

# Exhibit A

**Absentee Ballot Signature Matching in Georgia: Statistical Analysis and Report**

**Expert Report of Jason Sorens, Ph.D.  
Director of the Center for Ethics in Business and Governance at Saint Anselm College**

***Georgia Republican Party, Inc. v. Raffensperger, et al.,*  
U.S. District Court for the Northern District of Georgia**

**December 10, 2020**

## **EXPERT QUALIFICATIONS**

I am currently the Director of the Center for Ethics in Business and Governance at Saint Anselm College, a role that involves both program administration and the production of social science research for publication in peer-reviewed journals. I taught in the Government Department at Dartmouth College from 2013 to 2019. In addition to teaching, I have served as the President of Ethics & Economics Education of New England (an organization dedicated to raising ethical and economic literacy) since 2014. I specialize in public policy, voting behavior, and elections, both in the United States and in other advanced industrial democracies, using quantitative, statistical, and experimental research methods. I have extensive experience working with both individual-level survey data and aggregate election data, and with estimating the effects of electoral systems on electoral outcomes.

I received by Ph.D. in Political Science from Yale University and my B.A. in Economics and Philosophy with Honors from Washington and Lee University. I have taught courses at Yale, the University at Buffalo-SUNY, and Dartmouth College: I taught voting methods and behavior as part of comparative policies and American politics classes at Buffalo and Dartmouth from 2005 to 2019, and I have taught statistical research methods both as a separate course at Yale in 2004 and as a component of virtually all my other classes. Additional information about my professional experience as a political scientist and statistical researcher, including prior expert testimony, publications, and affiliations, can be found in my curriculum vitae, attached as Appendix A.

I have been asked by attorneys for Plaintiffs to examine records of absentee ballot rejections in Georgia general elections and to determine whether there exist any statistical anomalies related to rejections of absentee ballots due to signature defects. I have also been asked to evaluate any statistical anomalies over time.

In order to perform this analysis, I have reviewed county-level cast absentee ballot data, including rejected absentee ballots records, from the general elections held in Georgia in 2016, 2018, and 2020. Data on the cast ballots for the 2016, 2018, and 2020 Georgia elections is available from the Georgia Secretary of State, at <https://elections.sos.ga.gov/Elections/voterabsenteefile.do>. I wrote computer code to determine the statistical likelihood of obtaining patterns of absentee ballot rejection rates like those found in Georgia.<sup>1</sup> My analysis is guided by my training and experience as a political scientist and statistical researcher, including my work with voting data, voting methods, and elections.<sup>2</sup>

I am being compensated for my time in preparing a report and preparing or providing any testimony. My billing rate is \$215 for services performed in connection with this matter. In addition, I will be reimbursed for all reasonable out-of-pocket expenses incurred in connection with my analyses and testimony in this case. My compensation is not dependent on the outcome of this matter or the opinions expressed.

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<sup>1</sup> My statistical analysis is available from counsel upon request.

<sup>2</sup> My conclusions stated herein are based upon my review of the information available to me at this time. I reserve the right to alter, amend, or supplement these conclusions based upon further study or based upon the availability of additional information.

## **SUMMARY OF FINDINGS AND ANALYSIS**

The following is a report of my empirical findings and analysis, which demonstrates:

1. Ballot rejection rates due to signature mismatch have drastically decreased in Georgia over the past three election cycles.
2. The past three election cycles show that ballot rejection rates due to signature mismatch differ statistically significantly across counties, strongly demonstrating that the signature matching process is being applied unequally across the state. The disparity in rejection rates between counties cannot be explained by population size or a county's geographic location within the state.
3. The likelihood of obtaining the rejection rates reported in multiple Georgia counties via normal statistical variation is practically impossible, with a statistical likelihood of less than 0.01%. Further, the extremely low number of rejected absentee ballots for missing signatures, combined with extremely low number of rejected absentee ballots for signature mismatch, supports the conclusion that these counties are likely doing limited or even no signature verification.

## **BACKGROUND**

Georgia's November 2020 election featured a general and a special election to fill each of its two U.S. Senate seats. Over 1.3 million absentee votes were cast in the November 2020 election, approximately one quarter of all votes cast. However, no candidate for either of Georgia's Senate seats received a majority of the votes cast. *See November 3, 2020 General Election, Ga. Sec'y of State Brad Raffensperger* (last updated Nov. 20, 2020, 3:37 PM), <https://results.enr.clarityelections.com/GA/105369/web.264614/#/summary>. The candidates, therefore, must proceed to a run-off election, which is scheduled for January 5, 2021. *See GA Const. art. II, § 2, ¶ 2; O.C.G.A. § 21-2-501.*

As part of its absentee ballot voting procedure, Georgia law instructs county registrars and clerks to conduct a signature match review on all absentee ballots submitted. Specifically, Georgia law requires the following procedure:

Upon receipt of each ballot, a registrar or clerk shall write the day and hour of the receipt of the ballot on its envelope. The registrar or clerk shall then compare the identifying information on the oath with the information on file in his or her office, shall compare the signature or mark on the oath with the signature or mark on the absentee elector's voter registration card or the most recent update to such absentee elector's voter registration card and application for absentee ballot or a facsimile of said signature or mark taken from said card or application, and shall, if the information and signature appear to be valid and other identifying information appears to be correct, so certify by signing or initialing his or her name below the voter's oath. Each elector's name so certified shall be listed by the

registrar or clerk on the numbered list of absentee voters prepared for his or her precinct.

