



Princeton Neuroscience Institute
Princeton Gerrymandering Project
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The Honorable Paul Ridgeway
Senior Resident Judge
Wake County Justice Center
300 S. Salisbury Street
Raleigh, NC 27602

The Honorable Alma L. Hinton
Senior Resident Judge
Halifax County Courthouse
357 Ferrell Lane
Halifax, NC 27839

The Honorable Joseph N. Crosswhite
Senior Resident Judge
Hall of Justice
226 Stockton Street
Statesville, NC 28677

Re: Common Cause et al. v. Lewis et al., No. 18-CVS-14001 (N.C. Super.)

To the Court:

I write on behalf of the Princeton Gerrymandering Project, a redistricting policy and research group which I direct. The Princeton Gerrymandering Project's mission is to bridge gaps between math, law, and technology to enable open and fair districting nationwide. Founded by me in 2015, the Project is housed at the Center for Information Technology Policy at Princeton University.

I am a full professor at Princeton, appointed to the Neuroscience Institute. My scholarly work includes numerous papers on the development and implementation of statistical methods in large data sets. I have written articles on partisan gerrymandering for the *Stanford Law Review* and the *Election Law Journal*. One of these articles was recognized with a national prize by Common Cause. I have co-written two amicus briefs that have been cited by the U.S. Supreme Court. One brief, written in collaboration with Heather Gerken, dean of the Yale Law School, was cited by Chief Justice John Roberts in *Gill v. Whitford*. A second brief was cited in *Rucho v. Common Cause*. My most recent law article, "Laboratories of Democracy: State Constitutions and Partisan Gerrymandering" focuses on the judicial approach taken by the Court in this case. This article is forthcoming in the *University of Pennsylvania Journal of Constitutional Law* and can be found on the Social Science Research Network (SSRN) and at <http://bit.ly/2lzNegj>.

PUBLIC DRAWING OF MAPS IS ONLY THE START OF TRUE TRANSPARENCY

My principal reason for writing is to highlight the importance of “digital sunshine” in ensuring a fair redrawing of the House and Senate maps. Commendably, the Court has required that the drawing process between now and September 18 be done in public. I recommend an additional step of transparency: **digitally-downloadable publication of draft maps on a day-by-day basis**. Such a step would take little effort on the part of the General Assembly, yet add enormously to the transparency of the process.

The Court has rightly determined that House and Senate maps were drawn to confer an overall statewide advantage to the Republican Party. The Court has further ordered that re-drawing occur to minimize county splits and not use election data. The intentions behind these rules are commendable. However, they still allow the possibility that a partisan advantage could be created.

A PRETTY MAP CAN STILL HIDE ILL INTENT

For example, in last year’s case before the Pennsylvania Supreme Court, the legislature proposed a remedial map that was as visually attractive as the map that was ultimately adopted. Yet the legislature’s proposed map contained considerably more bias. See “When Simple Rules Aren’t Enough.” Princeton Election Consortium, February 13, 2018. Downloadable at <http://bit.ly/2IZIWpi>.

Even if lines are drawn in public view, that information is not enough to let everyday citizens evaluate the outcomes that are expected from those lines. **Publicly available redistricting software allows such a determination to be done rapidly - but only if the draft district boundaries are available in machine-readable form.**

The Princeton Gerrymandering Project has complete precinct geography for North Carolina, validated against other sources, as well as election results from 2008 through 2018. We can evaluate the impact of a draft map in seconds. We are also working with PlanScore.org and other organizations that make tools freely available so that citizens and journalists can make their own evaluations.

“DIGITAL SUNSHINE” CAN IMPROVE THE OUTCOME

We therefore recommend to the Court that it instruct the General Assembly to disclose the results of its line drawing process as close to real time as is practicable. For example, the Court could instruct the legislature to post the results of each day’s work in machine-readable format at the close of the day’s business. This could take a variety of forms, including **census block equivalency files, shapefiles, or other industry standards**. A growing community of citizen analysts would then be able to interpret the likely impact of maps almost instantaneously.

THE VALUE OF DR. HOFELLER’S FILES

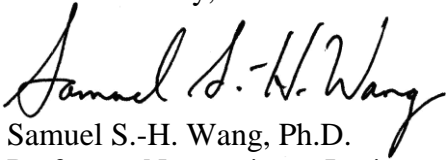
In the same vein, we encourage the Court to make available the data and redistricting work product of the late Dr. Thomas Hofeller as soon as possible. Even if the legislators

are enjoined from using election results in drawing maps, some legislators may remember details of Dr. Hofeller's maps that were drawn with partisan intent. Thus a partisan offense could be committed even while nominally complying with the Court's instructions. The availability of Dr. Hofeller's files will greatly reduce the likelihood of such an occurrence. His files are also a valuable resource to researchers. He was a master of his craft, and it would be of great interest to researchers and good-government advocates alike to study how he achieved his feats.

CONCLUSION

Once again, we commend the Court on establishing an admirably transparent process for the coming weeks. Our recommendation of "digital sunshine" will open the process even further.

Yours sincerely,

A handwritten signature in black ink that reads "Samuel S.-H. Wang". The signature is written in a cursive style with a large, sweeping initial 'S'.

Samuel S.-H. Wang, Ph.D.
Professor, Neuroscience Institute
Director, Princeton Gerrymandering Project