recognized the value of local statistical data and expressed concerns about data quality.
- I witnessed the dignity of America's indigenous people and their honorable, indeed sacred way of life through living with nature.
- And I met with government officials, with scholars and researchers from across the nation to understand their concerns.
- So, here are some takeaways...some insights:
- We learned that it takes a community-of-the-whole to maintain a fully functioning and successful federal statistical agency.
- We need to seek and act on feedback from stakeholders, partners, and the public.
- We should be continuously communicating a value proposition that highlights the utility of our statistical data products.
- We need to expand and nurture a trusted-messenger ecosystem of partners and stakeholders that operates continuously, not just near the time of a decennial census.
- Such an ecosystem is a key for us to collect data from historically recalcitrant segments of our wonderfully diverse population.
- These types of insights are critical to helping us prepare for the 2030 Census and for advancing our transformation in its fullest sense. <<pause>>
- Well, I hope that gives you a flavor of how we are generating new insights to transform all we do at the Census Bureau.
- So, thank you on coming along with me on this journey of discovery.
- I've told some stories, shared some crazy ideas, but mostly tried to reach out to each and everyone of you, so that you know we at the Census Bureau care about your data needs.
- We want to do all we can to serve you better.
- And we look forward to a continuing and growing relationship.
- As I said earlier, there is much we can learn from you, and we very much need and appreciate all your support.
- Thank you for listening, everyone.
- I'll now take your questions.