O.C.G.A. § 21-2-386(a)(1)(B).

Under Georgia law, “[i]f the elector has failed to sign the oath, or if the signature does not appear to be valid, or if the elector has failed to furnish required information or information so furnished does not conform with that on file in the registrar’s or clerk’s office, or if the elector is otherwise found disqualified to vote, the registrar or clerk shall write across the face of the envelope ‘Rejected,’ giving the reason therefor.” O.C.G.A. § 21-2-386(a)(1)(C).

Once an absentee ballot is rejected, the voter is given the opportunity to cure the problem resulting in the rejection of the ballot by submitting an appropriate affidavit and a copy of one of the accepted forms of identification. *Id.* If the ballot is cured, and the County Officials find “the affidavit and identification to be sufficient, the absentee ballot shall be counted.” *Id.* However, if no cure is completed, or the affidavit and identification are not found to be sufficient, the rejected absentee ballot may not be counted in an election. *Id.*

This procedure was modified in March 2020, by a “Compromise and Settlement Agreement and Release” (the “Litigation Settlement”) in the case of *Democratic Party of Georgia, Inc., et al. v. Raffensperger, et al.*, Case No. 1:19-cv-05028-WMR (N.D. Ga. Mar. 6, 2020), ECF No. 56-1.

As relevant here, the Litigation Settlement imposed the following additional procedures for signature matching:

If the registrar or absentee ballot clerk determines that the voter’s signature on the mail-in absentee ballot envelope does not match any of the voter’s signatures on file . . . , the registrar or absentee ballot clerk must seek review from two other registrars, deputy registrars, or absentee ballot clerks. A mail-in absentee ballot shall not be rejected unless a majority of the registrars, deputy registrars, or absentee ballot clerks reviewing the signature agree that the signature does not match any of the voter’s signatures on file . . . . If a determination is made that the elector’s signature on the mail-in absentee ballot envelope does not match any of the voter’s signatures on file . . . , the registrar or absentee ballot clerk shall write the names of the three elections officials who conducted the signature review across the face of the absentee ballot envelope, which shall be in addition to writing “Rejected” and the reason for the rejection as required under OCGA 21-2-386(a)(1)(C). . . .

*Id.* § 3(a).

That is, pursuant to the Litigation Settlement, a ballot may not be rejected for a signature mismatch unless (i) it is reviewed by three County Officials, and (ii) at least two of those County Officials agree that the signature on the absentee ballot envelope does not match the absentee

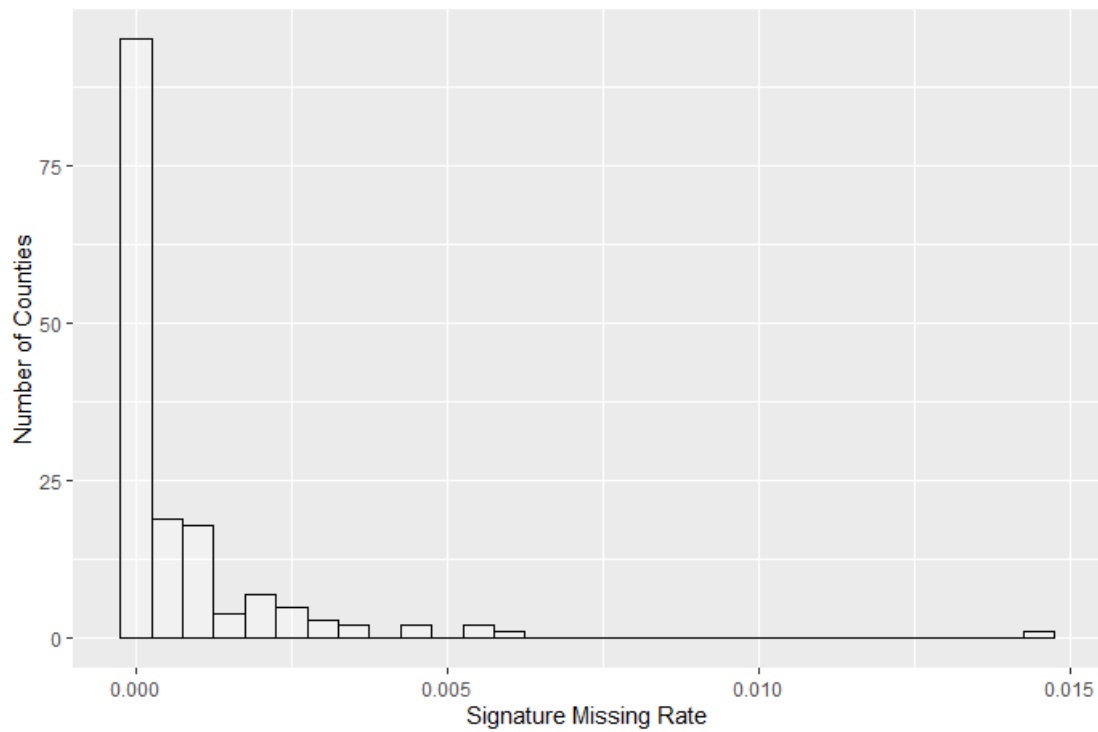
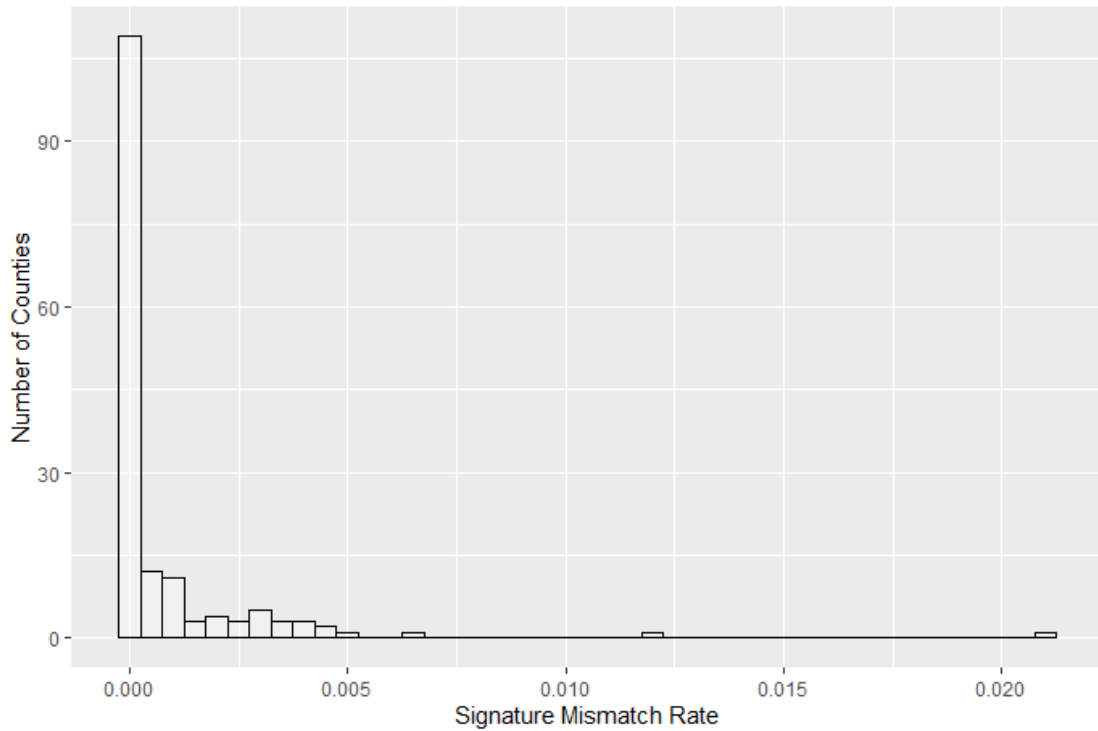
voter's signatures on file. These procedures do not apply to absentee ballots where the envelope signature matches a reference signature and is thus a valid, countable ballot.

