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No. 133 MM 2020

In the SUPREME COURT OF PENNSYLVANIA

PENNSYLVANIA DEMOCRATIC PARTY, ET AL.

Petitioners,

v.

KATHY BOOCKVAR, IN HER CAPACITY As Secretary of the Commonwealth of Pennsylvania, et al.,

Respondents.

BRIEF FOR COMMON CAUSE PENNSYLVANIA; LEAGUE OF WOMEN VOTERS OF PENNSYLVANIA; THE BLACK POLITICAL EMPOWERMENT PROJECT; MAKE THE ROAD PENNSYLVANIA, A PROJECT OF MAKE THE ROAD STATES; PATRICIA M. DEMARCO; DANIELLE GRAHAM-ROBINSON, AND KATHLEEN WISE AS AMICI CURIAE

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# **Other Authorities**

2020 Primary Election Mail Ballot Requests Department of State,	
OPEN DATA PENN., https://data.pa.gov/Government-Efficiency-	
Citizen-Engagement/2020-Primary-Election-Mail-Ballot-Requests-	
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Coronavirus Disease 2019 (COVID-19), How to Protect Yourself & Others, CTRS. FOR DISEASE CONTROL & PREVENTION, https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting- sick/prevention.html (updated July 31, 2020)
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- Exhibit 3 Affidavit of Voter Patricia M. DeMarco
- Exhibit 4 Affidavit of Donald S. Burke, MD
- Exhibit 5 Affidavit of Paul Gronke, PH.D.
- Exhibit 6 Affidavit of Lorraine C. Minnite, PH.D.
- Exhibit 7 Affidavit of Amber McReynolds
- Exhibit 8 Affidavit of Lori A. Martin

#### **INTEREST OF THE AMICI CURIAE<sup>1</sup>**

Amici are Pennsylvania voters and organizations that represent the interests of Pennsylvania voters. The organizations are non-partisan and work to promote democracy and foster participation in elections.

The League of Women Voters of Pennsylvania provides robust voter education around the state, registers voters, and helps the people of Pennsylvania safely exercise their right to vote.

Common Cause Pennsylvania encourages civic engagement and public participation in the democratic process to ensure the accountability of public officials and institutions.

The Black Political Empowerment Project ("B-PEP") encourages members of Pittsburgh's Black community to participate in democracy, including through voter registration drives, get-out-the-vote activities, educational outreach, and election-protection work.

Make the Road Pennsylvania, a project of Make the Road States ("Make the Road PA"), provides voter education to Latino and working-class communities.

<sup>&</sup>lt;sup>1</sup> Counsel for any party did not write this brief, in whole or in part. No person or entity other than amici, their members, and their counsel has made a monetary contribution intended to fund the preparation and submission of this brief. This brief is filed with permission of the Pennsylvania Supreme Court.

Patricia M. DeMarco, Danielle Graham-Robinson, and Kathleen Wise are Pennsylvania voters whose right to vote in the June 2020 primary was jeopardized by COVID-19, and who face similar concerns for the November 2020 general election. Each is at heightened risk for death or significant injury if she contracts COVID-19. Affidavit of Danielle Graham-Robinson, dated September 8, 2020 (attached at Ex. 1) ¶ 5; Affidavit of Kathleen Wise, dated September 8, 2020 (attached at Ex. 2) ¶ 5; Affidavit of Patricia M. DeMarco, dated September 8, 2020 (attached at Ex. 3) ¶ 5. Each requested a mail-in ballot early. Mses. Graham-Robinson and Wise received their ballots late; timely receipt by election officials of their ballots could not be guaranteed through the U.S. mail. Graham-Robinson Affidavit ¶¶ 7–10; Wise Affidavit ¶¶ 6–7.

Ms. DeMarco, age 74, mailed her ballot. When she could not confirm that election officials received it, she cast a provisional in-person ballot. DeMarco Affidavit ¶¶ 1, 7–10. Ms. Wise, age 62, was disenfranchised when she received her mail-in ballot too close to the Primary Election to permit timely return of the ballot to election officials. Wise Affidavit ¶¶ 1, 11–12. Ms. Graham-Robinson, age 44, delivered her ballot in-person at her County Board of Elections central office. She is recently unemployed, incurred parking charges to deliver her ballot

to county election officials, and was exposed to significant health risks by voting. Graham-Robinson Affidavit ¶¶ 11–12.

This case involves Act 77, the election statute adopted in 2019. Amici submit this brief, bolstered by five expert affidavits, to provide critical facts and contexts concerning mail-in ballots, drop-boxes, secrecy envelopes, delivery delays with the U.S. Postal Service ("U.S.P.S."), and health risks facing voters during the COVID-19 pandemic. Together, these materials confirm that the Court must interpret Act 77's text faithfully to the "expansive sweep" of the Pennsylvania Constitution's unique protections to ensure, "to the greatest degree possible, a voter's right to equal participation in the electoral process for the selection of his or her representatives in government." *League of Women Voters v. Commonwealth*, 178 A.3d 737, 815 (Pa. 2018).

#### **SUMMARY OF ARGUMENT**

I. COVID-19 has had a devastating impact on senior citizens, people with pre-existing health concerns, and people of color, all of whom face greater risks of serious health and mortality. Close in-person contact at in-person polling sites increases the risk of COVID-19 infection, which has increased public interest in alternatives to in-person voting. The unprecedented interest in mail-in voting

increases pressure on the U.S. Postal Service, which is experiencing significant delays in the delivery of mail, and also delays in delivering election ballots.

II. The Pennsylvania Election Code, as modernized by Act 77 (the "Code"), provides for expanded access to mail-in ballots and for the return of ballots in person, mail, and in specially designated election drop-boxes. The Code authorizes the County Boards of Election to designate drop-boxes in multiple locations because a Board of Elections is a body existing in multiple locations at "offices at the county seat" and also in "branch offices … in cities other than the county seat." 25 P.S. § 2645(b). Experience with drop-boxes around the country confirms that they are secure, accessible, and permit delivery of ballots more quickly than the U.S.P.S. There is essentially no illegal voting associated with the use of drop-boxes or other forms of mail-in ballots.

III. County Boards of Elections are supposed to provide a secrecy envelope so that voters may protect the privacy of their election preferences. Such secrecy envelopes are not aimed at ensuring ballot integrity. And ballot packages are not subject to audit procedures to confirm whether a secrecy envelope was provided to all mail-in voters. Nonetheless, some counties determined that they would not count ballots that omitted a secrecy envelope. The use of a secrecy

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envelope is not mandatory, and the omission of a secrecy envelope is not a valid statutory basis to refuse to count a ballot.

IV. Act 77 instructs County Boards of Election to count every valid ballot that has been voted before the close of the election. This requirement extends to ballots delivered to either a designated drop-box or deposited in a U.S. postal box prior to the close of the election. Ballots deposited in a U.S. postal box should be deemed to be delivered before the close of the election based on indicia of delivery to the U.S. mails (such as a postmark), like the postmark mailbox rule traditionally applied to the delivery of court papers sent by incarcerated individuals without access to the U.S. mails, or based on receipt by a County Board of Election within three days of the election. Such an interpretation makes sense in light of the oneweek allowance for receipt of service members' ballots following the election and accords with the Pennsylvania Constitutional requirement that the Code be construed broadly to protect the voter's right of suffrage. See League of Women Voters, 178 A.3d at 804; Appeal of James, 105 A.2d 64, 65-66 (Pa. 1954). In the present COVID-19 emergency, and with unprecedented delays in mail delivery, failure to count ballots received within three days of the election infringes on the right of suffrage through no fault of the voter. And in these extraordinary times, the Pennsylvania Constitution demands that these mailed ballots count.

#### ARGUMENT

In October 2019, the Pennsylvania General Assembly enacted Act 77, which authorizes vote by mail without excuse. This modernization of the Pennsylvania election laws was timely. Americans now face an unprecedented global pandemic and many Pennsylvania voters are concerned about serious health risks with inperson voting. Pennsylvania's new election law promises to facilitate broad participation by Pennsylvania voters in the general election, especially for voters afraid to vote in person. In the June Primary, nearly 1.5 million Pennsylvania voters that voted absentee in the 2016 primary.<sup>2</sup> The national experience with mail-in ballots (delivered either to a United States postal box or to a designated county election drop-box) confirms that robust voter participation in democracy can be achieved without the risk of an increase in voter impropriety.

Pennsylvania 2020 Primary Election: Act 35 of 2020 Report, PENN. DEP'T STATE (Aug. 1, 2020), https://www.dos.pa.gov/VotingElections/Documents/2020-08-01-Act35Report.pdf ("Act 35 Report"), at 4. Act 35 required the Department of State to collect and report comprehensive election data, including mail-in ballots. H.B. 2502, Reg. Sess. (Pa. 2020). Data from the June Primary was collected from the Statewide Uniform Registry of Electors and uniform surveys sent to each county election director.

### I. COVID-19 HEALTH AND MORTALITY RISKS HAVE CREATED A SIGNIFICANT PUBLIC INTEREST IN SAFE AND SECURE ALTERNATIVES TO IN-PERSON VOTING

## A. Pennsylvania Voters Are Legitimately Concerned About the Health Risks of In-Person Voting During the COVID-19 Pandemic

The COVID-19 pandemic is a global public-health emergency. As of

September 4, 2020, more than 137,662 Pennsylvanians have been diagnosed with

COVID-19 and over 7,700 have died of the disease.<sup>3</sup> The number of weekly cases

in Pennsylvania remains high, and will likely increase in the Fall and Winter.<sup>4</sup>

Affidavit of Dr. Donald Burke, dated September 8, 2020 (attached at Ex. 4) ¶¶ 52-

53. Senior citizens and persons with such underlying conditions as high blood

pressure, diabetes, chronic lung disease, or obesity are especially likely to suffer

serious illness or death from the virus.<sup>5</sup> *Id.*  $\P$  37. People of color have especially

high rates of infection, complications, and death resulting from COVID-19. Id.

<sup>3</sup> Coronavirus (COVID-19), PENN. DEP'T HEALTH (Sept. 4, 2020), https://www.health.pa.gov/topics/disease/coronavirus/Pages/Coronavirus.aspx; COVID-19 Data for Pennsylvania, PENN. DEP'T HEALTH (Sept. 4, 2020), https://www.health.pa.gov/topics/disease/coronavirus/Pages/Cases.aspx.

<sup>&</sup>lt;sup>4</sup> *COVID-19 Data for Pennsylvania*, PENN. DEP'T HEALTH (July 15, 2020), https://www.health.pa.gov/topics/disease/coronavirus/Pages/Cases.aspx.

<sup>&</sup>lt;sup>5</sup> Coronavirus Disease 2019 (COVID-19), People Who Are at Increased Risk for Severe Illness, CTRS. FOR DISEASE CONTROL & PREVENTION (updated June 25, 2020), https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-at-increased-risk.html.

¶ 43. Although Black Americans represent 12% of Pennsylvania's population, they account for a disproportionately higher number (22%) of the Commonwealth's COVID-19 deaths. *Id.* ¶ 49.

Some of the factors contributing to the devastating impact of COVID-19 on communities of color include reduced access to quality health care, higher prevalence of underlying chronic medical conditions, and housing challenges. Persons of color also are more likely to be employed as essential workers. *Id.* ¶¶ 43–47. These factors subject people of color and low-income Pennsylvanians to greater risk of exposure to the coronavirus. They are also more likely to suffer greater disease severity in the event of illness. *Id.* ¶ 43.

Close in-person contact at in-person polling sites increases the risk of infection. *Id.* ¶¶ 57–60, 67–70, 78. Florida and Chicago both reported positive tests and deaths for poll workers.<sup>6</sup> Following the Wisconsin primary, the state's Department of Health concluded that 71 in-person voters tested positive for COVID-19. *Id.* ¶ 81. One study also found that Wisconsin counties with higher

<sup>&</sup>lt;sup>6</sup> See, e.g., David Smiley & Bianca Padró Ocasio, Florida Held Its Primary Despite Coronavirus. Two Broward Poll Workers Tested Positive, MIAMI HERALD (Mar. 26, 2020), https://www.miamiherald.com/news/politics-government/article241539451.html; Mary Ann Ahern, Poll Worker at Chicago Voting Site Dies of Coronavirus, Election Officials Say, 5 CHI. (Apr. 13, 2020), https://www.nbcchicago.com/news/local/chicago-politics/poll-worker-atchicago-voting-site-dies-of-coronavirus-election-officials-say/2255072.

than average in-person voting had twice the rate of COVID-19 positive tests in the weeks that followed the election. *Id.*  $\P$  83.

Doctors and public health experts have observed that in-person voting poses a health risk to vulnerable communities, such as those represented by amici.<sup>7</sup> *See id.* ¶¶ 80–81, 90. Thousands of voters—including those who may be infected but are asymptomatic—can cycle through polling places on Election Day, exposing older volunteer poll workers. *Id.* ¶¶ 68–71, 78. Voting machines and materials exchanged between voters and poll workers are potential sites of surface transmission. *Id.* ¶¶ 73–74. Precautionary decontamination measures and social distancing cannot fully overcome the risk posed by prolonged exposure to strangers, including at polling places. *Id.* ¶¶ 42, 67–70, 72, 78.

No vaccine is expected to be widely available before the November election, and public health experts expect that infection and illness rates will remain high. *Id.* ¶¶ 50, 65. Even if every member of the public and poll worker employs best practices, infection at polling places cannot be entirely prevented. *Id.* ¶ 78. Social

<sup>7</sup> *Letter to Members of the United States Senate and House of Representatives*, Public Health Experts (May 5, 2020),

https://cdn.americanprogress.org/content/uploads/2020/05/05061221/21DemocracyTeam\_finalm ailvotingandcovid19.pdf (signed by over 800 public health experts).

distancing, masks, and the avoidance of crowded public places continue to be the best deterrent to COVID-19 spread.<sup>8</sup>

The COVID-19 pandemic has increased voter interest in alternatives to inperson voting. Ms. Wise, for example, has pre-existing conditions that pose a significant risk of severe illness and death if she contracts COVID-19. Wise Affidavit ¶ 5. Until the 2020 Primary, Ms. Wise voted in person in every election. She decided to vote by mail in the primary because of the COVID-19 pandemic. *Id.* ¶¶ 3–5. She applied for a mail-in ballot weeks before election day but did not receive the ballot until the day before the election. Id.  $\P\P$  6–7. With insufficient time to return the ballot by mail, Ms. Wise could not return her ballot. She did not have access to her family's only car. She could not use public transportation to deliver her ballot because she provides childcare to her grandchildren and was concerned about contracting COVID-19. Id. ¶¶ 10–11. For the first time in her memory, Ms. Wise did not vote. Id. ¶ 12. She would have been able to do so if the ballot receipt deadline had been extended, or if there was a drop-box closer to her home.

<sup>&</sup>lt;sup>8</sup> *Coronavirus Disease 2019 (COVID-19), How to Protect Yourself & Others*, CTRS. FOR DISEASE CONTROL & PREVENTION, https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html (updated July 31, 2020).

Like Ms. Wise, there are approximately four million high risk Pennsylvania adults who reasonably may conclude that in-person voting represents a significant health risk. Burke Affidavit ¶ 38.

#### **B.** Mail-In Ballots and Drop-Boxes Are Secure and Reliable

Millions of Americans vote by mail—at least one in four voters in the 2018 federal election.<sup>9</sup> In Pennsylvania, voters may apply for a mail-in ballot at any time. 25 P.S. §§ 3146.2, 3150.12. Once the application is received, the County Board of Elections determines voter eligibility before approving the application. *Id.* §§ 3146.2, 3150.12b.

Along with a ballot, the qualified mail-in voter receives instructions and two envelopes, one bigger than the other, to permit the smaller envelope to be placed within the larger one. *Id.* §§ 3146.3–.4, 3150.13–.14. On the smaller, so-called secrecy envelope, only the words Official Election Ballot are printed. *Id.* §§ 3146.4, 3150.14. The purpose of this envelope is to provide the voter with an additional layer of privacy protection. The larger envelope contains a form declaration containing a statement of the voter's qualifications and an averment

<sup>&</sup>lt;sup>9</sup> See, e.g., Wendy R. Weiser & Harold Ekeh, *The False Narrative of Vote by Mail Fraud*, BRENNAN CTR. FOR JUSTICE (Apr. 10, 2020), https://www.brennancenter.org/our-work/analysisopinion/false-narrative-vote-mail-fraud; *see also EAVS Deep Dive: Early, Absentee and Mail Voting*, U.S. ELECTION ASSISTANCE COMM'N (Oct. 17, 2017), https://www.eac.gov/documents/2017/10/17/eavs-deep-dive-early-absentee-and-mail-votingdata-statutory-overview.

that the voter has not already voted in the election. *Id.* Although County Boards of Election should record the identification number of the envelope into which the voter's ballot is inserted, *id.* §§ 3146.3, 3150.13, whether both envelopes are sent to voters is not currently tracked. Affidavit of Amber McReynolds, dated September 7, 2020 (attached at Ex. 7) ¶ 63.

Before 8 P.M. on election day, the voter should mark his ballot in secret. 25 P.S. §§ 3146.6, 3150.16. The voter then places the ballot in the secrecy envelope, and that envelope into the larger envelope. *Id.* The voter then fills out, dates, and signs the declaration on the larger envelope. *Id.* The voter (or where disabled a third-party) then delivers the ballot by either mail, in-person to the County Board of Election, or in a specially designated ballot collection drop-box. During the canvassing of ballots, the County Board of Elections examines the declaration and verifies the voter's proof of identification, without regard to whether the voter appears in person or votes by mail. *Id.* §§ 2602(z.5), 3146.8(g)(ii)(3).

Mail-in voting procedures, which provide for delivery of the ballot by a voter in a U.S.P.S. mailbox, or in a designated drop-box, are well-established nationally. Affidavit of Paul Gronke, dated September 8, 2020 (attached at Ex. 5) ¶¶ 32–33. California, Colorado, Hawaii, New Mexico, Oregon, and Washington

use drop-boxes.<sup>10</sup> *Id.* Drop-boxes are secured to the ground, fire-proof, and can be accessed only by authorized election officials. McReynolds Affidavit ¶¶ 50, 43–58. County election drop-boxes often have video surveillance. Some counties place drop-boxes within view of existing government property surveillance or contract with business owners for access to private video surveillance. *Id.* ¶ 53. Some counties temporarily reposition traffic or police cameras to observe drop-boxes. *Id.* 

The Pennsylvania Department of State ("DOS") has issued drop-box security guidance. *Pennsylvania Absentee and Mail-in Ballot Return Guidance*, Penn. Dep't State (Aug. 19, 2020), *available at* https://www.dos.pa.gov/ VotingElections/OtherServicesEvents/Documents/PADOS\_BallotReturn\_ Guidance\_1.0.pdf ("Guidance"). Pursuant to this Guidance, counties submit an election plan to DOS at least 45 days before the election. Counties must publish the plan 7-10 days after submission. *Id.* §§ 1.1, 1.3. DOS also provided recommendations for considerations of where drop-boxes should be located (*id.* § 1.2), design of drop-boxes to ensure security and ease of use (*id.* §§ 2.2, 2.4, 2.5),

<sup>&</sup>lt;sup>10</sup> See, e.g., VOPP: Table 9: Ballot Drop-box Definitions, Design Features, Location and Number, NAT'L CONF. STATE LEGISLATURES, https://www.ncsl.org/research/elections-andcampaigns/vopp-table-9-ballot-drop-box-definitions-design-features-location-and-number.aspx (last visited Sept. 5, 2020).

drop-box signage (*id.* § 2.3), and the collection and transport of ballots (*id.* §§ 3.1, 3.2). The Guidance is consistent with best practices. McReynolds Affidavit ¶¶ 32–33, 35; Gronke Affidavit ¶¶ 28–32.

The Guidance further instructs that drop-boxes should be: designed to prevent access by anyone other than authorized personnel; secured to prevent unauthorized removal, moving, or tampering; and, where feasible, monitored by video surveillance. The placement of drop-boxes in accessible locations increases access by voters who overwhelmingly prefer drop-boxes to in-person voting.<sup>11</sup> *See* DeMarco Affidavit ¶ 12; Graham-Robinson Affidavit ¶ 13; Gronke Affidavit ¶ 7; McReynolds Affidavit ¶ 41. Access to community drop-boxes also reduces third-party delivery of ballots because voters have more options to return their ballots on their own. Gronke Affidavit ¶¶ 10–12. Drop-boxes "improve[] voter access and turnout by reducing the costs of voting." *Id.* ¶ 42. An increase in early-voting locations is positively correlated to higher turnout, especially by Black and Hispanic voters. *Id.* 

<sup>&</sup>lt;sup>11</sup> Charles Stewart, 2016 Survey of the Performance of American Elections, HARVARD DATAVERSE at 12 (2017),

https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/Y38VIQ. The majority of voters in Colorado (73%), Washington (65%), and Oregon (59%) submitted their mail-in ballots at an election office or drop-box. *Id.* at 26.

The Republican Senate Caucus, the Republican Party of Pennsylvania, and their amici depict voting by mail or in a drop-box as subject to rampant voter fraud and the risk of potential counterfeit ballots. This fantastical depiction lacks evidentiary support. "[T]here is very little evidence of absentee ballot fraud in Pennsylvania over at least the past two decades." Affidavit of Lori Minnite, dated September 8, 2020 (attached at Ex. 6) ¶¶ 59, 63. Voting by mail is secure, no more susceptible to illegality than other forms of voting and endorsed by the Department of Homeland Security. Gronke Affidavit ¶¶ 35–38; McReynolds Affidavit ¶ 47. An exhaustive nationwide investigation by News21, a national investigative reporting project, found that *fewer than 0.00001%* of the billions of votes cast by mail between 2000 and 2012 were fraudulent.<sup>12</sup> Nationwide, there have been no significant incidents of tampering with drop-boxes. Gronke Affidavit ¶¶ 45, 50; McReynolds Affidavit ¶ 45.

<sup>&</sup>lt;sup>12</sup> Corbin Carson, *Election Fraud in America*, NEWS21 (Aug. 12. 2012), https://votingrights.news21.com/interactive/election-fraud-database.

The Heritage Foundation has created an online database called "A Sampling of Recent Election Fraud Cases from Across the United States." There is no description of the methodology for inclusion of cases. The site claims to provide "proven instances of voter fraud," but lumps relatively few instances of voters committing fraud with all other forms of election or public corruption and malfeasance, such as cases of "altering the vote count," "ballot petition fraud," and "buying votes," crimes voters in their capacity as voters cannot commit. The database identifies just 206 cases (of 1.6 billion votes cast) of "Fraudulent Use of Absentee Ballot" since 1988. Absentee ballot fraud in the U.S. is exceedingly rare. *See* Minnite Affidavit ¶ 6.

In Pennsylvania, there is "scant record of evidence of voter fraud of any kind."<sup>13</sup> *See* Minnite Affidavit ¶ 39; Gronke Affidavit ¶ 8. While no-excuse mailin voting is new, Pennsylvania has used absentee ballots for decades. Since 1998, there have been only 17 cases of election fraud in Pennsylvania. Minnite Affidavit ¶¶ 63–70. Only 5 of the 17 cases involved absentee ballots. *Id.* In 4 of those 5 cases, the improper act was committed by the candidate or someone working for the candidate. *Id.* Those parties that used the mail to commit vote fraud did so by intentionally deceiving voters to provide them with ballots that the candidates then filled out. *Id.* ¶¶ 65–69.

One reason that illegal voting is rare is that Pennsylvania has robust ballot verification procedures that ensure only one vote is counted per voter. *Id.* at 16–17, 20–21. The verification of the voter's identity applies equally to voters who appear in person and to ballots that are delivered by the U.S. mail or by county election drop-box. *Id.* at 16–17. Federal and Pennsylvania law also deter voter fraud with criminal penalties. *See, e.g.*, 25 P.S. § 3535 ("repeat" voting punishable up to seven years and/or \$15,000); 52 U.S.C. §§ 10307, 20511.

<sup>&</sup>lt;sup>13</sup> Act 35 Report at 39.

#### C. The Disruption of Mail Service May Disenfranchise Voters

Drop-boxes allow voters who receive their ballots close to election day to vote confidently. Pennsylvania law allows voters to request a mail-in ballot up to seven days before the election. 25 P.S. § 3150.12a(a). Postal Service guidelines, however, provide that under normal circumstances even the fastest standard option for delivery of election-related materials, including ballots, may take up to five days. Expert Report of Ronald Stroman, Ex. 8.2 to Affidavit of Lori A. Martin, dated September 8, 2020 (attached as Ex. 8) ¶ 18. A ballot sent to a voter and returned through U.S. First Class Mail could take 10 days, rendering it impossible for a voter who requests their ballot on October 27, 2020—seven days before the November election—to guarantee delivery by the date of the election.

Due to recent changes in Postal Service operations, mail delivery times may exceed 10 days. Staff shortages and prioritization of packages with life-saving pharmaceuticals and personal protective equipment receive delivery priority. *Id.* ¶ 20. Moreover, the surge in voting by mail has no precedent and has imposed unique strains on the Postal Service. *See id.* ¶ 3.

The Pennsylvania experience with delivery of mail-in ballots during the 2020 Primary is illustrative of the current strains on the Postal Service. Over 1.8 million Pennsylvania voters requested an absentee ballot in the June Primary. Tens

of thousands of those voters did not receive their ballots until *after* the election. *Id.* ¶ 11. County Boards of Election received 96,921 ballots back *after* the election; of the ballots received after the election, 61% (60,047) arrived within three days of the election date.<sup>14</sup> The Postal Service informed DOS that Pennsylvania's mail-in ballot system likely will result in the delivery of executed ballots to election officials after the date of the election.<sup>15</sup> The notification stated that the ballot system "creates a risk that ballots requested near the deadline under state law will not be returned by mail in time to be counted under your laws as we understand

Many of these ballots were accepted under one-time orders extending deadlines for specific counties, but thousands of others were not. Jonathan Lai, *Tens of thousands of Pennsylvania mail ballots were turned in after the deadline. November could be worse*, PHILA. INQUIRER (June 10, 2020), https://www.inquirer.com/politics/election/pa-mail-ballots-deadline-2020-primary-election-20200610.html; Pam Fessler & Elena Moore, *Signed, Sealed, Undelivered: Thousands of Mail-In Ballots Rejected For Tardiness*, NPR (July 13, 2020) (1.07% of Pennsylvania's mail-in ballots, or over 14,500 ballots, were not counted in the June primary because they arrived after the statutory deadline); Diana Cao, Angelo Dagonel, & Pia Deshpande, *Pennsylvania Election Analysis*, STANFORD MIT HEALTHY ELECTIONS PROJECT (Aug. 20, 2020), https://healthyelections.org/sites/default/files/2020-08/Pennsylvania%20Memo.pdf, at 22 (over 15,000 mail-in ballots were cancelled because they were returned after the deadline).

<sup>15</sup> Zak Hudak, U.S. Postal Service Warns that Pennsylvania's Mail-In Ballot Laws Could Cause Some Votes Not to Be Counted, CBS NEWS, (Aug. 14, 2020), https://www.cbsnews.com/news/postal-service-pennsylvanias-mail-in-ballot-laws-electionissues/.

<sup>&</sup>lt;sup>14</sup> See 2020 Primary Election Mail Ballot Requests Department of State, OPEN DATA PENN., https://data.pa.gov/Government-Efficiency-Citizen-Engagement/2020-Primary-Election-Mail-Ballot-Requests-Departm/853w-ecfz/data (last visited Sept. 5, 2020).

them."<sup>16</sup> Based on the Pennsylvania experience during the 2020 Primary, mail delays could disenfranchise 5% of voters who rely on the Postal Service to timely deliver their ballots. *See* Stroman Report ¶ 18. Drop-boxes would allow these voters to participate in the General Election. Gronke Affidavit ¶¶ 43–45.

## II. THE PENNSYLVANIA ELECTION CODE AND PENNSYLVANIA CONSTITUTION PERMIT THE USE OF SPECIALLY DESIGNATED ELECTION DROP-BOXES

### A. The Pennsylvania Election Code Authorizes Counties to Accept Mail-In Ballots at Specially Designated Election Drop-Boxes

The Code authorizes electors to vote by sending their ballots "by mail, postage prepaid, except where franked, or deliver it in person to *said county board of election*." 25 P.S. § 3146.6(a); 25 P.S. § 3150.16 (emphasis added). State law does not define "said county board of election" as the main office of each county board of elections. Instead, the Code defines a county board of elections as a body "consist[ing] of the county commissioners of such county ex officio, or any officials or board who are performing or may perform the duties of the county commissioners" that "shall have jurisdiction over the conduct of primaries and elections in [each] county." 25 P.S. § 2641(a)-(b). As with the location of inperson polling places, the County Board of Elections identifies the locations for in-

<sup>&</sup>lt;sup>16</sup> *Id.* 

person delivery of mail-in ballots and permits delivery of a ballot to a specially designated election drop-box. The Code authorizes counties to designate and operate multiple locations for receipt of ballots. The Code expressly indicates a County Board of Elections is a body that can designate "offices at the county seat" and "branch offices … in cities other than the county seat." *Id.* § 2645(b). The County Board of Election is, thus, a body that can serve voters at any location it designates, including drop-boxes for ballot collection.

### B. Pennsylvania Counties Are Using Specially Designated Drop-Boxes for the Receipt of Voter Ballots

Drop-boxes are an important element of a mail-in voting system. McReynolds Affidavit ¶ 16; Gronke Affidavit ¶¶ 32–34. They are "a safe and secure method of returning a vote by mail ballot, and provide a 'no-touch' method of return that is especially important for an election conducted in the midst of a pandemic." Gronke Affidavit ¶ 53. Pennsylvania counties that established election drop-boxes during the June 2020 Primary, include Bedford, Bucks, Cameron, Carbon, Centre, Chester, Clinton, Crawford, Dauphin, Delaware, Elk, Erie, Luzerne, Montgomery, Philadelphia, Venango, and York. These counties used drop-boxes similar in construction and design to drop-boxes used in other states. McReynolds Affidavit ¶¶ 29, 32–33. The Secretary's Act 35 report did not report any ballot security issues regarding these drop-boxes. See Act 35 Report at 4.

Due to the expansion of mail-in voting opportunities and fears about inperson voting during the COVID-19 pandemic, the number of ballots returned by mail (mail-in or absentee) increased from 84,000 in the 2016 primary to 1.5 million in the 2020 primary. *See* Act 35 Report. "[D]espite the changes and challenges, Pennsylvanians voted safely and peacefully in the primary, embracing the new mail-in voting option, and the new voting systems performed well." *Id*.

### C. The Free and Equal Elections Clause of the Pennsylvania Constitution Supports Removal of Barriers to Voting

Article I, Section 5 of the Pennsylvania Constitution provides: "Elections shall be free and equal; and no power, civil or military, shall at any time interfere to prevent the free exercise of the right of suffrage." PA. CONST., Art. I, § 5. This provision "mandates clearly and unambiguously, and in the broadest possible terms, that all elections conducted in this Commonwealth must be 'free and equal." *League of Women Voters*, 178 A.3d at 810. "[T]he Free and Equal Elections Clause has no federal counterpart" and "acts as a wholly independent protector of the rights of the citizens of our Commonwealth" with respect to elections. *Id.* at 802.

The Free and Equal Elections Clause protects the right to vote, which "[t]he Commonwealth recognizes ... as 'fundamental' and pervasive of other basic civil and political rights." *Applewhite v. Commonwealth*, No. 330 M.D. 2012, 2014 WL 184988, at \*18 (Pa. Commw. Ct. Jan. 17, 2014) (citation omitted). "[T]he right of suffrage is the most treasured prerogative of citizenship" and "may not be impaired or infringed upon in any way except through the fault of the voter himself." *Norwood Election Contest Case*, 116 A.2d 552, 553 (Pa. 1955).

In light of the imperative of safeguarding the right to vote, the "plain and expansive sweep of the words 'free and equal'" and the history of the provision, this Court held in *League of Women Voters*, 178 A.3d at 815, that the Free and Equal Elections Clause "should be given the broadest interpretation, one which governs all aspects of the electoral process." The Clause requires that "all aspects of the electoral process, to the greatest degree possible, be kept open and unrestricted to the voters of our Commonwealth, and, also conducted in a manner which guarantees, to the greatest degree possible, a voter's right to equal participation in the electoral process for the selection of his or her representatives in government." *Id.* at 804. It "guarantees [Pennsylvania] citizens an equal right, on par with every other citizen, to elect their representatives." *Id.* 

This Court should interpret the Code consistent with the Free and Equal Elections Clause's broad text and purpose. *See, e.g., Wolf v. Scarnati*, No. 104 MM 2020, 2020 WL 3567269, at \*11 (Pa. July 1, 2020). Pennsylvania counties have designated election drop-boxes for receipt of ballots and to foster greater electoral participation. The expansion of delivery receptacles for ballots serves the Free and Equal Elections Clause's prerogatives. *See Banfield v. Cortes*, 110 A.3d 155, 177 (Pa. 2015).

Counties that have been hard hit by COVID-19 require alternatives to voting in-person. Gronke Affidavit ¶¶ 46–52. Elections cannot be free when voters must risk their lives to vote. Elections are not free when voters who follow the rules are disenfranchised by the government's failure to provide mail-in ballots early, or when the Postal Service cannot guarantee timely ballot delivery.

The Republican Senate Caucus, the Republican Party of Pennsylvania, and their amici assert that County Boards of Election cannot designate the location for receipt of mail-in ballots and that high-risk voters should vote in-person to ensure that their vote is counted. They are wrong. The Code cannot be read to make voting "so difficult as to amount to a denial" of the franchise itself. *League of Women Voters*, 178 A.3d at 810. Interpreting the Code to prohibit drop-boxes would create a burden so heavy on voters to amount to a denial of the franchise. Safe, secure drop-boxes ensure that voters can have their ballot "honestly counted." *League of Women Voters*, 178 A.3d at 810.

#### III. FAILURE TO COUNT BALLOTS WITHOUT SECRECY ENVELOPES DISENFRANCHISES PENNSYLVANIA VOTERS

Before the June 2020 Primary, DOS informed counties that no statutory authority exists to set aside ballots lacking a secrecy envelope. E-mail from Jonathan Marks, Deputy Secretary for Elections & Commissions, to County Boards of Elections (May 28, 2020), Ex. 8.1 to Martin Affidavit. Notwithstanding this clear guidance, Lawrence County did not count approximately 440 ballots because they lacked a privacy envelope. Mot. to Modify Stay, *Trump Campaign v. Boockvar*, No. 20-cv-966, at 10 n.5 (W.D. Pa. Aug. 8, 2020), Dkt. 414. There is no evidence that voting impropriety is associated with missing secrecy envelopes. McReynolds Affidavit ¶ 16(b); Minnite Affidavit ¶¶ 65–69 (analyzing Pennsylvania voter fraud cases and finding none relating to secrecy envelopes).

Excluding lawfully cast votes for lack of a secrecy envelope has no statutory authorization. The purpose of the provision is to protect *the voter's interest in anonymity*; it is not designed as a condition for counting of votes. McReynolds Affidavit ¶ 60. The Code emphasizes the purpose of the envelope: so that voters "in secret … mark the ballot." Voters who mistakenly omit a secrecy envelope could not have expected their vote would be discarded, particularly when less

draconian measures exist for County Boards of Elections to process ballots in a way that preserves anonymity. *See id.* ¶¶ 59–68.

The Code's instruction to place the ballot in a secrecy envelope should be viewed as directory, not mandatory. MERSCORP, Inc. v. Delaware Cty., 207 A.3d 855, 866 (Pa. 2019) (explaining, "[w]hether a particular statute is mandatory or directory ... [depends] upon the intention of the Legislature, to be ascertained from a consideration of the entire act, its nature, its object, and the consequences that would result from construing it one way or the other," and finding that "shall" was directory in the statute at issue). In In re Luzerne County Return Board, this Court held that "the policy to liberally construe voting laws in the absence of fraud" required that election officials count ballots marked with inks other than blue, black, or blue-black ink despite the word "shall" preceding the instruction. 290 A.2d 108, 109 (Pa. 1972). Despite subsequent amendments to the Code, including Act 77, the legislature has never modified the Code to reverse the Court's ruling in that case, "thereby evincing an acquiescence in such construction."

Commonwealth v. Emerick, 96 A.2d 370, 373 (Pa. 1953).

The statutory language regarding secrecy envelopes for mail-in voting departs from that applicable to provisional ballots. For the latter, the Code states that provisional ballots will not be counted without a secrecy envelope. *See* 25

P.S. § 3050(a.4)(5)(ii)(C). That the legislature "knew how to" specify that some types of ballots must not be counted when they lack secrecy envelopes, yet "did not do so" with respect to absentee or mail-in ballots, demonstrates that the legislature's object was never to void mail-in ballots for lacking secrecy envelopes. *See Appeal of Stanton*, 452 A.2d 496, 498 (Pa. 1982).

The Free and Equal Clause of the Pennsylvania Constitution independently requires election officials to count ballots lacking secrecy envelopes. Ballot packages are currently not audited. McReynolds Affidavit ¶ 63. Counties that reject mail-in ballots without secrecy envelopes, even for voters who may not have received them, impermissibly disenfranchise voters "through [no] fault of the voter himself." *Appeal of Norwood*, 116 A.2d 552, 553 (Pa. 1955).

## IV. THE CODE AND THE PENNSYLVANIA CONSTITUTION SHOULD BE INTERPRETED AS PROVIDING FOR DELIVERY OF A BALLOT TO A POST OFFICE BOX OR DROP-BOX ON THE DATE OF ELECTION, WITH RECEIPT BY ELECTION OFFICIALS WITHIN THREE DAYS OF THE ELECTION

# A. States Endeavor to Ensure that Ballots Are Voted Before the Close of the Election

Citing concerns that the widespread delays of the Postal Service and the strain of the COVID-19 pandemic will burden Pennsylvanians' right to vote, the DOS petitioned this Court to treat ballots voted before the close of election, and received within three days of the election, as presumptively valid. *See* Praecipe to Withdraw Certain of Respondents' Preliminary Objections, *Crossey v. Boockvar*, No. 108 MM 2020 (Pa. Aug. 13, 2020). DOS views this relief as necessary to address the real threat that mail-delivery delays during an ongoing pandemic will disenfranchise Pennsylvania voters. *Id*.

To avoid thousands of voters being disenfranchised by mail delays, *see supra* note 14, allowing for a three-day extension of the ballot deadline is not only consistent with the Code, but is crucial to ensuring free and equal elections. DOS's concerns are shared by elections expert Amber McReynolds. McReynolds Affidavit ¶¶ 76–78. Because the purpose animating the deadline is to ensure the ballot is *voted* before election day, it is reasonable to count ballots that arrive within a time period that allows for a presumption the ballot was voted by the statutory deadline. *Id.* ¶¶ 77–78

#### **B.** The Code Should Be Construed as Allowing a Mailbox Rule

The Code states that qualified mail-in ballots will be canvassed if "received in the office of the county board of elections no later than eight o'clock P.M. on the day of the ... election," 25 P.S. § 3146.8(g)(1)(ii), and that County Boards of Elections shall meet "no later than the third day following the election" to canvass mail-in ballots not part of the pre-canvass meeting and "shall continue through the eighth day following the election." *Id.* § 3146.8(g)(1)(ii)(2).

To ensure that voters are not disenfranchised in violation of the Free and Equal Elections Clause of the Pennsylvania Constitution, this Court should construe the provision, "received in the office" by 8 P.M., as receipt in the appropriate receptacle before the close of the election. Such a construction is authorize in similar temporal statutes, such as receipt of ballots by the military voters, see 25 P.S. § 3511 (counting ballots "delivered by 5 p.m. on the seventh day following the election" even where the ballot has a late postmark), or has been read into the prisoner mailbox rule for the filing of court papers. The Superior Court construes statutes requiring "filing" by a certain date to perfect an appeal as the date the notice of appeal was mailed by a prisoner, even where the mailing was received after a filing deadline. Commonwealth v. Castro, 766 A.2d 1283, 1287 (Pa. Super. 2001). This interpretation recognizes that the prisoner "had done all that could reasonably be expected to get the letter to its destination within the required 10 days." Id. (citing Fallen v. United States, 378 U.S. 139, 144 (1964); see also Smith v. Pa. Bd. of Probation & Parole, 683 A.2d 278, 281 (Pa. 1996) (justifying the rule because prisoners are unfairly forced to rely on the vagaries of the mail to perfect their appeals).

During the COVID-19 pandemic, at-risk voters who request a mail-in ballot and deposit it with the U.S.P.S. by election day have done all that could reasonably be expected of them to get their ballot to election officials. The unknowable delays associated with the U.S.P.S. are not within the voter's control. To alleviate injustice and voter disenfranchisement, the Court should interpret the phrase "received in the office" as meaning the date that the voter deposits the ballot in the mail or such other receptacle designated by county election officials, and apply a presumption that any ballot delivered to election officials no later than the third day following the election is timely received by election officials.

This interpretation of the Code is consistent with practices throughout the country, where mail-in ballots are counted after Election Day. McReynolds Affidavit ¶¶ 75, 77. Moreover, it is consistent with Pennsylvania law that counts absentee ballots from military and overseas civilian voters if mailed by 11:59 pm on election day and received within 7 days of election day.<sup>17</sup> This interpretation also gives full import to this Court's prior rulings that the Pennsylvania Constitution requires the Code to be construed in the broadest possible terms to protect the voter's right of suffrage. *League of Women Voters*, 178 A.3d at 804; *Appeal of James*, 105 A.2d at 65–66.

