SABEW Spring Conference—April 27, 2018

BEA's Statistics: Relevant, Secure, and Trusted

- ✓ Thanks, <u>Marilyn</u>.

- ✓ Good afternoon and thank you for inviting me to be a part of this discussion.

- ✓ As we just heard from Ron, Federal Statistics are an essential ingredient for good decision-making, and I think the interest that we saw around this morning's GDP release is a really nice example of that.

- ✓ Let me start with BEA's biggest challenge: And that's to keep our statistics up-to-date with the ever-changing economy.

- ✓ And we have to do this with (1) increasingly tight or declining budgets, (2) in many cases, declining survey response rates, and (3) an ever-increasing demand for timelier and more comprehensive data (both in terms of more detail and greater geographic information).

- ✓ So, I'll highlight a couple of ways we're keeping our statistics up-to-date and, at the same time, <u>trying to keep a check on our budget</u>. First is the <u>greater use of "satellite accounts</u>," and second is the <u>expanded use of "big data</u>."

- ✓ I'll start with satellite accounts. As you know, economic measurement—especially when we're treading into new territory— requires considerable research, experimentation, and feedback before we can incorporate improvements into our core sets of economic accounts. So, we've been expanding the use of satellite accounts that

allow us to (1) <u>highlight specific aspects or sectors of the economy</u>, (2) <u>get some initial estimates out the door very quickly</u>, and (3) <u>not worry as much about completeness and the need for "perfection."</u>

✓ As an example, recently there has been a lot of interest in measuring Outdoor Recreation (activities like boating, RVing, and snowboarding)—interest from both Congress and private-sector groups. Using the satellite account platform, this past February, we released an "Outdoor Recreation Satellite Account" that (1) defined the outdoor economy, (2) quantified its impact on the U.S. economy, and (3) highlighted a path forward for releasing information on outdoor recreation on a regular basis. And we did all of this in about 1 year—that's near the speed of light in terms of developing new statistical measures—and we did it with funding from 7 partner agencies across the Federal Government. <u>So, faster and cheaper</u>. [By the way, for those of you who are interested, it turns out that the outdoor economy accounts for about 2% of GDP, or about $375 billion dollars, annually.]

✓ As another example, in March, we released some initial numbers on the size and growth of the <u>digital economy</u>. This information will help us build a "Digital Economy Satellite Account" that will address everything from formally <u>defining the "digital economy," to developing new quality-adjusted prices for high-tech goods and services (e.g., cloud-computing services), to looking at intellectual property flows across countries</u>. Again, using the satellite account platform, we are able to focus in on important aspects of the economy, provide users with some key findings quickly, and develop results that can be used across BEA's other accounts.

- ✓ Now let me say a word about <u>big data</u>.

- ✓ Big data hold much promise for dramatically changing the way we <u>collect, compile, and publish information</u>. We have several projects underway, and we hope that, at the end of the day, these efforts <u>will not only improve our statistics, but also save us money</u>!

- ✓ For example, we're looking at ways that big data can help us improve our early GDP estimates. We're researching how we can <u>better measure categories of spending where we simply don't have good information in time for the initial GDP estimates</u>—for example, using commercial insurance claims data to estimate consumer spending on health care—a sector that accounts for about 18% of GDP. We're also using point-of-sale retail scanner data to better track spending for digital products—things like Smartphones, video games, Uber rides, and music streaming.

- ✓ As far as expanding detail, we're tapping into zip code information from credit card datasets to produce estimates of consumer spending at the county and metropolitan levels. This type of geographic detail is not available from traditional surveys and would be extremely expensive to begin collecting.

- ✓ In fact, we're in the process of developing new GDP-by-county estimates for all 3,100 U.S. counties, and we expect to release prototype estimates by the fall of this year.

- ✓ One thing has become very clear: While big data are very promising, their use does require a very <u>specific set of skills</u>. We need to hire staff with strong data-science skills, in addition to the more traditional

skills in economics and statistics. We also have to look outside the agency to build tight relationships with data providers who have the expertise at manipulating big datasets in order to reduce the amount of in-house investment. And we also need to strengthen partnerships across statistical agencies to pool our data-science resources.

✓ Let me finish up with a few words on <u>integrity</u>. Integrity is a must for any statistical agency—<u>our effectiveness hinges on the public trust in our data</u>. Let me hit on a few aspects of integrity.

✓ First, as you all know, we take the <u>physical security aspects of integrity</u> very seriously. We follow a very well-established set of "best practices," including "GDP lock-up" that takes place the night before the official GDP release. This is the point where staff are sequestered, the shades are drawn, outside communications are cut off…and the components of GDP come together for the final analysis and review.

✓ But there are other aspects of integrity that are becoming more and more important. For example, <u>cybersecurity</u>. Over the last couple of years, we've had to double our investments in IT security—supporting things like <u>continuous monitoring, encrypted messaging with companies responding to our surveys, and hiring independent full-time security auditors</u>. This type of investment is now a necessary part of day-to-day IT operations, and it does pay off! For instance, on several occasions, we have been able to identify issues with the IT systems of companies submitting data to us, and we've been able to notify them that their IT infrastructure has been compromised–while, the whole time, keeping our network safe and secure.

- ✓ Employee integrity is also very important. BEA is made up entirely of <u>career civil servants</u> who are committed to producing the most accurate estimates of GDP. Hundreds of economists crunch and analyze data from a multitude of sources to produce not only GDP, but the thousands of other data points that flow out of the GDP report. <u>As important as these statistics are, we recognize that behind every one of these numbers is a person, and the integrity of our data is a reflection of the hard work and dedication of BEA's staff</u>.

- ✓ And finally, maintaining our integrity means that we operate <u>autonomously</u>. BEA doesn't share any information about our statistics before they are finalized, and we don't share drafts of our news releases. This independence means that our numbers are free from political influence, and they speak for themselves.

- ✓ Thank you.