## **ANALYSIS**

The purpose of this report is to investigate whether there are statistical anomalies that cannot be explained by chance alone in the county-level data on absentee ballot rejections due to signature mismatch (pre-cure) or missing signatures. More precisely, it reports the results of statistical analysis of county-by-county pre-cure signature rejections under the assumption ("null hypothesis") that each county's absentee ballots are a random draw from the statewide population. Rejecting this null hypothesis for a county implies that there is something significantly different about that county's absentee ballot rejections from those of other counties. The results show that some counties report highly statistically significantly different absentee ballot rejection rates from the statewide rate, and that these differences are so large that it is implausible to attribute them to unusual voter demographics.

### **I. DATA AND METHODS**

This report uses county-level absentee ballot rejections from the 2016, 2018, and 2020 election cycles. Specifically, two rejection quantities are investigated for each election: the number of submitted absentee ballots, mail and electronic, that are rejected due to mismatched signatures, and the number that are rejected due to missing signatures. These reported quantities are compared to the expected quantities for each county, where the expected quantity for a county is the statewide absentee ballot rejection rate multiplied by the number of ballots for that county. Specifically, the statewide absentee ballot rejection rate is the number of absentee ballots rejected for a particular reason (mismatch or missing) divided by the total number of absentee ballots submitted (accepted, spoiled, and blank).



**Fig. 1: Number of Counties by Signature Mismatch and Missing Rates, 2020**

Another way to visualize the distribution of ballot rejection rates across the state is through heatmaps. The two maps in Fig. 2 show how counties varied in their *rates* of rejection for both mismatched and missing signatures. The legend values, which are raw ratios of rejections to total

ballots, show a highly skewed distribution of values. Most counties rejected no ballots, but among counties that did reject at least one ballot, rejection rates were more typically in the 0.0005 to 0.004 range than below or above.