<sup>&</sup>lt;sup>17</sup> See Information for Military and Overseas Voters, available at https://www.votespa.com/Voting-in-PA/Pages/Military-and-Overseas-Voters.aspx.

# C. The Pennsylvania Constitution Requires the Extension of the Ballot Deadline

In the extraordinary circumstances of an ongoing public health emergency, including unprecedented U.S.P.S. delays, *see* Stroman Report ¶ 20, enforcement of the received-by deadline violates Pennsylvania's Free and Equal Elections Clause. An election is not free when tens of thousands of Pennsylvania voters are disenfranchised due to the consequences of the pandemic or mail delays, or must risk their health to ensure their votes will be counted. *See League of Women Voters*, 178 A.3d at 804, 810. Nor is an election "equal" when risks are amplified in communities of color and urban population centers where polling places are consolidated and overcrowded, voters rely on public transportation, and mail delays are disproportionately worse. *Cf. id.* at 808–09 (an election is not equal if voters will experience grossly disparate burdens in their ability to cast an effective ballot based on "the region of the state in which they live").

In the present emergency, not counting ballots received within three days of the election infringes on the right of suffrage through no fault of the voter. *See Norwood*, 116 A.2d at 553. The Pennsylvania Constitution demands an extension.

#### **CONCLUSION**

The Court should reject any attempt to limit the full participation of registered Pennsylvania voters in the General Election. The Court should instead

conclude that Act 77 permits broad mail-in voting, including by depositing ballots in designated county election drop-boxes. The Court should require that election officials count all valid ballots received, even if missing a secrecy envelope. Finally, the Court should require election officials to count ballots that are mailed or deposited in a drop-box by the close of the election on November 3, 2020, provided they are received within 3 days of the election. Every vote cast by registered Pennsylvania voters should be counted.

#### Dated: September 8, 2020



Witold J. Walczak (PA No. 62976) AMERICAN CIVIL LIBERTIES UNION OF PENNSYLVANIA P.O. Box 23058 Pittsburgh, PA 15222 Tel: (412) 681-7736 vwalczak@aclupa.org

Sophia Lin Lakin AMERICAN CIVIL LIBERTIES UNION FOUNDATION 125 Broad Street, 18<sup>th</sup> Floor New York, NY 10004 Tel: (212) 549-2500 slakin@aclu.org Respectfully submitted,

<u>/s/ Lori A. Martin</u> Lori A. Martin (PA No. 55786) *Counsel of Record* Christopher R. Noyes Jared Grubow WILMER CUTLER PICKERING HALE AND DORR LLP 7 World Trade Center 250 Greenwich Street New York, NY 10007 Tel: (212) 230-8800 Lori.Martin@wilmerhale.com Christopher.Noyes@wilmerhale.com Jared.Grubow@wilmerhale.com

Jasón H. Liss Wilmer Cutler Pickering Hale

Adriel I. Cepeda Derieux AMERICAN CIVIL LIBERTIES UNION FOUNDATION 125 Broad Street, 18<sup>th</sup> Floor New York, NY 10004 Tel: (212) 549-2500 acepedaderieux@aclu.org

Dale Ho AMERICAN CIVIL LIBERTIES UNION FOUNDATION 125 Broad Street, 18<sup>th</sup> Floor New York, NY 10004 Tel: (212) 549-2500 dho@aclu.org

Sarah Brannon\* AMERICAN CIVIL LIBERTIES UNION FOUNDATION 915 15<sup>th</sup> Street, NW Washington, DC 20005 Tel: (202) 210-7287 sbrannon@aclu.org

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Mary M. McKenzie (PA No. 47434) PUBLIC INTEREST LAW CENTER 1500 JFK Blvd., Suite 802 Philadelphia, PA 19102 Tel: 215-627-7100 Fax: 215-627-3183 mmckenzie@pubintlaw.org AND DORR LLP 60 State Street Boston, MA 02109 Tel: (617) 526-6699 Jason.Liss@wilmerhale.com

Samantha Picans WILMER CUTLER PICKERING HALE AND DORR LLP 1225 Seventeenth Street, Suite 2600 Denver, CO 80202 Tel: (720) 598-3477 Sam.Picans@wilmerhale.com

David P. Yih WILMER CUTLER PICKERING HALE AND DORR LLP 1875 Pennsylvania Avenue NW Washington, DC 20006 Tel: (202) 663-6677 David.Yin@wilmerhale.com

Eleanor Davis WILMER CUTLER PICKERING HALE AND DORR LLP 7 World Trade Center 250 Greenwich Street New York, NY 10007 Tel: (212) 230-8800 Eleanor.Davis@wilmerhale.com

Benjamin D. Geffen (PA No. 310134) PUBLIC INTEREST LAW CENTER 1500 JFK Blvd., Suite 802 Philadelphia, PA 19102 Tel: 215-627-7100 Fax: 215-627-3183 bgeffen@pubintlaw.org

Counsel for Common Cause Pennsylvania; The League of Women Voters of Pennsylvania; The Black Political Empowerment Project; Make the Road Pennsylvania, a project of Make the Road States; Patricia M. DeMarco; Danielle Graham-Robinson; and Kathleen Wise

## phy Pour

John Powers Ezra Rosenberg Voting Rights Project LAWYERS' COMMITTEE FOR CIVIL RIGHTS UNDER LAW 1500 K Street NW, Suite 900 Washington, DC 20005 Tel: (202) 662-8300 jpowers@lawyerscommittee.org erosenberg@lawyerscommittee.org

\* Not admitted DC; DC practice limited to federal court only.

#### **PUBLIC ACCESS POLICY CERTIFICATE OF COMPLIANCE**

It is hereby certified by the undersigned that this filing complies with the provisions of the *Public Access Policy of the Unified Judicial System of Pennsylvania: Case Records of the Appellate and Trial Courts* that require filing confidential information and documents differently than non-confidential information and documents.

Respectfully submitted,

/s/ Lori A. Martin

Lori A. Martin (PA No. 55786) WILMER CUTLER PICKERING HALE AND DORR LLP 7 World Trade Center 250 Greenwich Street New York, NY 10007 (212) 230-8800 Lori.Martin@wilmerhale.com

Dated: September 8, 2020

#### **CERTIFICATE OF COMPLIANCE WITH WORD COUNT**

It is hereby certified by the undersigned that this filing complies with the word count limitations of Pennsylvania Rules of Appellate Procedure §§ 531(b)(3) & 2135. The filing is 6,751 words long.

Respectfully submitted,

/s/ Lori A. Martin

Lori A. Martin (PA No. 55786) WILMER CUTLER PICKERING HALE AND DORR LLP 7 World Trade Center 250 Greenwich Street New York, NY 10007 (212) 230-8800 Lori.Martin@wilmerhale.com

Dated: September 8, 2020

# **EXHIBIT 1**

## IN THE SUPREME COURT OF PENNSYLVANIA

PENNSYLVANIA DEMOCRATIC PARTY, et al., Petitioners,

Election Matter

v.

NO. 133 MM 2020

KATHY BOOCKVAR, et al.,

Defendants.

#### **AFFIDAVIT OF VOTER DANIELLE GRAHAM ROBINSON**

I, Danielle Graham Robinson, hereby affirm as follows:

- 1. I am a 44-year-old woman who lives in the Brighton Heights neighborhood on Pittsburgh's Northside. Pittsburgh is in Allegheny County, Pennsylvania.
- 2. I have a graduate degree in theology but have most recently been working as a realtor.
- 3. I am a voter who rarely misses an election. Civic engagement generally, and voting specifically, are very important to me.
- 4. Until the most recent primary election on June 2, 2020, I have always voted in person at my polling place. I often volunteer to work at the

polls for candidates whom I support, but I did not do so during the most recent election.

- 5. I have several medical conditions that, according to the CDC, put me at high risk of serious illness and even death if I contract COVID-19.
- 6. Because of my elevated risk of serious illness during the COVID-19 pandemic, I decided to vote by mail for the June 2, 2020, election. I cannot afford the risk of having go to an indoor polling place, where I will be exposed to potentially many other people.
- 7. Because I am such a conscientious voter, I applied very early for my mail-in ballot sometime in early April. Despite this early application, the Allegheny County Board of Elections' mail-in ballot tracker indicates they did not receive my ballot application until April 28. I do not know whether the mail was that slow or if the application sat in the Elections offices for a while
- 8. The tracker also indicated that they mailed my ballot on May 2. I know from speaking to many other voters that they did not receive their ballots until many days and sometimes weeks after the mail date shown in the Allegheny County mail-in ballot tracker.
- 9. I cannot remember the exact date I received my ballot, but it was sometime after May 14 and before May 25.
- 10. Because it was only about a week before Election Day, which I know is the deadline to return the mail-in ballot, I was nervous about relying on the postal service to return my completed ballot. The first steps in the process took way longer than they should have.
- 11. In order to ensure my ballot was delivered on time, I personally took the ballot to the only place in Allegheny County that was accepting hand delivered mail-in ballots, which was the County Office Building in downtown Pittsburgh where the Elections Bureau has its offices.
- 12. While Brighton Heights is not that far from downtown, it is further than I can walk. I was not willing to risk my health by taking public transportation during the pandemic, especially given my health vulnerability. Consequently, I was forced to drive my car, which I had to park at a cost of \$15. Given the pandemic's impact on real

estate sales, \$15 was a significant expense. I had to go into the building, which also scared me because of the risk of exposure to strangers.

- 13. Given my health condition, and the likelihood that the virus will still be with us in November, I will almost certainly need to vote again by mail. I very much would like to see Allegheny County, and all of Pennsylvania, provide numerous "no contact" drop boxes throughout the county to make it easy and safe for people to deposit their mail-in ballots.
- 14. I am not receiving any financial or other compensation for participating in this litigation.

I hereby certify that the foregoing statements are true and correct to the best of my knowledge, information, and belief. This verification is made subject to the penalties of 18 Pa.C.S. § 4904 relating to unsworn falsification to authorities.

Executed this 8<sup>th</sup> day of September, 2020.

Danielle Graham Robinson

# **EXHIBIT 2**

## IN THE SUPREME COURT OF PENNSYLVANIA

PENNSYLVANIA DEMOCRATIC PARTY, et al.,

Petitioners,

NO. 133 MM 2020

v.

KATHY BOOCKVAR, et al.,

Respondents.

### AFFIDAVIT OF VOTER KATHLEEN WISE

I, Kathleen Wise, hereby affirm as follows:

- 1. I am a 62-year-old woman who lives in South Park Township, which is located in Southern Allegheny County, Pennsylvania.
- 2. I am a widow who retired due to a disability from nursing after more than thirty years. I am now a caretaker for my daughter's two young children.
- 3. Until this past election, I have voted in every election I can remember.
- 4. Prior to the most recent primary election on June 2, 2020, I have always voted in person at my polling place.
- 5. This past election, however, I decided to vote by mail because of the COVID-19 pandemic. My age and the fact I have several pre-existing conditions specified by the CDC, puts me at high risk of severe illness

- 6. and death if I contract the virus. I do not believe that going to a polling place, which is indoors and there are strangers present, is safe. Even with a mask, I am afraid of the risk.
- 7. Consequently, I applied by mail for a mail-in ballot from the Allegheny County Bureau of Elections several weeks before Election Day.
- 8. I did not, however, receive my ballot until June 1, the Monday before Election Day.
- 9. Knowing that there was no way I could mail the ballot and be sure it would reach the Elections Bureau by the deadline, which was Election Day the very next day I asked my daughter to take my completed mail-in ballot to the Township's one consolidated polling place, which was at the fire hall on Broughton Road.
- 10. The poll workers at the fire hall refused to take my ballot because they told my daughter I had to bring it in personally.
- 11. I could not take the ballot to the fire hall personally because I did not have access to the household's one car. I also had to care for my grandchildren, so even if I had access to the car I would have been worried to take them to the polling place because I would be risking all three of us to exposure to the virus.
- 12. I have since learned that even if I had personally taken my ballot to the one South Park polling place they could not have accepted the ballot because the Elections Bureau had only one drop box for all of Allegheny County, which was located at their offices in the County Office Building in downtown Pittsburgh. I would have had no way to get to that location, except possibly by mass transit, which during this pandemic I would not want to take, especially with my grandchildren.
- 13. So for the first time in as long as I can remember I was not able to vote in an election on June 2, 2020.
- 14. I am determined to cast my vote in the November 2020 general election, but because of the likelihood that the COVID-19 virus will still create risk, especially for people like me who are acutely vulnerable to fatal health effects, I will need to vote by mail.

- If I once again receive my ballot late, I will need some way to vote my 15. mail-in ballot that does not require me to travel long distances, or to enter an indoor location congested with strangers.
- I am not receiving any financial or other compensation for 16. participating in this litigation.

I hereby certify that the foregoing statements are true and correct to the best of my knowledge, information, and belief. This verification is made subject to the penalties of 18 Pa.C.S. § 4904 relating to unsworn falsification to authorities.

Executed this 8<sup>th</sup> day of September, 2020.

Kathleen Wise

# **EXHIBIT 3**

# IN THE SUPREME COURT OF PENNSYLVANIA

PENNSYLVANIA DEMOCRATIC PARTY, et al.,

**Election Matter** 

Petitioners,

v.

NO. 133 MM 2020

KATHY BOOCKVAR, et al.,

Defendants.

# AFFIDAVIT OF VOTER PATRICIA M. DEMARCO

I, Patricia M. DeMarco, hereby affirm as follows:

- 1. I am a 74-year-old woman who lives in Forest Hills Borough, Allegheny County, Pennsylvania.
- 2. I am a retired, but now-adjunct, professor of science, ethics and public policy at Chatham University.
- 3. I vote in nearly every election. Indeed, I cannot remember the last election in which I did not vote. I believe that voting is a civic obligation.
- 4. Ordinarily, I would vote in the nearby polling place, which is walking distance from my house. In the most recent primary, held on June 2,

2020, Allegheny County consolidated polling places so that there was only one available location to vote in the entire borough. It was not walking distance from my house.

- 5. According to the CDC and other health organizations, my age (74) and at least two co-morbidities put me at severe risk of severe illness and even death if I contract COVID-19.
- 6. Because of concern about unnecessary exposure to the virus if I voted in person at a polling place, I and my live-in partner, who is also at heightened risk, opted to vote by mail.
- 7. My partner and I both applied for and received ballots in May 2020, and put them in a public postal box well in advance of the ballot return deadline, which was election day.
- 8. Upon repeatedly checking the Allegheny County Board of Elections' website, I learned that my partner's ballot had been received, but there was no indication that they received mine.
- 9. When I checked the status of my ballot on the County Board of Elections website on election day, it still did not indicate that they had received my ballot. I had no choice but to go to my polling place, protected by two masks, to cast a ballot. I was made to vote provisionally because I had requested a mail-in ballot.
- 10. To this day I do not know if my ballot was counted, either the one I mailed in or the provisional one I cast at the polling place.
- 11. If there had been a conveniently located drop box for my ballot, either in my Borough or at the polling place, I could have been assured the County Elections Board received it.
- 12. While I would prefer to vote in person in November 2020, if the threat of COVID-19 remains high I will vote by mail, but I am nervous that my ballot may once again get lost or for some reason not be counted. I would feel more secure if I could drop my mail-in ballot into a drop box that would go directly to the County Elections Board for counting.
- 13. I am also an elected official on Forest Hills Borough Council. We have many people living in senior apartment complexes in the Borough who regularly walk to one of the eight polling places that are regularly open. Because these seniors too are at heightened risk of fatal infection, they are likely to want to vote by mail. Placing drop boxes outside of the

normal polling places would enable most of them to be sure that their ballots are delivered to the County Elections Board and increase the likelihood that the ballots are counted.

14. I am not receiving any financial or other compensation for participating in this litigation.

I hereby certify that the foregoing statements are true and correct to the best of my knowledge, information, and belief. This verification is made subject to the penalties of 18 Pa.C.S. § 4904 relating to unsworn falsification to authorities.

Executed this 8<sup>th</sup> day of September, 2020.

Tatrice M. De Mario Patricia M. DeMarco

# **EXHIBIT 4**

# IN THE SUPREME COURT OF PENNSYLVANIA

PENNSYLVANIA DEMOCRATIC PARTY, et al.,

Petitioners,

No. 133 MM 2020

v.

KATHY BOOCKVAR, et al.,

Respondents.

### AFFIDAVIT OF DONALD S. BURKE, MD

September 8, 2020

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#### I. Introduction

1. My name is Donald S. Burke. I have been retained by Wilmer Cutler Pickering Hale and Dorr LLP, counsel for Common Cause Pennsylvania; The League of Women Voters of Pennsylvania; The Black Political Empowerment Project ("B-PEP"); Make the Road Pennsylvania, a project of Make The Road States ("Make the Road PA"); Patricia DeMarco; Danielle Graham Robinson; and Kathleen Wise (together, "Amici") in the matter *Pennsylvania Democratic Party, et al., v. Boockvar, et al.*, No. 133 MM 2020.

2. A central issue in this matter is the impact of COVID-19—including how it spreads, and vulnerable populations—and the related risks created by inperson voting. I have been asked to evaluate the transmission and spread of COVID-19 and the effect of in-person voting on its spread. I have also been asked to assess and comment on any opinions provided by other experts on these same issues.

#### **II.** Summary of Opinions

3. The SARS-CoV-2/COVID-19 pandemic is a serious and grave threat to public health that has led to over 6.2 million Americans being infected and has resulted in greater than 187,000 American deaths, and counting.

4. In-person voting at a polling place on election day poses serious health risks to many voters—particularly older voters, persons of color, and/or persons

with conditions that place them at increased risk. In-person voting will likely expose voters and poll workers to the novel coronavirus SARS-CoV-2, lead to new cases of COVID-19, and result in avoidable serious illness and even death. If voters fear casting their ballots in person at a polling place on election day based on spreading or contracting SARS-CoV-2, their concerns are legitimate from a medical and public health basis.

5. Returning any kind of ballot in person, including mail-in or absentee ballots, directly to an election official poses significant health risks to many voters—particularly older voters, persons of color, and/or persons with conditions that place them at increased risk. Returning any kind of ballot in person will likely expose voters to the novel coronavirus SARS-CoV-2, lead to new cases of COVID-19, and result in avoidable serious illness and even death. If voters fear personal delivery of their mail-in ballot based on spreading or contracting SARS-CoV-2, their concerns are legitimate from a medical and public health basis.

6. These health risks will be disproportionately borne by older Americans, low-income communities and communities of color. The disproportionately high prevalence of chronic underlying medical conditions and other risk factors in these communities will be compounded by longer wait times and larger congregations of voters waiting in line to cast their ballot.

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7. As compared to in-person voting at a polling place, voting by depositing a ballot in a mail-box or in a drop-box is significantly safer for individual voters—particularly older voters, persons of color, and/or persons with conditions that place them at increased risk—and would reduce the risk of community spread of SARS-CoV-2.

8. Given that the only viable public health strategies available in the United States currently are risk mitigation and containment, reducing the number of events where large numbers of the general public cycle through enclosed spaces is imperative. Not taking steps to reduce these kinds of events is not only inadvisable but also reckless given the public health realities we now face in the United States.

9. Permitting voters to vote by mail or by drop-box will protect the health of voters and particularly those who are at especially at risk due to their age, compromised immune systems, or because they live with at-risk friends or family members. Steps taken to encourage and promote voting by mail or by drop-box which can take place outside, and do not require interaction with an election official—will reduce the transmission of the novel coronavirus, thereby preventing illness and likely saving lives.

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#### III. Background

10. I received a B.A. in chemistry and biology, *magna cum laude*, from Western Reserve University in 1967. I received a M.D. from Harvard Medical School in 1971.

11. From 1971-1976, I completed my residency training and fellowship at the Boston City Hospital and the Massachusetts General Hospital. I subsequently spent two years as a research fellow in infectious disease at the Walter Reed Army Medical Center.

12. I am the Distinguished University Professor of Health Science and Policy, the Jonas Salk Chair in Population Health, and a Professor of Epidemiology at the University of Pittsburgh.

13. I was the Dean of the University of Pittsburgh's Graduate School of Public Health from 2006-2019. I also served as the Director of the University of Pittsburgh's Center for Vaccine Research from 2006-2016.

14. I am a member of the Board of Health for Allegheny County, and have served in this capacity since 2008.

15. From 1973 to 1997, I served in the United States Army in multiple capacities, including as a Clinical Ward Officer for the U.S. Army Medical Research Institute of Infectious Diseases, a Clinical Desk Officer and Chief for

the Department of Virus Diseases, a Chief in the Virology Department of the Armed Forces Research Institute of Medical Sciences in Bangkok, Thailand, of which I subsequently served as Deputy Director, and a Research Fellow in Infectious Disease. From 1988-1990 I was a Director in the Division of Retrovirology at the Walter Reed Army Institute of Research. In 1988, I founded the U.S. Military HIV/AIDS Laboratory Complex, of which I served as Director until 1996. From 1996-1997, I was the Associate Director for Emerging Threats and Biotechnology.

16. I retired from the United States Army at the rank of Colonel after 23 years of active duty.

17. From 1997 to 2006, I was a Professor of International Health and Professor of Epidemiology at the Johns Hopkins Bloomberg School of Public Health, and a Professor of Medicine at the Johns Hopkins School of Medicine. I was also the Director of the Johns Hopkins Bloomberg School of Public Health's Center for Immunization Research.

18. I hold the following professional certifications, memberships, and affiliations:

- Elected Member, National Academy of Medicine
- Elected Fellow, American Association for the Advancement of Science
- Elected Fellow, American Academy of Microbiology

- Elected Fellow, American Epidemiological Society
- Fellow and former President (1995-96), American Society of Tropical Medicine and Hygiene
- Fellow, Royal Society of Tropical Medicine and Hygiene (U.K.)
- Fellow, American College of Physicians
- Fellow, Infectious Disease Society of America
- Member, American Public Health Association
- Member, Physicians for Human Rights
- Member, American Society for Virology
- Member, American Association for the History of Medicine
- Member, International AIDS Society
- Member, International Society for Vaccines
- Certified Diplomat in the Sub-Specialty of Infectious Diseases, American Board of Internal Medicine (1978-present)
- Certified Diplomat in the Specialty of Internal Medicine, American Board of Internal Medicine (1977-present)
- 19. I have studied prevention and control of infectious diseases of global

concern, including HIV/AIDS, influenza, dengue, and emerging infectious diseases. I lived for six years in Thailand, worked extensively in Cameroon, and conducted field epidemiology and vaccine studies in those countries and in numerous other developing countries.

20. I led a trans-disciplinary team to develop computational models and simulations of epidemic infectious and chronic diseases and use these simulations to forecast possible future trajectories of epidemics, and to evaluate prevention and control strategies. I have won major competitive grants for research on modeling of epidemic infectious diseases from the National Institutes of Health ("NIH"), the Centers for Disease Control and Prevention ("CDC"), the

Department of Defense, the Bill and Melinda Gates Foundation, and the Robert Wood Johnson Foundation. I am currently conducting research to apply these methods to the COVID-19 pandemic.

21. I co-founded and serve as President and Chairman of the Board of Epistemix, Inc., a start-up company the provides software and services for computational modeling to forecast and control epidemic diseases.

22. I have served on expert advisory panels on epidemic infectious diseases for the NIH, CDC, Food and Drug Administration ("FDA"), and the World Health Organization ("WHO").

23. In a book chapter on emerging viruses,<sup>1</sup> I correctly predicted the epidemic threat posed by coronaviruses, five years before the emergence of SARS. I authored two op-ed articles in *The Wall Street Journal* on the emergence of SARS and related viruses.

24. I have been interviewed and quoted about COVID-19 epidemiology in major national media (*Newsweek*, March 16; *New York Times*, April 23 and May 4), and in Pittsburgh and other Pennsylvania print, radio, and television media on numerous occasions.

<sup>&</sup>lt;sup>1</sup> DONALD S. BURKE, *Evolvability of Emerging Viruses*, PATHOLOGY OF EMERGING INFECTIONS Ch. 1 (Nelson A.M. and Horsburgh C.R., eds., American Society of Microbiology, 1998).

25. I serve on the expert Advisory Group to the National Academy of Medicine and the American Public Health Association on their national COVID-19 webinar series.

26. I have authored or co-authored over 300 peer-reviewed academic publications mostly on the topic of epidemic infectious diseases. My *curriculum vitae* lists all of the publications I have authored, including all those in the last 10 years, and is attached as Appendix A.

27. My contributions to epidemiology have been recognized by my peers. For example, in 2018, I received the John Snow Award from the Epidemiology Section of the American Public Health Association. In 2019 I was the Alexander Langmuir Keynote Lecturer at the American Epidemiological Society.

28. I have not testified as an expert at deposition or trial in the last four years.

#### **IV.** Materials Considered

29. In forming the opinions that I express in this report, I considered the materials referenced in the body of this report, the documents identified in Appendix B, and my own knowledge and experience.

#### V. Compensation

30. I am being compensated for my time at a consulting rate of \$225 per hour, up to \$4,000, and reimbursement for reasonable travel expenses. My compensation is not contingent upon the nature of my opinions, findings, conclusions, or the outcome of this matter.

#### VI. COVID-19

31. The SARS-CoV-2 coronavirus causes a disease known as COVID-19.<sup>2</sup> COVID-19 was declared to a pandemic by the World Health Organization (WHO) in March 2020. As of September 5, 2020, more than 6.1 million people have been infected with the coronavirus in the United States, and more than 187,000 people have died due to COVID-19.<sup>3</sup> The reported numbers of infections and of deaths in the United States are likely undercounted due to months of undertesting stemming from a variety of issues including a lack of testing kits, an inadequate

<sup>&</sup>lt;sup>2</sup> My report and other sources may refer to COVID-19 (the disease) interchangeably with SARS-CoV-2 (the virus).

<sup>&</sup>lt;sup>3</sup> See Cases in the U.S., CTRS. FOR DISEASE CONTROL AND PREVENTION, https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html (last accessed Sept. 5, 2020).

supply of personal protective equipment, and the sizeable number of people who are asymptomatic carriers of the virus.<sup>4</sup>

32. SARS-CoV-2 is easily spread through respiratory transmission and can be spread by both infected individuals exhibiting symptoms and asymptomatic carriers. Infected persons can transmit the virus before they start to show symptoms, and perhaps even for weeks after their symptoms resolve. A substantial portion of infected individuals, perhaps up to 35%, never show symptoms at all but may still transmit the virus to others.<sup>5</sup> Others may be capable of transmitting the virus before they develop symptoms. This means that testing or isolating only persons known to have symptoms will not stop the spread of infection. In addition, some people are so-called "superspreaders," who are thought to be more infectious than others and contribute to a higher rate of transmission due to a variety of causes, including behaviors and biological factors.

33. All people are susceptible to and capable of being infected with SARS-CoV-2 because of the ease with which the virus spreads and the low rates of

<sup>&</sup>lt;sup>4</sup> See Apoorva Mandavilli, Actual Coronavirus Infections Vastly Undercounted, C.D.C. Data Shows, N.Y. TIMES (June 27, 2020),

https://www.nytimes.com/2020/06/27/health/coronavirus-antibodies-asymptomatic.html (updated Aug. 6, 2020).

<sup>&</sup>lt;sup>5</sup> *COVID-19 Pandemic Planning Scenarios*, CTRS. FOR DISEASE CONTROL AND PREVENTION (May 20, 2020), https://www.cdc.gov/coronavirus/2019-ncov/hcp/planning-scenarios.html.

immunity in the population. The virus is spread through large and small airborne droplets; that is, when an infected individual—whether symptomatic or asymptomatic—speaks, coughs, sneezes, talks, sings, etc., that individual expels droplets which can transmit the virus to others in their proximity. Some evidence suggests that the virus can be aerosolized, such that tiny droplets containing the virus can remain in the air and be inhaled by others who come into contact with that air. The virus is also known to be spread through contact with contaminated surfaces, for example, when an infected person touches a surface with a hand they have coughed into and then another person touches that same surface before it has been disinfected and then touches their face. The virus can survive on some contaminated surfaces for up to three days.<sup>6</sup>

34. Without adhering to effective social distancing measures, a SARS-CoV-2 infected individual is estimated to infect on average two to three others, in a community context. This "basic reproduction number," or  $R_0$ , for SARS-CoV-2 is higher in comparison to that of seasonal influenza, where on average one to one and one-half others become infected. The  $R_0$  can vary according to population

<sup>6</sup> Neeltje van Doremalen et al., *Aerosol and Surface Stability of SARS-CoV-2 as Compared With SARS-CoV-1*, 382 NEW ENG. J. MED. 1962 (2020), https://pubmed.ncbi.nlm.nih.gov/32182409/; *How COVID-19 Spreads*, CTRS. FOR DISEASE CONTROL AND PREVENTION, https://tools.cdc.gov/api/v2/resources/media/407478/content.html (last accessed Sept. 5, 2020). density, with higher population density geographic areas having higher  $R_0$  values than lower population density areas.<sup>7</sup>

35. Outbreaks of COVID-19 have been reported in both indoor and outdoor spaces. Outbreaks have been linked to restaurants (Lu), fitness classes (Jang), and during choir practice in a "large multipurpose room" (Hamner). Attending events at a church led to a high COVID-19 attack rate (James). Family gatherings, such as attending a funeral or a birthday party, have led to COVID-19 clusters (Ghinai). These outbreaks demonstrate the infectiousness of SARS-CoV-2 and the possibility for transmission at indoor congregate activities, even in relatively spacious settings like a church—and, as relevant here, at a polling place where voting is occurring during an election—or in a crowded line without adequate social distancing.<sup>8</sup>

Paul L. Delamater, Erica J. Street, Timothy F. Leslie, Y. Tony Yang, and Kathryn H. Jacobsen, *Complexity of the Basic Reproduction Number (Ro)*, EMERGING INFECTIOUS DISEASES, Vol. 25, No. 1 (January 2019); see also Seth Flaxman et al., *Estimating the effects of non-pharmaceutical interventions on COVID-19 in Europe*, 584 NATURE 257 (2020), https://www.nature.com/articles/s41586-020-2405-7; Eskild Peterson et al., *Comparing SARS-CoV-2 with SARS-CoV and influenza pandemics*, 20 LANCET INFECTIOUS DISEASES e238 (2020), https://doi.org/10.1016/S1473-3099(20)30484-9; Ruiyun Li et al., *Substantial undocumented infection facilitates the rapid dissemination of novel coronavirus (SARS-CoV-2)*, 368 SCIENCE 489 (2020), https://science.sciencemag.org/content/368/6490/489.full; Benjamin J. Cowling et al., *The effective reproduction number of pandemic influenza: Prospective estimation*, 21(6) EPIDEMIOLOGY 842 (2010), author manuscript available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3084966/.

<sup>&</sup>lt;sup>8</sup> Jianyun Lu, et al., *Early Release-COVID-19 Outbreak Associated with Air Conditioning in Restaurant, Guangzhou, China, 2020*, 26 EMERG. INFECT. DIS. 1628 (2020), https://wwwnc.cdc.gov/eid/article/26/7/pdfs/20-0764-combined.pdf; Sukbin Jang, et al., *Cluster of Coronavirus Disease Associated with Fitness Dance Classes, South Korea*, 26 EMERG.

36. COVID-19 is a serious multi-system disease, which can lead to, among other things, respiratory, heart, and kidney failure, and ultimately death. Older persons and persons of any age with chronic underlying conditions are at a particularly high risk of severe cases and complications.<sup>9</sup>

37. According to the Centers for Disease Control and Prevention ("CDC"), underlying conditions that create an increased risk of severe illness from COVID-19 include cancer, chronic kidney disease, chronic obstructive pulmonary disease, immunocompromised state, obesity, serious heart conditions, sickle cell disease, and Type 2 diabetes.<sup>10</sup> In addition, conditions that might cause an increased risk of severe illness from COVID-19 include asthma, smoking, hypertension, pregnancy, cerebrovascular disease, cystic fibrosis, neurologic conditions, liver disease, pulmonary fibrosis, thalassemia, and Type 1 diabetes.

INFECT. DIS. 1917 (2020), https://wwwnc.cdc.gov/eid/article/26/8/pdfs/20-0633-combined.pdf; Isaac Ghinai, et al., *Community Transmission of SARS-CoV-2 at Two Family Gatherings -Chicago, Illinois, February-March 2020*, 69 MORBIDITY & MORTALITY WKLY REP. 446 (2020), https://www.cdc.gov/mmwr/volumes/69/wr/mm6915e1.htm; Lea Hamner, et al., *High SARS-CoV-2 Attack Rate Following Exposure at a Choir Practice — Skagit County, Washington, March 2020*, 69 MORBIDITY & MORTALITY WKLY REP. 606 (2020), https://www.cdc.gov/mmwr/volumes/69/wr/mm6919e6.htm.

<sup>&</sup>lt;sup>9</sup> Fei Zhou et al., *Clinical Course and Risk Factors for Mortality of Adult Inpatients with COVID-19 in Wuhan, China*, 395 LANCET 1054 (2020), https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30566-3/fulltext.

<sup>&</sup>lt;sup>10</sup> *People with Certain Medical Conditions*, CTRS. FOR DISEASE CONTROL AND PREVENTION, https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html (last accessed Sept. 5, 2020).

38. The Kaiser Family Foundation has estimated the proportion of each state's population at elevated risk for severe COVID-19 illness due to underlying conditions, based on the definition from the CDC of adults who are at increased risk and the CDC's 2018 Behavioral Risk Factor Surveillance System. Based on this analysis, *in Pennsylvania, 40% of adults (over the age of 18) are at elevated risk for severe illness due to COVID-19—that is approximately four million people*. And older adults (age 65 years and over) make up 58% of that elevated risk population in Pennsylvania.<sup>11</sup>

39. COVID-19 is associated with an increased need for care, including intensive care, and an increased likelihood of death, compared to seasonal influenza. According to recent estimates, the fatality rate of people infected with COVID-19 is about ten times higher than a severe seasonal influenza, even in

<sup>&</sup>lt;sup>11</sup> State Data and Policy Actions to Address Coronavirus, KAISER FAMILY FOUNDATION, https://www.kff.org/coronavirus-covid-19/issue-brief/state-data-and-policy-actions-to-addresscoronavirus/ (last accessed Sept. 5, 2020); How Many Adults Are at Risk of Serious Illness If Infected with Coronavirus? Updated Data, KAISER FAMILY FOUNDATION, https://www.kff.org/global-health-policy/issue-brief/how-many-adults-are-at-risk-of-seriousillness-if-infected-with-coronavirus/ (last accessed Sept. 5, 2020).

advanced countries with highly effective health care systems.<sup>12</sup> Serious illness, sometimes resulting in death, occurs in approximately 3% of cases.<sup>13</sup> The rate of life-threatening complications is higher among elderly and other at-risk individuals.

40. Patients with COVID-19, particularly those in high-risk categories, may have serious illness requiring hospitalization. For those hospitalized with COVID-19, their care often requires expensive hospital care, including an entire team of health professionals with 1:1 or 1:2 staff to patient ratios, respiratory therapists, and several specialists, including intensive care and infectious disease physicians.<sup>14</sup> Those infected with coronavirus—both those who were hospitalized and those who had mild to moderate disease not requiring hospitalization—may face prolonged recovery periods, potentially requiring extensive rehabilitation.<sup>15</sup>

<sup>&</sup>lt;sup>12</sup> Marco Cascella et al., *Features, Evaluation, and Treatment of Coronavirus (COVID-19)*, STATPEARLS, https://www.ncbi.nlm.nih.gov/books/NBK554776/ (updated Aug. 10, 2020) (noting the fatality rate of the COVID-19 outbreak in China was 2.3%); Eskild Peterson et al., *Comparing SARS-CoV-2 with SARS-CoV and influenza pandemics*, 20 LANCET INFECTIOUS DISEASES e238 (2020), https://doi.org/10.1016/S1473-3099(20)30484-9 (estimating that COVID-19 has a fatality rate of approximately 1%); *Disease Burden of Influenza*, CTRS. FOR DISEASE CONTROL AND PREVENTION, https://www.cdc.gov/flu/about/burden/index.html (last accessed Sept. 5, 2020) (reporting annual influenza infection numbers of 9 million – 45 million and annual influenza-caused deaths of 12,000 – 61,000 since 2010).

<sup>&</sup>lt;sup>13</sup> Supra note 5.

<sup>&</sup>lt;sup>14</sup> Chris Carter & Joy Notter, *COVID-19 disease: a critical care perspective*, 1 CLINICS IN INTEGRATED CARE 100003 (2020), available at https://doi.org/10.1016/j.intcar.2020.100003.

<sup>&</sup>lt;sup>15</sup> Derick T. Wade, *Rehabilitation after COVID-19: an evidence-based approach*, 20(4) CLINICAL MED. 359 (2020).

41. Problematically, COVID-19 shares many symptoms with seasonal influenza, and other common infectious diseases, including fever, body aches, cough, chills, and headache. Without testing, it is difficult for healthcare providers to ascertain whether an individual with these symptoms is suffering from COVID-19 or another infection.

42. Aside from self-quarantine, there is no way to completely protect against SARS-CoV-2 infection. Best practices like mask-wearing, hand hygiene, and social distancing only diminish, but do not eliminate, the risk of infection.

#### VII. Coronavirus Infection and Communities of Color

43. Coronavirus infection has had a disproportionate effect on communities of color.<sup>16</sup> First, communities of color suffer from higher infection rates than white communities. Second, infected individuals within these communities are more likely to experience serious illness or death than those in white communities. This disparity in outcomes is caused by a variety of factors, including issues related to access to care, poor quality of care, the higher prevalence of underlying chronic medical conditions among people of color and low-income people,

<sup>&</sup>lt;sup>16</sup> *COVID-19 in Racial and Ethnic Minority Groups*, CTRS. FOR DISEASE CONTROL AND PREVENTION (June 4, 2020), https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/racial-ethnic-minorities.html.

housing challenges, and the larger proportion of people of color who are employed in essential jobs that contribute to enhanced exposure.

44. Social Determinants of Health are the conditions in a person's life that shape every aspect of their health, including their susceptibility to all kinds of medical conditions and the complications they may face from these conditions. Access to medical care, education, high-quality housing, utilities, and nutritional food are examples of Social Determinants of Health. The Social Determinants of Health are tightly linked to a population's health status, including to their risk of certain health conditions.<sup>17</sup>

45. Social Determinants of Health are a major reason why communities of color and low-income communities suffer disproportionately from SARS-CoV-2. To take just one example, people in low-income communities may live in cramped quarters with more household members. These housing conditions increase the risk of coronavirus spread within a living space and make social distancing more difficult.

46. Because of Social Determinants of Health, communities of color and low-income communities also tend to have high rates of chronic underlying

#### Affidavit of Donald S. Burke, MD

<sup>&</sup>lt;sup>17</sup> See Elissa M. Abrams & Stanley J. Szefler, COVID-19 and the impact of social determinants of health, 8 LANCET RESPIRATORY MED. 659 (2020), https://doi.org/10.1016/S2213-2600(20)30234-4.

medical issues such as diabetes, hypertension, asthma, heart disease, chronic lung disease, chronic liver disease, and other conditions. People with these conditions are at a higher risk of suffering serious illness or death when they contract SARS-CoV-2.

47. Members of these communities are also, on average, less likely to have jobs that allow them to engage in social isolation, such as by working from home. Instead, they are frequently employed as essential workers in positions that involve high levels of public interaction even during the pandemic. For example, grocery store clerks, cashiers, bus drivers, and certain healthcare workers such as home health aides and nursing assistants are disproportionately people of color.<sup>18</sup> These roles bring workers into contact with dozens or hundreds of different people every day, increasing their risk of contracting the virus.

48. Compounding these issues, minority communities and low-income communities tend to have less access to SARS-CoV-2 testing. Public testing centers may not be located in minority communities. Even when they are, practices like drive-up testing sites exclude low-income individuals who don't have access to a car. Lack of access to testing prevents individuals, particularly

<sup>&</sup>lt;sup>18</sup> Hye Jin Rho, Hayley Brown & Shawn Fremstad, *A Basic Demographic Profile of Workers in Frontline Industries*, CTR. FOR ECON. & POL'Y RES. (2020), https://cepr.net/wp-content/uploads/2020/04/2020-04-Frontline-Workers.pdf.

those who are asymptomatic, from knowing the status of their infection, and taking necessary steps to stop the spread of the disease, such as taking sick leave or self-isolating.

49. These trends have played out in Pennsylvania. The Pennsylvania's minority communities, particularly its Black communities, have suffered the most from COVID-19. Black Pennsylvanians are only 12% of the Commonwealth's population but make up approximately 21% of the Commonwealth's COVID-19 deaths, and approximately 14% of the Commonwealth's COVID-19 cases for which racial data has been reported.<sup>19</sup> According to the PA Department of Health, the vast majority of deaths occurred in the >60 age group (7,178 out of 7,742 or 93% as of September 5, 2020).<sup>20</sup>

50. It is impossible to predict with certainty how the infection rate in vulnerable communities will change as Pennsylvania begins reopening, but experts expect that communities of color will continue to suffer at disproportionate rates.

<sup>&</sup>lt;sup>19</sup> *Compare Pennsylvania COVID-19 Dashboard*, PA. DEP'T PUBLIC HEALTH (Sept. 5, 2020), *available at* 

https://experience.arcgis.com/experience/cfb3803eb93d42f7ab1c2cfccca78bf7 (showing 1,619 Black deaths out of 7,742 total deaths; and 18,728 Black cases out of 138,625 total cases), with *Pennsylvania Population Estimates*, U.S. CENSUS BUREAU (July 1, 2019), *available at* https://www.census.gov/quickfacts/PA.

