



Commission for Evidence-Based Policymaking Public Hearing: Remarks from the American Statistical Association's Scientific and Public Affairs Advisory Committee

October 21, 2016

My name is Clyde Tucker and I am a member and former chair of the American Statistical Association's Scientific and Public Affairs Advisory Committee. The American Statistical Association was founded in 1839 and is the oldest continuously operating scientific society in the United States. With more than 19,000 members working in academia, government, and industry, the ASA works to promote the practice and profession of statistics, the science of learning from data, and measuring, understanding, and communicating its uncertainty. We believe that statistics and the ability to interpret statistical evidence are integral to the success of evidence-based policy making.

The ASA lauds Speaker Ryan and Senator Murray for their actions and efforts to bring evidence-based policymaking into the limelight. The ASA heartily supports the Commission for Evidence-Based Policymaking and looks forward to the Commission's efforts to improve the science surrounding evidence-based policymaking. We appreciate that three Commissioners are members of the ASA, two of which are former heads of federal statistical agencies. In my brief comments today, I will focus on five issues: (i) the stature and autonomy of the federal statistical system; (ii) data sharing that leads to data synchronization; (iii) concerns related to privacy and confidentiality that may present barriers to the release of data needed for evidence-based policy making; (iv) nurturing evidence-based policymaking capacity across the federal government; and (v) statistical evidence.

To ensure that the statistical analysis used to support evidence-based policy making is both impartial and accurate, the integrity of the research process must be maintained. In particular, the ASA believes that the federal statistical agencies will play a vital role in evidence-based policymaking, and ASA is committed to supporting the historical autonomy of these agencies in order to ensure the integrity of their work. In a 2015 letter to Congress, twenty former statistical agency heads wrote,

As the foundation for policy making and policy administration, objective and credible statistical data are vital to our democracy, economy, governance, and well-being. All sides of a policy debate should be able to look to the statistical data as objective and high quality. Any perception that the data have been influenced by a partisan perspective undermines the policy making and its administration. The independence of a federal statistical agency is a critical element in an agency producing objective and credible statistical data... Statistical agencies should have complete control over data collection, analysis, and publication. Such autonomy

should include control over an agency's planning, budget, press releases, and information technology.

In the past, this independence for some agencies has been protected from direct political interference by requiring that the heads of statistical agencies be appointed by the President and confirmed by the Senate. Currently, however, Senate confirmation is no longer required to appoint the director of the Bureau of Justice Statistics or the commissioner of the National Center for Education Statistics (NCES). There is also a House-passed bill pending in the Senate that would remove presidential appointment of the NCES Commissioner.

The ASA also supports data linkage and collaboration between the federal statistical agencies. Indeed, greater information sharing across agencies would enhance the research supporting evidence-based policymaking. One example of this type of data sharing is data synchronization. For example, ASA advocates, as a follow up to the Confidential Information Protection and Statistical Efficiency Act (CIPSEA), providing the Bureau of Labor Statistics and the Bureau of Economic Analysis the same access to the Internal Revenue Service's business information that the Census Bureau currently has. Supported not just by ASA but also by a wide variety of other stakeholders, this carefully crafted proposal costs no money, but would result in substantial improvements to the quality of our nation's official economic statistical data, ultimately benefitting policymakers, US businesses, and many other Americans. For more information on this, I provide links to three resources at the end of my written comments that I understand you will have access to.

Although privacy and confidentiality are important concerns with respect to the release of data for research purposes, barriers created to ensure privacy and confidentiality could limit analysis critical for evidence-based policymaking. In particular, researcher's access to data often is delayed as a result of the need to undergo reviews by multiple Institutional Review Boards (IRBs). This process can impede the ability to respond quickly to the needs of policymakers. I have provided a link to a new National Academies report that notes the delays caused by the multiple IRB approvals sometimes needed for a single study and the serious problems this creates for timely policymaking.

While perhaps beyond the charge of this committee, ASA also encourages more resources for federal agencies to develop their internal capacities for evidence-based policymaking. Although the statistical agencies have statistical expertise needed for evidence-based policymaking, a number of agencies do not. More could be done to increase this analytical capacity across the government. Given the constrained budgets of the federal government, we understand adding personnel with appropriate expertise isn't widely feasible. However, we strongly encourage alternative solutions, such as guidance documents and professional development on this topic. In fact, staff at the statistical agencies might be involved in these endeavors. We would also support greater agency collaboration through reduced barriers and greater access to data for trusted and vetted users in ways that ensure confidentiality protection.

Let me close with comments on statistical evidence for the wider evidence-based policymaking community. We encourage the use of modern statistical and data science methods in program evaluations—methods such as Bayesian modeling, decision analysis, and big data techniques. To put our comments in context, we recently saw statistical language in pending legislation that seemed artificially restrictive. Specifically, we were concerned that the language might limit analysis to significance testing or p-values alone.

The ASA Scientific and Public Affairs Advisory Committee recently released a statement with guidance on statistical language in legislation, http://ww2.amstat.org/misc/SPAAC_GuidanceStatisticalEvidence.pdf. We look forward to continued conversation on this issue.

To reiterate, we fully support the Commission on Evidence-Based Policymaking and look forward to engaging the statistical community in your efforts. Thank you for your time.

Links for 2015 letter to Congress from twenty former statistical agency heads:

- <http://ww2.amstat.org/misc/FormerAgencyHeadLetter.pdf>
- <http://community.amstat.org/blogs/steve-pierson/2015/01/29/former-federal-statistical-agency-heads-urge-stronger-nces-as-senate-panel-advances-bill-to-weaken-it>

References on Data Synchronization

- <http://www.aei.org/publication/data-asymmetry-public-policy/>
- <http://www.copafs.org/UserFiles/file/FederalBusinessRegistryLetterSenatewithAttach.pdf>
- <http://magazine.amstat.org/blog/2011/11/01/data-synchronizationscipolicy/>

Reference to the National Academies report on multiple IRB approvals

- <https://www.nap.edu/catalog/23670/strengthening-data-science-methods-for-department-of-defense-personnel-and-readiness-missions>