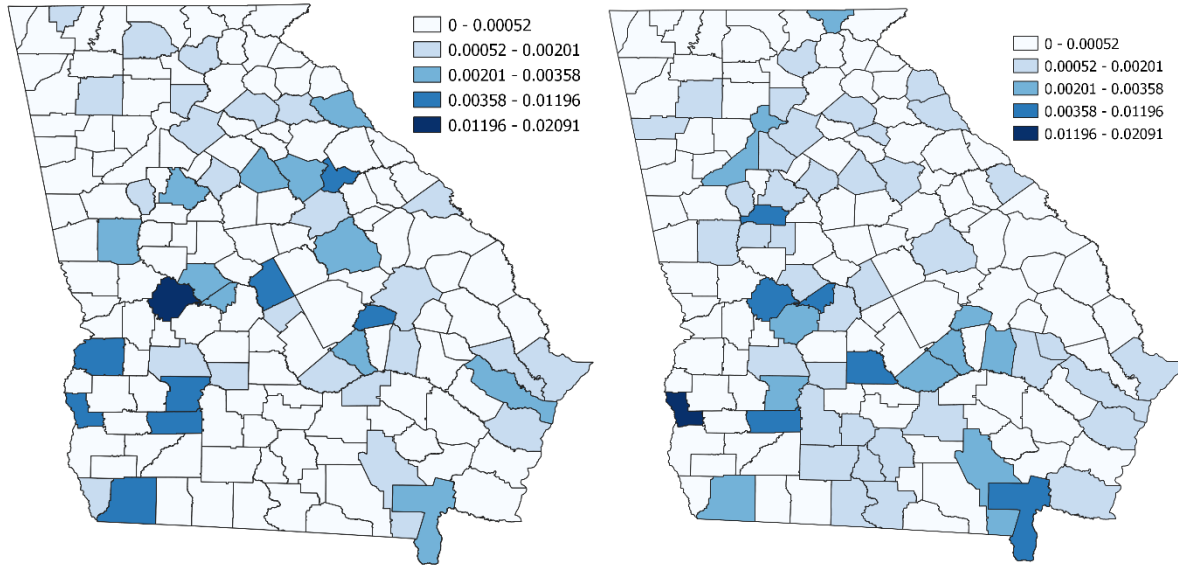


Fig. 2: Heatmaps of Mismatch Rejection Rates (Left) and Missingness Rejection Rates (Right)

To determine whether the quantity of rejections is statistically significantly different from the norm in a county, a probability distribution suitable for rare event counts is assumed. I have analyzed both binomial and Poisson distributions. They yield extremely similar results, but the Poisson distribution is more suitable for this kind of data, and therefore the results reported in this report employ the Poisson distribution.<sup>3</sup> Notably, these approaches are more “conservative” in finding statistically significant differences in highly skewed data of this kind than would be the standard normal distribution (the familiar “bell curve”). Figure 1 shows histograms of absentee ballot rejection rates by county for the 2020 election. They clearly do not resemble a normal curve.

Comparing the actual count of rejected ballots to the expected count given a statewide rejection rate, the number of absentee ballots sent in to the county, and a probability distribution yields a “ $p$ -value,” which we can interpret as the statistical probability that this particular county would yield a count of rejections so extreme if its ballots were simply a randomly drawn sample from the state population of absentee ballots.

This analysis was applied to all counties in Georgia, and I have surveyed all 159 counties for anomalies. As a result, we need a correction for multiple tests, since investigating a hypothesis 100 independent times should yield a statistically significant result at the 99% confidence level roughly once, on average, just due to normal statistical variation. As an example, suppose that you investigate the relationship between eating different colors of jelly beans and some health outcome, using random samples of human subjects. With 20 different colors tested, you should expect, on

<sup>3</sup> The Poisson distribution is more appropriate than the binomial when there is a known, large population and the size of each sample drawn from that population is not very small, while the binomial distribution is more appropriate for small sample sizes drawn from an indeterminate population.



average, that one of those tests will show a statistically significant result at the 95% confidence level, even if the true effect of jelly bean consumption on the health outcome is zero.

Therefore, to be even more conservative, this study corrected the statistical significance level for multiple tests using the Sidak criterion, defined as  $1 - (1 - k)^{\frac{1}{n}}$ , where  $k$  is the statistical significance level chosen and  $n$  is the number of tests. In this case, there are 159 tests, and two significance levels,  $p=0.001$  (99.9% confidence level) and  $p=0.0001$  (99.99% confidence level), are employed.

## **II. RESULTS**

In the November 3, 2020 general election, Georgia's election officials rejected a mere 719 absentee ballots for mismatched signatures, a rejection rate of approximately 0.05%. By comparison, the rejection rate for absentee ballots with mismatched signatures in the 2018 general election was 0.09%—nearly twice what it was this year.

More specifically, absentee ballot rejection rates for signature mismatch fell significantly in the last three election cycles, from 0.2% in 2016 to 0.09% in 2018 to 0.05% in 2020. These changes may be due to changes in state law that limited the criteria for rejecting absentee ballots, but they could also be due to a dramatic rise in the quantity of absentee ballots to be reviewed between 2018 and 2020. The total Georgia absentee ballot count rose from 232,021 in 2018 to 1,331,222 in 2020, an increase of 474%. Some county election boards may have been reluctant to do careful signature matching when facing a much larger workload.

At the same time, rejection rates for missing signatures were roughly constant: 0.07% (2016), 0.1% (2018), and 0.1% (2020). But counties differed significantly from each other in rejections for both criteria.

In 2020, nine counties had signature mismatch rejections that we can be confident were outside the statewide norm at the 99.99% confidence level. In other words, one could pick 10,000 random samples from the statewide population of absentee ballots, each of the size of the absentee ballot sample of the county in question, and still not expect to find one with a rejection level as extreme as that found in each of these counties. Cherokee, Cobb, DeKalb, and Fulton had mismatch rejections far below what could be attributed to random statistical variation. Dougherty, Gwinnett, Henry, Liberty, and Taylor had mismatch rejections far above what could be attributed to random statistical variation. In addition, four counties were statistically significantly different from the statewide norm at the still-high 99.9% confidence level. Muscogee was below the statewide norm (it rejected zero ballots for mismatch or missing), while Clay, Decatur, and Lee were above it.

When it comes to rejections for missing ballots in 2020, six counties were far above the norm at the 99.99% confidence level (Chatham, Dougherty, Fulton, Gwinnett, Peach, and Spalding), and one was above the norm at the 99.9% confidence level (Clay). Seven counties were far below the norm at the 99.99% confidence level (Cherokee, Clayton, Cobb, Douglas, Muscogee, Paulding, and Richmond), while Rockdale was below the norm at the 99.9% confidence level (Rockdale).