<sup>&</sup>lt;sup>20</sup> *Pennsylvania COVID-19 Dashboard*, PA. DEP'T PUBLIC HEALTH (Sept. 5, 2020), *available at* https://experience.arcgis.com/experience/cfb3803eb93d42f7ab1c2cfccca78bf7.

#### VIII. Coronavirus Will Still Threaten Public Health in November

51. Coronaviruses, along with other respiratory viruses, are known to follow a seasonal transmission cycle, with peak transmission in the winter rather than summer months.<sup>21</sup>

52. During the coming winter, the effective reproductive number of the SARS-CoV-2 virus transmission in the United States (including Pennsylvania) is likely to increase by about 1/3 over its mean annual value.<sup>22</sup> This "seasonal forcing" of transmission will amplify the effects of other epidemic drivers, such as opening of schools, or continued loosening of social isolation. Because of this, many public health experts, including myself, expect that there will be another, seasonally driven wave of the COVID-19 epidemic, occurring in approximately the late fall to early winter season of 2020.

53. From the onset of the epidemic until the present, the epidemic pattern of SARS-CoV-2 transmission has been remarkably variable across the Commonwealth of Pennsylvania. Cases grew quickly in eastern Pennsylvania, peaking in Philadelphia County on April 8 (555 cases per day). The epidemic also

<sup>21</sup> You Li, Xin Wang, Harish Nair, *Global Seasonality of Human Seasonal Coronaviruses: A Clue for Postpandemic Circulating Season of Severe Acute Respiratory Syndrome Coronavirus 2?*, 222 J. INFECT. DISEASES 1090 (2020), https://doi.org/10.1093/infdis/jiaa436.

<sup>22</sup> Stephen M. Kissler, et al., *Projecting the transmission dynamics of SARS-CoV-2 through the postpandemic period*, 368 SCIENCE 860 (Apr. 14, 2020), https://science.sciencemag.org/content/sci/368/6493/860.full.pdf.

peaked early in other large counties in the eastern region of the Commonwealth (Montgomery, Bucks, Delaware, others). In contrast, Allegheny County in western Pennsylvania experienced a small epidemic in April, but then a much larger peak on 13 July (322 cases per day). Other counties in western Pennsylvania also experienced a dominant epidemic peak in July, rather than in April.<sup>23</sup> If seasonal forcing and other factors generate another epidemic wave in the fall, it could occur anywhere throughout the Commonwealth.<sup>24</sup>

54. There currently is no approved vaccine to prevent SARS-CoV-2 infection. There is no known cure or FDA-approved<sup>25</sup> antiviral treatment for COVID-19 at this time. It is unlikely that a vaccine will be approved and widely distributed by November's election. Even if a vaccine were approved or available under an Emergency Use Authorization, it almost certainly would not be delivered

<sup>&</sup>lt;sup>23</sup> *COVID-19 Data for Pennsylvania*, PA. DEPT. OF HEALTH (Sept. 5, 2020), *available at* https://www.health.pa.gov/topics/disease/coronavirus/Pages/Cases.aspx.

<sup>&</sup>lt;sup>24</sup> Outbreaks are not limited to large counties. For example, York County has seen a recent outbreak associated with a prison. *See COVID-19 outbreak at York County Prison*, ABC27.com (Sept. 4, 2020), https://www.abc27.com/news/covid-19-outbreak-at-york-county-prison/. Outbreaks in prisons can spread through guards and other staff into the larger community, and York County has seen a significant uptick in COVID cases in recent days. *See York County COVID-19 Resource Center*, YORK COUNTY, https://covid19-yorkcosc.hub.arcgis.com/ (last accessed Sept. 5, 2020).

<sup>&</sup>lt;sup>25</sup> Issuances of Emergency Use Authorizations ("EUAs") are different than, and meet different standards than, full FDA approvals.

to a portion of the population large enough to create meaningful community immunity by November 3 (*i.e.*, election day).<sup>26</sup>

55. Coronavirus prevention strategies include containment and mitigation. Containment requires identifying and isolating people who are ill or who have had contact with people who are ill. It also requires the widespread use of personal protective equipment such as masks and gloves.

56. As SARS-CoV-2 spreads in a community, mitigation strategies must be used to protect public health. There is a wide consensus among public health and medical experts that avoiding congregative environments and practicing scrupulous social distancing is essential to preventing community transmission of SARS-CoV-2. This consensus is the basis for government actions including unprecedented, sweeping bans on gatherings of any size, shelter-in-place orders, and the closure of all but essential buildings. Schools, courts, collegiate and professional sports, theaters, and other congregate settings have been closed as

<sup>&</sup>lt;sup>26</sup> I am aware of the CDC's recent letter to states requesting that state vaccination sites should be prepared to distribute a potential vaccine for COVID-19 by November 1. *See, e.g., Trump Administration Asks States to Be Ready for Vaccine by November*, WALL STREET JOURNAL (Sept. 3, 2020), *available at* https://www.wsj.com/articles/trump-administration-asksstates-to-be-ready-for-vaccine-by-november-11599075477 (reporting a letter from the director of the CDC to the states, stating, "CDC urgently requests your assistance in expediting applications for these distribution facilities, and, if necessary, asks that you consider waiving requirements that would prevent these facilities from becoming fully operational by Nov. 1, 2020."). Even assuming a vaccine were available to *some* individuals around November 1, it almost certainly would not be delivered to a portion of the population large enough to create meaningful community immunity by November 3 (*i.e.*, election day).

part of this risk mitigation strategy. For example, on April 1, 2020, Pennsylvania Governor Tom Wolf issued an order for all residents of the Commonwealth to stay at home except as needed to maintain critical infrastructure.<sup>27</sup> As recognized by CDC guidelines, the stay at home orders, and social-distancing and mask wearing mandates, the only ways to meaningfully limit the spread of SARS-CoV-2 are self-quarantine, social distancing, mask wearing, frequent handwashing, and disinfecting surfaces. Self-quarantine involves not physically interacting with those outside one's household. Social distancing is maintaining at least six feet of distance between individuals. Both of these interventions are aimed at keeping infected individuals (with or without symptoms) far enough apart from other people so that they do not transmit the virus to others. Frequent handwashing and regular disinfection of surfaces can help curb the spread via contaminated surfaces. None of these steps alone or in combination, however, is guaranteed to halt transmission.

57. Transmission of SARS-CoV-2 is more likely to occur in any location where there is close proximity (less than six feet) between individuals, particularly in small and/or poorly ventilated indoor spaces. Because transmission of the virus

<sup>&</sup>lt;sup>27</sup> Gov. Tom Wolf, Plan to Reopen Pennsylvania (July 8, 2020), *available at* https://www.governor.pa.gov/process-to-reopen-pennsylvania/.

can occur via contact with contaminated surfaces, there is also risk of spread of the virus at any location where multiple individuals touch surfaces.

58. An important infection mitigation strategy is to avoid conditions that lead to "cluster transmission," where a single infected individual transmits the coronavirus to a large number of bystanders. Cluster transmissions occur when large groups of people are put into close spaces and are not able to practice appropriate social distancing protocols, or when many persons have close interactions with a single infected individual. A single cluster event can lead to multiple of new infections.

59. In the United States, clusters have been particularly pernicious in meatpacking plants, where workers are required to work on processing lines in close physical proximity to other workers. Otherwise-healthy workers at meat-packing facilities have become infected with the coronavirus at rates comparable to those in outbreaks in nursing homes and prisons.<sup>28</sup> Other examples of cluster

<sup>&</sup>lt;sup>28</sup> Michael Corkery, David Yaffe-Bellany & Derek Kravitz, *As Meatpacking Plants Reopen, Data About Worker Illness Remains Elusive*, N.Y. TIMES (May 25, 2020), https://www.nytimes.com/2020/05/25/business/coronavirus- meatpacking-plants-cases.html.

transmissions include choir practices,<sup>29</sup> funerals and birthday parties,<sup>30</sup> or church services.<sup>31</sup>

60. Higher-than-expected infection rates were also recorded in Wisconsin following the April primary elections.<sup>32</sup> A study by University of Wisconsin researchers reported a "statistically and economically significant association" between in-person voting and the spread of COVID-19 weeks after the election.<sup>33</sup>

61. Despite a surge in COVID-19 outbreaks in a majority of states in the

United States, states and localities are continuing to lift some, but not all,

containment measures. It is believed that too rash and unsafe re-opening

protocols are at least partially responsible for the current spike in cases and in

<sup>&</sup>lt;sup>29</sup> Lea Hamner et al., *High SARS-CoV-2 Attack Rate Following Exposure at a Choir Practice — Skagit County, Washington, March 2020*, 69 MORBIDITY & MORTALITY WKLY REP. 606 (2020), https://www.cdc.gov/mmwr/volumes/69/wr/pdfs/mm6919e6-H.pdf.

<sup>&</sup>lt;sup>30</sup> Shelby Bremer, *CDC Report Shows How a Funeral and Birthday Party 'Super Spread' COVID-19 in Chicago*, NBC CHI. (Apr. 9, 2020), https://www.nbcchicago.com/news/local/cdcreport-shows-how-a-funeral-and-birthday-party-super-spread-covid-19-in-chicago/2253006/.

<sup>&</sup>lt;sup>31</sup> Allison James et al., *High COVID-19 Attack Rate Among Attendees at Events at a Church — Arkansas, March 2020*, 69 MORBIDITY & MORTALITY WKLY REP. 632 (2020), https://www.cdc.gov/mmwr/volumes/69/wr/pdfs/mm6920e2-H.pdf.

<sup>&</sup>lt;sup>32</sup> Nicholas Reimann, *Coronavirus Infections Spiked in Wisconsin After In-Person Election, Study Says*, FORBES (May 19, 2020),

https://www.forbes.com/sites/nicholasreimann/2020/05/19/coronavirus-infections-spiked-in-wisconsin-after-in-person-election-study-says/#44f29b8514b3.

<sup>&</sup>lt;sup>33</sup> Chad D. Cotti et al., *The Relationship between In-Person Voting, Consolidated Polling Locations, and Absentee Voting on COVID-19: Evidence from the Wisconsin Primary*, NAT'L BUREAU ECON. RES. (2020), https://www.nber.org/papers/w27187.pdf.

hospitalizations. For example, on April 17, Pennsylvania sketched a plan for re-

opening; that plan is now being implemented.<sup>34</sup>

		Red Phase	
Work & Congregate Setting Restrictions			
	-		
		Social Restrictions	
<ul> <li>Restaurants and</li> </ul>			

#### Yellow Phase

#### Work & Congregate Setting Restrictions

- Telework Must Continue Where Feasible
- Businesses with In-Person Operations Must <u>Follow Business and Building Safety Orders</u>
- Masks Are Required in Businesses
- Child Care May Open Complying with Guidance
- Congregate Care and Prison Restrictions in Place
- Schools may provide in-person instruction only in accordance with <u>Department of Education guidance</u>.

#### Social Restrictions

- Stay at Home Order Lifted for Aggressive Mitigation
- Large Gatherings of More Than 25 Prohibited
- Masks Are Required in all Public Spaces
- In-Person Retail Allowable, Curbside and Delivery Preferable
- Indoor Recreation, Health and Wellness Facilities and Personal Care Services (such as gyms, spas, hair salons, nail salons and other entities that provide massage therapy), and all Entertainment (such as casinos, theaters) Remain Closed
- Restaurants and Bars May Open Outdoor Dining, in Addition to Carry-Out and Delivery (effective 6/5/2020)

<sup>&</sup>lt;sup>34</sup> Gov. Tom Wolf, Plan to Reopen Pennsylvania (July 8, 2020), *available at* https://www.governor.pa.gov/process-to-reopen-pennsylvania/.

Green Phase			
Work & Congregate Setting Restrictions			
Bus All I for Mas Chi Cor Pris	ework Must Continue Where Feasible sinesses with In-Person Operations Must Follow Updated <u>Business and Building Safety Requirements</u> Businesses Operating at 50% Occupancy in the Yellow Phase May Increase to 75% Occupancy, Except Where Noted Bars and Restaurants Isks Are Required in Businesses Ild Care May Open Complying with Guidance ngregate Care Restrictions in Place son and Hospital Restrictions Determined by Individual Facilities hools Subject to CDC and Commonwealth Guidance		
	Social Restrictions		
Mai Res On Bev Per Ind App All	loor Gatherings of More Than 25 Prohibited; Outdoor Gatherings of More Than 250 Prohibited sks Are Required in all Public Spaces staurants and Bars Open at 25% Capacity for Indoor Dining -premises Alcohol Consumption Prohibited Unless Part of a Meal; Cocktails-to-go and Carryout verages are Allowed rsonal Care Services (including hair salons and barbershops) Open at 50% Occupancy and by Appointment Only loor Recreation and Health and Wellness Facilities (such as gyms and spas) Open at 50% Occupancy with pointments Strongly Encouraged; Fitness Facilities Are Directed to Prioritize Outdoor Fitness Activities Entertainment (such as casinos, theaters, and shopping malls) Open at 50% Occupancy instruction Activity May Return to Full Capacity with Continued Implementation of Protocols		

62. Notably, under the Red Phase, Pennsylvanians should "Stay at Home" other than for "Life Sustaining Businesses." And even under the Yellow and Green Phases, indoor gatherings of more than 25 people are prohibited, and masks are required in all public spaces. Moreover, in all phases, the Business and Building Safety Requirements state that Pennsylvanians must "[k]eep our physical distance of six feet or more."<sup>35</sup>

<sup>&</sup>lt;sup>35</sup> *COVID-19 Guidance for Businesses*, https://www.governor.pa.gov/covid-19/business-guidance/ (last accessed Sept. 5, 2020).

63. As of September 5, 2020, all Pennsylvania counties are currently in the Green Phase, but future COVID-19 surges or spikes could cause counties to be placed in the Yellow or Red Phases.

64. The epidemic is ongoing in Pennsylvania, with 800 to 1,000 new cases diagnosed every day across the Commonwealth.<sup>36</sup>

65. It is not possible to predict with certainty the pandemic's severity in November. A major determinant of the infection rate is how much of the population adheres to mitigation strategies, and it is impossible to know what community behavior will look like in November.<sup>37</sup> However, the consensus among public health professionals is that community spread will still be a serious threat to public health and that infection and illness rates will remain high. Some experts have warned of a surge in cases in the fall.<sup>38</sup> The difficulties in testing for and detecting SARS-CoV-2 will remain, and there are still no known treatments or vaccines. Government plans should be based on what we know about the

<sup>&</sup>lt;sup>36</sup> Pennsylvania COVID-19 Dashboard, PA. DEP'T PUBLIC HEALTH, *available at* https://experience.arcgis.com/experience/cfb3803eb93d42f7ab1c2cfccca78bf7 (last accessed Sept. 5, 2020); *Pennsylvania Coronavirus Map and Case Count*, N.Y. TIMES, https://www.nytimes.com/interactive/2020/us/pennsylvania-coronavirus-cases.html (last accessed Sept. 5, 2020).

<sup>&</sup>lt;sup>37</sup> Mark Harrington, *Expert Consult Models to Predict If Coronavirus Cases Will Spike*, NEWSDAY (June 4, 2020), https://www.newsday.com/news/health/coronavirus/infectious-coronavirus-model-pandemic-1.45185224.

<sup>&</sup>lt;sup>38</sup> Len Strazewski, *Harvard Epidemiologist: Beware COVID-19's Second Wave This Fall*, AM. MED. ASS'N (May 8, 2020), https://www.ama-assn.org/delivering-care/publichealth/harvard-epidemiologist-beware-covid-19-s-second-wave-fall.

infection right now, including evidence that public gatherings threaten public health and contribute to infection transmission, because we can expect that coronavirus will continue to affect, sicken, and kill large numbers of Americans moving forward and into the fall.

66. Government plans should be based on what we know about the infection right now, including evidence that public gatherings threaten public health and contribute to infection transmission, because it is highly likely that SARS-CoV-2 will continue to infect, sicken, and kill large numbers of Americans into the fall and winter months.

### IX. Spread of Infectious Disease at Polling Places

67. There is a significant risk of exposure to infectious diseases in enclosed areas like polling places with many people entering, leaving, and waiting in line to enter. There are several reasons why this is the case.

68. In Pennsylvania, a polling place could serve as many as several thousand people on election day during a presidential election year.<sup>39</sup> Thus, a polling place could have hundreds or thousands of people moving through the same enclosed area on election day—precisely the sort of high-traffic event that increases the risk of coronavirus spread.

69. In Pennsylvania, "more than 40,000 poll workers are needed" to staff polling places each election day.<sup>40</sup> In advance of elections, poll workers must be trained.<sup>41</sup> Training may happen in a group setting, where a poll worker might

<sup>&</sup>lt;sup>39</sup> See, e.g., State election officials urge swift legislative action on voting reforms, PENN LIVE (Aug. 4, 2020), available at https://www.pennlive.com/news/2020/08/state-electionofficials-urge-swift-legislative-action-on-voting-reforms.html?outputType=amp (reporting that "more than 5,000 voters [were] assigned to one polling location" during the June 2020 primary election in Pennsylvania; and further reporting that Allegheny County has "nearly 900,000 voters"); Voting & Election Statistics, PA. DEPT. OF STATE,

https://www.dos.pa.gov/VotingElections/OtherServicesEvents/VotingElectionStatistics/Pages/V otingElectionStatistics.aspx (last updated Aug. 31, 2020) (showing, *e.g.*, approximately 907,000 registered voters in Allegheny County, and 585,000 registered voters in Montgomery County); *Allegheny County issues full list of consolidated polling place locations for June 2 primary election*, WTAE PITTSBURGH (June 1, 2020), *available at* 

https://www.wtae.com/article/allegheny-county-issues-full-list-of-consolidated-polling-placelocations-for-june-2-primary-election/32501520# (reporting that Allegheny County issued a "full list of consolidated polling place locations for June 2 primary election" and listing 161 polling places); *Voter Services Polling Locations as of 9/4/2020*, MONTGOMERY COUNTY, https://webapp02.montcopa.org/voterservices/voters/ListPolls1.asp?Municipality=ALL (showing 424 polling locations in Montgomery County). By way of example, this averages out to *nearly 5,600* voters assigned to each polling location in Allegheny County; and *nearly 1,400* voters assigned to each polling location in Montgomery County.

<sup>&</sup>lt;sup>40</sup> *Poll Worker Recruitment Newsletter*, PA. DEPT. OF STATE, *available at* https://www.votespa.com/Resources/Documents/PollWorkerRecruitment-Toolkit/PollWorkerRecruitment-Newsletter.pdf (last accessed Sept. 5, 2020).

<sup>&</sup>lt;sup>41</sup> *Election Poll Workers*, NAT'L CONF. ST. LEGISLATURES (Aug. 19, 2019), https://www.ncsl.org/research/elections-and-campaigns/election-poll-workers637018267.aspx.

interact with dozens of other people in a confined space.<sup>42</sup> Poll workers may also have to set up the polling place the night before or morning of the election and take it down after the polls close.<sup>43</sup> Set up and take down can require poll workers to interact with other individuals by accepting deliveries of supplies, moving tables and other equipment with other poll workers, and touching surfaces and handling equipment that may have been previously touched or handled by other individuals.<sup>44</sup>

70. During in-person voting, poll workers are stationed at each polling place to assist voters and ensure the election is carried out efficiently and securely.<sup>45</sup> A poll worker at the average precinct could be exposed to hundreds or thousands of voters over the course of election day.<sup>46</sup> During each interaction

<sup>46</sup> See supra, calculating the potential number of voters per polling location. See also Poll Worker Recruitment Newsletter, PA. DEPT. OF STATE, available at https://www.votespa.com/Resources/Documents/PollWorkerRecruitment-Toolkit/PollWorkerRecruitment-Newsletter.pdf ("Poll workers generally work all day on Election Day, from before the polls open at 7 a.m. until after the polls close at 8 p.m. In addition, they may be asked to attend a training session before the election.") (last accessed Sept. 5, 2020).

<sup>&</sup>lt;sup>42</sup> See, e.g., Election Board Training Seminar, OFFICE OF THE PHILADELPHIA CITY COMMISSIONERS, https://www.philadelphiavotes.com/en/voters/important-dates/details/1507election-board-training-seminar-wards-18-19-23-25-31-33-45-62.

See, e.g., Montgomery County Poll Worker Training – Spring 2020,
 https://www.youtube.com/watch?v=CjkzSbLooJE&feature=youtu.be (last accessed Sept. 5, 2020) (depicting poll worker set up of equipment, including of touch-screen voting machines).

<sup>&</sup>lt;sup>44</sup> *Id.* 

<sup>&</sup>lt;sup>45</sup> *Election Poll Workers*, NAT'L CONF. ST. LEGISLATURES (Aug. 19, 2019), https://www.ncsl.org/research/elections-and-campaigns/election-poll-workers637018267.aspx.

with a particular voter, a poll worker might be expected to greet the voter, check their identification, distribute ballots, answer questions, exchange paperwork, help elderly and disabled people navigate the poll site, and carry out other duties.<sup>47</sup> Once the last voter has cast her ballot, poll workers must make sure that every paper ballot that was distributed is accounted for and may also have to count the ballots.<sup>48</sup> Each of these discrete interactions puts the poll worker at risk of contracting the novel coronavirus, and each will be repeated dozens or hundreds of times over the course of Election Day.

71. Poll workers are more likely to be older, and accordingly are also more likely to have higher rates of certain high-risk conditions. One 2016 survey reported that "the poll worker population is skewed towards older Americans," and estimated "24 percent of poll workers were 71 or older and another 32 percent were between the ages of 61 and 70."<sup>49</sup> Those two factors (age and chronic

<sup>&</sup>lt;sup>47</sup> *Election Poll Workers*, NAT'L CONF. ST. LEGISLATURES (Aug. 19, 2019), https://www.ncsl.org/research/elections-and-campaigns/election-poll-workers637018267.aspx.

<sup>&</sup>lt;sup>48</sup> *Election Poll Workers*, NAT'L CONF. ST. LEGISLATURES (Aug. 19, 2019), https://www.ncsl.org/research/elections-and-campaigns/election-poll-workers637018267.aspx.

<sup>&</sup>lt;sup>49</sup> *Eavs Deep Dive: Poll Workers and Polling Places*, U.S. ELECTION ASSISTANCE COMM'N (Nov. 15, 2017), https://www.eac.gov/documents/2017/11/15/eavs-deep-dive-poll-workers-and-polling-places.

medical conditions) put poll workers at a higher risk of serious complications and death from COVID-19.<sup>50</sup>

72. Congregate settings such as polling places allow for rapid spread of infectious diseases that are transmitted person to person, especially those passed by droplets through coughing, sneezing, or even talking. When people are forced into close, crowded quarters the opportunities for transmission are greater. Polling places, which are almost always indoor spaces in public or private buildings repurposed for Election Day, may promote highly efficient spread of diseases through droplets.<sup>51</sup> If polling places have a low number of voting booths and privacy screens where ballots might be filled out and cast, that funnels every voter into small, intentionally enclosed areas used by dozens or hundreds of voters before them. This increases the risk of SARS-CoV-2 infection.

73. Some voting machines require voters to physically interact with them for example, by using touch screens or by pushing buttons to indicate their

<sup>&</sup>lt;sup>50</sup> Michael Barthel & Galen Stocking, *Older People Account for Large Shares of Poll Workers and Voters in U.S. General Elections*, PEW RES. CTR. (April 6, 2020), https://www.pewresearch.org/fact-tank/2020/04/06/older-people-account-for-large-shares-ofpoll-workers-and-voters-in-u-s-general-elections/.

<sup>&</sup>lt;sup>51</sup> For Building Administrators and Proprietors: Use of Facilities as Polling Places During COVID-19, PA. DEPT. OF HEALTH,

https://www.health.pa.gov/topics/disease/coronavirus/Pages/Guidance/Polling-Places-Guidance.aspx (last accessed Sept. 5, 2020) (noting polling places may be, *e.g.*, churches, private banquet halls, community centers, schools, fitness centers, libraries, township buildings, "private clubs with large common area," membership organization facilities (Legion, VFW, or social clubs), or hotel meeting or banquet rooms).

candidate or choice.<sup>52</sup> Poll workers may have to assist voters with malfunctioning machines and assistive devices.<sup>53</sup> Any surface that is touched by multiple voters, or by a voter and a poll worker, needs to be sanitized after every interaction in order to minimize the risk of coronavirus transmission. The combination of a high number of surfaces touched by voters and a large number of voters increases the risk that other voters or poll workers will become infected from touching a contaminated surface.

74. Every surface will have to be properly disinfected between voters, which may be difficult to achieve, and may delay voting, causing people to wait outside or inside for prolonged periods of time. Even if that cleaning was possible, workers tasked with carrying it out would themselves risk contracting SARS-CoV-2.

<sup>52</sup> For example, all voters in Philadelphia County vote using the Verified Voter – Express Vote XL ES&S voting machine, which requires use of a touch screen or a physical assistive device. *See Philadelphia County Voting System*, VotesPA.com, https://www.votespa.com/readytovote/Pages/Philadelphia-County-Voting-System.aspx (last accessed Sept. 5, 2020). Some voters in Alleghany County will use the ES&S ExpressVote 2.1

to mark their ballot, which similarly involves use of a touch screen or a physical assistive device. *See Alleghany County Voting System*, VotesPA.com,

<sup>53</sup> See, e.g., Philadelphia County Voting System, VotesPA.com, https://www.votespa.com/readytovote/Pages/Philadelphia-County-Voting-System.aspx (last accessed Sept. 5, 2020); Alleghany County Voting System, VotesPA.com, https://www.votespa.com/readytovote/Pages/Allegheny-County-Voting-System.aspx (last accessed Sept. 5, 2020).

https://www.votespa.com/readytovote/Pages/Allegheny-County-Voting-System.aspx (last accessed Sept. 5, 2020).

75. Polling places may be unable to adequately provide the mitigation recommendations described above and still carry out their primary mission of allowing voters to cast ballots effectively. During a coronavirus outbreak, people can protect themselves by washing their hands or frequently using alcohol-based sanitizers when handwashing is unavailable. For a poll worker or voter to sanitize her hands after every voter interaction, however, would substantially increase the amount of time it takes for each voter to cast a ballot, and could thus increase already-substantial waiting times. It may also cause skin conditions related to frequent washing and sanitizing.

76. If voters must wait longer to vote, they will inevitably stand in longer lines for more time with more people, exposing themselves to more people who might be infected with the novel coronavirus. In Washington D.C.'s election on June 2, conducted under pandemic conditions, voters stood in lines for up to five hours.<sup>54</sup> In Georgia's election on June, also conducted under pandemic conditions, "[s]ocial distancing requirements created long lines" and some voters

<sup>54</sup> Julie Zauzmer et al., Voting Problems in D.C., Maryland Lead to Calls for Top Officials to Resign, WASH. POST (June 3, 2020), https://www.washingtonpost.com/local/dcpolitics/voting-problems-in-dc-maryland-lead-to-calls-for-top-officials-toresign/2020/06/03/24b47220-a5a8-11ea-b619-3f9133bbb482\_story.html. waited for up to three hours and 45 minutes to cast their ballot.<sup>55</sup> In Allegheny County, Pennsylvania, during the June 2020 election, there were reports of "long lines" of voters, and a lack of social distancing in polling places with people standing "only two feet apart."<sup>56</sup> Moreover, not all voters in Allegheny County wore masks, and voters were not turned away for failing to wear masks.<sup>57</sup>

77. Precincts can easily become coronavirus transmission clusters if an infected voter is waiting in a long line to cast a ballot or an infected poll worker spends all day interacting with voters in the precinct. Proper disinfecting protocols might reduce the likelihood that a precinct can become a cluster, but they cannot eliminate the possibility. Pennsylvania has thousands of precincts;<sup>58</sup> if even a tiny fraction become transmission clusters, then the state could see thousands or tens of thousands of new infections.

<sup>&</sup>lt;sup>55</sup> Voting machines and coronavirus force long lines on Georgia voters, ATLANTA JOURNAL-CONSTITUTION, https://www.ajc.com/news/state--regional-govt--politics/votingmachines-and-coronavirus-force-long-lines-georgia-voters/VajM2D3aSHALhCz7KwDrpJ/ (June 9, 2020).

<sup>&</sup>lt;sup>56</sup> Primary 2020 updates: Polls now closed across Allegheny County: Officials receive complaints that some voters not 'social distancing,' wearing masks, PITTSBURGH POST-GAZETTE (June 2, 2020), https://www.post-gazette.com/news/politics-local/2020/06/02/Primary-election-western-pennsylvania/stories/202006020068.

<sup>&</sup>lt;sup>57</sup> *Id.* 

<sup>&</sup>lt;sup>58</sup> See Election Returns, PENN. DEP'T STATE, https://www.electionreturns.pa.gov/ (last accessed Sept. 5, 2020) (noting results for a total of 9,128 precincts in the June primary election).

78. There is no way to hold in-person voting without risking that some members of the public or some poll workers will be exposed to SARS-CoV-2. Not every member of the public nor every poll worker will follow best practices, but even if they did—wearing masks and gloves, maintaining six feet of distance between each person, and avoiding the polling place if they have any symptoms of COVID-19—infection still could not be entirely prevented. Asymptomatic individuals who are contagious but unaware will still vote; people who have mild symptoms may still decide to vote; people who are opposed to mask-wearing in public may show up to polling stations;<sup>59</sup> people may still touch contaminated surfaces and then touch their face; and respiratory droplets containing the virus may still circulate within the polling place.

79. Screening procedures, for example asking voters if they have symptoms or taking voters' temperatures before allowing them to enter a polling place, likewise cannot guarantee that an infection won't spread. Many contagious individuals can be asymptomatic or pre-symptomatic. Moreover, many contagious individuals do not have a fever or display the symptoms that the general public has come to associate with the disease, like coughing or fever.

<sup>&</sup>lt;sup>59</sup> Primary 2020 updates: Polls now closed across Allegheny County: Officials receive complaints that some voters not 'social distancing,' wearing masks, PITTSBURGH POST-GAZETTE (June 2, 2020), https://www.post-gazette.com/news/politics-local/2020/06/02/Primary-electionwestern-pennsylvania/stories/202006020068.

Others are entirely asymptomatic, or have not yet developed symptoms, but are still contagious. Thus, many contagious individuals could not be identified by common screening procedures.

80. Voters with chronic underlying medical conditions are more likely to suffer serious complications or death from COVID-19. Communities with high rates of risk factors are also communities where the coronavirus has spread most quickly, due to socioeconomic factors and the Social Determinants of Health, and thus where in-person voting may contribute to a higher risk of new cases of COVID-19.

81. Minority communities with high rates of poverty and other risk factors are also communities where polling places tend to have the longest lines and where voting tends to take the most time, increasing voters' likelihood of exposure to the coronavirus. Even before the pandemic, residents of these communities were required to wait in line for longer periods in order to cast a ballot than residents of whiter, more affluent communities.<sup>60</sup>

82. These risks and expected results have all been borne out in states that have permitted in-person voting during the pandemic. In Milwaukee, for

<sup>&</sup>lt;sup>60</sup> Matthew Weil, et al., *The 2018 Voting Experience: Polling Place Lines*, BIPARTISAN POL'Y CTR. (Nov. 4, 2019), https://bipartisanpolicy.org/report/the-2018-voting-experience/.

example, at least 71 SARS-CoV-2 infections have been attributed to in-person voting held in Wisconsin on April 7, 2020.<sup>61</sup>

83. A careful study by Cotti et al. released as a National Bureau of Economic Research working paper: (1) compared county-level data on the proportion of people voting in person and the proportion of COVID-19 tests that were positive; (2) assessed a time period after the election through May 3; (3) factored in measures of social distancing and county-specific demographics (population, population density); and (4) used the proportion of tests that were positive rather than just positive cases to control for temporal differences in testing. This study found that counties with higher than average in-person voting had twice the rate of COVID-19 positive tests in the weeks that followed the election. Across a range of exploratory models, the team found a large postelection increase in COVID-19 cases in counties that had more in-person votes per voting location, all else being equal. They also noted a decrease in the number of new positive COVID-19 cases in counties with relatively more mail-in absentee votes after accounting for differences in in-person voting, county-level COVID-

<sup>61</sup> See Chad D. Cotti, Bryan Engelhardt, Joshua Foster, Erik T. Nesson, Paul S. Niekamp, *The Relationship between In-Person Voting and COVID-19: Evidence from the Wisconsin Primary*, NBER Working Paper (Issued May 2020, Rev. June 2020), https://www.nber.org/papers/w27187.pdf. As discussed above, reported numbers likely undercount the total number of infections because of the lack of testing and the high number of infection by asymptomatic individuals. 19 testing, and population measures.<sup>62</sup> This study was a thorough attempt to determine the relationship between the amount of in-person voting per polling station and subsequent COVID-19 diagnoses in the relevant counties.

84. Two other studies (other than that by Cotti et al.), both done quickly and published within weeks of the Wisconsin primary election on April 7, did not detect an association of voting and new SARS-CoV-2 infections. Both of those studies, however, have significant flaws. The epidemiological analysis of this problem is not simple because it requires a determination of the epidemic trajectory before the vote (increasing or decreasing) and then an analysis to detect any deflections of the expected epidemic trajectory that could be attributed to voting. In the week before the vote, the overall epidemic trajectory in Wisconsin was downward (199 cases on April 1; 138 cases on voting day April 7).

85. A study by Berry et al.<sup>63</sup> compares the growth of cases in Wisconsin counties before and after the April 7 primary election to the growth of cases over the same time period nationwide and found no comparative increase in Wisconsin.

<sup>62</sup> Chad D. Cotti, Bryan Engelhardt, Joshua Foster, Erik T. Nesson, Paul S. Niekamp, *The Relationship between In-Person Voting and COVID-19: Evidence from the Wisconsin Primary*, NBER Working Paper (Issued May 2020, Rev. June 2020), https://www.nber.org/papers/w27187.pdf.

<sup>&</sup>lt;sup>63</sup> Berry et al., *Wisconsin April 2020 Election Not Associated with Increase in COVID-19 Infection Rates*, non-peer reviewed preprint posted at https://www.medrxiv.org/content/10.1101/2020.04.23.20074575v1 (posted April 28, 2020).

This is not surprising, given that the epidemic trajectory was already downward in Wisconsin. Given the variability in local epidemic patterns in states and counties across the United States, comparisons to other jurisdictions can provide little meaningful insight into deflections in the expected epidemic trajectory in Wisconsin.

86. A study by Leung et al.<sup>64</sup> calculated the daily epidemic reproduction number Rt ("t" refers to the calculated effective epidemic reproduction number at any given point in time, t) in Wisconsin before and after the April 7 primary election. They observed a falling Rt in the days leading up to the vote, consistent with a decreasing epidemic at that time. They then found a flattening or stabilization of Rt around the day of the vote, but no major spike in Rt in the 11 days following the vote that they analyzed and concluded that the vote had no effect on the epidemic trajectory. Had they instead analyzed the case data for a few days longer they would undoubtedly have seen a major spike in Rt, because counts in Wisconsin increased from 138 cases on the April 7 election day to 314 cases one month later on May 7.

<sup>&</sup>lt;sup>64</sup> Leung, et al., *No Detectable Surge in SARS-CoV-2 Transmission due to the April 7, 2020 Wisconsin Election*, non-peer reviewed preprint posted at https://www.medrxiv.org/content/10.1101/2020.04.24.20078345v1 (posted April 29, 2020).

87. Collectively, these studies do not definitively prove a direct and causal association of voting with increased SARS-CoV-2 transmission in Wisconsin. Nonetheless, given the superior study design of the Cotti et al. study showing an association of voter density and subsequent case incidence, compared to the much weaker study designs of Berry et al. and Leung et al., in my judgment the weight of this limited published literature is that voting in Wisconsin was probably associated with an increased risk of SARS-CoV-2 infection.

88. Notably, this risk persisted *despite* attempts by the state of Wisconsin to protect the safety of in-person voting, including social-distancing signs and tape, masks and gloves for poll workers, and use of disinfectant.<sup>65</sup>

89. Additionally, consolidation of in-person voting to a small number of polling places may contribute to an increase in infections. Milwaukee, for example, was forced to shut 175 of its 180 polling places due to a lack of poll workers. The five remaining polling places had long lines where voters waited for hours to cast their ballot.<sup>66</sup> The same was true in Pennsylvania, where, for

April 7, 2020 Election Summary Report, WISCONSIN ELECTIONS COMMISSION (April 18, 2020),

https://www.eac.gov/sites/default/files/paymentgrants/cares/WI\_20CARES\_Progress\_Report\_04 2820.pdf.

<sup>&</sup>lt;sup>66</sup> Alison Dirr & Mary Spicuzza, *What We Know So Far About Why Milwaukee Only Had 5 Voting Sites for Tuesday's Election While Madison Had 66*, MILWAUKEE J. SENTINEL (Apr. 9, 2020), https://www.jsonline.com/story/news/politics/elections/2020/04/09/wisconsin-electionmilwaukee-had-5-voting-sites-while-madison-had-66/2970587001/.

example, "[p]olling places were consolidated in Allegheny County, and that led to some challenges — long lines, traffic problems and tight spaces that weren't conducive to social distancing practices."<sup>67</sup>

90. Based on my decades of professional experience in medicine, epidemiology, and public health, it is my assessment that the health risks of inperson voting in the midst of an infectious disease pandemic are clear and significant. In-person voting on election day will undoubtedly increase the chances for exposure to the novel coronavirus for poll workers and voters alike, leading to more cases of SARS-CoV-2 infection. Reducing in-person voting on election day will reduce the spread of SARS-CoV-2 and reduce illness and deaths from the resulting COVID-19.

# X. Potential Alternatives To In-Person Voting At A Polling Place On Election Day

91. I understand that potential alternatives to in-person voting at issue in this case include the voter delivering a mail-in ballot in person to an election official at the headquarters of their county board of elections, sending a mail-in

<sup>&</sup>lt;sup>67</sup> Primary 2020 updates: Polls now closed across Allegheny County: Officials receive complaints that some voters not 'social distancing,' wearing masks, PITTSBURGH POST-GAZETTE (June 2, 2020), https://www.post-gazette.com/news/politics-local/2020/06/02/Primary-election-western-pennsylvania/stories/202006020068.

ballot by mail (*e.g.*, by bringing it to the post office, or depositing it in a mailbox), or by depositing a mail-in ballot in a dropbox.

92. Returning any kind of ballot in person to another individual at the headquarters of a county board of elections (*i.e.*, a public office building) entails similar risks to in-person voting. Like polling places, public office buildings are congregate settings that allow for rapid spread of infectious diseases that are transmitted person to person. Public office buildings have narrow hallways, enclosed rooms, and a high number of surfaces that are touched by multiple people that would need to be sanitized after every interaction in order to minimize the risk of coronavirus transmission. A large number of people cycle through public office buildings. The combination of a high number of surfaces touched by people and a large number of people indoors creates a significant risk that voters, other visitors, and public employees could become infected.

93. Depositing a ballot in a mailbox or drop-box does not require that a voter interact with other members of the public, compared to in-person voting and personally delivering a mail-in ballot to a public office building. Thus, depositing a ballot in a mailbox and depositing a ballot in a drop-box are potential methods of voting that impart the least health risk to individual voters, and the least public health risk to the community.

94. My affidavit, with supporting appendices, is contained herein, and

represents my opinion and the bases and reasons thereof. To the extent any additional information is produced or served by any party, I reserve the right to incorporate such additional information in my affidavit. This affidavit was prepared solely for the above-captioned matter and should not be used for any other purpose without prior authorization. I hereby certify that the foregoing statements are true and correct to the best of my knowledge, information, and belief. This verification is made subject to the penalties of 18 Pa.C.S. § 4904 relating to unsworn falsification to authorities.

