

ASA, AMS Council Issue Joint Statement Regarding the Drawing of Voting Districts and Partisan Gerrymandering

ALEXANDRIA, Va. (January 24, 2018) – The American Statistical Association (ASA) and Council of the American Mathematical Society (AMS) have issued a joint [statement](#) to inform discussions and planning around the drawing of voting districts as we approach the 2020 census. This marks the first time in recent history the two organizations have issued a joint statement of broad interest to the American public.

AMS President Ken Ribet said, “Our community is poised to play a central role in ongoing discussions about methods for creating voting districts and the evaluation of existing and proposed district maps. It has been a pleasure for me to observe the recent explosion in interest in this topic among colleagues and students in mathematics and statistics. I anticipate that the new statement by the ASA and AMS Council will lead to increasing transparency in the evaluation of districting methods.”

The statement is organized around the following three facts:

1. Existing requirements on districts do not prevent gerrymandering.
2. It has become easier to design district plans that favor partisan outcomes with greater confidence.
3. Modern mathematical, statistical and computing methods can identify district plans that favor partisan outcomes.

“While these points may be common knowledge in some circles, it’s important they be stated by objective and respected authorities like the AMS and the ASA and for them to be more widely known in the redistricting discussions around the 2020 Census,” noted 2018 ASA President Lisa LaVange. “Having lived in both Maryland and North Carolina in the last few years, I sincerely hope policymakers will accept our offer of help to ensure a healthy and vibrant democracy.”

The statement, while discussing Fact 2, cites “the growing use of big data and the increased role of predictive modeling of voting outcomes by election campaigns,” and asserts, “Using these tools, legislators easily can draw district plans that satisfy political and legal criteria, yet also are highly likely to result in one party winning a disproportionate share of the elections relative to the number of people who voted for that party.”

To help identify voting district plans that give one of the parties an unfair advantage, the two societies say a key step is to specify and calculate metrics that illuminate the partisan nature of proposed plans and briefly describe general principles and approaches.

“Statistical and mathematical standards and methods can be very helpful to inform decision-makers and the public about partisan gerrymandering,” remarked the statement’s main architect, Jerry Reiter, 2015-2017 chair of the ASA Scientific and Public Affairs Advisory Committee. “The statement acknowledges the value of partisan asymmetry as a standard, and it highlights some methods for measuring partisan asymmetry. The statement does not endorse any one method, as ultimately this issue is determined by policymakers and the courts.”

Finally, the statement notes “that open and transparent research practices have facilitated more robust, reliable and accepted findings involving mathematics and statistical science” and suggests “such openness and transparency could benefit the processes for evaluating and drawing voter districts.”

In issuing the statement, the two societies also offer to connect decision-makers and policymakers with mathematical and statistical experts.

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About the American Statistical Association

The ASA is the world’s largest community of statisticians and the oldest continuously operating professional science society in the United States. Its members serve in industry, government and academia in more than 90 countries, advancing research and promoting sound statistical practice to inform public policy and improve human welfare. For additional information, please visit the ASA website at www.amstat.org.

About the American Mathematical Society

Founded in 1888 to further mathematical research and scholarship, the AMS fulfills its mission through programs and services that promote mathematical research and its uses, strengthen mathematical education and foster awareness and appreciation of mathematics and its connections to other disciplines and everyday life. For additional information, please visit the AMS website at www.ams.org.

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