More than half of counties reported no absentee ballot rejections, but in most cases there were just not enough ballots in these counties to allow us to make a statistically significant inference about deviation from the statewide norm. But Douglas, Muscogee, Paulding, and Rockdale threw out zero ballots for either mismatched or missing signatures, even though each of these handled more than 10,000 ballots each. It is statistically highly improbable that these counties received no ballots that should have been rejected had standards prevailing in the majority of the state been applied.

Three possible explanations of these statistical discrepancies present themselves. One is that some county election boards were especially aggressive or reticent in rejecting absentee ballots, possibly in violation of state law. A second is that some county election boards may have misreported – or failed to report – ballot rejections. A third is that some counties are hugely demographically different from the rest of the state, which led their voters to make vastly fewer (or more) mistakes on their absentee ballot signatures.

The last explanation seems the least plausible. Cobb, Fulton, Gwinnett, and Paulding counties are demographically similar and lie within the Atlanta metropolitan area, but they had dramatically different experiences with absentee ballot rejections. Had Cobb, DeKalb, and Fulton rejected absentee ballots for signature mismatch at the same rate that election officials did statewide, they would have rejected 133 more ballots than they did, a 168% increase. It does not seem plausible that Georgia voters in general make 168% more errors than voters in these three counties. Three of the four counties that threw out zero ballots despite handling more than 10,000 of them apiece – Douglas, Muscogee, and Rockdale – have unusually high poverty rates and large populations of elderly and first-time voters, the sorts of voters one might expect to make mistakes on their ballots.

The second explanation, wholesale misreporting of data, also seems unlikely, since the Georgia Secretary of State has not previously made substantial corrections to these data, and the data are reported in media accounts as reliable.

Were the patterns visible in the 2020 election apparent in prior cycles as well? To answer this question, this report performs a similar analysis on county absentee ballot handling data from the 2016 and 2018 cycles.

There are fewer extreme outlier counties in prior election cycles. In 2016, 12 counties were statistically significantly different from the statewide norm at the 99.9% confidence level when it comes to rejecting absentee ballots for signature mismatch, and only four were different when it comes rejecting ballots for missing signatures. In 2018, just seven counties were statistically significantly different in “mismatch” rejections, and four in “missing” rejections. DeKalb and Fulton were extreme outliers in below-average mismatch rejections in the 2016 and 2018 cycles, just as in 2020, while Cobb was an extreme outlier in below-average mismatch rejections in 2016, as it was in 2020. Missing-ballot rejections were statistically significantly low in Fulton County in both 2016 and 2018, and in Cobb in 2016. While Cobb was not statistically significantly lower than the statewide norm using the extremely conservative threshold employed in this report in 2018, it was still lower than the statewide norm in that year for both mismatch and missing rejections. In addition, Muscogee County has not rejected a single absentee ballot in any of the last

three cycles for any reason – this anomaly escapes statistical significance in 2016 and 2018 only because absentee ballot counts were so low in those years.

In general, the continuities in those counties where absentee ballot rejection rates are abnormally low are striking. Cobb, DeKalb, Fulton, and Muscogee counties have been rejecting remarkably few ballots since at least 2016, especially for signature mismatch.

Counties with abnormally high absentee ballot rejection rates were not as consistent over time. Clay is the only county with a consistently high signature mismatch rejection rate (its missing-signature rejection rate has not usually been above the norm). However, with the county handling fewer than 200 absentee ballots in both 2016 and 2018, it is reasonable to wonder whether the independent-events assumption of the Poisson distribution is satisfied in such a small sample. For instance, one or two households could conceivably account for the five mismatch rejections that occurred there in 2018.

### **CONCLUSION**

This report has examined the evidence to see whether absentee ballot rejection data by county in Georgia display any demonstrable statistical anomalies. Strong statistical anomalies were found. Abnormally low absentee ballot rejection rates in several counties have persisted over time and are far enough away from the norm, with large enough sample sizes, that we can say with greater than 99.99% confidence that they do not reflect the typical statistical variation that one might find from drawing random samples from a known population.

It is implausible that these anomalous rejection rates merely reflect differences across counties in voters' capabilities, because these anomalies are found mostly in populous, diverse, metropolitan counties, and similar counties do not display anomalous results.

It also seems unlikely that counties are misreporting data on absentee ballot rejections, because the Secretary of State has not previously made significant revisions to these data from prior electoral cycles, and the data are treated in the media as reliable.

The remaining explanation seems most plausible: counties could be enforcing different standards for rejecting absentee ballots, particularly for signature mismatch, where the anomalies are generally more frequent and persistent. Some counties may be failing to do signature matching at all, or do so only sporadically.