Executed this 3 th day of September, 2020 in Pitts burgh, PH

Donald S. Burle

Donald S. Burke, MD

# **APPENDIX A**

## CURRICULUM VITAE

NAME:	Donald Scott Burke, M.D.	
	Distinguished University Professor of Health Science and Policy Jonas Salk Chair in Population Health Professor of Epidemiology	
CITIZENSHIP:	United States	
BUSINESS ADDRESS:	University of Pittsburgh Graduate School of Public Health 130 DeSoto Street Pittsburgh, PA 15261 Telephone: 412-383-3595 E-mail: donburke@pitt.edu	

# EDUCATION AND TRAINING

<u>Undergraduate</u>			
1963-1967	Western Reserve University, Cleveland, OH	B.A	Chemistry major; honors in biology; magna cum laude; Phi Beta Kappa
Graduate			
1967-1971	Harvard Medical School, Boston, MA	M.D.	Medicine
Post Graduate			
1971-1973	Harvard University and the Boston City Hospital, Boston, Massachusetts	Clinical Fellow Intern & Junior Resident Physician	Internal Medicine
1975-1976	Harvard University and the Massachusetts General Hospital, Boston Massachusetts	Clinical Fellow Senior Resident Physician	Internal Medicine
1976-1978	Walter Reed Army Medical Center, Washington, DC	Research Fellow	Infectious Disease

# APPOINTMENTS AND POSITIONS

2018-present	Jonas Salk Chair in Population Health	University of Pittsburgh Pittsburgh, PA
2011-present	Distinguished University Professor of Health Science and Policy	University of Pittsburgh, Pittsburgh, PA
2006-2019	Dean	Graduate School of Public Health, University of Pittsburgh, Pittsburgh, PA
2006-2019	Associate Vice Chancellor for Global Health	University of Pittsburgh, Pittsburgh, PA
2006-2018	UPMC- Jonas Salk Chair in Global Health	University of Pittsburgh, Pittsburgh, PA
2006-2016	Director	Center for Vaccine Research, University of Pittsburgh, Pittsburgh, PA
2006-present	Professor of Epidemiology and Professor of Medicine	University of Pittsburgh, Pittsburgh, PA
1997-2006	Professor of International Health and Professor of Epidemiology	Johns Hopkins Bloomberg School of Public Health, Baltimore, MD
	Professor of Medicine	Johns Hopkins School of Medicine, Baltimore, MD
	Director	Center for Immunization Research, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD
1996-1997	Associate Director	For Emerging Threats and Biotechnology, Walter Reed Army Institute of Research (WRAIR), Washington, DC
1988-1996	Director	US Military HIV/AIDS Research Program. Rockville, MD
1988-1990	Director	Division of Retrovirology, WRAIR, Washington, DC
	Founder and Director	US Military HIV/AIDS Laboratory Complex, Rockville, MD
1984-1988	Chief	Department of Virus Diseases, WRAIR, Washington, DC
1983-1984	Deputy Director	Armed Forces Research Institute of Medical Sciences, Bangkok Thailand

1978-1984	Chief	Virology Department, Armed Forces Research Institute of Medical Sciences (AFRIMS), Bangkok, Thailand
1976-1978	Clinical Desk Officer	Department of Virus Diseases, WRAIR, Walter Reed Army Medical Center, Washington, DC
1973-1975	Clinical Ward Officer	Medical Division, US Army Medical Research Institute of Infectious Diseases (USAMRID), Fort Detrick, MD

# ACADEMIC AND MEDICAL APPOINTMENTS / US MILITARY

1992-1997	Professor, Department of Medicine, Uniformed Service University of The Health Sciences, Bethesda, Maryland Uniformed Service University of The Health Sciences, Bethesda, MD
1985-1997	Staff Physician, Department of Medicine, Walter Reed Army Medical Center, Washington, DC
1990-1992	Faculty, Pre-Command Course, U.S. Army Command and General Staff College, Fort Leavenworth, KS
1987-1992	Associate Professor, Department of Medicine, Uniformed Service University of The Health Sciences, Bethesda, MD
1985-1992	Adjunct Associate Professor, Department of Preventive Medicine/Biometrics, Uniformed Service University of The Health Sciences, Bethesda, MD
1985-1990	Attending Physician, Infectious Diseases Service Walter Reed Army Medical Center, Washington, DC
CERTIF	ICATION AND LICENSURE

1978	Diplomat in the Sub- Specialty of Infectious Diseases	American Board of Internal Medicine
1977	Diplomat in the Specialty of Internal Medicine	American Board of Internal Medicine

# MEDICAL OR OTHER PROFESSIONAL LICENSURE

Not current

Medical License #D16350 Specialist in Internal Medicine and Infectious Diseases

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State of Maryland

# MEMBERSHIP IN PROFESSIONAL AND SCIENTIFIC SOCIETIES

Elected Member	National Academy of Medicine
Elected Fellow	American Association for the Advancement of Science
Elected Fellow	American Academy of Microbiology
Elected Fellow	American Epidemiological Society
Fellow; President (1995-96)	American Society of Tropical Medicine and Hygiene
Fellow	Royal Society of Tropical Medicine and Hygiene (U.K.)
Fellow	American College of Physicians
Fellow	Infectious Disease Society of America
Member	American Public Health Association
Member	Physicians for Human Rights
Member	American Society for Virology
Member	American Association for the History of Medicine
Member	International AIDS Society
Member	International Society for Vaccines

# HONORS

<u>Military</u>	
1997	Legion of Merit
1991	National Defense Service Medal, First Oak Leaf Cluster
1991	Meritorious Service Medal, Third Oak Leaf Cluster
1990	Department of the Army "A" Proficiency Designator, Infectious Diseases
1989	Order of Military Medical Merit
1986	Meritorious Service Medal, Second Oak Leaf Cluster
1985	Meritorious Service Medal, First Oak Leaf Cluster

1984	Armed Forces Reserves Medal
1984	Overseas Ribbon
1981	Humanitarian Service Medal
1978	Meritorious Service Medal
1975	Army Commendation Medal
1973	National Defense Service Medal
1973	Army Service Ribbon

Medical and Public Health

2019	September 13, 2019 declared Donald S. Burke Day in Pittsburgh and Allegheny County by Mayor William Peduto and County Executive Richard Fitzgerald
2019	Porter Prize, Pittsburgh, for exemplary performance of health promotion and disease prevention
2018	John Snow Award American Public Health Association, Epidemiology Section
2018	Jonas Salk Chair in Population Health, University of Pittsburgh
2016	Fellow, American Society of Tropical Medicine & Hygiene
2011	Distinguished University Professor of Health Science and Policy, University of Pittsburgh
2009	Elected Member, Institute of Medicine (now National Academy of Medicine), National Academies of Science
2008	Lifetime National Associate of the National Research Council, for "Extraordinary Service to the NRC and the Academies"
2007	Ambassador, Paul G. Rogers Society for Global Health Research
2006	UPMC – Jonas Salk Chair in Global Health, University of Pittsburgh
2006	Elected Fellow, American Epidemiological Society
2003	Elected Fellow, American Association for the Advancement of Science (Medical Science)
2000	Elected Fellow, American Academy of Microbiology
2000	Elected Member, Delta Omega Public Health Honorary Society
1999	Golden Apple Award (best teacher), Johns Hopkins School of Hygiene and Public Health

1995	Elected President, American Society of Tropical Medicine & Hygiene
1992	Sustaining Membership Award, Association of Military Surgeons of the US, for outstanding contributions to medical research
1990	Bailey K. Ashford Medal of the American Society of Tropical Medicine and Hygiene, for outstanding achievements in tropical medicine by a society member under the age of 45 years
1989	Nathaniel A. Young Memorial Award of the American Committee on Arthropod-borne viruses, American Society of Tropical Medicine and Hygiene for outstanding contributions to arbovirology by a scientist under the age of 45 years
1989	Kimble Methodology Award of the Conference of Public Health Laboratorians, for outstanding contributions to Public Health by development and implementation of HIV diagnostics

# **RESEARCH AND TRAINING**

## Grants and Contracts Received

Years Inclusive	Title	Role
2019 - 2020	Advancing Analytics to Improve Actionable Changes in the Opioid Overdose Epidemic (CDC)	Principal Investigator
2018 - 2020	Support the Creation of a Pittsburgh Regional Forum on Opioid Epidemic (The Pittsburgh Foundation)	Co-Principal Investigator
2018 - 2020	PA Opioid Data Dashboard and Data Analytics Tool (PA Dept. of Health)	Co-Principal Investigator
2016 - 2021	Outpatient VE for Seasonal Flu Pandemic Flu and RSV in a Large Diverse Network (NIH)	Co-Investigator
2016 - 2020	Development of a Novel, Sensitive ZIKV-Specific Sero-diagnostic Assay Utilizing Biologically Inspired Synthetic Molecules (NIH/NIAID)	Principal Investigator
2004 - 2020	Modeling of Infectious Disease Agent Study Center of Excellence "MIDAS" (NIH/NIGMS)	Principal Investigator

Years Inclusive	Title	Role
2015 - 2019	Developing Public Health Decision Support Tools: FRED Ages and Stages and MPDS (Robert Wood Johnson Foundation)	Principal Investigator
2015 - 2019	Empowering Indian Health Researchers with Computational Modeling Tools (NIH / Fogarty International Center)	Co-Principal Investigator
2013 - 2019	Improving Global Health Through the Use of Modeling and Simulation in Brazil, South Africa, Taiwan, and Burma (Benter Foundation)	Principal Investigator
2013 – 2018	VMI II: Application of Computational Models to Guide and Evaluate Global Infectious Disease Control Programs (Bill and Melinda Gates Foundation)	Principal Investigator
2008 – 2016	Evaluation of Candidate Vaccine Technologies using Computational Models "Vaccine Modeling Initiative" Bill and Melinda Gates Foundation)	Principal Investigator
2013 – 2015	Detection of Recent HIV-1 Infections Based on Naturally Inspired Synthetic Oligomers (Bill and Melinda Gates Foundation)	Principal Investigator
2008 - 2014	Preparedness and Emergency Response Research Center: A Public Health Systems Approach (CDC)	Investigator
2009 - 2012	Center for Immunology of Emerging Infectious Diseases (NIH/NIAID)	Principal Investigator
2007 - 2010	Dengue Envelope Domain III C3D Vaccine (Dept of Defense)	Principal Investigator
2007 - 2011	Dengue Virus-Like Particle Vaccine (Department of Defense)	Investigator
2006 - 2009	Pittsburgh Influenza Prevention Project "PIPP" (CDC)	Principal Investigator

2005 - 2010	Planning for Avian Influenza Outbreaks and Potential Pandemics in Thailand (NIH/Fogarty International Center)	Principal Investigator
2003 - 2006	Mid-Atlantic Regional Center of Excellence for Biodefense (NIH/NIAD)	Co-Principal Investigator
2000 - 2006	Johns Hopkins HIV Vaccine Trials Unit (NIH/NIAID)	Principal Investigator

# HONORARY LECTURES AND SEMINARS

December 2019	Keynote Address	Epidemics7, Charleston, SC
March 2019	Alexander Langmuir Keynote Lecturer	American Epidemiological Society, Annual Meeting, Los Angeles, CA
February 2015	Keynote Speaker	Sixth Annual J. Robert Clapp, Jr., Diversity Leadership Award Ceremony, Rush University Medical Center, Chicago, IL
April, 2009	O. Ray Kling Distinguished Lecturer	University of Oklahoma, Oklahoma City, OK
December 2008	Keynote Address	Tulane University President's Symposium, New Orleans, LA
June 2008	Invited Lecturer	"Science with the Stars" Walter Reed Army Institute of Research Seminar Series, Silver Springs, MD
December 2007	Keynote Address	Institute of Medicine Forum on Microbial Threats, Washington, DC
August 2007	Keynote Address	Annual Meeting of the US Department of Defense Global Emerging Infection Surveillance and Response System, Louisville, KY
September 2006	John C. Cutler Memorial Lecturer	University of Pittsburgh Graduate School of Public Health. Pittsburgh, PA
June 2005	Keynote Address	Annual Symposium, New York Academy of Medicine and the Royal Society of Medicine, New York, NY
April 2004	Invited Lecturer	Annual Meeting of the National Academy of Sciences, Washington, DC
December 2003	Centennial Anniversary Lecturer	American Society of Tropical Medicine and Hygiene, Philadelphia, PA
November 2002	Distinguished Scientist Seminar	Marine Biological Laboratory, Woods Hole, MA

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March 2001	Thomas Francis, Jr. Annual Memorial Lecturer	University of Michigan School of Public Health, Ann Arbor, MI
February 1999	Invited Lecturer, 50 <sup>th</sup> Anniversary Celebration	University of Pittsburgh, Graduate School of Public Health, Pittsburgh, PA
November 1997	Chapman Binford Memorial Lecture	American Society of Microbiology, Atlanta, GA
December 1996	Presidential Address	American Society of Tropical Medicine and Hygiene, Baltimore, MD
May 1995	Visiting Professor	University of Pittsburgh, School of Medicine, Department of Molecular Genetics and Biochemistry, Pittsburgh, PA
February 1995	Visiting Lecturer	Department of Microbiology and Molecular Genetics, Harvard Medical School, Boston, MA
March 1994	Visiting Professor	Tulane University School of Public Health and Tropical Medicine, New Orleans, LA
April 1993	Visiting Professor	Dartmouth Medical School and Dartmouth College, Hanover, NH

#### PUBLICATIONS ORCID ID: 0000-0002-5704-8094

- 1. Rushforth NB, **Burke DS**. Behavioral and electrophysiological studies of hydra, II. Pacemaker activity of isolated tentacles. Biol Bull 1971;140:502-519
- 2. Burke DS. Cardiac monitor malfunction simulating bizarre rhythm. Postgrad Med 1976;60:265-66
- 3. **Burke DS**. Immunization against Tularemia: Analysis of the effectiveness of live *Francisella tularensis* vaccine in prevention of laboratory-acquired tularemia. J Infect Dis. 1977 Jan;135(1):55-60
- Goldman L, Caldera DL, Nussbaum SR, Southwick FS, Krogstad D, Murray B, Burke DS, O'Malley TA, Goroll AH, Caplan CH, Nolan J, Carabello B, Slater EE. Multifactorial index of cardiac risk in noncardiac surgical procedures. N Engl J Med. 1977 Oct 20;297(16):845-50
- Oster CN, Burke DS, Kenyon RH, Ascher MS, Harber P, Pedersen CE. Laboratory-acquired Rocky Mountain Spotted Fever: The hazard of aerosol transmission. N Engl J Med. 1977 Oct 20;297(16):859-63
- 6. **Burke DS**, Ramsburg HH, Edelman R. Persistence in humans of antibody to subtypes of Venezuelan Equine Encephalitis (VEE) virus after immunization with attenuated (TC-83) VEE virus vaccine. J Infect Dis. 1977 Sep;136(3):354-9
- 7. **Burke DS**, Ullian RB. Megaesophagus and pneumonia associated with Mycobacterium chelonei: A case report and a literature review. Am Rev Respir Dis. 1977 Dec;116(6):1101-7
- Goldman L, Caldera DL, Southwick FS, Nussbaum SR, Murray B, O'Malley TA, Goroll AH, Caplan CH, Nolan J, Burke DS, Krogstad D, Carabello B, Slater EE. Cardiac risk factors and complications in non-cardiac surgery. Medicine (Baltimore). 1978 Jul;57(4):357-70

- 9. Fine D, Mosher D, Yamada T, **Burke DS**, Kenyon R. Coagulation and complement studies in Rocky Mountain Spotted Fever. Arch Intern Med 1978;138:735-738
- 10. **Burke DS**, Madoff S. Infection of a traumatic pelvic hematoma with Mycoplasma hominis. Sex Transm Dis. 1978 Apr-Jun;5(2):65-7
- 11. Light JA, **Burke DS**. Association of cytomegalovirus (CMV) infections with increased recipient mortality following transplantation. Transplant Proc. 1979 Mar;11(1):79-82
- 12. **Burke DS**, Gaydos JC, Hodder RA, Bancroft WH. Seroimmunity to polioviruses in U.S. Army recruits. J Infect Dis. 1979 Feb;139(2):225-7
- 13. Burke DS, Magic shotgun pelets. Lancet. 1979 Jun 30;1(8131):1414
- 14. **Burke DS**, Brown SL. Lack of diagnostic utility of "Febrile Agglutinin" screens. Mil Med. 1980 Sep;145(9):624-7
- 15. **Burke DS,** Jensen MM, Immunization against turkey coryza by colonization with mutants of Alcaligenes faecalis. Avian Dis. 1980 Jul-Sep;24(3):726-33
- 16. **Burke DS**, Nimmannitya S. Passively acquired antibody to hepatitis A virus in Thai infants. Southeast Asian J Trop Med Public Health. 1980 Sep;11(3):415-6
- 17. **Burke DS**, Snitbhan R, Johnson DE, Scott RM. Age specific prevalence of hepatitis A virus antibody in Thailand. Am J Epidemiol. 1981 Mar;113(3):245-9
- 18. Johnson DE, **Burke DS**, Williams RG, Murray BE. Observations on medical care in a refugee camp in Thailand. Mil Med. 1981 Dec;146(12):842-5
- 19. Nimmannitya S, Nisalak A, **Burke DS**. Passively acquired antibody to flaviviruses in Thai infants. Southeast Asian J Trop Med Public Health. 1981 Sep;12(3):344-5
- 20. **Burke DS**, Churchill FE Jr, Gaydos JC, Kaufman L. Epidemic histoplasmosis in patients with undifferentiated fever. Mil Med. 1982 Jun;147(6):466-7
- 21. Tingpalapong M, Whitmire RE, Watts DM, **Burke DS**, Binn LN, Tesaprateep T, Laungtongkum S, MarchwickRH. Epizootic of viral enteritis in dogs in Thailand. Am J Vet Res. 1982 Sep;43(9):1687-90
- 22. Watts DM, Harrison BA, Nisalak A, Scott RM, **Burke DS**. Evaluation of Toxorhynchites splendens (Diptera: Culicidae) as a bioassay host for dengue viruses. J Med Entomol. 1982 Jan 28;19(1):54-9
- 23. **Burke DS**, Nisalak A. Detection of Japanese encephalitis virus Immunoglobulin M antibodies in serum by antibody capture radioimmunoassay. J Clin Microbiol. 1982 Mar;15(3):353-61
- 24. **Burke DS**, Nisalak A, Ussery MA. Antibody capture immunoassay detection of Japanese encephalitis virus immunoglobulin M and G antibodies in cerebrospinal fluid. J Clin Microbiol. 1982 Dec;16(6):1034-42 PMID:7161371
- 25. Lam K-W, **Burke DS**, Siemens M, Cipperly V, Li C-Y, Yam LT. Characterization of serum acid phosphatase associated with dengue hemorrhagic fever. Clin Chem. 1982 Nov;28(11):2296-9
- 26. Gilbreath MJ, Pavanand K, MacDermott RP, Ussery M, **Burke DS**, Nimmannitya S, Tulyayon S. Cold-reactive immunoglobulin M antilymphocyte antibodies directed against B cells in Thai children with dengue hemorrhagic fever. J Clin Microbiol. 1983 Apr;17(4):672-6
- 27. Echeverria P, **Burke DS**, Blacklow NR, Cukor G, Charoenkul C, Yanggratoke S. Age-specific prevalence of antibody to rotavirus, Escherichia coli, heat-labile enterotoxin, Norwalk virus, and hepatitis A virus in a rural community in Thailand. J Clin Microbiol. 1983 May;17(5):923-5
- 28. Srivatanakul P, **Burke DS**, Thanasombutt S, and Tanngarmtron D. Serum markers of hepatitis A and B virus infection in Thai patients with primary hepatocellular carcinoma. Thai Cancer J 1983;9:113-118
- 29. Henderson A, Leake CJ, Burke DS. Japanese encephalitis in Nepal. Lancet. 1983 Dec 10;2(8363):1359-60

- 30. **Burke DS**, Heisey GB. Wild Malaysian cynomolgus monkeys are exposed to hepatitis A virus. Am J Trop Med Hyg. 1984 Sep;33(5):940-4
- Brown GW, Shirai A, Jegathesan M, Burke DS, Twartz JC, Saunders P, and Huxsoll DL. Febrile illness in Malaysia - An analysis of 1,629 hospitalized patients. Am J Trop Med Hyg. 1984 Mar;33(2):311-5
- 32. Henchal EA, McCown JM, **Burke DS**, Seguin MC, Brandt WE. Epitopic analysis of antigenic determinants on the surface of dengue-2 virions using monoclonal antibodies. Am J Trop Med Hyg. 1985 Jan;34(1):162-9
- 33. **Burke DS**, Nisalak A, Ussery MA, Laorakpongse T, Chantavibul S. Kinetics of IgM and IgG Responses to Japanese encephalitis virus in human serum and cerebrospinal fluid. J Infect Dis. 1985 Jun;151(6):1093-9
- 34. **Burke DS**, Tingpalapong M, Ward GS, Andre R, Leake CJ. Intense transmission of Japanese encephalitis virus to pigs in a region free of epidemic encephalitis. Southeast Asian J Trop Med Public Health. 1985 Jun;16(2):199-206
- 35. **Burke DS**, Tingpalapong M, Elwell MR, Paul PS, VanDeusen RA. Japanese encephalitis virus immunoglobulin M antibodies in porcine sera. Am J Vet Res. 1985 Oct;46(10):2054-7
- 36. **Burke DS**, Chatiyanonda K, Anandrik S, Nakornsri S, Nisalak A, Hoke CH. Improved surveillance of Japanese encephalitis by detection of virus-specific IgM in desiccated blood specimens. Bull World Health Organ. 1985;63(6):1037-42
- Burke DS, Lorsomrudee W, Leake CJ, Hoke CH, Nisalak A, Chongswasdi V, Laorkapongse T. Fatal outcome in Japanese encephalitis. Am J Trop Med Hyg. 1985 Nov;34(6):1203-10
- 38. **Burke DS**, Nisalak A, Lorsomrudee W, Ussery MA, Laorpongse T. Virus-specific antibody-producing cells in blood and cerebrospinal fluid in acute Japanese encephalitis. J Med Virol. 1985 Nov;17(3):283-92
- 39. Watts DM, Harrison BA, Pantuwatana S, Klein TA, **Burke DS**. Failure to detect natural transovarial transmission of dengue virus by Aedes aegypti and Aedes albopictus (Diptera: Culicidae). J Med Entomol. 1985 May 24;22(3):261-5
- 40. Johnson RT, **Burke DS**, Elwell M, Leake CJ, Nisalak A, Hoke CH, Lorsomrudee W. Japanese encephalitis: immunocytochemical studies of viral antigen and inflammatory cells in fatal cases. Ann Neurol. 1985 Nov;18(5):567-73
- 41. **Burke DS**, Ussery MA, Elwell MR, Nisalak A, Leake C, Laorakpongse T, Isolation of Japanese encephalitis virus strains from sentinel pigs in northern Thailand, 1982. Trans R Soc Trop Med Hyg. 1985;79(3):420-1
- 42. Wattanavijarn W, Tesprateep T, **Burke DS**, Absence of porcine parvovirus transmission to man. Trans R Soc Trop Med Hyg. 1985;79(4):561
- 43. **Burke DS**, Nisalak A, Nimmannitya S, Disappearance of Chikungunya virus from Bangkok. Trans R Soc Trop Med Hyg. 1985;79(3):419-20
- 44. Tingpalapong M, Hoke CH, Ward GS, **Burke DS**, Elwell MR, Lohytyothin S, Saisombat S. Anti-rabies virus IgM in serum and cerebrospinal fluid from rabid dogs. Southeast Asian J Trop Med Public Health. 1986 Dec;17(4):550-7
- 45. **Burke DS**, Nisalak A, Hoke CH. Field trial of a Japanese encephalitis diagnostic kit. J Med Virol. 1986 Jan;18(1):41-9
- 46. Leake CJ, **Burke DS**, Nisalak A, Hoke CH. Isolation of Japanese encephalitis virus from clinical specimens using a continuous mosquito cell line. Am J Trop Med Hyg. 1986 Sep;35(5):1045-50
- 47. **Burke DS**, Redfield RR, Classification of infections with human immunodeficiency virus. Ann Intern Med. 1986 Dec;105(6):968
- Monath TP, Wands JR, Hill LJ, Brown NV, Marciniak RA, Wong MA, Gentry MK, Burke DS, Grant JA, Trent DW. Geographic classification of dengue-2 virus strains by antigen signature analysis. Virology. 1986 Oct 30;154(2):313-24

- 49. Leake CJ, Ussery MA, Nisalak A, Hoke CH, Andre RG, **Burke DS**. Virus isolations from mosquitoes collected during the 1982 Japanese encephalitis epidemic in northern Thailand. Trans R Soc Trop Med Hyg. 1986;80(5):831-7
- 50. Kelley PW, Redfield RR, Ward DL, **Burke DS**, Miller RN, Prevalence and incidence of HTLV-III infection in a prison. JAMA. 1986 Oct 24-31;256(16):2198-9
- 51. **Burke DS**, Redfield RR, False-positive Western blot tests for antibodies to HTLV-III. JAMA. 1986 Jul 18;256(3):347
- 52. Sjogren MH, Tanno H, Fay O, Sileoni S, Cohen BD, **Burke DS**, Feighny RJ. Hepatitis A virus in stool during clinical relapse. Ann Intern Med. 1987 Feb;106(2):221-6
- 53. **Burke DS**, Morrill JE. Levels of Interferon in the plasma and cerebrospinal fluid of patients with acute Japanese Encephalitis. J Infect Dis. 1987 Apr;155(4):797-9
- 54. Watts DM, **Burke DS**, Harrison BA, Whitmire RE, Nisalak A. Effect of temperature on the vector efficiency of Aedes aegypti for dengue-2 virus. Am J Trop Med Hyg. 1987 Jan;36(1):143-52
- 55. **Burke DS**, Nisalak A, Gentry MK. Detection of flavivirus antibodies in human serum by epitope-blocking immunoassay. J Med Virol. 1987 Oct;23(2):165-73
- 56. **Burke DS**, Redfield RR, Putman P, Alexander SS. Variations in Western blot banding patterns of Human T-Cell Lymphotropic Virus Type III/Lymphadenopathy-associated Virus. J Clin Microbiol. 1987 Jan;25(1):81-4
- 57. Redfield RR, Wright DC, James WD, Jones TS, Brown C, **Burke DS**. Disseminated vaccinia in a military recruit with human immunodeficiency virus (HIV) disease. N Engl J Med. 1987 Mar 12;316(11):673-6
- 58. **Burke DS**, Brandt BL, Redfield RR, Lee T-H, Thorne RM, Beltz GA, Hung C-H. Diagnosis of Human Immunodeficiency Virus infection by immunoassay using a molecularly cloned and expressed virus envelope polypeptide. Comparison to Western blot on 2707 consecutive serum samples. Ann Intern Med. 1987 May;106(5):671-6
- 59. **Burke DS**, Brundage JF, Bernier W, Gardner LI, Redfield RR, Gunzenhauser J, Voskovitch J, Herbold JR. Demography of HIV infections among civilian applicants for military service in four counties in New York City. N Y State J Med. 1987 May;87(5):262-4
- 60. Redfield RR, **Burke DS**. Shadow on the Land: The Epidemiology of HIV infection. Viral Immunol. 1987 Spring;1(1):69-81
- 61. Rhoads JL, Wright DC, Redfield RR, **Burke DS**. Chronic vaginal candidiasis in women with Human Immunodeficiency infection. JAMA. 1987 Jun 12;257(22):3105-7
- 62. **Burke DS**, Brundage JF, Herbold JR, Berner W, Gardner LI, Gunzenhauser JD, Voskovitch J, Redfield RR. Human Immunodeficiency Virus infections among civilian applicants for United States military service, October 1985 to March 1986. N Engl J Med. 1987 Jul 16;317(3):131-6
- 63. Lennox JL, Redfield RR, **Burke DS**. HIV antibody screening in a general hospital population. JAMA. 1987 Jun 5;257(21):2914
- 64. **Burke DS**, Nisalak A, Johnson DE, Scott RMcN. A prospective study of dengue infections in Bangkok. Am J Trop Med Hyg. 1988 Jan;38(1):172-80 PMID:3341519
- 65. Kliks SC, Nimmanitya S, Nisalak A, **Burke DS**. Evidence that maternal dengue antibodies are important in the development of dengue hemorrhagic fever in infants. Am J Trop Med Hyg. 1988 Mar;38(2):411-9
- Walker PJ, Henchal EA, Blok J, Repik PM, Henchal LS, Burke DS, Robbins SJ, Gorman BM. Variation in dengue type 2 viruses isolated in Bangkok during 1980. J Gen Virol. 1988 Mar;69 (Pt 3):591-602
- 67. Putnak JR, Charles PC, Padmanabhan R, Irie K, Hoke CH, **Burke DS**. Functional and antigenic domains of the dengue-2 virus nonstructural glycoprotein NS-1. Virology. 1988 Mar;163(1):93-103

- Innis BL, Eckels KH, Kraiselburd E, Dubois DR, Meadors GF, Gubler DJ, Burke DS, Bancroft WH. Virulence of a live dengue virus vaccine candidate: A possible new marker of dengue virus attenuation. J Infect Dis. 1988 Oct;158(4):876-80
- 69. Hoke CH, Nisalak A, Sangawhipa N, Jatanasen S, Laorakapongse T, Innis BL, Kotchasenee S-O, Gingrich JB, Latendresse J, Fukai K, **Burke DS**. Protection against Japanese encephalitis by inactivated vaccines. N Engl J Med. 1988 Sep 8;319(10):608-14 PMID:2842677
- Brundage JF, Burke DS, Gardner LI, Visintine R, Peterson M, Redfield RR. HIV infection among young adults in the New York area: Prevalence and incidence estimates based on antibody screening among civilian applicants for military service. NY State J of Med 1988:88:232-235
- 71. Warrell MJ, Looareesuwan S, Manatsathit S, White NJ, Phuapradit P, Vejjajiva A, Hoke CH, **Burke DS**, Warrell DA. Rapid diagnosis of rabies and post-vaccinal encephalitides. Clin Exp Immunol 1988 Jun;72(3):521
- 72. **Burke DS**, Brundage JF, Redfield RR, Damato JJ, Schable CA, Putman P, Visintine R, Kim HI. Measurement of the false positive rate in a screening program for Human Immunodeficiency Virus infections. N Engl J Med. 1988 Oct 13;319(15):961-4
- 73. Damato JJ, Fipps DR, Redfield RR, **Burke DS**. The Department of the Army quality assurance program for Human Immunodeficiency Virus antibody testing. Lab Med 1988;19:577-580
- 74. Damato JJ, Kim H, Fipps DR, Wylie N, **Burke DS**. High-resolution HIV Western blot methodology using Bio Rad Mini Protein II Test System. Lab Med 1988;19:753-756
- 75. Fipps DR, Damato JJ, Brandt B, **Burke DS**. Effects of multiple freeze thaws and various temperatures on the reactivity of Human Immunodeficiency Virus antibody using three detection assays. J Virol Methods. 1988 Jun;20(2):127-32
- 76. Gendelman HE, Orenstein JM, Martin MA, Ferrua C, Mitra R, Phipps T, Wahl LA, Lane HC, Fauci AS, Burke DS, Skillman D, Meltzer MS. Efficient isolation and propagation of Human Immunodeficiency Virus on recombinant colony-stimulating factor 1-treated monocytes. J Exp Med. 1988 Apr 1;167(4):1428-41
- Looney DJ, Fisher AG, Putney SD, Rusche JR, Redfield RR, Burke DS, Gallo RC, Wong-Staal F. Type-restricted neutralization of molecular clones of Human Immunodeficiency Virus. Science. 1988 Jul 15;241(4863):357-9
- 78. Fipps DR, Damato JJ, **Burke DS**. Effects of heat inactivation on HIV antibody screening and confirmatory test systems. Diagn Microbiol Infect Dis. 1988 Jun;10(2):103-7
- 79. Redfield RR, **Burke DS**. HIV Infection: The Clinical Picture. Sci Am. 1988 Oct;259(4):90-8
- 80. **Burke DS**, Review of laboratory proficiency, Infect Control Hosp Infect Control Hosp Epidemiol. 1988 Aug;9(8):365
- Kliks SC, Nisalak A, Brandt WE, Wahl L, Burke DS. Antibody-dependent enhancement of dengue virus growth in human monocytes as a risk factor for dengue hemorrhagic fever. Am J Trop Med Hyg. 1989 Apr;40(4):444-51
- 82. Mason PW, Dalrymple JM, Gentry MK, McCown JM, Hoke CH, **Burke DS**, Fournier MJ, Mason TL. Molecular characterization of a neutralizing domain of the Japanese encephalitis virus structural glycoprotein. J Gen Virol. 1989 Aug;70 (Pt 8):2037-49
- Kaufman BM, Summers PL, DuBois DR, Cohen WH, Gentry MK, Timchak RL, Burke DS, Eckels KH. Monoclonal antibodies for dengue virus PRM glycoprotein protect mice against lethal dengue infection. Am J Trop Med Hyg. 1989 Nov;41(5):576-80
- 84. Shafferman A, Lennox J, Grosfeld H, Sadoff J, Redfield RR, **Burke DS**. Patterns of antibody recognition of selected conserved amino acid sequences from the HIV envelope in sera from different stages of HIV infection. AIDS Res Hum Retroviruses. 1989 Feb;5(1):33-9

- 85. Rickman WJ, Waxdal MJ, Monical C, Damato JD, **Burke DS**. Department of Army lymphocyte immunophenotyping quality assurance program. Clin Immunol Immunopathol. 1989 Jul;52(1):85-95
- Gardner LI, Jr, Brundage JF, Burke DS, McNeil JG, Visintine R, Miller RN. Spatial diffusion of the Human Immunodeficiency Virus infection epidemic in the United States, 1985-1987. Ann Assoc Am Geograph 79:25-43
- 87. McNeil JG, Brundage JF, Wann ZF, **Burke DS**, Miller RN, and the Walter Reed Retrovirus Research Group. Direct measurement of Human Immunodeficiency Virus seroconversions in a serially tested population of young adults in the United States Army, October 1985 to October 1987. N Engl J Med. 1989 Jun 15;320(24):1581-5
- 88. Shafferman A, Layne A, Sadoff J, **Burke DS**, Morton WR, Benveniste RE. Antibody recognition of SIV envelope peptides in plasma from macaques experimentally infected with SIVmne. AIDS Res Hum Retroviruses. 1989 Jun;5(3):327-36
- 89. **Burke DS**. Laboratory diagnosis of Human Immunodeficiency Virus infection. Clin Lab Med. 1989 Sep;9(3):369-92
- 90. Gardner LI, Brundage JF, **Burke DS**, McNeil JG, Visintine R, Miller RN. Evidence for spread of the Human Immunodeficiency Virus epidemic into low prevalence areas of the United States. J Acquir Immune Defic Syndr. 1989;2(6):521-32
- 91. Burke DS, Redfield RR, Bjornson DC, Fowler AK, Oster, CN, Frequent isolation of HIV-1 from the blood of patients receiving zidovudine (AZT) therapy, N Engl J Med. 1989 Dec 14;321(24):1682
- 92. Malone JL, Simms TE, Gray GC, Wagner KF, Burge JR, **Burke DS**. Sources of variability in repeted T-helper lymphocyte counts from Human Immunodeficiency virus Type 1-infected patients: total lymphocyte count fluctuations and diurnal cycle are important. J Acquir Immune Defic Syndr. 1990;3(2):144-51
- 93. Brundage JF, McNeil JG, Miller RN, Gardner LI, Harrison SM, Hawkes C, Craig DB, Redfield RR, Burke DS. The current distribution of CD4+ T-lymphocyte counts among adults in the United States with Human Immunodeficiency Virus infections: Estimates based on the experience of the US Army. J Acquir Immune Defic Syndr. 1990;3(1):92-4
- Kelly PW, Miller RN, Pomerantz R, Wann F, Brundage JF, Burke DS. Human Immunodeficiency Virus seropositivity among members of the active duty U.S. Army, 1985-1989. Am J Public Health. 1990 Apr;80(4):405-10
- 95. Gomatos PJ, Stamatos NM, Gendelman HE, Fowler A, Hoover DL, Kalter DC, Burke DS, Tramont EC, Meltzer MS. Relative inefficiency of soluble recombinant CD4 for inhibition of infection by monocyte-tropic HIV in monocytes and T cells. J Immunol. 1990 Jun 1;144(11):4183-8
- 96. **Burke DS**, Brundage JF, Goldenbaum M, Gardner LI, Peterson M, Visintine R, Redfield RR. Human Immunodeficiency Virus infections in teenagers: Seroprevalence among applicants for US military service. JAMA. 1990 Apr 18;263(15):2074-7.
- 97. **Burke DS**, Fowler AK, Redfield RR, Dilworth S, Oster CN. Isolation of HIV-1 from the blood of seropositive adults: Patient stage of illness and sample inoculum size are major determinants of a positive culture. J Acquir Immune Defic Syndr. 1990;3(12):1159-67
- 98. Brundage JF, **Burke DS**, Gardner LI, McNeil JG, Goldenbaum M, Visintine R, Redfield RR, Peterson M, Miller RN. Tracking the spread of the HIV infection epidemic among young adults in the United States: results of the first four years of screening among civilian applicants for U.S. military service. J Acquir Immune Defic Syndr. 1990;3(12):1168-80
- 99. Cowan DN, Pomerantz RS, Wann ZF, Goldenbaum M, Brundage JF, Miller RN, Burke DS, Carroll CA, and the Walter Reed Retrovirus Research Group. Human Immunodeficiency Virus infection among members of the Reserve Components of the US Army: Prevalence, incidence, and demographic characteristics J Infect Dis. 1990 Oct;162(4):827-36

- 100. Birx D, Redfield RR, Tencer K, Fowler A, Burke DS, and Tosato G. Induction of interleukin-6 during Human Immunodeficiency Virus Infection. Blood. 1990 Dec 1;76(11):2303-10
- 101. Humphrey M, Mosca J, Baker JR Jr, Drabick JJ, Carr FE, Burke DS, Wartofsky L, Djuh Y-Y, and Burman KD. Absence of retroviral sequences in Graves disease. Lancet. 1991 Jan 5;337(8732):17-8
- 102. Birx DL, Rhoads JL, Wright JC, Burke DS, Redfield RR. Immunologic parameters in early-stage HIV-seropositive subjects associated with vaccine responsiveness. J Acquir Immune Defic Syndr. 1991;4(2):188-96
- 103. Wages JM Jr., Hamdallah M, Calabro MA, Fowler AK, Oster CN, Redfield RR, and Burke DS. Clinical Performance of a polymerase chain reaction testing algorithm for diagnosis of HIV-1 infection in peripheral blood mononuclear cells. J Med Virol. 1991 Jan;33(1):58-63
- 104. Michael NL, Morrow P, Mosca J, Vahey M, Burke DS, and Redfield RR. Induction of Human Immunodeficiency Virus Type 1 expression in chronically infected cells is associated primarily with a shift in RNA splicing patterns. J Virol. 1991 Mar;65(3):1291-303
- 105. McNeil JG, Brundage JF, Gardner LI, Wann ZF, Razullo PO, Redfield RR, Burke DS, Miller RN. Trends of HIV seroconversion among young adults in the US Army, 1985 to 1989. JAMA. 1991 Apr 3;265(13):1709-14
- 106. Redfield RR, Birx DL, Ketter N, Tramont E, Polonis V, Davis C, Brundage JF, Smith G, Johnson S, Fowler A, Wierzba T, Shafferman A, Volvovitz F, Oster C, Burke DS, and the Military Medical Consortium for Applied Retroviral Research. A Phase I evaluation of the safety and immunogenicity of vaccination with recombinant gp160 in patients with early Human Immunodeficiency Virus infection. N Engl J Med. 1991 Jun 13;324(24):1677-84
- 107. Cowan DN, Brundage JF, Pomerantz RS, Miller RN, Burke DS. HIV infection among members of the US Army Reserve Components with medical and health occupations. J JAMA. 1991 Jun 5;265(21):2826-30
- 108. Drabick JJ, Horning VL, Lennox JL, Coyne PE, Oster CN, Knight RD, Dillard TA, Fuller SA, Damato JJ, **Burke DS**. A retrospective analysis of diseases associated with indeterminate HIV western blot patterns. Mil Med. 1991 Feb;156(2):93-6
- 109. Damato JJ, O'Bryen BN, Fuller SA, Roberts CR, Redfield RR, Burke DS. Resolution of indeterminant HIV-1 test data using the Department of Defense HIV-1 testing program. Lab Medicine 1991;22:107-113
- 110. Michael NL, **Burke DS**. Natural history of human immunodeficiency virus infection. Dermatol Clin. 1991 Jul;9(3):429-41
- 111. Shafferman A, Jahrling PB, Benveniste RE, Lewis MG, Phipps TJ, Eden-McCutchan F, Sadoff J, Eddy GA, **Burke DS**. Protection of macaques with a simian immunodeficiency virus envelope peptide vaccine based on conserved human immunodeficiency virus type 1 sequence. Proc Natl Acad Sci U S A. 1991 Aug 15;88(16):7126-30
- 112. Rosenberg YJ, White BD, Papemaster SF, Zack P, Jarling PB, Eddy GA, **Burke DS**, Lewis MG. Variation in T-lymphocyte activation and susceptibility to SIVPBj-14-induced acute death in macaques. J Med Primatol. 1991 Jun;20(4):206-10
- 113. McCutchan FE, Sanders-Buell E, Oster CW, Redfield RR, Hira SK, Perine PL, Ungar BLP, Burke DS. Genetic comparison of Human Immunodeficiency Virus (HIV-1) isolates by polymerase chain reaction. J Acquir Immune Defic Syndr. 1991;4(12):1241-50
- 114. Rhoads JL, Birx DL, Wright DC, Brundage JF, Brandt BL, Redfield RR, **Burke DS**. Safety and immunogenicity of multiple conventional immunizations administered during early HIV infection. J Acquir Immune Defic Syndr. 1991;4(7):724-31