  
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Professor Jason Sorens

Date: 12/10/20

## **APPENDIX A**

### **Jason Sorens Curriculum Vitae**

Center for Ethics in Business and Governance  
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jsorens@anselm.edu  
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#### **EDUCATION**

**YALE UNIVERSITY** New Haven, Conn.  
**Ph.D., Department of Political Science** May 2003  
Subfield concentrations: Political Economy (primary), Comparative Politics, Political Theory

**WASHINGTON AND LEE UNIVERSITY** Lexington, Va.  
**BA, Economics and Philosophy (magna cum laude)** June 1998

#### **EMPLOYMENT HISTORY**

**SAINT ANSELM COLLEGE** Manchester, N.H.  
**Director, Center for Ethics in Business and Governance** Summer 2019–present  
Program administration, fundraising, grant-writing, content production, conducting and writing social science research

**DARTMOUTH COLLEGE** Hanover, N.H.  
**Lecturer, Department of Government** Fall 2013–Summer 2019  
Teaching concentrations: political economy, U.S. politics (institutions and behavior), international relations  
**Program Director, Political Economy Project** Fall 2014–Summer 2019

**UNIVERSITY AT BUFFALO, STATE UNIVERSITY OF NEW YORK** Buffalo, N.Y.  
**Assistant Professor, Department of Political Science** Fall 2005–Summer 2013  
Teaching concentrations: political economy, positive political theory (institutions and behavior), comparative politics, political philosophy

**YALE UNIVERSITY** New Haven, CT  
**Lecturer, Department of Political Science** Fall 2003–Spring 2005  
Teaching concentrations: political economy, European politics, methodology

**NEW SCHOOL UNIVERSITY** New York, NY  
**Lecturer, Department of Political Science** Fall 2003

#### **PUBLICATIONS**

##### **Books**

Ruger, William, and Jason Sorens. 2018. *Freedom in the 50 States: Index of Personal and Economic Freedom* (5<sup>th</sup> ed.). Washington, DC: Cato Institute. 287 pages.

Sorens, Jason. 2012. *Secessionism: Identity, Interest, and Strategy*. Montreal: McGill-Queen's University Press.

### Articles

#### **Refereed Journals**

McLean, Dylan S. and Jason Sorens. 2019. "The Changing Ideological Politics of U.S. State Firearms Regulation." *Politics & Policy* 47 (4): 638–72.

Sorens, Jason. 2018. "The Effects of Housing Supply Restrictions on Partisan Geography." *Political Geography* 66 (September): 44–56.

Cappelen, Christoffer and Jason Sorens. 2018. "Precolonial Centralisation, Traditional Indirect Rule, and State Capacity in Africa." *Commonwealth & Comparative Politics* 56 (2): 195–215.

Cross, Ester, and Jason Sorens. 2016. "Arab Spring Constitution-Making: Polarization, Exclusion, and Constraints." *Democratization* 23 (7): 1292–1312.

Sorens, Jason. 2016. "Secession Risk and Fiscal Federalism." *Publius: The Journal of Federalism* 46 (1): 25–50. Winner of the John Kincaid Best Article Award.

Sorens, Jason and William P. Ruger. 2014. "Globalisation and Intrastate Conflict: An Empirical Analysis." *Civil Wars* 16 (4): 381–401.

Sorens, Jason. 2014. "Legal Regimes for Secession: Applying Moral Theory and Empirical Findings." *Public Affairs Quarterly* 28 (3): 259–88.

Sorens, Jason. 2014. "Fiscal Federalism, Jurisdictional Competition, and the Size of Government." *Constitutional Political Economy* 25 (4): 354–75.

Johnson, Noel D., William P. Ruger, Jason Sorens, and Steven Yamarik. 2014. "Corruption, Regulation, and Growth: An Empirical Study of the United States." *Economics of Governance* 15 (1): 51–69.

Sorens, Jason. 2014. "Does Fiscal Federalism Promote Regional Inequality? An Empirical Analysis of the OECD, 1980–2005." *Regional Studies* 48 (2): 239–53.

Sorens, Jason and William P. Ruger. 2012. "Does Foreign Investment Really Reduce Repression?" *International Studies Quarterly* 56 (2): 427–36.

Sorens, Jason. 2011. "Mineral Production, Territory, and Ethnic Rebellion: The Role of Rebel Constituencies." *Journal of Peace Research* 48 (5): 571–85.

Sorens, Jason. 2011. "The Institutions of Fiscal Federalism." *Publius: The Journal of Federalism* 41 (2): 207–31.

Sorens, Jason. 2010. "The Politics and Economics of Official Ethnic Discrimination: A Global Statistical Analysis, 1950–2003." *International Studies Quarterly* 54 (3): 535–58.

Sorens, Jason. 2009. "The Partisan Logic of Decentralization in Europe." *Regional and Federal Studies* 19 (2): 255–72.

Sorens, Jason. 2009. "Development and the Political Economy of Foreign Aid." *Journal of Private Enterprise* 24 (2): 87–100.

Sorens, Jason. 2008. "Regionalists Against Secession: The Political Economy of Territory in Advanced Democracies." *Nationalism and Ethnic Politics* 14 (3): 325–60.

Sorens, Jason, Fait Muedini, and William P. Ruger. 2008. "State and Local Public Policies in 2006: A New Database." *State Politics and Policy Quarterly* 8 (3): 309–26.

Sorens, Jason. 2005. "The Cross-Sectional Determinants of Secessionism in Advanced Democracies." *Comparative Political Studies* 38 (3): 304–26.

Sorens, Jason. 2004. "Globalization, Secessionism, and Autonomy." *Electoral Studies* 23 (4): 727–52.

Sorens, Jason. 2001. "The Failure to Converge: Why Globalization Doesn't Cause Deregulation," *Critical Review* 14 (1): 19–33.

#### **Contributions to Books (Refereed)**

Sorens, Jason. 2009. "Ethnicity and Nationalism in Wars of Secession." In Robert A. Denemark (ed.), *International Studies Encyclopedia* (Oxford, UK: Wiley-Blackwell).

#### **Non-Refereed Articles**

Sorens, Jason. 2011. "A Stability-Seeking Power: U.S. Foreign Policy and Secessionist Conflicts by Jonathan Paquin" (book review), *Perspectives on Politics* 9 (4): 977–78.

Sorens, Jason. 2010. "The Foundations of Ethnic Politics: Separatism of States and Nations in Eurasia and the World by Henry E. Hale" (book review), *Journal of Politics* 72: 260–62.

#### **OTHER RESEARCH, INVITED LECTURES, AND CONFERENCE PRESENTATIONS**

"The Changing Ideological Politics of Firearms Regulation." With Dylan McLean. Revise and resubmit at *Politics and Policy*.

"Modeling State Policy Ideology: An Application to Firearms Regulation." With Dylan McLean. State Politics and Policy Conference, State College, Penna., June 8, 2018.

"The Changing Ideological Politics of Firearms Regulation." With Dylan McLean. New England Political Science Association Annual Meeting, Portsmouth, N.H., April 21, 2018.

"Autonomous Island and Exclave Jurisdictions: What Decolonization Can Tell Us About Decentralization." American Political Science Association Annual Meeting, San Francisco, Calif., September 2, 2017.

"Residential Building Restrictions, Cost of Living, and Partisanship: State- and County-Level Analyses." State Politics & Policy Conference, St. Louis, Mo., June 2, 2017.

"The Electoral Effects of Local Zoning Restrictions." American Elections Academic Symposium, Saint Anselm College, Goffstown, N.H., March 18, 2017.

"On the Moral Duties of Business." With William Ruger. Corporate Social Responsibility conference, Wake Forest University School of Business, April 16, 2016.

“Freedom in the 50 States.” With William Ruger. Association for Private Enterprise Education annual meeting, Las Vegas, Nev., April 5, 2016.

“The Ethics of Secession.” Inliberty.ru invited lecture, Moscow, Russia, March 23, 2016.

“Vertical Fiscal Gaps and Economic Performance: A Theoretical Review and Empirical Meta-Analysis.” Mercatus Working Paper, Mercatus Center at George Mason University, Arlington, Va., February 2016. Public Choice Society annual meeting, Ft. Lauderdale, Fla., March 12, 2016.

“The Two Logics of Perverse Fiscal Federalism in the Developing World.” 2014 American Political Science Association annual meeting, Washington, D.C.

“The Business Political Cycle: Economic Conditions and Ideological Dimensionality in Multiparty Systems.” 2012 American Political Science Association annual meeting, New Orleans, La., and at the 2014 New England Political Science Association annual meeting, Woodstock, Vt.

“Secessionism: Identity, Interest, and Strategy.” Invited lecture as part of University of the Basque Country’s summer course on “The Right to Decide on Secession: The Creation of New States in Europe,” June 17, 2013.

“Constitutionalizing the Right to Self-Determination.” Invited lecture at Centre Maurits Coppieters, Brussels, Belgium, June 13, 2013.

“Secessionism in the New Europe.” Invited lecture as part of “Secession Redux” symposium at the University of Texas, Austin, March 1, 2013.

“Secession: A Right to National Divorce?” Invited lecture at Yeshiva University, February 19, 2013.

“The Political Economy of Federalism.” Invited lecture at Texas State University, San Marcos, April 9, 2012.

With Govinda Bhattarai [second author]. “Resources, Ethnicity, and Commitment: Central Government Policies Toward Mineral-Rich Ethnoregions.” 2011 American Political Science Association annual meeting, Seattle, WA.

With William P. Ruger. “State Legislative Professionalism and Size of Government.” 2011 meeting of the Midwest Political Science Association, Chicago, IL.

With Dean Stansel. “Fiscal Decentralization and Economic Freedom in the American States.” 2011 meeting of the Association for Private Enterprise Education, Nassau, The Bahamas.

Principal Investigator, State and Local Public Policies Database. Prepared with Fait Muedini and William P. Ruger, available at <http://www.statepolicyindex.com>.

“Mineral Production, Territory, and Ethnic Rebellion: The Role of Rebel Constituencies.” 2010 meeting of the Peace Science Society, Forth Worth, TX.

“Fiscal Federalism and Regional Inequality.” 2008 American Political Science Association annual meeting, Boston, MA.

“Globalization and Ethnic Discrimination.” International Studies Association annual meeting, Chicago, IL, March 2007, at the Midwest Political Science Association annual meeting, Chicago, IL,

April 2007, and at the American Political Science Association annual meeting, Chicago, IL, August 2007.

“Why Are Separatists More Rebellious than Other Ethnic Groups?” International Studies Association annual meeting, Chicago, IL, March 1, 2007.

“The Cross-Sectional Determinants of Regionalism in Advanced Democracies.” Presented at Midwest Political Science Association annual meeting, April 2006, Chicago, IL.

“Countercyclical Macroeconomic Policies under Trade and Capital Openness.” Presented at Yale-Harvard-Cornell Comparative Political Economy Research Symposium, 21 May 2004, New Haven, CT.

“Explaining Regional Ideological Differences.” Presented at New England Political Science Association annual meeting, 1 May 2004, Portsmouth, NH.

“Globalization, Secessionism, and Autonomy.” Presented at Southern Political Science Association conference, 7 November 2002, Savannah, GA.

“The Political Economy of Capital Account Liberalization,” with Nancy Brune, Geoffrey Garrett, and Alexandra Guisinger (unpublished manuscript). Yale University Department of Political Science.

“Social Order without the State: The Case of Somalia,” with Leonard Wantchekon (unpublished manuscript). Yale University Department of Political Science.