- 115. **Burke DS**, Introduction to the 1991 ASTMH presidential address, Am J Trop Med Hyg. 1992 Mar;46(3):239-40
- 116. Michael NL, Vahey M, **Burke DS**, Redfield RR. Viral DNA and mRNA expression correlate with the stage of human immunodeficiency virus (HIV) type 1 infection in humans: evidence for viral replication in all stages of HIV disease. J Virol. 1992 Jan;66(1):310-6
- Roberts CR, Fipps DR, Brundage JF, Wright SE, Goldenbaum M, Alexander SS, Burke DS. Prevalence of human T-lymphotropic virus in civilian applicants for the United States Armed Forces. Am J Public Health. 1992 Jan;82(1):70-3
- 118. **Burke DS**. Human HIV Vaccine Trials: Does antibody-dependent enhancement pose a genuine risk? Perspect Biol Med. 1992 Summer;35(4):511-30
- 119. Nkya WM, Warren RQ, Wolf H, Hendrix CW, Tesha J, Redfield RR, Melcher GP, Burke DS, Kanda P, Kennedy RC. Fine specificity of the humoral immune response to HIV-1 Gp160 in HIV-1 infected individuals from Tanzania. J Med Virol. 1992 May;37(1):61-6
- 120. McCutchan FE, Ungar BLP, Hegerich P, Roberts CR, Fowler AK, Hira SK, Perine PL, Burke DS. Genetic analysis of HIV-1 isolates from Zambia and an expanded phylogenetic tree for HIV-1. J Acquir Immune Defic Syndr. 1992;5(5):441-9
- 121. Shafferman A, Lewis MG, McCutchan FE, Benveniste RE, Jahrling PB, Hickman RL, Lai C-Y, **Burke DS**, Eddy GA. Vaccination of macaques with SIV conserved envelope peptides suppressed infection and prevented disease progression and transmission. AIDS Res Hum Retroviruses. 1992 Aug;8(8):1483-7
- 122. McCutchan FE, Hegerich PA, Brennan TP, Phanuphak P, Singharaj P, Jugsudee A, Berman PW, Gray AM, Fowler AK, **Burke DS**. Genetic variants of HIV-1 in Thailand. AIDS Res Hum Retroviruses. 1992 Nov;8(11):1887-95
- 123. Burke DS, Amsterdam AIDS conference reveals slow progress. Crit Care Nurse. 1992 Oct;12(7):98-9
- 124. **Burke DS**, International vaccine efficacy trials: special considerations. AIDS Res Hum Retroviruses. 1992 Aug;8(8):1531
- 125. Rosenberg YJ, Shafferman A, White BD, Papermaster SF, Leon E, Eddy GA, Benveniste R, Burke DS, Lewis MG. Variation in the CD4+ and CD8+ populations in lymph nodes does not reflect that in the blood during SIVMNE/E11S infection of macaques., J Med Primatol. 1992 Feb-May;21(2-3):131-7
- 126. Malone JL, Oldfield EX 3<sup>rd</sup>, Wagner KF, Simms TE, Daly R, O'Brian J, **Burke DS**, Abnormalities of morning serum cortisol levels and circadian rhythms of CD4+ lymphocyte counts in human immunodeficiency virus type 1-infected adult patients, J Infect Dis. 1992 Jan;165(1):185-6
- 127. Tramont EC, Burke DS. AIDS/HIV in the US Military. Vaccine. 1993;11(5):529-33.
- 128. Roy MJ, Damato JJ, **Burke DS**. Absence of true seroreversion of HIV-1 antibody in seroreactive individuals. JAMA. 1993 Jun 9;269(22):2876-9
- 129. Kim JH, Mosca JD, Vahey MT, McLinden RJ, **Burke DS**, Redfield RR. Consequences of Human Immunodeficiency Virus Type 1 superinfection of chronically infected cells. AIDS Res Hum Retroviruses. 1993 Sep;9(9):875-82
- 130. Birx DL, Brundage J, Larson K, Engler R, Smith L, Squire E, Carpenter G, Sullivan M, Rhoads J, Oster C, James W, Lupton G, Wierzba T, **Burke DS**, Redfield RR. The prognostic utility of delayed-type hypersensitivity skin testing in the evaluation of HIV-infected patients. J Acquir Immune Defic Syndr. 1993 Nov;6(11):1248-57
- 131. **Burke DS**. Of postulates and peccadilloes: Robert Koch and vaccine (tuberculin) therapy for tuberculosis. Vaccine. 1993;11(8):795-804
- 132. Shafferman A, Lewis MG, McCutchan FE, Benveniste RE, Jahrling PB, **Burke DS**, Eddy GA. Prevention of transmission of simian immunodeficiency virus from vaccinated

macaques that developed transient virus infection following challenge. Vaccine. 1993;11(8):848-52

- 133. **Burke DS**. Vaccine therapy for HIV: A historical review of the treatment of infectious diseases by active specific immunization with microbe-derived antigens. Vaccine. 1993;11(9):883-91. Erratum in: Vaccine 1994 Jan;12(1):93
- 134. Mascola JR, Mathieson BJ, Zack PM, Walker MC, Halstead SB, **Burke DS**. Summary report: Workshop on the potential risks of antibody-dependent enhancement in human HIV vaccine trials. AIDS Res Hum Retroviruses. 1993 Dec;9(12):1175-84
- 135. Mascola JR, Burke DS. Antigen detection in neutralization assays: High levels of interfering anti-p24 antibodies in some plasma. AIDS Res Hum Retroviruses. 1993 Dec;9(12):1173-4
- 136. Lewis MG, Elkins WR, McCutchan FE, Beneveniste RE, Lai CY, Montefiori DC, Burke DS, Eddy GA, Shafferman A. Passively transferred antibodies directed against conserved regions of SIV envelope protect macaques from SIV infection. Vaccine. 1993 Oct;11(13):1347-55
- 137. Louwagie J, McCutchan FE, Peeters M, Brennan TP, Sanders-Buell E, Eddy GA, van der Groen G, Fransen K, Gershy-Damet GM, Deleys R, Burke DS. Phylogenetic analysis of gag genes from 70 international HIV-1 isolates provides evidence for multiple genotypes. AIDS. 1993 Jun;7(6):769-80
- 138. Mascola JR, Louwagie J, McCutchan FE, Fischer CL, Hegerich PA, Wagner KF, Fowler AK, McNeil JG, Burke DS. Two antigenically distinct subtypes of Human Immunodeficiency Virus Type 1: Viral genotype predicts neutralization serotype. J Infect Dis. 1994 Jan;169(1):48-54
- 139. Mayers DL, Japour AJ, Arduino JM, Hammer SM, Reichman R, Wagner KF, Chung R, Lane J, Crumpacker CS, McLeod GX, Beckett LA, Roberts CR, Winslow D, Burke DS. Dideoxynucleoside resistance emerges with prolonged zidovudine monotherapy. Antimicrob Agents Chemother. 1994 Feb;38(2):307-14
- 140. Louwagie J, Delwart EL, Mullins JI, McCutchan FE, Eddy G, **Burke DS**. Genetic analysis of HIV-1 isolates from Brazil reveals presence of two distinct genetic subtypes. AIDS Res Hum Retroviruses. 1994 May;10(5):561-7
- 141. Carroll R, Lin JT, Dacquel EJ, Mosca JD, **Burke DS**, St Louis DC. A Human Immunodeficiency Virus Type 1 (HIV-1) -based retroviral vector system utilizing stable HIV-1 packaging cell lines. J Virol. 1994 Sep;68(9):6047-51
- 142. Biselli R, Loomis LD, Del Bono V, Burke DS, Redfield RR, Birx DL. Immunization of HIV-infected patients with RPG160: Modulation of anti-RGP120 antibody spectrotype. J Acquir Immune Defic Syndr. 1994 Oct;7(10):1016-24
- 143. Vahey M, Birx DL, Michael NL, **Burke DS**, Redfield RR. Assessment of gag DNA and genomic RNA in peripheral blood mononuclear cells in HIV-infected patients receiving intervention with a recombinant gp 160 subunit vaccine in a phase I study. AIDS Res Hum Retroviruses. 1994 Jun;10(6):649-54
- 144. VanCott TC, Bethke FR, Kalyanaraman V, **Burke DS**, Redfield RR, Birx DL. Preferential antibody recognition of structurally distinct HIV-1 gp120 molecules. J Acquir Immune Defic Syndr. 1994 Nov;7(11):1103-15
- 145. Mascola JR, McNeil JG, **Burke DS**, AIDS vaccines. Are we ready for human efficacy rials? JAMA. 1994 Aug 10;272(6):488-9
- 146. Mayers DL, Mikovits JA, Joshi B, Hewlett IK, Estrada JS, Wolfe AD, Garcia GE, Doctor BP, Burke DS, Gordon RK, Lane JR, Chiang PK. Anti-Human Immunodeficiency Virus 1 (HIV-1) activities of 3-Deaza-adenosine Analogs: Increased potency against 3-azido-3-dexythymidine-resistant HIV-1 strains. Proc Natl Acad Sci U S A. 1995 Jan 3;92(1):215-9
- 147. Louwagie J, Janssens W, Mascola J, Heyndrickx L, Hegerich P, van der Groen G, McCutchan FE **Burke DS**. Genetic diversity of the envelope glycoprotein from human immunodeficiency virus type 1 isolates of African origin. J Virol. 1995 Jan;69(1):263-71

- 148. **Burke DS**. Review: Human trials of experimental HIV vaccines. AIDS. 1995;9 Suppl A:S171-80
- 149. Loomis LD, Deal CD, Kersey KS, Burke DS, Redfield RR, Birx DL. Humoral responses to linear epitopes on the HIV-1 envelope in seropositive volunteers after vaccine therapy with rgp160. J Acquir Immune Defic Syndr Hum Retrovirol. 1995 Sep 1;10(1):13-26
- 150. Artenstein AW, VanCott TC, Mascola JR, Carr JK, Hegerich PA, Gaywee J, Sanders-Buell E, Robb ML, Dayhoff DE, Thitivichianlert S, Nitayaphan S, McNeil JG, Birx DL, Michael RA, Burke DS McCutchan FE. Dual infection with Human Immunodeficiency Virus type 1 of distinct envelope subtypes in humans. J Infect Dis. 1995 Apr;171(4):805-10
- 151. Salminen MO, Koch C, Sanders-Buell E, Ehrenberg PK, Michael NL, Carr JK, Burke DS, McCutchan FE. Recovery of virtually full-length HIV-1 provirus of diverse subtypes from primary virus cultures using the polymerase chain reaction. Virology. 1995 Oct 20;213(1):80-6
- 152. Brodine SK, Mascola JR, Weiss PJ, Ito SI, Porter KR, Artenstein AW, Garland FC, McCutchan FE, Burke DS. Detection of diverse HIV-1 genetic subtypes in the USA. Lancet. 1995 Nov 4;346(8984):1198-9
- 153. Michael NL, Mo T, Merzouki A, O, Shaughnessy M, Oster C, **Burke DS**, Redfield RR, Birx DL, Cassol SA. Human immunodeficiency virus type 1 cellular RNA load and splicing patterns predict disease progression in a longitudinally studied cohort. J Virol. 1995 Mar;69(3):1868-77
- 154. VanCott TC, Bethke FR, **Burke DS**, Redfield RR Birx DL. Lack of induction of antibodies specific for conserved, discontinuous epitopes of HIV-1 envelope glycoprotein by candidate AIDS vaccines. J Immunol. 1995 Oct 15;155(8):4100-10
- 155. Renzullo PO, McNeil JG, Wann ZF, Burke DS, Brundage JF. Human immunodeficiency virus type-1 seroconversion trends among young adults serving in the United States Army, 1985 - 1993. J Acquir Immune Defic Syndr Hum Retrovirol. 1995 Oct 1;10(2):177-85
- 156. Brown AE, Lane JR, Wagner KF, Zhou S, Chung R, Ray KL, Blatt SP, **Burke DS**. Rates of p24 antigenemia and viral isolation in comparable white and black HIV-infected subjects. AIDS. 1995 Apr;9(4):325-8
- 157. Artenstein AW, Coppola J, Brown AE, Carr JK, Sanders-Buell E, Galbarini E, Mascola JR, VanCott TC, Schonbrood P, McCutchan FE, Burke DS. Multiple introductions of HIV-1 subtype E into the western hemisphere. Lancet 1995 Nov 18;346(8986):1376
- Salminen MO, Carr JK, Burke DS, McCutchan FE. Identification of breakpoints in intergenotypic recombinants of HIV type-1 by bootscanning. AIDS Res Hum Retroviruses. 1995 Nov;11(11):1423-5
- 159. Brown AE, **Burke DS.** Cost of HIV testing in the U.S. Army. N Engl J Med. 1995 Apr 6;332(14):963
- Burke DS, Brown AE, Screening surgeons for HIV infection. Ann Intern Med. 1995 Nov 15;123(10):812-3
- 161. **Burke DS**. Joseph-Alexander Auzias-Turrenne, Louis Pasteur, and early concepts of virulence, attenuation, and vaccines. Perspect Biol Med. 1996 Winter;39(2):171-86
- 162. Brown AE, Brundage JF, Tomlinson JP, **Burke DS**. The U.S. Army HIV testing program: The First Decade. Mil Med. 1996 Feb;161(2):117-22
- 163. Brown AE, Newby JH, Ray KL, Jackson JN, Burke DS. Prevention and treatment of HIV infection in minorities in the U.S. Military: A Review of Military Research. Mil Med. 1996 Feb;161(2):123-7
- 164. Wong MT, Dolan MJ, Kozlow E, Doe R, Melcher GP, **Burke DS**, Boswell RN, Vahey M. Patterns of virus burden and T-cell phenotype are established early and are correlated

with the rate of disease progression in Human Immunodeficiency Virus type 1 - infected persons. J Infect Dis. 1996 Apr;173(4):877-87

- 165. Mascola JR, Snyder SW, Weislow OS, Belay SM, Belshe RB, Schwartz DH, Clements ML, Dolin R, Graham BS, Gorse GJ, Keefer MC, McElrath MJ, Walker MC, Wagner KF, McNeil JG, McCutchan FE, Burke DS. Immunization with envelope subunit vaccine products elicits neutrallizing antibodies against laboratory-adapted but not primary isolates of human immunodeficiency virus type 1. J Infect Dis. 1996 Feb;173(2):340-8
- 166. McCutchan FE, Artenstein AW, Sanders-Buell E, Salminen MO, Carr JK, Mascola JR, Yu X-F, Nelson KE, Khamboonruang C, Schmitt D, Kieny MP, McNeil JG, Burke DS. Diversity of the envelope glycoprotein among human immunodeficiency virus type 1 isolates of clade E from Asia and Africa. J Virol. 1996 Jun;70(6):3331-8
- 167. Sirisopana N, Torugsa K, Mason CJ, Markowitz LE, Jugsudee A, Supapongse T, Chuenchitra C, Michael RA, Burke DS, Singharaj P, Johnson AE, McNeil JG, McCutchan FE, Carr JK. Correlates of HIV-1 seropositivity among young men in Thailand. J Acquir Immune Defic Syndr Hum Retrovirol. 1996 Apr 15;11(5):492-8
- Chiang PK, McCann PP, Land JR, Pankaskie M, Burke DS, Mayers DL. Anti-human immunodeficiency virus (HIV-1) activities of inhibitors of polyamine pathways. J J Biomed Sci. 1996 Apr;3(2):78-81
- 169. Levine BL, Mosca JD, Riley JL, Carroll RG, Vahey MT, Jogodzinski L, Wagner KF, Mayers DL, Burke DS, Weislow OS, St. Louis DC, June CH. Antiviral effect and ex vivo CD4+ T cell proliferation in HIV-1 positive patients as a result of CD28 costimulation. Science. 1996 Jun 28;272(5270):1939-43
- 170. Carr JK, Salminen MO, Koch C, Gotte D, Artenstein AW, Hegerich PA, St. Louis D, **Burke DS**, McCutchan FE. Full length sequence and mosaic structure of a human immunodeficiency virus type 1 isolate from Thailand. J Virol. 1996 Sep;70(9):5935-43.
- 171. Salminen MO, Johansson B, Sonnerborg A, Ayehunie S, Gotte D, Leinikki P, Burke DS, McCutchan FE. Full-length sequence of an Ethiopian human immunodeficiency virus. AIDS Res Hum Retroviruses. 1996 Sep 20;12(14):1329-39
- 172. Mascola JR, Louder MK, Surman SR, Vancott TC, Yu XF, Bradac J, Porter KR, Nelson KE, Girard M, McNeil JG, McCutchan FE, Birx DL, **Burke DS**. Human immunodeficiency virus type 1 neutrallizing antibody serotyping using serum pools and an infectivity reduction assay. AIDS Res Hum Retroviruses. 1996 Sep 20;12(14):1319-28
- 173. Michael NL, Davis KE, Loomis-Price LD, VanCott TC, **Burke DS**, Redfield RR, Birx DL. V3 seroreactivity and sequence variation: tracking the emergence of V3 genotypic variation in HIV-1 infected patients. AIDS. 1996 Feb;10(2):121-9
- 174. Kim JH, McLinden RJ, Mosca JD, **Burke DS**, Boswell RN, Birx DL, Redfield RR. Transcriptional effects of superinfection in HIV chronically infected T cells: studies in dually infected clones. J Acquir Immune Defic Syndr Hum Retrovirol. 1996 Aug 1;12(4):329-42
- 175. McCutchan FE, Salminen MO, Carr JK, Burke DS. HIV-1 genetic diversity. AIDS. 1996 Dec;10 Suppl 3:S13-20
- 176. Porter KR, Mascola JR, Hupudio H, Ewing D, VanCott TC, Anthony RL, Corwin AL, Widodo S, Ertono S, McCutchan FE, Burke DS, Hayes CG, Wignall FS, Graham RR. Genetic, antigenic and serologic characterization of human immunodeficiency virus type 1 from Indonesia. J Acquir Immune Defic Syndr Hum Retrovirol. 1997 Jan 1;14(1):1-6
- 177. Evans JS, Nims T, Cooley J, Bradley W, Jagodzinski L, Zhou S, Melcher GP. Burke DS, Vahey M. Serum levels of virus burden in early-stage HIV-1 disease in women. J Infect Dis. 1997 Apr;175(4):795-800
- 178. Kim JH, Loveland JE, Sitz KV, Ratto Kim S, Mclinden RJ, Tencer K, Davis K, **Burke DS**, Boswell RN, Redfield RR, Birx DL. Expansion of restricted cellular immune

responses to HIV-1 envelope by vaccination: IL-7 and IL-12 differentially augment cellular proliferative responses to HIV-1. Clin Exp Immunol. 1997 May;108(2):243-50

- 179. Pope M, Frankel S, Mascola JR, Trkola A, Isdell F, Birx DL, Burke DS, Ho DD, Moore JP. Human immunodeficiency virus type 1 strains of subtypes B and E replicate in cutaneous dendritic cell T-cell mixtures without displaying subtype -specific tropism. J Virol. 1997 Oct;71(10):8001-7
- 180. Salminen MO, Carr JK, Robertson DL, Hegerich P, Gotte D, Koch C, Sanders-Buell E, Gao F, Sharp PM, Hahn BH, Burke DS, McCutchan FE. Evolution and probable transmission of inter-subtype recombinant HIV-1 in a Zambian couple. J Virol. 1997 Apr;71(4):2647-55
- 181. Burke DS. Recombination in HIV: An important viral evolutionary strategy. Emerg Infect Dis. 1997 Jul-Sep;3(3):253-9
- 182. **Burke DS**, Sing for the gov'nor: a call to advocacy for tropical medicine and hygiene. Am J Trop Med Hyg. 1997 Jan;56(1):1-6
- 183. Gardner LI, Harrison SH, Hendrix CW, Blatt SP, Wagner KF, Chung RC, Harris RW, Cohn DL, Burke DS, Mayers DL. Size and duration of zidovudine benefit in 1003 HIVinfected patients: U.S. Army, Navy, and Air Force natural history data. Military Medical Consortium for Applied Retroviral Research. J Acquir Immune Defic Syndr Hum Retrovirol. 1998 Apr 1;17(4):345-53
- 184. **Burke DS**, DeJong KA, Grefenstette JJ, Ramsey CL, Wu AS. Putting more genetics into genetic algorithms. Evol Comput. 1998 Winter;6(4):387-410
- 185. Ramsey CL, DeJong KA, Grefenstette JJ, Wu AS, **Burke DS**. Genome length as an evolutionary self-adaptation. Parallel Problem Solving from Nature 5: 345-353 (1998).
- 186. Wu AS, DeJong KA, Burke DS, Grefenstette JJ, Ramsey CL. Visual analysis of evoluntionary algorithms. Proceedings of the 1999 congress on Evoluntionary Computation 1999;2:1419-1425
- 187. Wolfe ND, Eitel MD, Gockowski J, Muchaal PK, Nolte C, Prosser AT, Torimiro JN, Weise SF, Burke DS. Deforestation, hunting, and the ecology of microbial emergence. Global Change and Human Health 2000;1:1-5
- 188. Hay SI, Myers MF, Burke DS, Vaughn DW, Endy T, Ananda N, Shanks GD, Snow RW, Rogers DJ. Etiology of interepidemic periods of mosquito-borne disease. Proc Natl Acad Sci U S A. 2000 Aug 1;97(16):9335-9
- 189. Carr JK, Torimiro JN, Wolfe ND, Eitel MN, Kim B, Sanders-Buell E, Jagodzinski LL, Gotte D, Burke DS, Birx DL, Mc Cutchan FE. The AG recombinant IbNG and novel strains of group M HIV-1 are common in Cameroon. Virology. 2001 Jul 20;286(1):168-81
- 190. Esparza J, **Burke DS**. Epidemiological considerations in planning HIV preventive vaccine trials. AIDS. 2001;15 Suppl 5:S49-57
- 191. Epstein JM, Cummings DAT, Chakravarty S, Singa RM, **Burke DS**. Toward a containment strategy of smallpox bioterror: An individual-based computational approach. Brookings Institution Center on Social and Economic Dynamics Working Paper No. 31 (2002).
- 192. Nisalak A, Endy TP, Nimmannitya S, Kalayanarooj S, Thisayakorn U, Scott RM, Burke DS, Hoke CH, Innis BL, David W. Vaughn DW. Serotype-specific dengue virus circulation and dengue disease in Bangkok, Thailand from 1973 to 1999. Am J Trop Med Hyg. 2003 Feb;68(2):191-202
- 193. Oh S, Hodge JW, Ahler JD, **Burke DS**, Schlom J, Berzofsky JA. Selective induction of high avidity CTL by altering the balance of signals from APC. J Immunol. 2003 Mar 1;170(5):2523-30
- 194. Oh S, Berzofsky JA, **Burke DS**, Waldmann TA, Perera LP. Co-administration of HIV vaccine vectors with vaccinia viruses expressing IL-15 but not IL-2 induces long-lasting cellular immunity. Proc Natl Acad Sci U S A. 2003 Mar 18;100(6):3392-7

- 195. de Bruyn G, Anthony J. Rossini AJ, Chiu Y-L, Holman D, Elizaga ML, Frey SE, Burke DS, Evan TG, Corey L, Keefer MC. Safety profile of recombinant canarypox HIV vaccines. Vaccine. 2004 Jan 26;22(5-6):704-13
- 196. Cummings DAT, Irizarry RA, Huang NE, Endy TP, Nisalak A, Ungchusak K, **Burke DS**. Traveling waves in the occurrence of dengue hemorrhagic fever in Thailand. Nature. 2004 Jan 22;427(6972):344-7
- 197. Wolfe ND, Switzer WM, Carr JK, Bhullar VB, Vedapuri Shanmugam V, Tamoufe U, Prosser AT, Torimiro JN, Wright A, Mpoudi-Ngole E, McCutchan FE, Birx DL, Folks TM, Burke DS, Heneine W. Naturally acquired simian retrovirus infections among Central African hunters. Lancet. 2004 Mar 20;363(9413):932-7
- 198. Kijak GH, Sanders-Buell E, Wolfe ND, Mpoudi-Ngole E, Kim B, Brown B, Robb ML, Birx DL, **Burke DS**, Car JK, McCutchan FE. Development and application of a high-throughput HIV type 1 genotyping assay to identify CRF02\_AG in West/West Central Africa. AIDS Res Hum Retroviruses. 2004 May;20(5):521-30
- 199. Oh S, Perera LP, **Burke DS**, Waldmann TA, Berzofsky JA. IL-15/IL-15R alphamediated avidity maturation of memory CD8+ T cells. Proc Natl Acad Sci U S A. 2004 Oct 19;101(42):15154-9
- 200. Waters HR, Dougherty L, Tegang S-P, Tran N, Wiysonge CS, Long K, Wolfe ND, Burke DS. Coverage and costs of childhood immunization in Cameroon. Bull World Health Organ. 2004 Sep;82(9):668-75. PMID:15628204. PMCID:PMC2622979.
- 201. Wolfe ND, Prosser AT, Carr JK, Tamoufe U, Mpoudi-Ngole E, Torimiro JN, LeBreton M, McCutchan FE, Birx DL, Burke DS. Exposure to nonhuman primates in rural Cameroon. Emerg Infect Dis. 2004 Dec;10(12):2094-9. PMID:15663844. PMCID:PMC3323379.
- 202. Burke DS, Brown SL. Lessons learned from the 1954 Field Trial of Poliomyelitis Vaccine. Clin Trials. 2004 Feb;1(1):3-5. PMID:16281456.
- 203. Nguyen JC, Murphy ME, Nutman TB, Neafie RC, Maturo S, Burke DS, Turiansky GW. Tropical Medicine Rounds: Cutaneous onchocerciasis in an American traveler. Int J Dermatol. 2005 Feb;44(2):125-8. PMID:15689210.
- 204. Gilbert PB, Peterson ML, Follmann D, Hudgens MG, Francis DP, Gurwith M, Heyward WL, Jobes DV, Popovic V, Self SG, Sinangil F, Burke DS, Berman PW. Correlation between immunologic responses to recombinant glycoprotein 120 vaccine and incidence of HIV-1 infection in a phase 3 HIV-1 preventive vaccine trial. J Infect Dis. 2005 Mar 1;191(5):666-77. PMID:15688279.
- 205. Wolfe ND, Heneine W, Carr JK, Garcia AD, Shanmugam V, Tamoufe U, Torimiro JN, Prosser AT, Lebreton M, Mpoudi-Ngole E, McCutchan FE, Birx DL, Folks TM, Burke DS, Switzer WM. Emergence of unique primate T-lymphotropic viruses among central African bushmeat hunters. Proc Natl Acad Sci U S A. 2005 May 31;102(22):7994-9. PMID:15911757. PMCID:PMC1142377.
- 206. Cummings DAT, Schwartz IB, Billings L, Shaw LB, Burke DS. Dynamic effects of antibody dependent enhancement on the fitness of viruses. Proc Natl Acad Sci U S A. 2005 Oct 18;102(42):15259-64. PMID:16217017. PMCID:PMC1257724.
- 207. Ferguson NM, Cummings DA, Cauchemez S, Fraser C, Riley S, Meeyai A, Iamsirithworn S, Burke DS. Strategies for containing an emerging influenza pandemic in Southeast Asia. Nature. 2005 Sep 8;437(7056):209-14. PMID:16079797.
- Schwartz IB, Shaw LB, Cummings DAT, Billings L, McCrary M, Burke DS. Chaotic desynchronization of multistrain diseases. Phys Rev E Stat Nonlin Soft Matter Phys. 2005 Dec;72(6 Pt 2):066201. PMID:16486034.
- 209. Wolfe ND, Daszak P, Kilpatrick AM, Burke DS. Bushmeat hunting, deforestation, and prediction of zoonoses emergence. Emerg Infect Dis. 2005 Dec;11(12):1822-7. PMID:16485465.

- 210. Kalish ML, Wolfe ND, Ndongmo CB, McNicholl J, Robbins KE, Aidoo M, Fonjungo PN, Alemnji G, Zeh C, Djoko CF, Mpoudi-Ngole E, Burke DS, Folks TM. Central African hunters exposed to simian immunodeficiency virus. Emerg Infect Dis. 2005 Dec;11(12):1928-30. PMID:16485481. PMCID:PMC3367631.
- 211. **Burke DS**, Kliks S, Antibody-dependent enhancement in dengue virus infections. J Infect Dis. 2006 Feb 15;193(4):601-3; PMID:16425141. author reply 603-4.
- 212. Torimiro JN, Carr JK, Wolfe ND, Karacki P, Martin MP, Gao X, Tamoufe U, Thomas A, Ngole EM, Birx DL, McCutchan FE, **Burke DS**, Carrington M. HLA class I diversity among rural rainforest inhabitants in Cameroon: identification of A\*2612-B\*4407 haplotype. Tissue Antigens. 2006 Jan;67(1):30-7. PMID:16451198.
- 213. Cummings DA, Moss WJ, Long K, Wiysonge CS, Muluh TJ, Kollo B, Nomo E, Wolfe ND, Burke DS. Improved measles surveillance in Cameroon reveals two major dynamic patterns of incidence. Int J Infect Dis. 2006 Mar;10(2):148-55. PMID:16275043.
- 214. **Burke DS**, Epstein JM, Cummings DA, Parker JI, Cline KC, Singa RM, Chakravarty S. Individual-based computational modeling of smallpox epidemic control strategies. Acad Emerg Med. 2006 Nov;13(11):1142-9. PMID:17085740.
- 215. Kuniholm MH, Wolfe ND, Huang CY, Mpoudi-Ngole E, Tamoufe U, Burke DS, Gubler DJ. Seroprevalence and distribution of Flaviviridae, Togaviridae, and Bunyaviridae arboviral infections in rural Cameroonian adults. Am J Trop Med Hyg. 2006 Jun;74(6):1078-83. PMID:16760524. Erratum in: Am J Trop Med Hyg. 2006 Aug;75(2):371.
- 216. Gupta SB, Mast CT, Wolfe ND, Novitsky V, Dubey SA, Kallas EG, Schechter M, Mbewe B, Vardas E, Pitisuttithum P, Burke D, Freed D, Mogg R, Coplan PM, Condra JH, Long RS, Anderson K, Casimiro DR, Shiver JW, Straus WL. Cross-clade reactivity of HIV-1-specific T-cell responses in HIV-1-infected individuals from Botswana and Cameroon. Journal of Acquired Immune Deficiency Syndromes (1999). 2006 Jun;42(2):135-9. PMID:16760794. doi:10.1097/01.qai.0000223017.01568.e7.
- 217. LeBreton M, Umlauf S, Djoko CF, Daszak P, Burke DS, Kwenkam PY, Wolfe ND. Rift Valley fever in goats, Cameroon. Emerg Infect Dis. 2006 Apr;12(4):702-3. PMID:16715582. PMCID:PMC3294709.
- 218. Oh S, Stegman B, Pendleton CD, Ota MO, Pan CH, Griffin DE, **Burke DS**, Berzofsky JA. Protective immunity provided by HLA-A2 epitopes for fusion and hemagglutinin proteins of measles virus. Virology. 2006 Sep 1;352(2):390-9. PMID:16781760.
- 219. Switzer WM, Qari S, Wolfe ND, Burke DS, Folks TM, Heneine W. Ancient origin and molecular features of the novel human T-lymphotropic virus type 3 revealed by complete genome analysis. J Virol. 2006 Aug;80(15):7427-38. PMID:16840323. PMCID:PMC1563715.
- Ferguson NM, Cummings DA, Fraser C, Cajka JC, Cooley PC, Burke DS. Strategies for mitigating an influenza pandemic. Nature. 2006 Jul 27;442(7101):448-52. PMID:16642006.
- 221. Switzer WM, Hewlett I, Aaron L, Wolfe ND, Burke DS, Heneine W. Serologic testing for human T-lymphotropic virus-3 and -4. Transfusion. 2006 Sep;46(9):1647-8. PMID:16965596.
- 222. Ockenhouse CF, Hu WC, Kester KE, Cummings JF, Stewart A, Heppner DG, Jedlicka AE, Scott AL, Wolfe ND, Vahey M, **Burke DS**. Common and divergent immune response signaling pathways discovered in peripheral blood mononuclear cell gene expression patterns in presymptomatic and clinically apparent malaria. Infect Immun. 2006 Oct;74(10):5561-73. PMID:16988231. PMCID:PMC1594921.
- 223. Longini IM Jr, Elizabeth Halloran M, Nizam A, Yang Y, Xu S, **Burke DS**, Cummings DA, Epstein JM. Containing a large bioterrorist smallpox attack: a computer simulation approach. Int J Infect Dis. 2007 Mar;11(2):98-108. PMID:16899385.

- Billings L, Schwartz IB, Shaw LB, McCrary M, Burke, DS, Cummings DA. Instabilities in multiserotype disease models with antibody-dependent enhancement. J Theor Biol. 2007 May 7;246(1):18-27. PMID:17270219.
- 225. Torimiro JN, Wolfe ND, Thomas A, Martin MP, Mpoudi-Ngole E, Tamoufe U, Birx DL, Carrington M, **Burke DS**, Carr JK. Frequency of CCR5 variants among rural populations with low HIV-1 prevalence in Cameroon. AIDS. 2007 Feb 19;21(4):527-8. PMID:17301575.
- 226. Lessler J, Cummings DA, Fishman S, Vora A, Burke DS. Transmissibility of swine flu at Fort Dix, 1976. J R Soc Interface. 2007 Aug 22;4(15):755-62. PMID:17412677. PMCID:PMC2373398.
- 227. LeBreton M, Yang O, Tamoufe U, Mpoudi-Ngole E, Torimiro JN, Djoko CF, Carr JK, Tassy Prosser A, Rimoin AW, Birx DL, Burke DS, Wolfe ND. Exposure to wild primates among HIV-infected persons. Emerg Infect Dis. 2007 Oct;13(10):1579-82. PMID:18258013. PMCID:PMC2851513.
- 228. Halloran ME, Ferguson NM, Eubank S, Longini IM Jr, Cummings DA, Lewis B, Xu S, Fraser C, Vullikanti A, Germann TC, Wagener D, Beckman R, Kadau K, Barrett C, Macken CA, **Burke DS**, Cooley P. Modeling targeted layered containment of an influenza pandemic in the United States. Proc Natl Acad Sci U S A. 2008 Mar 25;105(12):4639-44. PMID: 18332436. PMCID: PMC2290797.
- 229. Parmanto B, Paramita MV, Sugiantara W, Pramana G, Scotch M, Burke DS. Spatial and multidimensional visualization of Indonesia's village health statistics. Int J Health Geogr. 2008 Jun 11;7:30. PMID:18544174. PMCID:PMC2494543.
- Vora A, Burke DS, Cummings DA. The impact of a physical geographic barrier on the dynamics of measles. Epidemiol Infect. 2008 May;136(5):713-20. PMID:17662170. PMCID:PMC2870857.
- 231. Parrish CR, Holmes EC, Morens DM, Park EC, Burke DS, Calisher CH, Laughlin CA, Saif LJ, Daszak P. Cross-species virus transmission and the emergence of new epidemic diseases. Microbiol Mol Biol Rev. 2008 Sep;72(3):457-70. PMID:18772285. PMCID:PMC2546865.
- 232. Switzer WM, Salemi M, Qari SH, Jia H, Gray RR, Katzourakis A, Marriott SJ, Pryor KN, Wolfe ND, Burke DS, Folks TM, Heneine W. Ancient, independent evolution and distinct molecular features of the novel human T-lymphotropic virus type 4. Retrovirology. 2009 Feb 2;6:9. PMID:19187529. PMCID:PMC2647524.
- 233. Sintasath DM, Wolfe ND, Lebreton M, Jia H, Garcia AD, Le Doux-Diffo J, Tamoufe U, Carr JK, Folks TM, Mpoudi-Ngole E, **Burke DS**, Heneine W, Switzer WM. Simian Tlymphotropic virus diversity among nonhuman primates, Cameroon. Emerg Infect Dis. 2009 Feb;15(2):175-84. PMID:19193260. PMCID:PMC2657614.
- 234. **Burke DS**, Russell J, Cerqueira MT, Conley KM, Eggleston MM, Koo D, Lewis AL, Lee AF, Pearson CE, Pestronk RM, Schwartz B, Smith WA. Comments from the field on the Galway Consensus Conference Statement. Health Educ Behav. 2009 Jun;36(3):483-6. PMID:19447946.
- 235. Zimmer SM, **Burke DS.** Historical perspective—Emergence of influenza A (H1N1) viruses. N Engl J Med. 2009 Jul 16;361(3):279-85. PMID: 19564632
- 236. Torimiro JN, Javanbakht H, Diaz-Griffero F, Kim J, Carr JK, Carrington M, Sawitzke J, Burke DS, Wolfe ND, Dean M, Sodroski J. A rare null allele potentially encoding a dominant-negative TRIM5alpha protein in Baka pygmies. Virology. 2009 Aug 15;391(1):140-7. PMID:19577266. PMCID:PMC2760473.
- 237. Cummings DA, Iamsirithaworn S, Lessler JT, McDermott A, Prasanthong R, Nisalak A, Jarman RG, **Burke DS**, Gibbons RV. The impact of the demographic transition on dengue in Thailand: insights from a statistical analysis and mathematical modeling. PLoS Med. 2009 Sep;6(9):e1000139. PMID:19721696. PMCID:PMC2726436.

- 238. Lee BY, Burke DS. Constructing target product profiles (TPPs) to help vaccines overcome post-approval obstacles. Vaccine. 2010 Apr 1;28(16):2806-9. PMID:19782109. PMCID:PMC3385993.
- Lee BY, Brown ST, Cooley P, Potter MA, Wheaton WD, Voorhees RE, Stebbins S, Grefenstette JJ, Zimmer SM, Zimmerman RK, Assi TM, Bailey RR, Wagener DK, Burke DS. Simulating school closure strategies to mitigate an influenza epidemic. J Public Health Manag Pract. 2010 May-June;16(3):252-61. PMID:20035236. PMCID:PMC2901099.
- 240. Lee BY, Brown ST, Cooley PC, Zimmerman RK, Wheaton WS, Zimmer SM, Grefenstette JJ, Assi TM, Furphy TJ, Wagner DK, Burke DS. A computer simulation of employee vaccination to mitigate an influenza epidemic. Am J Prev Med. 2010 Mar;38(3):247-57. PMID:20042311. PMCID:PMC2833347.
- 241. Fried LP, Bentley ME, Buekens P, **Burke DS**, Frenk JJ, Klag MJ, Spencer HC. Global health is public health. Lancet, 2010 Feb 13;375(9714):535-7. PMID: 20159277.
- 242. Cooley P, Lee BY, Brown S, Cajka J, Chasteen B, Ganapathi L, Stark JH, Wheaton WD, Burke DS. Protecting health care workers: a pandemic simulation based on Allegheny County. Influenza Other Respiratory Viruses, 2010 Mar; 4(2):61-72. PMID:20167046. PMCID:PMC2894576.
- 243. Carr JK, Wolfe ND, Torimiro JN, Tamoufe U, Mpoudi-Ngole E, Eyzaguirre L, Birx D L, McCutchan FE, Burke DS. HIV-1 recombinants with multiple parental strains in lowprevalence, remote regions of Cameroon: evolutionary relics? Retrovirology 2010 Apr 28;7:39. PMID:20426823. PMCID:PMC2879232.
- 244. Lee BY, Brown ST, Korch GW, Cooley PC, Zimmerman RK, Wheaton WD, Zimmer SM, Grefenstette, Bailey JJ, Assi TM, Burke DS. A computer simulation of vaccine prioritization, allocation, and rationing during the 2009 H1N1 Influenza pandemic. Vaccine, 2010 July12;28(31):4875-9. PMID:20483192. PMCID:PMC2906666.
- 245. Morens, DM, **Burke DS**, Halstead SB. The wages of original antigenic sin. Emerg Infect Dis. 2010 Jun;16(6):1023-4. PMID: 20507764. PMCID: PMC3086238.
- 246. Lee BY, Norman BA, Assi TM, Chen SI, Bailey RR, Rajgopal J, Brown ST, Wiringa AE, Burke DS. Single versus multi-dose vaccine vials: an economic computational model. Vaccine 2010 Jul 19;28(32):5292-300. PMID:20566395. PMCID:PMC2919154.
- 247. Zimmer SM, Crevar CJ, Carter DM, Stark JH, Giles BM, Zimmerman RK, Ostroff SM, Lee BY, Burke DS, Ross TM. Seroprevalence following the second wave of Pandemic 2009 H1N1 influenza in Pittsburgh, PA, USA. PLoS One, 2010 Jul 14;5(7):311601. PMID:20644650. PMCID:PMC2904390.
- 248. Van Panhuis WG, Gibbons RV, Endy TP, Rothman AL, Srikiatkhachom A, Nisalak A, Burke DS, Cummings DA. Inferring the serotype associated with dengue virus infections on the basis of pre-and post-infection neutralizing antibody titers. J Infect Dis. 2010 Oct 1;202(7);1002-10. PMID:20738205. PMCID:PMC2943243.
- 249. Huang SS, Avery TR, Song Y, Elkins KR, Nguyen CC, Nutter SK, Nafday AA, Condon CJ, Chang MT, Chrest D, Boos J, Bobashev G, Wheaton W, Frank SA, Platt R, Lipsitch M, Bush RM, Eubank S, Burke DS, Lee BY. Quantifying interhospital patient sharing as a mechanism for infectious disease spread. Infect Control Hosp Epidemiol. 2010 Nov;31(11):1160-9. PMID:20874503. PMCID:PMC3064463.
- 250. Lee BY, Brown ST, Cooley P, Grefenstette JJ, Zimmerman RK, Zimmer SM, Potter MA, Rosenfeld R, Wheaton WD, Wiringa AE, Bacon KM, **Burke DS.** Vaccination deep into a pandemic wave potential mechanisms for a "third wave" and the impact of vaccination. Am J Prev Med, 2010 Nov;39(5):21-9. PMID:20965375. PMCID:PMC2975455.
- 251. Lee BY, McGlone SM, Song Y, Avery TR, Eubank S, Chang CC, Bailey RR, Wagener DK, Burke DS, Platt R, Huang SS. Social network analysis of patient sharing among hospitals in Orange County, California. Am J Public Health. 2011 Apr;101(4):707-13. PMID: 21330578. PMCID: PMC3052345.