#### GRANT SUPPORT

**Institute for Humane Studies**, 2016 & 2017, two separate approximately \$3,000 grants for Dartmouth on-campus student discussion colloquia on the topics “Economics and a Free People” and “New Perspectives on Political Problems.”

**Julian Park Publication Fund**, 2011, University at Buffalo College of Arts and Sciences, \$8,000 subvention for publication of book, *Secessionism*.

**Charles G. Koch Foundation**, 2010-11, “Freedom, Migration, and Growth in the U.S.” \$7,960 for research assistants (Suparna Soni and Lance Newman). Role: PI.

**DonorsTrust**, Research Workshop Series in Markets and States, \$15,000 (2008-10), \$7,500 (2010-11), \$5,000 (2011-12). Role: director.

#### ACADEMIC HONORS

**John Kincaid Best Article Award**, *Publius: The Journal of Federalism*, 2017.

**Lisa Park Hertel Outstanding Professor teaching award**, 2010-11 and 2011-12.

**Olive W. Garvey Fellowship Program, Junior Faculty Division**, 2<sup>nd</sup> place winner in essay competition (\$5,000), 2007.

#### SERVICE

##### Professional/Public Service

**Director** (see “Grant Support”), Research Workshop Series in Markets and States, University at Buffalo, 2008-2013.

**Lecturer**, Institute for Humane Studies summer seminar for graduate students, Bryn Mawr College, Philadelphia, PA, June 11-17, 2011.



**Conference Director**, Liberty Fund colloquium on “Federalism and Individual Liberty,” Jackson, N.H., September 2015.

**Conference Director**, Liberty Fund colloquium on “Nationalism, the State, and Liberty,” Montreal, Canada, October 2010.

**Conference Director**, Liberty Fund colloquium on “Political Obligation and State Legitimacy,” San Francisco, Cal., June 2008.

**Conference Director**, Liberty Fund colloquium on “Secession, Local Autonomy, and Liberty,” New Castle, N.H., April 2007.

**Member**, American Political Science Association.

**Referee**, *American Journal of Political Science*, *American Political Science Review*, *British Journal of Politics and International Relations*, Cambridge University Press, *Comparative Political Studies*, *Comparative Politics*, *Conflict Management and Peace Science*, *Contemporary Politics*, *Democratization*, *Environment and Planning A*, *Ethnopolitics*, *European Journal of Comparative Economics*, *European Journal of Political Research*, *European Political Science Review*, FWO-Vlaanderen, *International Interactions*, *International Journal of Comparative Sociology*, *International Studies Quarterly*, *Journal of Common Market Studies*, *Journal of Institutional Economics*, *Journal of Peace Research*, *Journal of Politics*, *Journal of Social Philosophy*, Kansas University Press, *Law and Policy*, National Science Foundation, *Nationalities Papers*, Oxford University Press, Palgrave Macmillan, *Policy and Internet*, *Political Behavior*, Polity Press, *Public Choice*, *Publius: The Journal of Federalism*, *Regional and Federal Studies*, *Regional Studies*, Routledge, *Sociological Forum*, *State Politics and Policy Quarterly*, *Studies in Comparative International Development*, Swiss National Science Foundation, United Nations University Press, *Urban Studies*, *World Development*, *World Politics*, Yale University Press.

#### **University Service**

**Departmental committees:** 2006-7 Comparative Politics Search Committee, 2006-7 International Relations Search Committee, 2006-7 Advisory Committee, 2006-7 Graduate Committee, 2006-7 Comparative Politics Field Examination Committee, 2006-7 International Relations Field Examination Committee, 2006-7 Methodology Field Examination Committee, 2007-8 International Relations Search Committee, 2007-8 Comparative Politics Field Examination Committee, 2007-8 International Relations Field Examination Committee, 2008-9 Comparative Politics Field Examination Committee, 2008-9 International Relations Field Examination Committee, 2009-10 Graduate Committee, 2009-10 Comparative Politics Field Examination Committee, 2010-11 Undergraduate Committee, 2011-12 Comparative Politics Field Examination Committee.

**Student oral field examination committees:** Sooh-Rhee Ryu, Kijoo Kim, Chia-Sheng Chen, Yung-Ming Yen, Jee Yong Kim, Wooksung Kim, Meredith-Joy Petersheim.

**First reader, Master’s projects & theses:** Terry Bagia, Thom Hierl, Will Taylor.

**Second reader, Master’s projects & theses:** Vanessa Brown, David A. Scott, Dan Loge, Jennifer Kaplan, Morgan Fallon.

**Second reader, undergraduate honors thesis:** Aaron Krolikowski.

**Graduate independent studies:** Jee Yong Kim, Sooh-Rhee Ryu, Brian Nottingham, Meredith-Joy Petersheim.

**Undergraduate independent study:** Roman Gressel.

**Dissertation committees:** Meredith-Joy Petersheim, Sooh-Rhee Ryu, Jesse Wasson, Yungming Yen, Jee Yong Kim, Thomas Placito, Megan Gall, Brian Hardt.

#### **Professionally Related Community Service**

**Unpaid consultant**, ISAF intelligence in Afghanistan.

**Unpaid lecturer**, Centre Maurits Coppieters, Barcelona, Catalonia.

**Unpaid lecturer**, International Institute of Buffalo.

**Unpaid lecturer**, Ethics and Economics Education of New England.

#### **EXPERT WITNESS EXPERIENCE**

Brett Baber, et al. v. Matthew Dunlap, et al., U.S. District, Maine 1:18-CV-465-LEW (2018) (prepared expert report)