- 252. Lee BY, Assi TM, Rookkapan K, Connor DL, Rajgopal J, Sornsrivichai V, Brown ST, Welling JS, Norman BA, Chen SI, Bailey RR, Wiringa AE, Wateska AR, Jana A, Van Panhuis WG, **Burke DS**. Replacing the measles ten-dose vaccine presentation with the single-dose presentation in Thailand. Vaccine. 2011 May 12;29(21):3811-7. PMID:21439313. PMCID:PMC3084328.
- 253. Ndip LM, Biswas HH, Nfonsam LE, LeBreton M, Ndip RN, Bissong MA, Mpoudi-Ngole E, Djoko C, Tamoufe U, Prosser AT, Burke DS, Wolfe ND. Risk factors for African tick-bite fever in rural central Africa. Am J Trop Med Hyg. 2011 Apr;84(4):608-13. PMID:21460018. PMCID:PMC3062457.
- 254. Lee BY, Connor DL, Kitchen SB, Bacon KM, Shah M, Brown ST, Bailey RR, Laosiritaworn Y, **Burke DS**, Cummings DA. Economic value of dengue vaccine in Thailand. Am J Trop Med Hyg. 2011 May; 84(5):764-72. PMID:21540387. PMCID:PMC3083745.
- 255. Lee BY, McGlone SM, Wong KF, Yilmaz SL, Avery TR, Song Y, Christie R, Eubank S, Brown ST, Epstein JM, Parker JI, Burke DS, Platt R, Huang SS. Modeling the spread of methicillin-resistant Staphylococcus aureus (MRSA) outbreaks throughout the hospitals in Orange County, California. Infect Control Hosp Epidemiol. 2011 Jun;32(6):562-72. PMID:21558768. PMCID:PMC3388111.
- 256. Brown ST, Tai JH, Bailey RR, Cooley PC, Wheaton WD, Potter MA, Voorhees RE, Lejeune M, Grefenstette JJ, **Burke DS**, McGlone SM, Lee BY. Would school closure for the 2009 H1N1 influenza epidemic have been worth the cost?: a computational simulation of Pennsylvania. BMC Public Health. 2011 May 20;11:353. PMID:21599920. PMCID:PMC3119163.
- 257. Rajgopal J, Connor DL, Assi TM, Norman BA, Chen SI, Bailey RR, Long AR, Wateska AR, Bacon KM, Brown ST, **Burke DS**, Lee BY. The optimal number of routine vaccines to order at health clinics in low or middle income countries. Vaccine. 2011 Jun 25:29(33);5512-8. PMID:21624419. PMCID:PMC3138835.
- 258. Assi TM, Brown ST, Djibo A, Norman BA, Rajgopal J, Welling JS, Chen SI, Bailey RR, Kone S, Kenea H, Connor DL, Wateska AR, Jana A, Wisniewski SR, Van Panhuis WG, Burke DS, Lee BY. Impact of changing the measles vaccine vial size on Niger's vaccine supply chain: a computational model. BMC Public Health. 2011 Jun 2;11:425. PMID:21635774. PMCID:PMC3129313.
- 259. Lee BY, Song Y, Bartsch SM, Kim DS, Singh A, Avery TR, Brown ST, Yilmaz SL, Wong KF, Potter MA, **Burke DS**, Platt R, Huang SS. Long-term care facilities; important participants of the acute care facility social network? PloS one. 2011;6(12):e29342. PMID:22216255. PMCID:PMC3246493
- 260. Lee BY, Brown ST, Bailey RR, Zimmerman RK, Potter MA, McGlone SM, Cooley PC, Grefenstette JJ, Zimmer SM, Wheaton WD, Quinn SC, Voorhees RE, Burke DS. The benefits to all of ensuring equal and timely access to influenza vaccines in poor communities. Health Aff (Milwood). 2011 Jun;30(6):1141-50. PMID:21653968. PMCID:PMC3385997.
- 261. Stebbins S, Cummings DA, Stark JH, Vukotich C, Mitruka K, Thompson W, Rinaldo C, Roth L, Wagner M, Wisniewski SR, Dato V, Eng H, Burke DS. Reduction in the Incidence of Influenza A But Not Influenza B Associated With Use of Hand Sanitizer and Cough Hygiene in Schools: A Randomized Controlled Trial. Pediatr Infect Dis J. 2011 Nov;30(11):921-6. PMID:21691245. PMCID:PMC3470868.
- Fraser C, Cummings DA, Klinkenberg D, Burke DS, Ferguson NM. Influenza transmission in households during the 1918 pandemic. Am J Epidemiol. 2011 Sept 1;174(5):505-14. PMID:21749971.
- 263. Lee BY, Assi TM, Rookkapan K, Wateska AR, Rajgopal J, Sornsrivichal V, Chen SI, Brown ST, Welling J, Norman BA, Connor DL, Bailey RR, Jana A, Van Panhuis WG, Burke, DS. Maintaining vaccine delivery following the introduction of the rotavirus and

pneumococcal vaccines in Thailand. PloS one. 2011;6(9):e24673. PMID:21931805. PMCID:PMC3172252.

- 264. Lee BY, Assi TM, Rajgopal J, Norman BA, Chen SI, Brown ST, Slayton RB, Kone S, Kenea H, Welling JS, Connor DL, Wateska AR, Jana A, Wiringa AE, Van Panhuis WG, Burke DS. Impact of Introducing the Pneumococcal and Rotavirus Vaccines into the Routine Immunization Program in Niger. Am J Public Health. 2012 Feb: 102(2):269-75. PMID:21940923. PMCID:PMC3386610.
- 265. Shim E, Grefenstette JJ, Albert SM, Cakouros BE, Burke DS. A game dynamic model for vaccine skeptics and vaccine believers: Measles as an example. J Theor Biol. 2012 Feb 21;295:194-203. PMID:22108239.
- 266. Word DP, Cummings DA, Burke DS, Iamsirithaworn S, Laird CD. A nonlinear programming approach for estimation of transmission parameters in childhood infectious disease using a continuous time model. JR Soc Interface. 2012 Aug 7;9(73):1983-97. PMID:22337634. PMCID:PMC3385750.
- 267. Djoko CF, Wolfe ND, Aghokeng AF, Lebreton M, Liegeois F, Tamoufe U, Schneider BS, Ortiz N, Mbacham WF, Carr JK, Rimoin AW, Fair NJ, Pike BL, Mpoudi-Ngole E, Delaporte E, Burke DS, Peeters M. Failure to detect simian immunodeficiency virus infection in a large Cameroonian cohort with high non-human primate exposure. EcoHealth. 2012 Mar;9(1):17-23. PMID:22395958.
- 268. Stark JH, Sharma R, Ostorff S, Cummings DA, Ermentrout B, Stebbins S, Burke DS, Wisniewski SR. Local spatial and temporal processes of influenza in Pennsylvania. USA: 2003-2009. PloS One. 2012;7(3):e34245. PMID:22470544. PMCID:PMC3314628.
- 269. Potter MA, Brown ST, Lee BY, Grefenstette J, Keane CR, Lin CJ, Quinn SC, Stebbins S, Sweeney PM, Burke DS. Preparedness for pandemics: does variation among States affect the nation as a whole? J Public Health Manag Pract. 2012 May; 18(3):233-40. PMID:22473116. PMCID:PMC3758226.
- 270. Salje H, Lessler J, Endy TP, Curriero FC, Gibbons RV, Nisalak A, Nimmannitya S, Kalayanarooj S, Jarman RG, Thomas SJ, Burke DS, Cummings DA. Revealing the microscale spatial signature of dengue transmission and immunity in an urban population. Proc. Natl Acad Sci U S A. 2012 June 12;109(24):9535-8. Epub 2012 May 29. PMID:22645364. PMCID:PMC3386131.
- 271. Stark JH, Cummings DA, Ermentrout B, Ostroff S, Sharma R, Stebbins S, Burke DS, Wisniewski SR. Local variations in spatial synchrony of influenza epidemics. PloS one. 2012;7(8):e43528. PMID:22916274. PMCID:PMC3420894.
- 272. Potter MA, Brown ST, Cooley PC, Sweeney PM, Hershey TB, Gleason SM, Lee BY, Keane CR, Grefenstette J, **Burke DS.** School closure as an influenza mitigation strategy: how variations in legal authority and plan criteria can alter the impact. BMC Public Health. 2012 Nov 14;12:977. PMID:23148556.PMCID:PMC3532840.
- 273. Wecker M, Gilbert P, Russell N, Hural J, Allen M, Pensiero M, Chulay J, Chiu YL, Abdool Karim SS, Burke DS, HVTN 040/059 Protocol Team, NIAID HIV Vaccine Trials Network. Phase I safety and immunogenicity evaluations of an alphavirus replicon HIV-1 subtype C gag vaccine in healthy HIV-1-uninfected adults. Clinical and vaccine immunology : CVI. 2012 Oct;19(10):1651-60. PMID:22914365. PMCID:PMC3485893.
- 274. Ma D, Jasinska A, Kristoff J, Grobler JP, Turner T, Jung Y, Schmitt C, Raehtz K, Feyertag F, Martinez Sosa N, Wijewardana V, Burke DS, Robertson DL, Tracy R, Pandrea I, Freimer N, Apetrei C; International Vervet Research Consortium. SIVagm infection in wild African green monkeys from South Africa: epidemiology, natural history, and evolutionary considerations. PLoS Pathog. 2013 Jan;9(1):e1003011. PMID:23349627. PMCID:PMC3547836.

- 275. Toner ES, Adalja AA, Nuzzo JB, Inglesby TV, Henderson DA, Burke DS. Assessment of Serosurveys for H5N1. Clin Infect Dis. 2013 May;56(9):1206-12. PMID:23386633. PMCID:PMC3858121.
- 276. Kumar S, Grefenstett JJ, Galloway D, Albert SM, Burke DS. Policies to reduce influenza in the workplace: impact assessments using an agent-based model. Am J Public Health. 2013 Aug: 103(9):1406-11. Epub 2013 June 13. PMID:23763426.
- 277. Reich NG, Shrestha S. King AA, rohani P, Lessler j, Kalayanarooj S, Yoon IK, gibbons RV, Burke DS, Cummings DA. Interactions between serotypes of dengue highlight epidemiological impact of cross-immunity. J R Soc Interface. 2013 July3; 10(86):20130414. PMID:23825116. PMCID:PMC3730691.
- 278. **Burke DS**, Grefenstette JJ. Toward an integrated meta-model of public health dynamics for preparedness decision support. J Public Health Manag Pract. 2013 Sep-Oct;19: Suppl 2:S12-5. PMID:23903387.
- 279. Gibbons RV, Nisalak A, Yoon IK, Tannitisupawong D, Rungsimunpaiboon K, Vaughn DW, Endy TP, Innis BL, Burke DS, Mammen MP Jr, Scott RM, Thomas SJ, Hoke CH Jr. A model international partnership for community-based research on vaccine-preventable diseases: the Kamphaeng Phet-AFRIMS Virology Research Unit (KAVRU).Vaccine. 2013 Sep 23;31(41):4487-500. Epub 2013 Aug 8. PMID:23933334
- 280. Rodriguez-Barraquer I, Mier-y-Teran-Romero L, Burke DS, Cummings DA. Challenges in the interpretation of dengue vaccine trial results. PLoS Negl Trop Dis. 2013 Aug 29;7(8):e2126. doi: 10.1371/journal.pntd.0002126. eCollection 2013. PMID:24009782. PMCID:PMC3757058.
- 281. Grefenstette JJ, Brown ST, Rosenfeld R, DePasse J, Stone NT, Cooley PC, Wheaton WD, Fyshe A, Galloway DD, Sriram A, Guclu H, Abraham T, Burke DS. FRED (a Framework for Reconstructing Epidemic Dynamics): an open-source software system for modeling infectious diseases and control strategies using census-based populations. BMC Public Health. 2013 Oct 8;13:940. PMID:24103508. PMCID:PMC3852955.
- 282. Yonas MA, Burke JG, Brown ST, Borrebach JD, Garland R, **Burke DS**, Grefenstette JJ. Dynamic simulation of crime perpetration and reporting to examine community intervention strategies. Health Educ Behav. 2013 Oct;40(1 Suppl):87S-97S. PMID:24084404. PMCID:PMC3964320.
- 283. Kumar S, Grefenstette JJ, Galloway D, Alert SM, Burke DS, Kumar et al. respond. Am J Public Health Jan 2014;104(1):e1-2. PMID: 24228647
- 284. Azman AS, Stark JH, Althouse BM, Vukotich CJ Jr, Stebbins S, **Burke DS**, Cummings DA. Household transmission of influenza A and B in a school-based study of non-pharmaceutical interventions. Epidemics. 2013 Dec;5(4):181-6. Epub 2013 Sep 26. PMID:24267874.
- 285. Rodriguez-Barraquer I, Mier-y-Teran-Romero L, Schwartz IB, Burke DS, Cummings DA. Potential opportunities and perils of imperfect dengue vaccines. Vaccine. 2014 Jan 16;32(4):514-20. Epub 2013 Nov 19. PMID:24269318. PMCID:PMC4142437.
- 286. van Panhuis WG, Grefenstette J, Jung SY, Chok NS, Cross A, Eng H, Lee BY, Zadorozhny V, Brown S, Cummings D, Burke DS. Contagious diseases in the United States from 1888 to the present. N Engl J Med. 2013 Nov 28;369(22):2152-8. PMID:24283231.
- 287. LeBreton M, Switzer WM, Djoko CF, Gillis A, Jia H, Sturgeon MM, Shakar A, Zheng H, Nkeunen G, Tamoufe U, Nana A, Le Doux Diffo J, Tafon B, Kiyang J, Schneider BS, Burke DS, Wolfe ND. A gorilla reservoir for human T-lymphotropic virus type 4. Emerg Microbes Infect. 2014 Jan;3(1):e7. Doi: 10.1038/emi.2014.7. Epub 2014 Jan 22. PMID:26038495. PMCID:PMC3913825.
- 288. Lukens S, DePasse J, Rosenfeld R, Ghedin E, Mochan E, Brown ST, Grefenstette J, **Burke DS**, Swigon D, Clermont G. A large-scale immune-epidemiological simulation of

influenza A epidemics. BMC Public Health, 2014;14:1019. PMID:25266818. PMCID:PMC4194421.

- 289. van Panhuis WG, Paul P, Emerson C, Grefenstette J, Wilder R, Herbst AJ, Heymann D, Burke DS. A systematic review of barriers to data sharing in public health. BMC Public Health. 2014 Nov 5;14(1):1144. PMID:25377061. PMCID:PMC4239377.
- 290. Ruberto I, Marques E, **Burke DS**, van Panhuis WG. The availability and consistency of dengue surveillance data provided online by the World Health Organization. PLoS Negl Trop Dis. 2015 Apr 14;9(4):e0003511. PMID:25874804. PMCID:PMC4397048.
- 291. Farrow DC, Burke DS, Rosenfeld R. Computational characterization of transient straintranscending immunity against Influenza A. PLoS One. 2015 May 1;10(5):e0125047. eCollection 2015. PMID:25933195. PMCID:PMC4416895.
- 292. Ablah E, Biberman DA, Weist EM, Buekens P, Bentley ME, **Burke D**, Finnegan JR Jr, Flahault A, Frenk J, Gotsch AR, Klag MJ, Rodriguez Lopez MH, Nasca P, Shortell S, Spencer HC. Improving global health education: development of a Global Health Competency Model. The American Journal of Tropical Medicine and Hygiene. 2014 Mar;90(3):560-5. PMID:24445206. PMCID:PMC3945704.
- 293. Rodriguez-Barraquer I, Mier-y-Teran-Romero L, Ferguson N. Burke DS, Cummings DA. Differential efficacy of dengue vaccine by immune status. Lancet. 2015 May2;385(9979):1726. doi.10.1016/S0140-6736(15)60889-3. PMID: 25943936
- 294. van Panhuis WG, Choisy M, Xiong X, Chok NS, Akarasewi P, Iamsirithaworn S, Lam SK, Chong CK, Lam FC, Phommasak B, Vongphrachanh P, Bouaphanh K, Rekol H, Hien NT, Thai PQ, Duong TN, Chuang JH, Liu YL, Ng LC, Shi Y, Tayag EA, Roque VG Jr, Lee Suy LL, Jarman RG, Gibbons RV, Velasco JM, Yoon IK, Burke DS, Cummings DA. Region-wide synchrony and traveling waves of dengue across eight countries in Southeast Asia. Proc Natl Acad Sci U S A. 2015 Oct 20;112(42):13069-74. doi: 10.1073/pnas.1501375112. Epub 2015 Oct 5.2015 Oct 5. PMID:26438851
- 295. Dalziel BD, Bjørnstad ON, van Panhuis WG, **Burke DS**, Metcalf CJ, Grenfell BT. Persistent Chaos of Measles Epidemics in the Prevaccination United States Caused by a Small Change in Seasonal Transmission Patterns. PLoS Computational Biology. 2016 Feb;12(2):e1004655. PMID:26845437. PMCID:PMC4741526. doi:10.1371/journal.pcbi.1004655
- 296. Balmert LC, Buchanich JM, Pringle JL, Williams KE, **Burke DS**, Marsh GM. Patterns and Trends in Accidental Poisoning Deaths: Pennsylvania's Experience 1979-2014. PLoS One. 2016;11(3):e0151655. PMID:26963396. PMCID:PMC4786332. doi:10.1371/journal.pone.0151655.
- 297. Metcalf CJE, Farrar J, Cutts F, Basta N, Graham AL, Lessler J, Ferguson N, Burke D, Grenfell BT. Use of Serological surveys to generate key insights of the changing global landscape of infectious disease. Lancet (London, England). 2016 Apr 5. PMID:27059886. doi:10.1016/S0140-6736(16)30164-7.
- 298. Buchanich JM, Balmert LC, Pringle JL, Williams KE, **Burke DS**, Marsh GM. Patterns and trends in accidental poisoning death rates in the US, 1979-2014. Preventive Medicine. 2016 Apr 13. PMID:27085991. doi:10.1016/j.ypmed.2016.04.007.
- 299. Gearhart TL, Montelaro RC, Schurdak ME, Pilcher CD, Rinaldo CR, Kodadek T, Park Y, Islam K, Yurko R, Marques ET Jr, **Burke DS**. Selection of a potential diagnostic biomarker for HIV infection from a random library of non-biological synthetic peptoid oligomers. J Immunol Methods. 2016 Aug;435:85-89. PMID:27182050. PMCID:PMC4947968. doi:10.1016/j.jim.2016.05.001.
- 300. Zimmerman RK, Nowalk MP, Chung J, Jackson ML, Jackson LA, Petrie JG, Monto AS, McLean HQ, Belongia EA, Gaglani M, Murthy K, Fry AM, Flannery B; U.S. Flu VE Investigators. 2014-2015 Influenza Vaccine Effectiveness in the United States by Vaccine Type. Clin Infect Dis. 2016 Dec 15;63(12):1564-1573. PMID: 27702768. PMCID: PMC5146719. doi:10.1093/cid/ciw635

- 301. Burke DS. Forecasting the opioid epidemic. Science. 2016 Nov 4;354(6312):529. PMID: 27811241. doi:10.1126/science.aal2943
- 302. Farrow DC, Brooks LC, Hyun S, Tibshirani RJ, **Burke DS**, Rosenfeld R. A human judgment approach to epidemiological forecasting. PLoS Comput Bio, 2017 Mar 10;13(3):e1005248. PMID:28282375. PMCID:PMC5345757. doi:10.1371/journal.pcbi.1005248.
- 303. Marques ETA, Burke DS. Tradition and innovation in development of a Zika vaccine. Lancet, 2018 Feb 10:391(10120):516-517. PMID:29217377. doi:10.1016/S0140-6736(17)33107-0
- 304. Nascimento EJM, Huleatt JW, Cordeiro MT, Castanha PMS, George JK, Grebe E, Welte A, Brown M, Burke DS, Marques ETA. Development of antibody biomarkers of long term and recent dengue virus infections. J Virol Methods, 2018 Jul;257:62-68. PMID:29684416. doi: 10.1016/j.jviromet.2018.04.009.
- 305. Buchanich JM, Doerfler SM, Lann MF, Marsh GM, **Burke DS.** Improvement in racial disparities in years of life lost in the USA since 1990. PLoS One. 2018 Apr 25;13(4):e0194308. PMID: 29694402 doi: 10.1371/journal.pone.0194308.
- 306. Buchanich JM, Balmert LC, Williams KE, **Burke DS.** The effect of incomplete death certificates on estimates of unintentional opioid-related overdose deaths in the United States, 1999-2015. Public Health Rep. 2018 Jul/Aug;133(4):423-431. PMID: 29945473 doi: 10.1177/0033354918774330.
- 307. España G, Grefenstette J, Perkins A, Torres C, Campo Carey A, Diaz H, de la Hoz F, Burke DS, van Panhuis WG. Exploring scenarios of chikungunya mitigation with a datadriven agent-based model of the 2014-2016 outbreak in Colombia. Sci Rep. 2018 Aug 15;8(1):12201. doi: 10.1038/s41598-018-30647-8. PMID: 30111778; PMCID: PMC6093909.
- 308. Jalal H, Buchanich JM, Roberts MS, Balmert LC, Zhang K, Burke DS. Changing dynamics of the drug overdose epidemic in the United States from 1979 through 2016. Science. 2018 Sep 21;361(6408). pii: eaau1184. doi: 10.1126/science.aau1184. PMID: 30237320
- 309. van Panhuis WG, Cross A, Burke DS. Project Tycho 2.0: A repository to improve the integration and reuse of data for global population health. J Am Med Inform Assoc. 2018 Dec 1;25(12):1608-1617. doi: 10.1093/jamia/ocy123. PMID: 30321381
- 310. Sinclair DR, Grefenstette JJ, Krauland MG, Galloway DD, Frankeny RJ, Travis C, **Burke DS**, Roberts MS. Forecasted size of measles outbreaks associated with vaccination exemptions for schoolchildren. JAMA Netw Open. 2019 Aug 2;2(8):e199768. doi: 10.1001/jamanetworkopen.2019.9768.
- 311. Jalal H, Buchanich JM, Sinclair DR, Roberts MS, Burke DS. Age and generational patterns of overdose death risk from opioids and other drugs. Nat Med. 2020 May;26(5) :699-704. doi: 10.1038/s41591-020-0855-y. Epub 2020 May 4. PMID: 32367060
- 312. Jalal H, and **Burke DS**. Hexamaps for Age-Period-Cohort Data Visualization in R. Epidemiology (in press, 2020).

#### <u>Books</u>

- 1. **Burke DS** (Chairman). Under The Weather: Climate, Ecosystems, and Infectious Disease. National Academy Press, Washington DC, 2001.
- 2. **Burke DS** (Chairman). Protecting the Frontline in Biodefense Research: The Special Immunizations Program. National Academy Press, Washington DC, 2011.

#### **Book Chapters / Monographs**

- 1. **Burke DS**, Chutichedej P, Boongrapu P, Narendar Pal Singh. Studies of viral hepatitis at Pramongkutklao Hospital, pp 134-150 in Viral Hepatitis in Thailand, Ed. Wasi C and Thongcharoen P, Aksorn Samai, Bangkok (in Thai language, 1983).
- 2. **Burke DS**. The prospects for immunizing against Japanese encephalitis. In Priorities for New Vaccine Development, Part II. National Academy of Sciences, Washington, DC (1987).
- 3. Binn LN, Bancroft WH, Eckels KH, Marchwicki RH, Dubois DR, Asher LVS, LeDuc JW, Trahan CJ, **Burke DS**. Inactivated hepatitis A virus vaccine produced in human diploid MRC-5 cells. In Zuckerman AJ (ed.): Viral Hepatitis and Liver Disease. New York: Alan R. Liss, Inc., pp 91-93 (1988).
- 4. Sjorgren MH, Eckels KH, Binn LN, Dubois DR, Hoke CH, **Burke DS**, Bancroft WH. Safety and immunogenicity of an inactivated hepatitis A vaccine. In Zuckerman AJ (ed): Viral Hepatitis and Liver Disease. New York: Alan R. Liss, Inc., pp 94-96 (1988).
- 5. **Burke DS**, Leake CJ. Japanese encephalitis. Chapter 28 in The Arboviruses: Epidemiology and Ecology, Volume III, pages 63-92. CRC Press, Inc. Boca Raton, FL (1988).
- 6. **Burke DS**, McCutchan FE. Global Distribution of Human Immunodeficiency Virus-1 Clades, chapter 7 in AIDS, Biology, diagnosis, Treatment and Prevention, fourth edition, ed. VT DeVita, S Hellman, SA Rosenberg. Lippincott-Raven Publishers (1996).
- 7. Burke DS. Vaccine Therapy. Chapter 67 in New Generation Vaccines, Second Edition, second edition, ed. Levine MM, Woodrow GC, Kaper JB, and Cobon GS, Marcel Decker, Inc., New York (1997).
- 8. **Burke DS**. Evolvability of Emerging Viruses. Chapter 1in Pathology of Emerging Infections, ed. Nelson AM and Horsburgh CR, American Society of Microbiology, Washington DC (1998).
- 9. **Burke DS**. HIV and AIDS in the United States Military. Chapter in the Oxford Companion to American Military History, ed. Chambers JW (2000).
- 10. **Burke DS**. AIDS and AIDS-Related Infections. Chapter 114 in Essentials of Tropical Infectious Diseases: Principles, Pathogens, and Practice, ed. Guerrant RL, Weller PF, and Walker DH, W.B. Saunders Company, Philadelphia, PA (2000).
- 11. **Burke DS** and Monath TP. Flaviviruses. Chapter 33 (pp. 1043-1126) in Field's Virology, 4<sup>th</sup> Edition, Editors Knipe DM and Howley PM, Lippincott Williams & Wilkins, Philadelphia, PA (2001).
- 12. **Burke DS**. Vaccine Therapy. Chapter in New Generation Vaccines, Third Edition, ed. Levine MM, Woodrow GC, Kaper JB, and Cobon GS, Marcel Decker, Inc., New York (2004).
- 13. Epstein JM, Cummings DAT, Chakravarty S, Singa RM, **Burke DS**. Toward a containment strategy for smallpox bioterror: An individual-based computational approach. Brookings Institution Press, Washington DC (2004)

#### **Book Reviews**

- 1. Burke DS. Louis Pasteur. J Amer Med Assoc 283: 2587-2588 (2000).
- 2. Burke DS. The Politics of International Health. Bull Hist Med 74: 650-651 (2000).
- 3. Burke DS. The Vaccine Book. J Amer Med Assoc 290: 406-407 (2003).
- 4. **Burke DS**. <u>Six Modern Plagues and How We Are Causing Them</u>. Env Health Perspectives 112: A66 (2004).

#### **Letters to the Editor**

- 1. **Burke DS**, Rushforth NB. Inhibition of pacemaker activity in Hydra. Amer Zool 6:91 (letter, 1966).
- 2. Burke DS. Magic shotgun pellets. Lancet 1:1414 (letter, 1979).
- 3. Henderson A, Leake CJ, **Burke DS**. Japanese encephalitis in Nepal. Lancet 2:1359-1360 (letter, 1983).
- 4. **Burke DS**, Ussery MA, Elwell MR, Nisalak A, Leake C, Laorakpongse T. Isolation of Japanese encephalitis strains from sentinal pigs in northern Thailand, 1982. Trans Roy Soc Trop Med Hyg 79:420-421 (letter, 1985).
- 5. **Burke DS**, Nisalak A, Nimmannitya S. Disappearance of chikungunya virus from Bangkok. Trans Roy Soc Trop Med Hyg 79:419-420 (letter, 1985).
- 6. Wattanavijarn W, Tesprateep T, **Burke DS**. Absence of porcine parvovirus transmission to man. Trans Roy Soc Trop Med Hyg 79:561 (letter, 1985).
- 7. **Burke DS**, Redfield RR. False positive Western blot tests for antibodies to HTLV-III. J Am Med Assoc 256:347 (letter, 1986).
- 8. Kelley PW, Redfield RR, Ward DL, **Burke DS**, Miller RN. Prevalence and incidence of HTLV-III infection in a prison. J Am Med Assoc 256:2198-2199 (letter, 1986).
- 9. Burke DS, Redfield RR. Classification of infections with Human Immunodeficiency Virus. Ann Int Med 105:968 (letter, 1986).
- 10. Lennox JF, Redfield RR, **Burke DS**. HIV antibody screening in a general hospital population. J Am Med Assoc 257:2914 (letter, 1987).
- 11. **Burke DS**, Redfield RR. Transmission of Human Immunodeficiency Virus (HIV). N Engl Med 318:1202-1203 (letter, 1988).
- 12. **Burke DS**. Review of laboratory proficiency. Infect Control Hosp Epidemiol 9:365 (letter, 1988).
- 13. **Burke DS**, Brundage JF, Redfield RR, Damato JJ. Screening for Human Immunodeficiency Virus infections. N Engl J Med 320:461-463 (letter, 1989).
- 14. **Burke DS**, Redfield RR, Bjornson DC, Fowler AK, Oster CN. Frequent isolation of HIV-1 from the blood of patients receiving zidovudine (AZT) therapy. N Engl J Med 321:1682 (letter, 1989).
- 15. Malone JL, Oldfield EC; Wagner KF, Simms TE, Daly R, O'Brian J, **Burke DS**. Abnormalities of morning serum cortisol levels and circadian rhythms of CD4+ lymphocyte counts in human immunodeficiency virus type 1-infected adult patients (letter). J Infect Dis 165:185-186 (letter, 1992).
- 16. Roy MJ, Damato JJ, **Burke DS**. Absence of seroreversion of HIV-1 antibody in seroreactive individuals. J Am Med Assoc 270:2179 (letter, 1993).
- 17. **Burke DS**, Brown AE. Screening surgeons for HIV infection. Ann Intern Med 123:812-813 (letter, 1995).
- 18. Brown AE, **Burke DS**. Cost of HIV testing in the U.S. Army. N Eng J Med 332:963 (letter, 1995).
- 19. Burke DS. Another look at Microbe Hunters. Amer Soc Microbiol News 8: 403 (letter, 1997).
- 20. Burke DS, Kliks S. Antibody dependent enhancement in dengue virus infections. J Infect Dis 193: 601-603 (2006).

#### Editorials / Other

- 1. Burke DS. A strategy to prevent the spread of AIDS. The Saturday Evening Post, May/June, pp. 22, 91 (1988).
- 2. Burke DS. The threat posed by dengue virus infection. Infect Med 5:499-510 (1988).

- 3. **Burke DS**. Introduction to the 1991 ASTMH Presidential Address. Am J Trop Med Hyg 46:239-240 (1992).
- 4. **Burke DS**. Amsterdam AIDS Conference reveals slow progress (news). Critical Care Nurse 12:98-99 (1992).
- 5. **Burke DS**. HIV infection and AIDS: Editorial overview. Curr Opp Infect Dis 6:179-180 (1993).
- 6. Mascola JR, McNeil, JG, **Burke DS**. AIDS vaccines. Are we ready for human efficacy trials? J Am Med Assoc 272:488-489 (1994).
- Burke DS. 1996 American Society of Tropical Medicine and Hygiene President's Address. Sing for the Gov'nor: A call to advocacy for tropical medicine and hygiene. Am J Trop Med Hyg 56:1-6 (1997).
- 8. Burke DS. Six Months to Act (Op-Ed on SARS). Wall Street Journal, 25 April 2003.
- 9. **Burke DS**. Ignoring Deadly Viruses (Op-Ed on avian influenza). Asian Wall Street Journal, 26 January 2004.
- 10. **Burke DS**. Avian Influenza Is a Threat to Our Collective Security (Op-Ed). Wall Street Journal, 3 November 2005
- 11. **Burke DS**. Obamacare Arrives in Allegheny County: The nation and the Pittsburgh Region can now focus on preventive care. (Op-Ed). Pittsburgh Post-Gazette, Nov 21, 2012
- 12. Burke DS. This is a Well Regulated Militia?? (Infographic), 26 June 2016
- 13. **Burke DS**. We didn't lose the War on Drugs, we surrendered (Op-Ed). Pittsburgh Post-Gazette. 22 Oct. 2017
- 14. Hufford M, and Burke DS: The costs of heroin and naloxone: a tragic snapshot of the opioid crisis. (Op-Ed) STAT, 8 November 2018. <u>https://www.statnews.com/2018/11/08/costs-heroin-naloxone-tragic-snapshot-opioid-crisis/</u>

### SERVICE: UNIVERSITY AND PROFESSIONALLY RELATED

#### University of Pittsburgh

2006-2019	Graduate School of Public Health, University of Pittsburgh, Pittsburgh, PA	Dean	
2006-2019	Center for Global Health, University of Pittsburgh, Pittsburgh, PA	Associate Vice Chancellor	
2006 - 2016	Center for Vaccine Research, University of Pittsburgh, Pittsburgh, PA	Director	
2011 - 2014	Distinguished Faculty Committee, University of Pittsburgh	Chair	
2013 - 2014	Chancellor Search Committee, University of Pittsburgh	Member	
Johns Hopkins University (Bloomberg School of Public Health)			
2002-2006	Committee on Appointments and Promotions / school-wide	Member	
2002-2006	Disease Prevention and Control Division	Assoc Dept Chairman	
2001-2003	Biodefense Leadership Group / school-wide	Member	
1998-2001	Committee on Human Research (Institutional Review Board) /	Co-Chairman	

school-wide

1998-2006	Certificate Program in Vaccine Science and Policy	Director
1997-2006	Appointments and Promotions Committee	Member
1997-2006	Executive Committee	Member
1997-2006	Curriculum Committee	Member
1997-2003	Admissions Committee	Member
1997-2002	Graduate Degree Program in Vaccine Science and Policy	Director

#### CONSULTATIONS, PANELS, AND BOARDS

World Health Organization/SE Asia Regional Office, Temporary Advisor, on Research in Viral Hemorrhagic Fevers, 1980; on Dengue Hemorrhagic Fever, 1983; on Viral Hepatitis, 1984 Steering Committee on Dengue Vaccines, World Health Organization, Member, 1985 – 1988 AIDS Vaccine Research and Development Subgroup, US Public Health Service, DoD representative, 1987 – 1992 HIV Early Care Advisory Group, American Medical Association, Member, 1989 – 1990 Diagnostic and Therapeutic Technology Assessment Panel, American Medical Association, Member, 1989 – 1991 Roundtable for the Development of Drugs and Vaccines against AIDS, Institute of Medicine, Member, 1989 – 1994 International Forum on AIDS Research, Institute of Medicine, Member, 1990 – 1992 Steering Committee on AIDS/HIV Vaccine Development, World Health Organization, Member, 1991 - 1994HIV/AIDS Working Group, Center for Strategic and International Studies, Member, 1992 – 1994 Mahidol University, Consultant, Post-graduate Training in Virology in Response to the HIV/AIDS Epidemic, Bangkok, Thailand, 1993 Civil-Military Alliance against HIV/AIDS, Co-Founder, 1993 Working Group on HIV Vaccine Development and International Field Trials of the Federal Coordinating Committee on Science, Engineering and Technology Committee on Life Sciences and Health, Co-Chairman, 1992 - 1994 Pharmaceutical Organization, Royal Thai Government, Consultant, on Local Production of HIV Vaccines, 1994 AIDS Vaccine Trials Data and Safety Monitoring Board, Member, National Institutes of Health, 1988 - 1996UNAIDS, Temporary Advisor on HIV Molecular Epidemiology, 1996 and 2000 Vice President's Working Group on HIV Vaccines and Therapeutics, White House, Member, 1996 American Association of Blood Banks, Consultant, Think Tank on Emerging Viruses, 1996 Ministry of Agriculture, Government of New Zealand, Consultant, on Rabbit Hemorrhagic Disease Virus as a Bio-control Agent, 1997 National Institutes of Health Study Section on Tropical Medicine and Parasitology, Member, 1997 -2000 Food and Drug Administration, Transmissible Spongiform Encephalopathies Advisory Committee, Member, 1998 – 2002 National Research Council, Panel on Climate, Ecology, Infectious Diseases, and Health, Chairman, 1999 - 2001 Institute of Medicine, Department of Defense Global Emerging Infectious Surveillance Committee, Member, 2000 – 2001

- International Research Institute for Climate Prediction of Columbia University, Scientific Advisory Committee, Member, 2000 – 2003
- Institute of Medicine, Committee on Emerging Microbial Threats to Health in the 21st Century, Member, 2001 – 2003

Smallpox Computational Modeling Working Group, Office of Public Health Emergency Preparedness, US Department of Health and Human Services, Member, 2002 – 2004. SARS Task Force, Defense Science Board, Department of Defense, Member, 2003 – 2004.

National Biodefense Analysis and Countermeasure Center, Department of Homeland Security, Working Group on Threat Prioritization, Chair, Virology Group, 2003 – 2004

- Federation of American Scientists, Biosecurity Education for Biology Graduate Students Project, Temporary Advisor, 2004
- International AIDS Vaccine Initiative, Co-founder, 1994-96; Senior Scientific Advisor, 1997-2002; Policy Advisory Board Member, 2003 present
- Institute of Medicine, Department of Defense / Veterans Affairs Medical Follow-up Agency, Member of the Board, 2002-2006

Physicians for Human Rights / Health Action AIDS, Executive Committee, 2003 – 2006

- Data Safety and Monitoring Board, HIV RV144 Phase III Clinical Trial (Rayong Thailand), Member, 2004 2009
- Middle Atlantic Regional Center of Excellence for Biodefense and Emerging Infections (MARCE), Steering Committee, 2004 – 2008
- Consortium for Conservation Medicine, Executive Committee, 2004-present

Bill & Melinda Gates Foundation, Technical Review Panel, HIV/AIDS Vaccines, Member, 2005

Special Review Panel of the Joint National Institutes of Health / National Science Foundation

Ecology of Infectious Disease Program, Panel Chairman, 2005

- Jewish Healthcare Foundation, Board Member, 2006 2012
- Community Health Committee of the UPMC Board of Directors, 2006 2009
- National Biodefense Analysis & Countermeasures Center, Science & Technology Advisory Committee, Department of Homeland Security, 2006 – present
- Brookings Institution Center on Social and Economics Dynamics Advisory Board Member, 2006 2007
- Wellcome Trust / Bill & Melinda Gates Foundation Ad Hoc Advisory Meeting on Innovation in Research, Delegate, London, 2007
- South African AIDS Vaccine Initiative of the South African Medical Research Council, Scientific Advisory Committee, 2007 2009
- Pediatric Dengue Vaccine Initiative, Board of Counselors, Chair, 2007 2010
- Jewish Health Care Pittsburgh Regional Health Initiative (PRHI) Oversight Committee Member, 2008 2018
- Institute of Medicine, Board on Global Health, Committee on Research Needs for Retention of Variola Virus Member, 2008 2009
- NIH Director's Blue Ribbon Panel for the Risk Assessment of the National Emerging Infectious Diseases Laboratories, Member, 2008 2011
- University of Pittsburgh Confucius Institute Advisory Board Member, 2008 2015
- Dengue Vaccine Advocacy Initiative (Sanofi-Pasteur) Steering Committee Member, 2008 2018
- UPMC/21CB Vaccine Production Steering Committee Member, 2009 2011

Institute of Medicine Report on Personal Protective Equipment against H1N1 Review Coordinator, 2009

Pennsylvania's Public Health Law Advisory Committee, 2009 – 2012

- National Biosurveillance Advisory Subcommittee, Centers for Disease Control, Member and Champion for National Workforce Development Taskforce, 2010 2011
- Institute of Medicine, Committee on the Special Immunizations Program for Laboratory Personnel Engaged in Research on Countermeasures for Select Agents, Chair, 2010 - 2012
- Office of Public Health Preparedness and Response Board of Scientific Counselors, CDC,

2011 - 2014

- Association for Schools and Programs of Public Health Global Health Committee Chair, 2011 2015
- National Research Council, Committee on Support to the Department of Defense's Programs to Counter Biologic Threats, Chair, 2012 2015
- World Health Organization, Immunization and Vaccines Implementation Research Committee, 2012 2019
- Governor's Health Innovation in Pennsylvania (HIP) Steering Committee, 2015 2016
- National Academies of Science-Engineering-Medicine, Planning Committee on Gain-of-Function Research, The Second Symposium, 2016
- Association for Schools and Programs of Public Health, member of Task Force on Public Health Initiatives to Address the Substance Abuse Crisis, 2018

Current Consultations, Boards, and Panels

Allegheny County Board of Health, Member, 2008 - present

- MRC Centre for Outbreak Analysis and Modeling, Scientific Advisory Board Member, Imperial College, London, 2008 present
- Grace and Harold Sewell Memorial Fund for Medical Librarians, Board Member and Vice-President, 2012 – present

Magee Women's Research Institute & Foundation, Board Member, 2019 - present

National Academy of Medicine / American Public Health Association Expert Advisory Panel, COVID-19 Webinar Series, 2020 – present

## **BUSINESS ACTIVITIES**

Epistemix, Inc. Co-founder and President, 2018 - present

# CLINICAL AND RELATED ACTIVITIES

Inpatient: Patient Care		
LOCATION/SERVICE	ACTIVITY	TIME DEVOTED TO ACTIVITY
Walter Reed Army Medical Center, Washington, DC	Attending Physician, Infectious Diseases Service	1985-1990

I was previously licensed in Maryland but I do not currently practice medicine

# PATENTS

Title:	PRIMATE T-LYMPHOTROPIC VIRUSES (HTLV-3 and HTLV-4)
Patent Holders:	Switzer WM, Heneine W, Folks TM, Wolfe ND, Burke DS, Mpoudi-Ngole E
Patent #:	8,541,221 B2 (formerly 7794998)
Application Date:	7/01/2010
Issue Date:	9/24/2013
Titler	SIMIAN T CELL I VMBHOTDODIC VIDUS
Title:	SIMIAN T-CELL LYMPHOTROPIC VIRUS
Patent Holders:	Switzer WM, Heneine W, Folks TM, Wolfe ND, Burke DS, Sintasath DM
Patent #:	8,663,968
Application Date:	05/20/2008
Issue Date:	03/04/2014
	COMPOSITIONS AND METHODS FOR
	PEPTOID-BASED DETECTION AND
	DIAGNOSIS OF HIV/AIDS AND OTHER
Title:	INFECTIOUS DISEASES
Patent Holders.	Burke DS, Montelaro RC, Gearhart TL,
	Marques ET
Provisional Patent Application University of Pittsburgh Ref #:	03791
Application #:	62/335,893
Recorded date:	06/09/2016

# **APPENDIX B**

# **Materials** Considered

Alison Dirr & Mary Spicuzza, *What We Know So Far About Why Milwaukee Only Had 5 Voting Sites for Tuesday's Election While Madison Had 66*, MILWAUKEE J. SENTINEL (Apr. 9, 2020), https://www.jsonline.com/story/news/politics/elections/2020/04/09/wisconsinelection-milwaukee-had-5-voting-sites-while-madison-had-66/2970587001/.

Alleghany County Voting System, VotesPA.com, https://www.votespa.com/readytovote/Pages/Allegheny-County-Voting-System.aspx (last accessed Sept. 5, 2020).

Allegheny County issues full list of consolidated polling place locations for June 2 primary election, WTAE PITTSBURGH (June 1, 2020), available at https://www.wtae.com/article/allegheny-county-issues-full-list-of-consolidatedpolling-place-locations-for-june-2-primary-election/32501520#.

Allison James et al., *High COVID-19 Attack Rate Among Attendees at Events at a Church — Arkansas, March 2020*, 69 MORBIDITY & MORTALITY WKLY REP. 632 (2020), https://www.cdc.gov/mmwr/volumes/69/wr/pdfs/mm6920e2-H.pdf.

Apoorva Mandavilli, *Actual Coronavirus Infections Vastly Undercounted*, *C.D.C. Data Shows*, N.Y. TIMES (June 27, 2020), https://www.nytimes.com/2020/06/27/health/coronavirus-antibodiesasymptomatic.html (updated Aug. 6, 2020).

*April 7, 2020 Election Summary Report*, WISCONSIN ELECTIONS COMMISSION (April 18, 2020), https://www.eac.gov/sites/default/files/paymentgrants/cares/WI\_20CARES\_Prog ress\_Report\_042820.pdf.

Benjamin J. Cowling et al., *The effective reproduction number of pandemic influenza: Prospective estimation*, 21(6) EPIDEMIOLOGY 842 (2010), author manuscript available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3084966/.

Berry et al., *Wisconsin April 2020 Election Not Associated with Increase in COVID-19 Infection Rates*, non-peer reviewed preprint posted at https://www.medrxiv.org/content/10.1101/2020.04.23.20074575v1 (posted April 28, 2020).

*Cases in the U.S.*, CTRS. FOR DISEASE CONTROL AND PREVENTION, https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html (last accessed Sept. 5, 2020).

Chad D. Cotti et al., *The Relationship between In-Person Voting*, *Consolidated Polling Locations, and Absentee Voting on Covid-19: Evidence from the Wisconsin Primary*, NAT'L BUREAU ECON. RES. (2020), https://www.nber.org/papers/w27187.pdf.

Chad D. Cotti, Bryan Engelhardt, Joshua Foster, Erik T. Nesson, Paul S. Niekamp, *The Relationship between In-Person Voting and COVID-19: Evidence from the Wisconsin Primary*, NBER Working Paper (Issued May 2020, Rev. June 2020), https://www.nber.org/papers/w27187.pdf.

Chris Carter & Joy Notter, *COVID-19 disease: a critical care perspective*, 1 CLINICS IN INTEGRATED CARE 100003 (2020), available at https://doi.org/10.1016/j.intcar.2020.100003.

*COVID-19 Data for Pennsylvania*, PA. DEPT. OF HEALTH (Sept. 5, 2020), *available at* https://www.health.pa.gov/topics/disease/coronavirus/Pages/Cases.aspx.

*COVID-19 Guidance for Businesses*, https://www.governor.pa.gov/covid-19/business-guidance/ (last accessed Sept. 5, 2020).

*COVID-19 in Racial and Ethnic Minority Groups*, CTRS. FOR DISEASE CONTROL AND PREVENTION (June 4, 2020), https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/racialethnic-minorities.html.

*COVID-19 outbreak at York County Prison*, ABC27.com (Sept. 4, 2020), https://www.abc27.com/news/covid-19-outbreak-at-york-county-prison/.

*COVID-19 Pandemic Planning Scenarios*, CTRS. FOR DISEASE CONTROL AND PREVENTION (May 20, 2020), https://www.cdc.gov/coronavirus/2019-ncov/hcp/planning-scenarios.html.

Derick T. Wade, *Rehabilitation after COVID-19: an evidence-based approach*, 20(4) CLINICAL MED. 359 (2020).

*Disease Burden of Influenza*, CTRS. FOR DISEASE CONTROL AND PREVENTION, https://www.cdc.gov/flu/about/burden/index.html (last reviewed Apr. 17, 2020).

DONALD S. BURKE, *Evolvability of Emerging Viruses*, PATHOLOGY OF EMERGING INFECTIONS Ch. 1 (Nelson A.M. and Horsburgh C.R., eds., American Society of Microbiology, 1998).

*Eavs Deep Dive: Poll Workers and Polling Places*, U.S. ELECTION ASSISTANCE COMM'N (Nov. 15, 2017), https://www.eac.gov/documents/2017/11/15/eavs-deep-dive-poll-workers-and-polling-places.

*Election Board Training Seminar*, OFFICE OF THE PHILADELPHIA CITY COMMISSIONERS, https://www.philadelphiavotes.com/en/voters/importantdates/details/1507-election-board-training-seminar-wards-18-19-23-25-31-33-45-62.

*Election Poll Workers*, NAT'L CONF. ST. LEGISLATURES (Aug. 19, 2019), https://www.ncsl.org/research/elections-and-campaigns/election-poll-workers637018267.aspx.

*Election Returns*, PENN. DEP'T STATE, https://www.electionreturns.pa.gov/ (last accessed Sept. 5, 2020).

Elissa M. Abrams & Stanley J. Szefler, *COVID-19 and the impact of social determinants of health*, 8 LANCET RESPIRATORY MED. 659 (2020), https://doi.org/10.1016/S2213-2600(20)30234-4.

Eskild Peterson et al., *Comparing SARS-CoV-2 with SARS-CoV and influenza pandemics*, 20 LANCET INFECTIOUS DISEASES e238 (2020), https://doi.org/10.1016/S1473-3099(20)30484-9.

Fei Zhou et al., *Clinical Course and Risk Factors for Mortality of Adult Inpatients with COVID-19 in Wuhan, China*, 395 LANCET 1054 (2020), https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30566-3/fulltext.

For Building Administrators and Proprietors: Use of Facilities as Polling Places During COVID-19, PA. DEPT. OF HEALTH, https://www.health.pa.gov/topics/disease/coronavirus/Pages/Guidance/Polling-Places-Guidance.aspx (last accessed Sept. 5, 2020).

Gov. Tom Wolf, Plan to Reopen Pennsylvania (July 8, 2020), *available at* https://www.governor.pa.gov/process-to-reopen-pennsylvania/.

*How COVID-19 Spreads*, CTRS. FOR DISEASE CONTROL AND PREVENTION, https://tools.cdc.gov/api/v2/resources/media/407478/content.html (last accessed Sept. 5, 2020).

How Many Adults Are at Risk of Serious Illness If Infected with Coronavirus? Updated Data, KAISER FAMILY FOUNDATION, https://www.kff.org/global-health-policy/issue-brief/how-many-adults-are-at-risk-of-serious-illness-if-infected-with-coronavirus/ (last accessed Sept. 5, 2020).

Hye Jin Rho, Hayley Brown & Shawn Fremstad, *A Basic Demographic Profile of Workers in Frontline Industries*, CTR. FOR ECON. & POL'Y RES. (2020), https://cepr.net/wp-content/uploads/2020/04/2020-04-Frontline-Workers.pdf.

Isaac Ghinai, et al., *Community Transmission of SARS-CoV-2 at Two Family Gatherings - Chicago, Illinois, February-March 2020*, 69 MORBIDITY & MORTALITY WKLY REP. 446 (2020), https://www.cdc.gov/mmwr/volumes/69/wr/mm6915e1.htm.

Jianyun Lu, et al., *Early Release-COVID-19 Outbreak Associated with Air Conditioning in Restaurant, Guangzhou, China, 2020*, 26 EMERG. INFECT. DIS. 1628 (2020), https://wwwnc.cdc.gov/eid/article/26/7/pdfs/20-0764-combined.pdf.

Julie Zauzmer et al., *Voting Problems in D.C., Maryland Lead to Calls for Top Officials to Resign*, WASH. POST (June 3, 2020), https://www.washingtonpost.com/local/dc-politics/voting-problems-in-dcmaryland-lead-to-calls-for-top-officials-to-resign/2020/06/03/24b47220-a5a8-11ea-b619-3f9133bbb482 story.html.

Lea Hamner et al., *High SARS-CoV-2 Attack Rate Following Exposure at a Choir Practice — Skagit County, Washington, March 2020*, 69 MORBIDITY & MORTALITY WKLY REP. 606 (2020), https://www.cdc.gov/mmwr/volumes/69/wr/pdfs/mm6919e6-H.pdf.

Len Strazewski, *Harvard Epidemiologist: Beware COVID-19's Second Wave This Fall*, AM. MED. ASS'N (May 8, 2020), https://www.ama-assn.org/delivering-care/public-health/harvard-epidemiologist-beware-covid-19-s-second-wave-fall.

Leung, et al., *No Detectable Surge in SARS-CoV-2 Transmission due to the April 7, 2020 Wisconsin Election*, non-peer reviewed preprint posted at https://www.medrxiv.org/content/10.1101/2020.04.24.20078345v1 (posted April 29, 2020).

Marco Cascella et al., *Features, Evaluation, and Treatment of Coronavirus* (*COVID-19*), STATPEARLS, https://www.ncbi.nlm.nih.gov/books/NBK554776/ (updated Aug. 10, 2020).

Mark Harrington, *Expert Consult Models to Predict If Coronavirus Cases Will Spike*, NEWSDAY (June 4, 2020), https://www.newsday.com/news/health/coronavirus/infectious-coronavirus-model-pandemic-1.45185224.

Matthew Weil et al., *The 2018 Voting Experience: Polling Place Lines*, BIPARTISAN POL'Y CTR. (Nov. 4, 2019), https://bipartisanpolicy.org/report/the-2018-voting-experience/.

Michael Barthel & Galen Stocking, *Older People Account for Large Shares of Poll Workers and Voters in U.S. General Elections*, PEW RES. CTR. (April 6, 2020), https://www.pewresearch.org/fact-tank/2020/04/06/older-people-account-for-large-shares-of-poll-workers-and-voters-in-u-s-general-elections/.

Michael Corkery, David Yaffe-Bellany & Derek Kravitz, *As Meatpacking Plants Reopen, Data About Worker Illness Remains Elusive*, N.Y. TIMES (May 25, 2020), https://www.nytimes.com/2020/05/25/business/coronavirus-meatpacking-plants-cases.html.

*Montgomery County Poll Worker Training – Spring 2020*, https://www.youtube.com/watch?v=CjkzSbLooJE&feature=youtu.be (last accessed Sept. 5, 2020).

Neeltje van Doremalen et al., *Aerosol and Surface Stability of SARS-CoV-2 as Compared With SARS-CoV-1*, 382 NEW ENG. J. MED. 1962 (2020), https://pubmed.ncbi.nlm.nih.gov/32182409/.

Nicholas Reimann, *Coronavirus Infections Spiked in Wisconsin After In-Person Election, Study Says*, FORBES (May 19, 2020), https://www.forbes.com/sites/nicholasreimann/2020/05/19/coronavirusinfections-spiked-in- wisconsin-after-in-person-election-studysays/#44f29b8514b3.

Paul L. Delamater, Erica J. Street, Timothy F. Leslie, Y. Tony Yang, and Kathryn H. Jacobsen, *Complexity of the Basic Reproduction Number* ( $R_0$ ), EMERGING INFECTIOUS DISEASES, Vol. 25, No. 1 (January 2019).

*Pennsylvania Coronavirus Map and Case Count*, NY TIMES, https://www.nytimes.com/interactive/2020/us/pennsylvania-coronaviruscases.html (last accessed Sept. 5, 2020).

*Pennsylvania COVID-19 Dashboard*, PA. DEP'T PUBLIC HEALTH (Sept. 5, 2020), *available at* https://experience.arcgis.com/experience/cfb3803eb93d42f7ab1c2cfccca78bf7.

*Pennsylvania Population Estimates*, U.S. CENSUS BUREAU (July 1, 2019), *available at* https://www.census.gov/quickfacts/PA.

*People with Certain Medical Conditions*, CTRS. FOR DISEASE CONTROL AND PREVENTION, https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html (last accessed August 19, 2020).

*Philadelphia County Voting System*, VotesPA.com, https://www.votespa.com/readytovote/Pages/Philadelphia-County-Voting-System.aspx (last accessed Sept. 5, 2020). *Poll Worker Recruitment Newsletter*, PA. DEPT. OF STATE, *available at* https://www.votespa.com/Resources/Documents/PollWorkerRecruitment-Toolkit/PollWorkerRecruitment-Newsletter.pdf (last accessed Sept. 5, 2020).

Primary 2020 updates: Polls now closed across Allegheny County: Officials receive complaints that some voters not 'social distancing,' wearing masks, PITTSBURGH POST-GAZETTE (June 2, 2020), https://www.post-gazette.com/news/politics-local/2020/06/02/Primary-election-western-pennsylvania/stories/202006020068.

Ruiyun Li et al., Substantial undocumented infection facilitates the rapid dissemination of novel coronavirus (SARS-CoV-2), 368 SCIENCE 489 (2020), https://science.sciencemag.org/content/368/6490/489.full.

Seth Flaxman et al., *Estimating the effects of non-pharmaceutical interventions on COVID-19 in Europe*, 584 NATURE 257 (2020), https://www.nature.com/articles/s41586-020-2405-7.

Shelby Bremer, *CDC Report Shows How a Funeral and Birthday Party 'Super Spread' COVID-19 in Chicago*, NBC CHI. (Apr. 9, 2020), https://www.nbcchicago.com/news/local/cdc-report-shows-how-a-funeral-andbirthday-party-super-spread-covid-19-in-chicago/2253006/.

State Data and Policy Actions to Address Coronavirus, KAISER FAMILY FOUNDATION, https://www.kff.org/coronavirus-covid-19/issue-brief/state-data-and-policy-actions-to-address-coronavirus/ (last accessed Sept. 5, 2020).

State election officials urge swift legislative action on voting reforms, PENN LIVE (Aug. 4, 2020), available at https://www.pennlive.com/news/2020/08/state-election-officials-urge-swift-legislative-action-on-voting-reforms.html?outputType=amp.

Stephen M. Kissler, et al., *Projecting the transmission dynamics of SARS-CoV-2 through the postpandemic period*, 368 SCIENCE 860 (Apr. 14, 2020), https://science.sciencemag.org/content/sci/368/6493/860.full.pdf.

Sukbin Jang, et al., *Cluster of Coronavirus Disease Associated with Fitness Dance Classes, South Korea*, 26 EMERG. INFECT. DIS. 1917 (2020), https://wwwnc.cdc.gov/eid/article/26/8/pdfs/20-0633-combined.pdf.

*Trump Administration Asks States to Be Ready for Vaccine by November*, WALL STREET JOURNAL (Sept. 3, 2020), *available at* https://www.wsj.com/articles/trump-administration-asks-states-to-be-ready-forvaccine-by-november-11599075477.

U.S. Census Bureau, Pennsylvania Population Estimates, July 1, 2019, *available at* https://www.census.gov/quickfacts/PA.

*Voter Services Polling Locations as of 9/4/2020*, MONTGOMERY COUNTY, https://webapp02.montcopa.org/voterservices/voters/ListPolls1.asp?Municipality =ALL.

*Voting & Election Statistics*, PA. DEPT. OF STATE, https://www.dos.pa.gov/VotingElections/OtherServicesEvents/VotingElectionSta tistics/Pages/VotingElectionStatistics.aspx (last updated Aug. 31, 2020).

Voting machines and coronavirus force long lines on Georgia voters, ATLANTA JOURNAL-CONSTITUTION https://www.ajc.com/news/state--regionalgovt--politics/voting-machines-and-coronavirus-force-long-lines-georgiavoters/VajM2D3aSHALhC z7KwDrpJ/ (June 9, 2020).

York County COVID-19 Resource Center, YORK COUNTY, https://covid19yorkcosc.hub.arcgis.com/ (last accessed Sept. 5, 2020).

You Li, Xin Wang, Harish Nair, *Global Seasonality of Human Seasonal Coronaviruses: A Clue for Postpandemic Circulating Season of Severe Acute Respiratory Syndrome Coronavirus 2?*, 222 J. INFECT. DISEASES 1090 (2020), https://doi.org/10.1093/infdis/jiaa436.

# **EXHIBIT 5**

# IN THE SUPREME COURT OF PENNSYLVANIA

PENNSYLVANIA DEMOCRATIC PARTY, et al.,

Petitioners,

No. 133 MM 2020

v.

KATHY BOOCKVAR, et al.,

Respondents.

# AFFIDAVIT OF PAUL GRONKE, PH.D.

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#### I. Background and Qualifications

1. I am a Professor of Political Science at Reed College and Director of the Early Voting Information Center. I received a BA in Political Science from the University of Chicago, a Master's Degree in Western European Politics from the University of Essex, Colchester UK, and a PhD in Political Science from the University of Michigan. I have written scientific research publications on voting by mail, early voting, voter turnout, and election administration that have appeared in peer-reviewed journals and university press edited volumes. I have written and collaborated on policy reports on public opinion and the opinions of local election officials (LEOs) about elections and election administration. The principal focus of my research and writing since 2006 has been early voting, election administration, local election officials, and public opinion about elections, election reform, and electoral integrity.

2. I created the Early Voting Information Center (EVIC) in 2006 as a nonpartisan center for the study of non-precinct place voting in the United States. EVIC has attracted more than \$1,000,000 in funding from public charities, non-profits, state governments, and federal agencies. As the Director of EVIC, I regularly consult with election officials at the local and state level to help them anticipate and plan for the changes wrought by the growth in early in-person, no-excuse absentee, and vote by mail voting. I worked as a contractor and subcontractor in 2006 and 2008 for the United States Election Assistance Commission, helping to oversee the collection, analysis, and reporting of election administration data pertaining to the National Voter Registration Act, the Uniformed Overseas and Citizens Abroad Voting Act, and the Election Administration and Voting Survey. I helped develop the section of the Election Assistance Commission's Election Administration and Voting Survey (EAVS) that asks for information about early in-person and absentee ballots. I designed the survey questions for early voting used by two highly regarded academic election surveys, the Cooperative Congressional Election Study (CCES) and the American National Election Study.

3. I have published a number of articles that contain statistical analyses of national, regional, and state trends in voting by mail, early voting, and the demographic and attitudinal characteristics of individual early in-person and no-excuse absentee voters. These publications include peer-reviewed articles in *American Politics Research* (2012), the *Annual Review of Political Science* (2008), the *Journal of Social Issues* (2008), and *PS: Political Science and Politics* (2007). Other published works that discuss the legal and administrative changes to early voting and the public response include a 2015 *Electoral Studies* article, a 2014 chapter in *Measure of American Elections*, a 2008 William and Mary Law Review article, a 2008 chapter in *Democracy in the States*, and 2019, 2016, and 2008 chapters in editions of *America Votes! A Guide to Election Law and Voting Rights*.

A complete list of my publications is included in my curriculum vitae, attached to this affidavit as Appendix A.

4. In light of my scientific expertise on early voting, election administration, election reform, and electoral integrity, I was retained to provide an expert report and give expert testimony in *Democracy North Carolina v. Board of Elections* (Civil Action No. 1:20-CV-457, Summer 2020), provide an expert report in *North Carolina Democratic Party v. State of North Carolina* (Civil Action 19-CV-014688, Spring 2020), provide an expert report and give expert testimony in *League of Women Voters v. State of North Carolina* (Civil Action No. 1:13-CV-660, 2014-2015), and provide an expert report in *Ohio State Conference of the NAACP*, *et al. vs. John Husted et al.* (Case No. 2:14-cv-00404, Summer 2014).

5. I have been retained by Common Cause Pennsylvania, League of Women Voters of Pennsylvania, Black Political Empowerment Project, Make the Road Pennsylvania, Patricia DeMarco, Kathleen Wise, and Danielle Graham Robinson to bring my scientific expertise to bear on the use of drop boxes for the return of vote-by-mail / absentee ballots in the Commonwealth of Pennsylvania during the November 3, 2020, general election. Specifically, I have been asked to opine on (1) the impact of voting by mail generally on voter turnout and among particular subgroups; (2) the impact of allowing drop boxes on voter turnout; (3) how and why drop boxes are important for a well-functioning vote by mail system; and (4) how drop boxes can assist in providing a safe and secure voting experience during the COVID-19 pandemic.

## **II.** Summary of Opinions

6. Based on my scientific expertise and the empirical evidence, my expert opinion is that drop boxes should be provided in every jurisdiction that has significant (20% or more) percentages of voters casting a ballot by mail, which includes Pennsylvania for the November 3, 2020 election.

7. Drop boxes are recommended by a number of national commissions and experts on voting by mail, and election officials report that they improve administration and voter access. Scientific research shows that drop boxes raise voter turnout and enhance voter confidence in the elections process. Voters utilize drop boxes heavily—forty to seventy percent of voters in vote by mail states and twentyfive percent or more in no-excuse absentee states.

8. Drop boxes have been in use for years all over the country and are secure. I am not aware of any reports that drop boxes are a source for voter fraud.

9. Drop boxes are especially important for a November 3, 2020 election that will be conducted under the cloud of the COVID-19 pandemic, and for a state like Pennsylvania that is going to experience an enormous increase in the number of by-mail ballots cast by the citizenry of the state.

4

10. Drop boxes will reduce the chance that voters will be disenfranchised due to unexpected delays in postal delivery, and will help the United States Postal Service ("USPS") handle the load for those voters that do choose to return their ballots by mail.

11. Drop boxes allow voters to wait until they have received all campaign information, if they choose to do so. Finally, drop boxes are a "no-touch" ballot return method that benefits everyone: voters, election workers, and election administrators.

12. In summary, in my expert opinion, there is absolutely no reason not to deploy drop boxes in Pennsylvania for use by vote by mail balloting during the November 2020 general election.

# III. Background Regarding Voting by Mail

#### A. Emergence of Voting by Mail and Trends in Usage

13. Voting by mail is a method of voting in which a ballot and other balloting materials are produced by a local election official and are transmitted to an eligible voter using the United States Postal Service (in most cases<sup>1</sup>). The eligible citizen completes the ballot and provides additional validating information (in most

<sup>&</sup>lt;sup>1</sup> The Federal Military and Overseas Voter Empowerment Act (MOVE) requires states to provide blank absentee ballots to UOCAVA (Uniformed and Overseas Citizens Absentee Voting Act) voters in at least one electronic format – email, fax, or an online delivery system – at least 45 days before an election. See <u>https://www.fvap.gov/uploads/FVAP/Policies/moveact.pdf</u>.

cases, a signature, although 12 states ordinarily require additional or alternate verifying information, such as a notary or witness signature, or copy of a valid identification<sup>2</sup>); and the ballot is returned using the United States Postal Service, returned to a local elections office, dropped off at a designated drop box, or dropped off at a local polling place or voting center.

14. Absentee voting was first made available in nineteen of twenty-five states during the 1864 election so that Union soldiers in the field would not be disenfranchised.<sup>3</sup> By the end of World War II, most states provided for some sort of civilian access to an absentee ballot for business travelers, railroad workers, and citizens who were sick and infirm. The ratification of the 26th Amendment added many college students to the voting rolls, and in response, many states extended absentee balloting rights to students. The passage of the Overseas Citizens Voting Rights Act (Pub. L. No. 94-203, 89 Stat. 1142 (1976) extended absentee balloting to citizens living overseas. In all of these cases, a voter was required to have a legally specified reason for being "absent" on Election Day.

15. Thirty-four states and the District of Columbia do not require an excuse to request an absentee ballot, a method most commonly referred to as "no-excuse

<sup>&</sup>lt;sup>2</sup> State requirements for verifying absentee ballots are documented by the National Conference of State Legislatures. https://www.ncsl.org/research/elections-and-campaigns/verification-of-absentee-ballots.aspx.

<sup>&</sup>lt;sup>3</sup> Fortier, John C. 2006. Absentee and Early Voting: Trends, Promises, and Perils. Washington, D.C.: AEI Press.

absentee voting." No-excuse absentee voting started in California in 1978, which was followed by additional states in the following decades. Pennsylvania passed no-excuse absentee voting in October 2019, with the passage and signing of Act 77.<sup>4</sup>

16. Five states among the thirty-four "no excuse" states are "fully vote by mail," also referred to as "universal ballot delivery" states. This method was first passed by citizen initiative in Oregon in 1998 and implemented in 2000. Full vote by mail is also used Colorado, Hawaii, Utah, and Washington. In a fully vote by mail system, every registered voter on the registration rolls is sent a ballot without the need to file a request. These fully vote by mail states do not operate precinct polling places, although states continue to provide in-person voting services at county offices and, in some cases, designated voting centers in addition to county offices.

17. As of the time of this affidavit, sixteen states require an excuse for requesting an absentee ballot. The National Conference on State Legislatures categorizes the required excuses as: out of country on Election Day, illness or disability, being order than a certain age, working shift during all voting hours, student living outside of county, election workers or poll workers, religious beliefs

<sup>4</sup> "Governor Wolf signs historic election reform bill including new mail-in voting." Press release from the Office of Governor Tom Wolf, October 31, 2019. See https://www.governor.pa.gov/newsroom/governor-wolf-signs-election-reform-bill-includingnew-mail-in-voting/. or practices, address confidentiality participant, incarcerated but eligible, and jury duty.<sup>5</sup>

18. In response to the dangers of the COVID-19 pandemic and to ensure a safe, secure, and accessible election, ten of those sixteen states (Alabama, Arizona, Connecticut, Delaware, Kentucky, Massachusetts, Missouri, New Hampshire, New York, and West Virginia) explicitly allow a fear of COVID-19 to serve as an excuse to cast an absentee ballot in November 2020.<sup>6</sup>

19. In response to the dangers of the COVID-19 pandemic and to ensure a safe, secure, and accessible election, four of the no-excuse absentee states (California, Nevada, New Jersey, and Vermont) and the District of Columbia will send ballot materials to all registered voters for the November 3, 2020 election, thus becoming "all vote by mail" for the November election.

20. The following figure, reproduced from the National Conference of State Legislatures,<sup>7</sup> provides a visual representation of these three different "voting

<sup>6</sup> Kate Rabinowitz and Brittany Renee Mayes. August 14, 2020. "At least 77% of American voters can cast ballots by mail this fall." Washington Post.

<sup>&</sup>lt;sup>5</sup> "Excuses to Vote Absentee / By Mailed Ballot", Table 2 of "Voting Outside the Polling Place: Absentee, All-Mail and other Voting at Home Options", National Conference of State Legislatures, July 10, 2020. https://www.ncsl.org/research/elections-and-campaigns/absenteeand-early-voting.aspx accessed August 17, 2020.

https://www.washingtonpost.com/graphics/2020/politics/vote-by-mail-states/ Accessed August 17, 2020.

<sup>&</sup>lt;sup>7</sup> Source: https://www.ncsl.org/research/elections-and-campaigns/absentee-and-early-voting.aspx.

by mail" voting regimes. As the figure makes clear, while no-excuse options first emerged in the western United States, no-excuse absentee voting has become available in every region of the country.

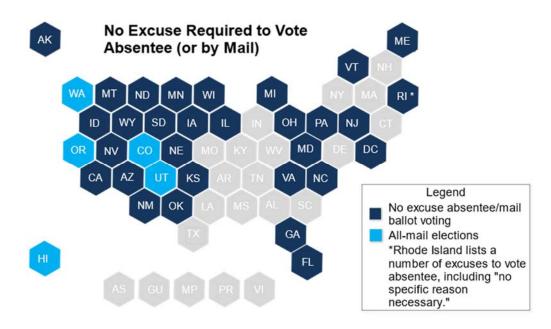


Figure 1: Vote by Mail Options as of May 2020

21. For the purposes of this affidavit, I will rely on the umbrella term "voting by mail" to refer to the no-excuse absentee election administration system that is currently in place in thirty-four states and in the District of Columbia, including Pennsylvania. When I refer to a citizen "voting by mail," I am referring to the individual act of casting a mail or absentee ballot, regardless of the state in which they live and regardless of how the voter returns the ballot.

22. The use of voting by mail has grown as it has become more widely available across the country. The Census Bureau has conducted the Current Population Survey (CPS) Voting and Registration Supplement in November of federal election years since 1964.<sup>8</sup> The CPS is a large random sample survey that is an authoritative source to compare registration and voting in the United States. The following figure displays the percentage of respondents who report voting on Election Day, voting early in-person, and voting by mail from 1996-2018 (prior to these years, the CPS did not ask about when the ballot was cast). As shown in the figure, Election Day voting comprised more than 90% of ballot cast in 1996, and vote by mail totaled just over 5% of ballots. Two decades later, in the 2016 presidential election, over 20% of ballots nationally were cast by-mail, and nearly 25% were cast by mail in 2018.

<sup>&</sup>lt;sup>8</sup> https://www.census.gov/topics/public-sector/voting.html.

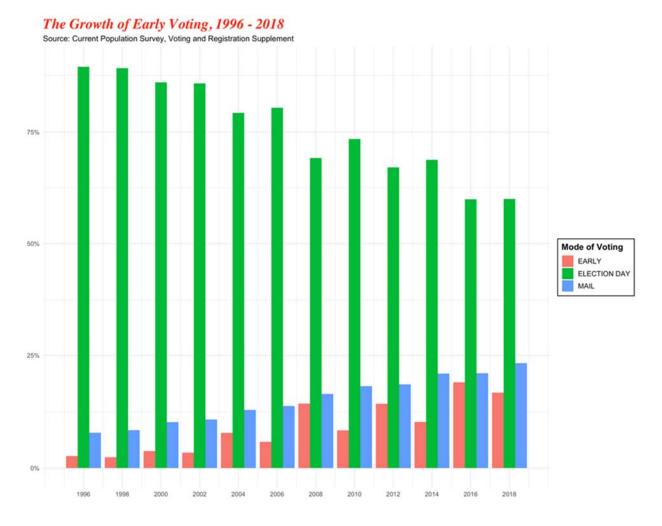


Figure 2: Election Day, Early In Person, and Voting by Mail from 1996-2018

# **B.** Turnout Effects of Vote by Mail

23. There are four primary influences on voter turnout: individual resources (mainly demographics and attitudes toward participation), social resources (connectedness to social and organizational networks), organizational actions (political parties, candidates, and other mobilization organizations), and election

laws and rules.<sup>9</sup> Scientific research shows that voter turnout responds in predictable ways to changes in the costs and the benefits of voting.<sup>10</sup> Two of the main changes in election laws that have increased voter participation, eased access to the ballot box, and provide more opportunity and convenience for voting are the adoption of early in-person voting and no-excuse absentee voting. Providing more opportunities to vote (e.g., the number of days, hours, or sites at which to vote) increases voter participation.

24. The costs of voting refers to factors that can hinder participation in elections, or require citizens to expend more time and effort to cast their ballot. Among these costs are the time and distance required to travel to cast the ballot. The 2018 Current Population Survey's Voting and Registration Supplement asked a sample of U.S. citizens why they did not vote in the 2018 midterm election. The most common response (27%) was "too busy, conflicting schedule," another 3.3% cited an "inconvenient polling place," and 2.9% said they faced "transportation problems."<sup>11</sup> There are substantial differences in how these barriers impact

<sup>&</sup>lt;sup>9</sup> Rosenstone, Steven, and John Mark Hansen. 1993. Mobilization, Participation, and Democracy in America. New York: Macmillan.

<sup>&</sup>lt;sup>10</sup> Aldrich, John H., 1993, "Rational Choice and Turnout," American Journal of Political Science 37(1): 246–78. Riker, William H., and Peter C. Ordeshook, 1968, "A Theory of the Calculus of Voting." American Political Science Review 62(1): 25–42.

<sup>&</sup>lt;sup>11</sup> All data in this paragraph is drawn from the 2018 Current Population Survey, Voting and Registration Supplement, Table 10, https://www.census.gov/data/tables/time-series/demo/voting-and-registration/p20-583.html, accessed February 26, 2020.

subgroups of the voting population. As shown in Table 1, only 6% of the oldest voters (65 and older) said that "conflicting schedules" were a reason that they did not vote, compared to 35.4% of voters aged 25 to 44. Younger voters (18 to 24) were most impacted by an "inconvenient polling place," over three times as much as the oldest voters. Other obstacles to voting that can reduce turnout are waiting in long lines to vote and less accessible voting locations that require longer distances to travel to and have limited parking.<sup>12</sup> Early in-person voting and voting by mail were developed at least partially to reduce the costs of voting by allowing the voter to choose the day and time to vote.

	Too Busy, Conflicting Schedule	Transportation Problems	Inconvenient Polling Place
Overall	26.9	2.9	3.3
18 to 24 years	31.0	1.1	4.3
25 to 44 years	35.4	2.0	3.5
45 to 64 years	25.3	3.1	3.7
65 years and over	6.0	6.3	1.2

Table 1: Reasons for Not Voting, 2018 CPS

25. Scientific research has shown modestly positive impact of no-excuse absentee voting and full voting by mail on turnout. The most comprehensive study of the impact of no-excuse absentee voting is by Jan E. Leighley and Jonathan Nagler, who estimate a 1.4% increase in turnout as a result of states adopting no-

<sup>&</sup>lt;sup>12</sup> Stein, Robert M, and Greg Vonnahme. 2008. "Engaging the Unengaged Voter: Vote Centers and Voter Turnout." The Journal of Politics 70(02): 487–97.

excuse absentee voting.<sup>13</sup> Fully vote by mail is estimated to have a roughly two percentage point positive impact on voter turnout, as estimated in studies of the rollout of vote by mail in Washington State<sup>14</sup> and in a second study of California, Utah, and Washington.<sup>15</sup>

26. The turnout increase in Pennsylvania, if we take the lower-end estimate of a 1.4% increase in turnout, would have been 122,399 additional votes cast in the 2016 presidential election. If we take the higher estimate of a 2% increase for the full vote by mail system, 174,737 additional ballots would have been cast.<sup>16</sup>

https://siepr.stanford.edu/sites/default/files/publications/20-015.pdf

<sup>&</sup>lt;sup>13</sup> P. 107-109 of Jan E. Leighley and Jonathan Nagler. 2014. Who Votes Now? Princeton, NJ: Princeton University Press.

<sup>&</sup>lt;sup>14</sup> Gerber, A. S., Huber, G. A., & Hill, S. J. (2013). "Identifying the Effect of All-Mail Elections on Turnout: Staggered Reform in the Evergreen State." Political Science Research and Methods, 1(01), 91–116.

<sup>&</sup>lt;sup>15</sup> Thompson, D. M., Wu, J., Yoder, J., & Hall, A. B. April, 2020.. The Neutral Partisan Effects of Vote-by-Mail: Evidence from County-Level Roll-Outs. Stanford Institute for Economic Policy Research Working Paper No. 20-015.

<sup>&</sup>lt;sup>16</sup> The figures were calculated from the turnout and registered voter totals reported by the Pennsylvania Department of State.

https://www.dos.pa.gov/VotingElections/OtherServicesEvents/VotingElectionStatistics/Pages/V otingElectionStatistics.aspx.

27. There is limited scientific research on what kinds of voters use noexcuse voting, but research indicates that no-excuse absentee voting benefits voters older than 65<sup>17</sup> and voters with disabilities.<sup>18</sup>

# IV. Drop Boxes in the Voting by Mail System

## A. Drop Boxes: Construction and Security

28. Drop boxes are secure locations provided for voters to deposit an absentee or mail-in ballot if they choose not to use the postal service or if they choose to vote close enough to Election Day that they are unable to return the ballot using the Postal Service and have it arrive on time, among other reasons.

29. Drop boxes are typically of two types. The most common type of drop box is a secure metal container that has been specially designed to accept only elections materials (i.e., the opening is for envelopes only). The boxes are secure, sealed, and tamper-proof. A company that makes drop boxes for ten states describes many of the features that make drop boxes for elections mail even more secure than regular postal "blue boxes." These include "ADA compliance (drive up and walk up options), 3/16 to 1/2 inch steel; no grip points for forced entry; doors resist impact

<sup>&</sup>lt;sup>17</sup> Meredith, M., & Endter, Z. May 14, 2016. Aging into Absentee Voting: Evidence from Texas. Working Paper. https://www.sas.upenn.edu/~marcmere/workingpapers/AgingIntoAbsentee.pdf; Ashok, V., Feder, D., McGrath, M., & Hersh, E. (2016). The Dynamic Election: Patterns of Early Voting Across Time, State, Party, and Age. Election Law Journal: Rules, Politics, and Policy, 15(2), 115-128.

<sup>&</sup>lt;sup>18</sup> Miller, P., & Powell, S. (2016). Overcoming Voting Obstacles: The Use of Convenience Voting by Voters With Disabilities. American Politics Research, 44(1), 28–55.

and prying; lock body is never exposed outside the box thereby protecting against tampering."<sup>19</sup>

30. These anchored, tamper-proof drop boxes are placed outside of county elections offices and in other locations convenient for voters. Some are monitored with 24-hour surveillance cameras.

31. A second type of drop box is an adapted plastic storage bin with zip ties to secure the top and a slot in the top to deposit ballots. This type of drop box is only used in staffed, indoor locations.

32. Drop boxes are a safe and secure direct extension of the county or local jurisdiction elections office. Once the voter deposits the ballot into the drop box, the ballot is for all intents and purposes in the custody of the elections office. With respect to chain of custody, drop boxes eliminate one link in the chain (i.e., further handling by the Postal Service), and by implication provide a more secure method of returning mail ballots than by using the mail.

33. Nineteen states currently use drop boxes: Arizona, California, Colorado, Hawaii, Kansas, Montana, Nebraska, New Mexico, Oregon, Utah, and

<sup>&</sup>lt;sup>19</sup> VoteArmor product page from Laserfabusa.com. http://votearmor.laserfabusa.com/.

Washington,<sup>20</sup> recently joined by Michigan,<sup>21</sup> Pennsylvania,<sup>22</sup> Georgia,<sup>23</sup> Wisconsin,<sup>24</sup> Connecticut, Georgia, Minnesota, and Hawaii.<sup>25</sup> As many as 34 states this year will use drop boxes in one or more counties in the state, according to a recent report.<sup>26</sup> Of the top 10 states in terms of vote by mail ballot usage in 2016, eight use drop boxes. Every state with more than 40% vote by mail usage in 2016 used drop boxes as an additional method for returning ballots.<sup>27</sup>

34. Pennsylvania will be an outlier if it fails to use drop boxes, given the projected rate of vote by mail in November.

<sup>24</sup> "Absentee Ballot Return Options – COVID-19". https://elections.wi.gov/node/6798

<sup>&</sup>lt;sup>20</sup> National Conference of State Legislatures "Voting Outside the Polling Place: Absentee, All-Mail, and Other Voting at Home Options," https://www.ncsl.org/research/elections-and-campaigns/absentee-and-early-voting.aspx.

<sup>&</sup>lt;sup>21</sup> https://www.michigan.gov/documents/sos/Ballot\_Dropbox\_Locations\_697191\_7.pdf.

<sup>&</sup>lt;sup>22</sup> VotesPA.Com: https://www.votespa.com/Voting-in-PA/Documents/2020Primary-County-DropLocations.pdf.

<sup>&</sup>lt;sup>23</sup> Mark Niesse, June 4, 2020, "Absentee ballot drop boxes set up for Georgia's June 9 primary", Atlanta Journal and Constitution, https://www.ajc.com/news/state--regional-govt--politics/where-find-ballot-drop-boxes-metro-atlanta/eNbdsawjWjqXTppWxhzq6J/.

<sup>&</sup>lt;sup>25</sup> Bree Baccaglini et al., "Rehearsal for November: An Analysis of Sixteen State Elections," August, 25, 2020, https://healthyelections.org/sites/default/files/2020-08/august\_primaries\_memo.pdf.

<sup>&</sup>lt;sup>26</sup> Hufford, A. (2020, August 27). "The Rise of Ballot Drop Boxes Due to the Coronavirus." Lawfare. https://www.lawfareblog.com/rise-ballot-drop-boxes-due-coronavirus.

<sup>&</sup>lt;sup>27</sup> Absentee ballot rates calculated from Table 2, pg.23-25, of the 2016 Election Administration and Voting Survey.

# **B.** Cybersecurity and Infrastructure Security Agency, an Agency of the Department of Homeland Security, Identifies Drop Boxes as a Vote by Mail Best Practice

35. The Cybersecurity and Infrastructure Security Agency (CISA) is an agency of the Federal Department of Homeland Security. The CISA Elections Infrastructure Government Coordinating Council and Sector Coordinating Council's Joint COVID Working Group defines drop boxes as: "a secure and convenient means for voters to return their mail ballot. A drop box is a secure, locked structure operated by election officials where voters may deliver their ballots from the time they receive them in the mail up to the time polls close on Election Day. Ballot drop boxes can be staffed or unstaffed, temporary or permanent."<sup>28</sup>

36. Drop boxes are a best practice because, according to CISA, they improve access and empower voters: "[b]allot drop boxes and drop-off locations allow voters to deliver their ballots in person. More importantly, the availability of ballot drop boxes and drop-off locations ensures that even voters who wait until the last minute to vote or who receive their requested ballot in the mail at the last minute will be able to return their ballots in time to be counted."<sup>29</sup>

https://www.eac.gov/sites/default/files/electionofficials/vbm/Ballot\_Drop\_Box.pdf.

<sup>&</sup>lt;sup>28</sup> Cybersecurity and Infrastructure Security Agency (CISA) Elections Infrastructure Government Coordinating Council and Sector Coordinating Council's Joint COVID Working Group. "Ballot Drop Box". Available at

<sup>&</sup>lt;sup>29</sup> CISA Task Force, op cit. p. 1.

37. CISA also identifies drop boxes as a method to minimize COVID-19 risk for by-mail voting and for in-person voting, both early and on Election Day: "[s]etting up ballot drop boxes and educating voters to use them mitigates a number of COVID-19-related risks associated with in-person voting. It also minimizes the number of people that will need to access voting locations, thereby providing more space for those who are engaged in in-person voting."<sup>30</sup>

38. Drop boxes can reduce the burden on the United States Postal Service, an important consideration given controversies over USPS capacity and the enormous projected increase in the use of mail balloting. Drop boxes can also save local jurisdictions, or voters, money since there is no need for return postage.

39. I am not aware of any evidence of voter fraud that results from using drop boxes as way of returning absentee ballots.<sup>31</sup>

<sup>&</sup>lt;sup>30</sup> CISA Task Force, op cit. p. 2.

<sup>&</sup>lt;sup>31</sup> In Pennsylvania, it is impermissible to return a mail ballot on behalf of another person (with exceptions for disabled voters). For a person to return two ballots to a drop-box might violate that restriction, but I would not consider it "voter fraud" unless it was done for an improper purpose. For example, I would not consider a person who returned their spouse's ballot to a drop-box to have committed an act of voter fraud (assuming the spouse's candidate selection was accurately reflected on the ballot and that the spouse was entitled to vote in that district).

#### C. Drop Boxes: Voter Preferences and Voter Turnout

40. Election officials report that voters "love" drop boxes and that they are "absolutely safe."<sup>32</sup> The Wisconsin Elections Commission described the expanded use of drop boxes in the state for the November election as "about avoiding confusion among voters who try to drop their ballots at the polls...also as a way to alleviate growing fears that a mailed ballot may not be received on time."<sup>33</sup>

41. The empirical evidence from voter behavior is that voters do, in fact, love drop boxes. Substantial numbers of voters choose to return their mail ballots in person, either to a county office, a polling location, or to a designated drop box. In Colorado, Oregon, and Washington, between forty and seventy percent of voters opt to return their ballots in-person, and twenty-five percent of ballots in "no-excuse" absentee states are returned in person.<sup>34</sup> In Oregon's May primary, the state provided

<sup>&</sup>lt;sup>32</sup> Lissandra Villa, August 20, 2020. "Ballot Drop Boxes Are Emerging as a Vote-By-Mail Alternative—But They Have Critics, Too". Time. https://time.com/5881310/ballot-drop-boxes-usps/.

<sup>&</sup>lt;sup>33</sup> Scott Bauer, August 19, 2020, "Milwaukee adding drop boxes to help protect absentee voting." Associated Press. https://madison.com/wsj/news/local/govt-and-politics/milwaukee-adding-drop-boxes-to-help-protect-absentee-voting/article\_0237af44-b8b5-53ad-b8a2-553842de2275.html.

<sup>&</sup>lt;sup>34</sup> Pew Charitable Trusts, "Vote-by-Mail Rates More than Double since 2000." https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2015/4/29/vote-by-mail-practices-more-than-double-since-2000.

paid-postage for ballots for the first time, and still 50% of the ballots were returned using drop boxes.<sup>35</sup>

42. Scientific research supports the claims of CISA and the quoted election officials: using drop boxes improves voter access and increases voter turnout by reducing the costs of voting.<sup>36</sup> There is a substantial body of research that finds that geographic proximity to voting locations is positively related to overall turnout. Much of this research focuses on early in-person voting, and the findings consistently show that more early voting locations, and more convenient locations, are positively related to both the usage rates of early in-person voting and to overall turnout.<sup>37,38,39</sup> An especially pertinent national study showed that the number of locations to vote early is positively associated with turnout gains, and these gains are higher among African-American, Hispanic, and younger voters.<sup>40</sup>

<sup>&</sup>lt;sup>35</sup> Personal communication with the author for the Oregon Secretary of State, Division of Elections, August 17, 2020.

<sup>&</sup>lt;sup>36</sup> William McGuire, Benjamin Gonzalez O'Brien, Katherine Baird, Benjamin Corbett, and Loren Collingwood. (undated). "Evaluating the Impact of Drop Boxes on Voter Turnout." MIT Election Data and Science Lab, http://electionlab.mit.edu/sites/default/files/2019-01/mcguire et al 2017summary.pdf.

<sup>&</sup>lt;sup>37</sup> Richardson, Lilliard E., and Grant W. Neeley. 1996. "The Impact of Early Voting on Turnout: The 1994 Elections in Tennessee." State and Local Government Review 28(3), p. 177.

<sup>&</sup>lt;sup>38</sup> Stein, Robert M., and Patricia A. García-Monet. 1997. "Voting Early but Not Often." Social Science Quarterly 78(3): 657–71.

<sup>&</sup>lt;sup>39</sup> Losco, J., Scheele, R., & Hall, S. R. 2010. "The impact of vote centers on early voting in Indiana." Paper prepared for delivery at the Western Political Science Association Annual Meeting, San Francisco, CA.

<sup>&</sup>lt;sup>40</sup> Fullmer, Elliott B. 2015. "Early Voting: Do More Sites Lead to Higher Turnout?" Election Law Journal: Rules, Politics, and Policy 14(2): 81–96.

43. Scientific research has also examined how the need to travel a longer distance to cast a ballot can discourage voting. Gimpel and Schuknecht (2003), in a study of three Maryland counties, looked at the impact of distance and of "impedance" (anything that stands in the way of getting from point A to point B) on turnout in the 2000 presidential election. They found that the geographic accessibility of polling places has a significant and independent effect on the likelihood that individuals will vote: "even after controlling for variables that account for the motivation, information and resource levels of local precinct populations, we find that accessibility does make a significant difference to turnout" (2003, 471).<sup>41</sup> These results have been replicated in studies in an Atlanta mayoral election,<sup>42</sup> and in a study that evaluated the impact of precinct consolidation in Los Angeles County.<sup>43</sup>

44. The research cited focused on early voting, but has been extended to demonstrate the positive turnout effects of drop boxes, including how convenient drop boxes are for voters. Research conducted in King County, WA shows that proximity of an elections drop box has a positive and statistically significant

<sup>&</sup>lt;sup>41</sup> Gimpel, J.G., and J.E. Schuknecht. 2003. "Political Participation and the Accessibility of the Ballot Box." Political Geography 22(5): 471–88.

<sup>&</sup>lt;sup>42</sup> Haspel, Moshe, and H. Gibbs Knotts. 2005. "Location, Location, Location: Precinct Placement and the Costs of Voting." Journal of Politics 67(2): 560–73.

<sup>&</sup>lt;sup>43</sup> pg. 116 of Brady, Henry E., and John E. McNulty. 2011. "Turning Out to Vote: The Costs of Finding and Getting to the Polling Place." American Political Science Review 105(01): 115–34.

relationship to the probability that a registered voter will cast a ballot.<sup>44</sup> This research result has been replicated in Pierce County, WA. Many voters express higher levels of confidence and trust that their ballots will be counted as cast when they deposit them into a drop box.

45. Finally, voters who opt for drop boxes do so if they are less trusting in the United States Postal Service and if they show a preference to wait until the end of campaigning to make their voting decision.<sup>45</sup> Improving trust in the confidence that a ballot is cast is another way that drop boxes reduce "costs" of voting.

# V. The Impact of the COVID-19 Pandemic on Administering Elections

46. The Centers for Disease Control and Prevention (CDC) has issued interim guidance for election polling locations to reduce the spread of the novel coronavirus that causes COVID-19. The recommendations include: encouraging mail-in voting, encouraging early voting, relocating polling places from locations that would put certain populations at risk (e.g., nursing homes and senior living

<sup>&</sup>lt;sup>44</sup> Collingwood, L., McGuire, W., Gonzalez O'Brien, B., Baird, K., & Hampson, S. (2018). Do Drop Boxes Improve Voter Turnout? Evidence from King County, Washington. Election Law Journal: Rules, Politics, and Policy, 17(1), 58–72.

<sup>&</sup>lt;sup>45</sup> Menger, A., & Stein, R. M. (2019). Choosing the Less Convenient Way to Vote: An Anomaly in Vote by Mail Elections: Political Research Quarterly.

residences), and adding social distancing measures to protect individuals during voting.<sup>46</sup>

47. COVID-19 has slowed some mail delivery by the USPS, a special concern for mail-in voting. The USPS recently warned that delayed mail-in ballots could potentially disenfranchise tens of millions of Americans, because of both an "avalanche" of absentee ballots and COVID-19 service delays.<sup>47</sup> The Congressional Research Service also warns of USPS delays as a "potential challenge for mail voting in 2020."<sup>48</sup>

48. An April 2020 poll conducted by the Pew Research Center reported that two-thirds of Americans expect some disruption of the November 2020 election due to the pandemic. Seventy percent of the respondents favor allowing any voter to vote by mail if the voters wants to do so.<sup>49</sup>

<sup>&</sup>lt;sup>46</sup> Centers for Disease Control, "Recommendations for Election Polling Locations." March 27, 2020. https://www.cdc.gov/coronavirus/2019-ncov/community/election-polling-locations.html Accessed May 21, 2020.

<sup>&</sup>lt;sup>47</sup> Cox, E., Viebeck, E., Bogage, J., & Ingraham, C. (n.d.). Postal Service warns 46 states their voters could be disenfranchised by delayed mail-in ballots. Washington Post. Retrieved August 20, 2020, from https://www.washingtonpost.com/local/md-politics/usps-states-delayed-mail-in-ballots/2020/08/14/64bf3c3c-dcc7-11ea-8051-d5f887d73381\_story.html.

<sup>&</sup>lt;sup>48</sup> Shanton, K. L., & Eckman, S. J. (April 23, 2020). Mail Voting and COVID-19: Developments and Potential Challenges. Congressional Research Service. https://crsreports.congress.gov/product/pdf/IN/IN11356.

<sup>&</sup>lt;sup>49</sup> Carroll Doherty, Jocelyn Kiley, and Nida Ascher. April, 2020. "Two-Thirds of Americans Expect Presidential Election Will Be Disrupted by COVID-19." Report of the Pew Research Center, Washington DC. https://www.people-press.org/2020/04/28/two-thirds-of-americans-expect-presidential-election-will-be-disrupted-by-covid-19/.

49. A May 2020 national poll conducted by a university consortium found that 60% of respondents supported making voting by mail easier, and 36% said that they would be more likely to vote if they had the option to vote by mail. However, 44% of respondents under 25 said they were not confident that they understood the process of voting by mail, and 40% of respondents aged 25 to 44 also said they were not confident about the mail voting process.<sup>50</sup> This survey also indicates that a significant number of respondents will vote using the in-person method.

50. Pennsylvania held a primary on June 2, 2020. Thirty-six counties announced changes to voting locations<sup>51</sup> due in significant part to poll worker shortages.<sup>52</sup> As a result, seven counties closed more than half of their polling places, including dramatic closure rates of 85% (Allegheny County), 77% (Philadelphia County), and 60% (Montgomery County).<sup>53</sup> A lack of poll workers was felt throughout the state and resulted in emergency guidelines to reduce the number of

<sup>51</sup> Emily Previti and Katie Meyer, May 23, 2020, "With PA's Polling Place Changes, Voters Might Get Conflicting Information on Where to Go June 2." PA Post. https://papost.org/2020/05/23/with-pa-s-polling-place-changes-voters-might-get-conflicting-information-on-where-to-go-june-2/.

<sup>&</sup>lt;sup>50</sup> Covidstates.org. May 22, 2020, "The State of the Nation: A 50-State COVID-19 Survey: Report."

<sup>&</sup>lt;sup>52</sup> Michael Tanenbaum, May 13, 2020. "Philly plans sharp reduction of polling places for June 2 election." Philly Voice. https://www.phillyvoice.com/philly-polling-places-primary-election-june-2-2020-poll-workers-mail-in-absentee-ballot/.

<sup>&</sup>lt;sup>53</sup> Jerry Yan, Nicole Collins, Bill Wermuth, Jeffrey Rodriguez, Marco Massey, Sarah Maung, and Sreya Guha, June 25, 2020, "The 2020 Pennsylvania Primary Election," Healthyelections.org, https://live-healthy-elections.pantheonsite.io/sites/default/files/2020-06/pennsylvania\_pre-\_and\_post-mortem\_memo.pdf.

poll workers required at each voting location.<sup>54</sup> Long lines were reported in a number of counties,<sup>55</sup> and many counties had to consolidate precincts due to poll worker shortages. A post-primary survey of 1,000 Pennsylvania voters found that "I was worried about the COVID-19 virus" was the most common reason for not voting, and was the most common reason voters had voted by mail.<sup>56</sup>

51. Nearly 100,000 mail-in ballots in Pennsylvania were received too late to be counted in the June primary, over 60,000 of which were received in the three days following the primary.<sup>57</sup> Drop boxes provide a method to reduce the number of ballots not delivered to local elections offices on time.

52. In the June 2020 primary, nearly 1.5 million mail ballots were cast—

17 times the number that were cast by mail in 2016.<sup>58</sup> In my opinion, Pennsylvania

<sup>&</sup>lt;sup>54</sup> Lai, J. (May 7, 2020). Pennsylvania allows big reduction in poll workers for 2020 primary election to help counties during pandemic. Https://Www.Inquirer.Com. Retrieved August 20, 2020, from https://www.inquirer.com/politics/election/pennsylvania-2020-primary-poll-worker-reduction-20200507.html.

<sup>&</sup>lt;sup>55</sup> Jerry Yan, et al., op cit. p. 12.

<sup>&</sup>lt;sup>56</sup> Cao, et al. (August 20, 2020), "Pennsylvania Election Analysis" at 24, 28. See https://healthyelections.org/sites/default/files/2020-08/Pennsylvania%20Memo.pdf (last accessed September 6, 2020).

<sup>&</sup>lt;sup>57</sup> Data is available on the Pennsylvania government website. *See 2020 Primary Election Mail Ballot Requests Department of State*, OPEN DATA PENN., https://data.pa.gov/Government-Efficiency-Citizen-Engagement/2020-Primary-Election-Mail-Ballot-Requests-Departm/853w-ecfz/data (last visited Sept. 5, 2020).

<sup>&</sup>lt;sup>58</sup> Kathy Boockvar, June 22, 2020. "Historic primary paves way for successful general election in Pennsylvania." Brookings Institute Blog.

https://www.brookings.edu/blog/fixgov/2020/06/22/historic-primary-paves-way-for-successful-general-election-in-pennsylvania/.

needs to prepare for a similarly high rate of mail-in ballot usage in November, and in an election that is forecast to have historically high turnout.

# VI. Conclusions

53. My opinion is that the Commonwealth of Pennsylvania should continue to provide drop boxes as a way for voters to return vote by mail ballots. A review of the scientific evidence shows that drop boxes are a safe and secure method of returning a vote by mail ballot, and provide a "no-touch" method of return that is especially important for an election conducted in the midst of a pandemic. Drop boxes are used in almost every state that has significant numbers of vote by mail ballots. Drop boxes are the most preferred method of ballot return in the full vote by mail states. Scientific research shows that drop boxes can increase turnout and increase public confidence in the safety and security of the elections system.

I hereby certify that the foregoing statements are true and correct to the best of my own personal knowledge, information, and belief. This verification is made subject to the penalties of 18 Pa.C.S. § 4904 relating to unsworn falsification to authorities.

Executed this \_\_\_\_ day of September, 2020 in \_\_\_\_\_.

Paul Gronke, PhD

# **APPENDIX** A

# Paul Gronke

**EDUCATION** 

**UNIVERSITY OF MICHIGAN** *Doctor of Philosophy*, Political Science

**UNIVERSITY OF ESSEX** *Master of Arts*, Western European Politics

UNIVERSITY OF CHICAGO Bachelor of Arts, Political Science, with honors

EMPLOYMENT

# REED COLLEGE

Professor of Political Science

- Teach introductory and upper-level classes focusing on American politics, including elections, political behavior, political institutions and political research methods.
- Publish peer-reviewed articles, book chapters, and research reports.
- Research support from foundations, contracts, consultancies and internal competitive grants.
- Granted tenure in 2004; promoted to full professor in 2008.

# Appalachian State University

Daniel B. German Endowed Visiting Professor of Political Science

- Inaugural holder of endowed visiting professorship.
- Teach research courses on elections, elections research, U.S. Congress, research methods.
- Lead departmental symposia and sponsor visiting lectures.

# THE DEMOCRACY FUND

Strategic Consultant, Elections Program

- Engaged in systems mapping and strategic planning for multiyear grant making and research initiative.
- Provide scientific and methodological evaluations of grantee requests and report.
- Connect the program to a network of academics with interests in election administration and reform.

# **Pew Charitable Trusts**

Consultant, Elections Initiatives of the Pew Center on the States

- Provided empirical analysis and write reports for ongoing projects pertaining to election integrity and equity.
- Consulted on strategic initiatives, review grant proposals, provide methodological and substantive quality control review.
- Helped organize gatherings and conferences, manage inquiries from media and other stakeholders.

# **D**UKE UNIVERSITY

Assistant Professor of Political Science

- Taught undergraduate and graduate classes focusing on American politics, including public opinion, legislative behavior, political parties, and graduate statistical methods (first course). Received campus-wide teaching award in 1996.
- Published a university press book, peer-reviewed articles, and book chapters.

# Affidavit of Paul Gronke, Ph.D. - Appendix A 29

3203 SE Woodstock, Blvd., Eliot 424 Portland, OR 97202 (503) 517-7393 gronke@reed.edu

> Ann Arbor, MI December 1993

> > Essex, UK June 1984

Chicago, IL June 1982

Portland, OR

Boone, NC August 2014-May 2016

January 2001 - Present

Washington, DC

September 2015 – ongoing

Durham, NC

September 1991 – December 2000

# nd referm

Washington, DC September 2007 – November 2011

- Received research support from the National Science Foundation, the Ford Foundation, and internal grants. ٠
- Instructor from September 1991-August 1993; Assistant Professor from September 1993-December 2000. •

#### **ADMINISTRATIVE POSITIONS**

#### FOUNDER AND DIRECTOR

Early Voting Information Center

- Established a non-partisan center conducting research into and disseminating information about early in-person and absentee balloting.
- Manage public outreach, recruit and supervise 2-4 staff members (undergraduate and post-baccalaureate researchers), manage budgets, work to attract continuing external support.
- Raised more than \$750,000 in external support since 2005.

#### **CO-EDITOR**

#### Co-Editor, PS: Political Science and Politics

- Appointed interim co-editor of flagship journal of the American Political Science Association, the world's largest scholarly society for political scientists.
- Tasked with modernizing content, determining new content delivery methods, engaging readership via social media, along with soliciting articles and conducting all other editorial duties.
- Helped to hire, train, and supervise a new managing editor. ٠
- Reappointed by the APSA Council to a second four year term from 2018-2021.

#### Editor

Election Law Journal

- Responsible for reviewing incoming articles, hire and supervise an editorial assistant to assign reviewers and meet deadlines, and evaluating reviews and articles for acceptance or rejection.
- First social scientist chosen to co-edit the only peer-reviewed interdisciplinary journal covering election law, election administration, and election policy.
- Co-editor 2010-2013, primary editor 2014-present.

#### **DEPARTMENT CHAIR**

Department of Political Science

- Responsible for curricular planning, committee assignments, student progress toward degree, staff hiring and supervision, and other departmental governance for a five-member department and 30-40 majors (juniors and seniors).
- Successfully expanded faculty from 4 to 7 members; worked with department and college to update and reform department requirements and curriculum; doubled departmental majors and expanded class enrollments.
- Budgetary planning and management of a \$23,000 department budget and seven endowed funds with annual income exceeding \$70,000.
- With Economics Department, responsible for campus-wide student-faculty summer research program, 3-5 • awards each summer.

#### DIRECTOR

Public Policy Lecture Series

Reed College 2001-2006, 2008-2011, 2012-14, Fall 2016

- Created a campus wide lecture series to bring nationally and internationally recognized speakers on domestic and international affairs to campus. Identify important areas of public and campus concern; identify potential speakers; and collaborate on public outreach.
- Empowered students by creating a student coordinating committee; continue to work with student committee to manage series; create student-run events with each speaker.

2005-present

August 2014-present

Reed College

Reed College

2001-2004; 2005-2007; 2009-2010, 2012-2014

2010-2017

- Responsible for evaluating the feasibility of a major new interdisciplinary program. •
- Ad Hoc Committee on Environmental Studies, Reed College

  - Worked with external review committee to evaluate program proposal and review recommendations. •
  - Helped build campus consensus for a new program, which successfully passed faculty in 2008. •

# **GRANTS, CONTRACTS, AND CONSULTANCIES**

# **EXTERNAL COMPETITIVE GRANTS**

National Science Foundation. Award #1727458 "Election Sciences Workshop." June 15, 2017-November 30, 2018. Awarded in collaboration with Portland State University (#1727461). Total award: \$49,783.

#### Affidavit of Paul Gronke, Ph.D. - Appendix A 31

Manage \$20,000 annual lecture series budget; hire and manage part-time lecture coordinator. •

# DIRECTOR

Public Policy Workshop

- Maintain a divisional student research and thesis writing workspace (6 workstations, group meeting space, computer projection).
- Responsible for hiring and supervising part-time facility manager, coordinating with divisional members to assure identifying new computational and statistical needs for students and faculty, and assuring continuing support from the College.

# **OTHER GOVERNANCE ACTIVITIES**

# **CO-CHAIR**

Ad Hoc Committee on Governance

- Lead an effort to improve faculty meetings, propose changes to faculty elections, evaluate the structure of the Dean's Office and reform major governance committees in order to reinvigorate faculty governance.
- Appointed by the President of the College. •

# MEMBER

Foundational Curriculum Working Group, Reed College Strategic Planning

- Responsible for analyzing materials, soliciting community feedback, and writing a working group report about Reed's first year curriculum as part of the College wide strategic planning process.
- Selected by Dean of the Faculty. •

# MEMBER

# Dean of the College Search Committee, Reed College

- Responsible for working with President and committee to write a job description, identify candidates, evaluate nominations, and build consensus among the President, Committee on Advancement and Tenure, and the campus community to select a candidate.
- Selected as committee secretary.
- Chosen for membership by Committee on Advancement and Tenure and President of the College.

# MEMBER

Committee on Academic Policy and Planning, Reed College

- Elected as a member of the primary faculty governance committee.
- Responsible for long-range strategic planning, reviewing major college curricular initiatives and monitoring ongoing curricular matters, overseeing and reviewing departmental self-evaluations, and allocating tenure track and visiting faculty positions.

# MEMBER

2009-2010

2006-2007

2004-2006

2017-2018

2001-02, 2005-present

Reed College

2013-2014

Federal Voting Assistance Program. "Trend Analysis in UOCAVA Voting." September 2012-August 2013. \$90,000.

- Pew Charitable Trusts. "Diagnosing Residual Voting: A Comprehensive Approach." October 2007-August 2009. \$137,000. With Kimball Brace and Charles Stewart.
- Carnegie Foundation of New York. "Extending the Election Day Survey." June-December, 2006. \$17,000. (Matching funds from AEI/Brookings Election Reform Project: \$4000).

Mellon Foundation, Summer Faculty Research Grant, "The Early Voting Information Center." Summer 2005. \$8000.

- Mellon Foundation: Summer Teaching Conference "Integrating Quantitative Methods in Social Science Classes." Summer 2005. \$12,000.
- National Science Foundation Research Experiences for Undergraduates (REU) Program Award, \$5000, July 1999-June 2000.
- National Science Foundation. "Consensus, Volatility, and Uncertainty in Presidential Approval." May 1, 1998-April 20, 2000. \$20,000.

"Governing a Volatile Public." Howard Foundation Fellowship (December, 1996). Awarded honorable mention.

Ford Foundation Course Development Grant, "The Internet and Political Participation," Spring 2000 (\$5000).

Ford Foundation Grants for Undergraduate Mentoring in Political Science (1998-2000, \$3000, with Carrie Liken; 1996-1998, \$3000, with Kelly Jade Davis)

#### CONSULTANT AND CONTRACT WORK

- State of Oregon, Division of Elections, PO-16500-405. "Oregon Elections Performance Audit." \$50,000. With Dr. R. Michael Alvarez, California Institute of Technology.
- The Democracy Fund, Elections Program. Scientific Consultant to the Elections Team. September 2015-ongoing.
- Federal Voting Assistance Program. "Survey Validation Study Contract HHSP233201200040C." Subcontractor for SBG Technology Solutions. January-August 2013.
- Pew Center on the States, Elections Initiatives. "WEVOTE: A Web-Based Early Voting Optimization Tool." Awarded to Reed College and EVIC. Oct. 2010-March 2011. \$84,000.
- Maryland Department of Legislative Services. Maryland Voting Systems Study. Subcontractor to the Research Triangle Institute. August 2010-December 2010. \$6500.
- Pew Center on the States, Election Initiatives. Academic Consultant and Policy Advisor. Awarded to the Reed Institute and EVIC. September 2009-August 2010. \$130,290.
- State of Oregon, Division of Elections. Implementation of Redistricting Utilizing the Oregon Centralized Voter Registration System (RFP #165-1045-09). Paul Gronke and EVIC were academic consultants to the Gartrell Group, Inc. (Primary contractor). October 2009-June 2010. \$25,000.
- Pew Charitable Trusts. Quality Control and Validation Process. Reed Institute and EVIC. June 2009–August 2009. \$36,900.
- Pew Charitable Trusts. Consultant and Policy Advisor to the Elections Initiative of the Pew Center on the States. Awarded to the Reed Institute and the Early Voting Information Center. September 2007–August 2009. \$206,000.
- Election Assistance Commission. The 2008 election administration and voting survey. EVIC was a subcontractor to the Research Triangle Institute. \$32,500.
- Election Assistance Commission. The 2006 election administration and voting survey data." Contract No. 1406-04-07-PO-67699. May–September 2007. \$186,825 total award; subcontract to Paul Gronke/EVIC for \$40,000.

#### EXPERT WITNESS WORK

League of Women Voters vs. The State of North Carolina, Civil Action No. 1:13-CV-660, 2014-2015 Ohio State Conference of the NAACP, et al. vs. John Husted, et al., Case No. 2:14-cv-00404, Summer 2014 State of Florida vs. The United States of America et al. Civil Action No. 11-1428. Summer 2012.

#### **INTERNAL COMPETITIVE GRANTS**

- Corbett-Goldhammer Summer Collaborative Research Grant. "The Noisy Reaction: How Reductions in Early Voting Opportunities Impacts Citizen Enfranchisement." With Jacob Canter, Summer 2013.
- Corbett-Goldhammer Summer Collaborative Research Grant. "American Anti-Muslim Attitudes." With Rebecca Traber, Summer 2011.
- Corbett-Goldhammer Summer Collaborative Research Grant. "The Data for Democracy Report." With Bailey Schreiber, Summer 2008 (\$10,000).
- Michael and Carole Levine Foundation. "Early Voting Reforms in America." \$10,500. 2007-08.
- Corbett-Goldhammer Summer Collaborative Research Grant. "Trust but Verify collaborative writing project." With Avery Ucker, Summer 2006 (\$10,000).
- Michael Levine Fund for Faculty Research, \$8,000 (2003-4).
- Corbett-Goldhammer Summer Collaborative Research Grant. "Voting Early, Voting Smart? America's Experience with Early Voting." With Peter Miller. Summer 2004 (\$10,000).
- Corbett-Goldhammer Summer Collaborative Research Grant: "Building a Cross-Sectional Time Series Dataset for Presidential Approval Research." With Joshua Simon. Summer 2003 (\$10,000).
- Corbett-Goldhammer Summer Collaborative Research Grant. "Disdaining the News: Changing Public Attitudes Towards the News Media." With Aaron Rabiroff. Summer 2002 (\$9,000).
- Stillman-Drake Summer Research Grant. "Presidential Honeymoons: A Motivational Approach." Summer 2001 (\$1,200).
- Center for Instructional Technology Course Development Grant, Spring 2000. "The Internet, Public Policy, and Political Participation." \$2,000. Awarded for web based course development for a series of public policy and political science undergraduate courses.
- Instrumentation Grant, 1998-9 (\$6000).
- Arts and Sciences Research Council Grant, 1999-2000 (\$2,000), 1998-9 (\$2,000). 1997-8 (\$2,500). Additional Council grants awarded in 1994, 1995, 1996.

#### HONORS, AWARDS, AND FELLOWSHIPS

- Daniel B. German Visiting Endowed Professorship, Department of Government and Justice Studies, Appalachian State University, 2014 and 2015 academic years.
- Competitive Paid Leave Award, Reed College, Spring 2008 (leave for one semester)
- Competitive Paid Leave Award, Reed College, Fall 2004 (leave for one semester)

Nominee, Eliza and Joan Gardner Howard Fellowship, 2003-4

Fellow, Joan Shorenstein Center for Press and Politics, Harvard University, Spring 2001 (declined)

Richard K. Lublin Distinguished Award for Teaching Excellence, 1995-6

Nominee, Duke University Alumni Distinguished Teaching Award, 1999

Nominee, Rowman-Littlefield Award for Innovative Teaching, 1996-7, 1997-8

Horace H. Rackham Dissertation Fellowship, 1990

Gerald R. Ford Dissertation Fellowship, 1989-1990

Horace H. Rackham Predoctoral Dissertation Fellowship, 1988-1989

#### **BOARD MEMBERSHIP**

Advisory Board Member, MIT Election Data and Science Lab. 2016 - present. National Advisory Board Member, Vote @ Home Institute. 2018 - present. Advisory Council Member, Oregon Values and Beliefs Center, 2019 - present.

#### PUBLICATIONS

#### BOOKS

Gronke, Paul. 2000. Settings, Campaigns, Institutions, and the Vote: A Unified Approach to House and Senate Elections. Ann Arbor, MI: University of Michigan Press.

#### ARTICLES IN REFEREED JOURNALS

- Gronke, P., Hicks, W. D., McKee, S. C., Stewart, C. and Dunham, J. 2019. "Voter ID Laws: A View from the Public." Social Science Quarterly. 100: 215-232.
- Bowler, Shaun, Thomas Brunell, Todd Donovan, and Paul Gronke. 2015. "Election Administration and Perceptions of Fair Elections." *Electoral Studies*. 38(2015): 1-9.
- Gronke, Paul and Peter Miller. 2012. "Voting by Mail and Turnout in Oregon: Revisiting Southwell and Burchett." *American Politics Research*. 40(6): 976-997.
- Gronke, Paul. 2012. "When and How to Teach Election Law in the Undergraduate Classroom." *St. Louis Law Review* 56(3): 735-746.
- Gronke, Paul and Darius Rejali. 2010. "U.S. Public Opinion on Torture, 2001-2009." PS: Political Science and Politics 43:437-444.
- Gronke, Paul. 2008. "Early Voting Reforms and American Elections." William and Mary Law Review. 17(2): 423-451.
- Gronke, Paul, Eva Galanes-Rosenbaum and Peter Miller. 2008. "Convenience Voting." *Annual Review of Political Science*. Volume 11: 437-455.
- Gronke, Paul and Daniel Krantz Toffey. 2008. "The Psychological and Institutional Determinants of Early Voting." Journal of Social Issues. 64(3): 503-524.
- Gronke, Paul, Eva Galanes-Rosenbaum, and Peter Miller. 2007. "Early Voting and Turnout." PS: Political Science and Politics 40(4): 639-645.
- Gronke, Paul and Timothy E. Cook. 2007. "Disdaining the Media? Americans' Changing Attitudes Toward the News." *Political Communication*. 24(3): 259-281.
- Cook, Timothy E. and Paul Gronke. 2005. "The Skeptical American: Revisiting the Meanings of Trust in Government and Confidence in Institutions." *Journal of Politics*. 67(3).
- Gronke, Paul and Brian Newman. 2003. "From FDR to Clinton, from Mueller to ?? A Field Essay on Presidential Approval." *Political Research Quarterly*. 56(4): 501-12.
- Gronke, Paul, Jeffrey Koch, and J. Matthew Wilson. 2003. "Follow the Leader? Presidential Approval, Perceived Presidential Support, and Representatives' Electoral Fortunes." *Journal of Politics* 65(3): 785-808.

Gronke, Paul and John Brehm. 2002. "History, Heterogeneity, and Presidential Approval." Electoral Studies 21:425-452

- J. Matthew Wilson and Paul Gronke. 2000. "Concordance and Projection of Representative's Roll Call Votes." Legislative Studies Quarterly. XXV: 445-67.
- Gronke, Paul and J. Matthew Wilson. 1999. "Competing Redistricting Plans as Evidence of Political Motives: The

North Carolina Case." American Politics Quarterly, 27: 2 (April) 147-176.

- Alvarez, R. Michael and Paul Gronke. 1996. "Constituents and Legislators: Learning About the Gulf War Resolution." Legislative Studies Quarterly, February, 1996: p. 105-128.
- Gronke, Paul. 1992. "Overreporting the Vote in the 1988 Senate Election Study: A Response to Wright." Legislative Studies Quarterly, February, 1992: p. 113-129.
- Kinder, D.R., G. Adams, and P. Gronke. 1989. "Economics and Politics in 1984." *American Journal of Political Science*, 33: 491-515.
- Page, B.I., R.Y. Shapiro, P. Gronke, and R. Rosenberg. 1985. "Constituency, Party, and Representation in Congress." *Public Opinion Quarterly.* 48: 741-756.

#### **BOOK CHAPTERS**

- Gronke, Paul and Peter Miller. 2019. "Early Voting in America: Public Usage and Public Support". In Ben Griffith (ed), *America Votes!* 4<sup>th</sup> Ed. Cleveland OH, Lachina Publishing.
- Gronke, Paul and Jacob Canter. 2016. "Convenience Voting and American Election Law." In Ben Griffith (ed), *America Votes! A Guide to Election Law and Voting Rights 2<sup>nd</sup> Ed.* Cleveland OH, Lachina Publishing.
- Gronke, Paul. 2015. "Voter Confidence as a Metric of Election Performance." In Barry Burden and Charles Stewart III (eds), *Measure of American Elections*. New York: Cambridge University Press.
- Gronke, Paul. 2014. "Early Voting After Bush v. Gore." In R. Michael Alvarez and Bernard Grofman (ed), Election Administration in the United States A Decade After Bush v. Gore. New York: Cambridge University Press.
- Miller, Peter, Paul Gronke, and Darius Rejali. 2014. "Torture and Public Opinion: The Partisan Dimension." In Tracy Lightcap and James Pfiffner (eds), *Examining Torture: Empirical Studies of State Repression*. New York: Palgrave.
- Gronke, Paul. 2012. "Early Voting: The Quiet Revolution in American Elections." In Matthew Streb (ed), Law and Election Politics: The Rules of the Game. Boulder, CO: Lynne Riener.
- Gronke, Paul, James Hicks, and Timothy E. Cook. 2009. "Trust in Government and in Social Institutions." In Norrander and Wilcox (eds), Understanding Public Opinion. Washington DC: CQ Press.
- Gronke, Paul and Brian Newman. 2009. "Public Evaluations of Presidents." In George Edwards III and William Howell (eds), *The Oxford Handbook of the American Presidency*, pp. 232-253. New York: Oxford University Press.
- Gronke, Paul, Eva Galanes-Rosenbaum, and Peter A. Miller. 2008. "From Ballot Box to Mail Box: Early Voting and Turnout." In Cain, Tolbert, and Donovan (eds), *Democracy in the States: Experiments in Elections Reform*. Washington D.C.: Brookings Institute Press.
- Gronke, Paul and Eva Galanes-Rosenbaum. 2008. "The Growth of Early and Non-Precinct Place Balloting: When, Why, and Prospects for the Future." In Ben Griffith (ed), *America Votes! A Guide to Election Law and Voting Rights*. Cleveland, OH: Lachina Publishing.
- Gronke, Paul. 2006. "Public Opinion" and "The Election Campaign." In World Book Encyclopedia. Chicago, IL: World Book Publishing.
- Feaver, Peter D., Paul Gronke, and David Filer. 2004. "The Reserves and The Guard: Standing in the Civil-Military Gap Before and After 9/11." In Reserve Component Contributions to the All Volunteer Army. Washington, DC: National Defense University.
- Gronke, Paul. 2003. "Politics." In Bigdoli, Hossein (ed), *The Internet Encyclopedia*. New York: John Wiley. (Peer reviewed contribution)
- Gronke, Paul. 2003. "The Election Campaign." In World Book Encyclopedia. Chicago, IL: World Book Publishing.
- Gronke, Paul and Peter D. Feaver. 2001. "Uncertain Confidence: Civilian and Military Attitudes about Civil-Military Relations." In Richard Kohn and Peter D. Feaver, *Soldiers and Civilians: The Civil-Military Gap and American National Security.* Cambridge, MA: MIT Press.

#### POLICY REPORTS (PRIMARY AUTHOR OR CO-AUTHOR)

- "Stewards of Democracy: The Views of American Local Election Officials." June 2019. With Natalie Adona, Paul Manson and Sarah Cole. Democracy Fund, Washington DC. Report URL: <u>https://www.democracyfund.org/publications/stewards-of-democracy</u>
- "Understanding the Voter Experience: The Public's View of Election Administration and Reform." October 2018. With Natalie Adona. Democracy Fund, Washington DC. Report URL: <u>https://www.democracyfund.org/publications/understanding-the-voter-experience-the-publics-view-of-elections</u>
- "Who Votes with Automatic Voter Registration? Impact Analysis of Oregon's First-In-The-Nation Program." June, 2017. With Rob Griffin, Tova Wang, and Liz Kennedy. The Center for American Progress, Washington D.C. Report URL:

https://www.americanprogress.org/issues/democracy/reports/2017/06/07/433677/votes-automatic-voter-regis tration/

- "Survey Validation Study." August 15, 2013. With Lonna Atkeson and Michael McDonald. Report prepared for the Federal Voting Assistance Program, Washington DC.
- "Residual Voting in Florida." October 2010. Washington, DC: The Pew Charitable Trusts. Available online at http://www.pewcenteronthestates.org/uploadedFiles/Florida\_Residual\_Vote\_report.pdf?n=3568.
- "Data For Democracy: Improving Elections Through Metrics and Measurements." November, 2008. Washington, DC: The Pew Charitable Trusts. Available online at http://www.pewcenteronthestates.org/report\_detail.aspx?id=46600. Organize conference that preceded this report; Oversaw editing and production of report.
- "The 2006 Election Day Survey." November 2007. With Kimball Brace and Clark Bensen, submitted to the Election Assistance Commission.
- "Uniformed and Overseas Citizens Absentee Voting Act: UOCAVA. Survey report findings." September 2007. With Kimball Brace and Clark Bensen, submitted to the Election Assistance Commission.
- "The Impact of the National Voter Registration Act: A Report to the 110th Congress." June 30, 2007. With Kimball Brace and Clark Bensen, submitted to the Election Assistance Commission.
- "Ballot Integrity under Oregon's Vote by Mail System." June 15, 2005. Prepared for the Commission on Federal Election Reform, co-chaired by President Jimmy Carter and the Honorable James S. Baker III.

#### POLICY REPORTS: CONTRIBUTED MATERIALS, RESEARCH, AND WRITING

- "Maryland Voting Systems Study." December 2010. Prepared by Research Triangle International for the Maryland Department of Legislative Services.
- "Findings and Recommendations for Integrating GIS into the Oregon Central Voter Registration System." May 2010. With Bryce Gartrell, Ben McLeod, Anthony Iaccarino, and Tim Flez. Submitted to the Division of Elections, State of Oregon.
- "The 2008 Election Day Survey." 2009. Coauthored as part of a subcontract with the Research Triangle Institute and the EAC.
- "Uniformed and Overseas Citizens Absentee Voting Act: UOCAVA Survey Report Findings." 2009. Coauthored as part of a subcontract to the Research Triangle Institute and the EAC.
- "The Impact of the National Voting Registration Act: A Report to the 111th Congress." 2009. Coauthored as part of a subcontract to the Research Triangle Institute and the EAC.

#### ADDITIONAL WRITINGS AND RESEARCH ACTIVITIES

#### **B**LOGS

- "Election Security and the 2016 Voter Experience." December 2, 2016. http://www.democracyfund.org/blog/entry/election-security-and-the-2016-voter-experience
- "Americans have become much less confident that we count votes accurately." August 10, 2016. <u>https://www.washingtonpost.com/news/monkey-cage/wp/2016/08/10/are-u-s-voters-confident-in-their-electo</u> <u>ral-system-yes-and-no/</u>
- "More states are registering voting automatically. Here's how that affects voting." June 16, 2016. <u>https://www.washingtonpost.com/news/monkey-cage/wp/2017/06/16/more-states-are-registering-voters-automatically-heres-how-that-affects-voting/</u>

Ongoing blogging, http://earlyvoting.net

#### **Op-Eds, Textbooks, Other Writing**

Textbook essays, "Applying the Principles: Politics in the News." Sixteen essays analyzing news stories for the 10<sup>th</sup> edition of Lowi, Ginsberg, and Shepsle *American Government*. New York: W.W. Norton, 2007.

Book Review. Dennis Thomspon, Just Elections. Congress and the Presidency.

- Textbook essays, "Applying the Five Principles of Politics" Sixteen analytical essays for the 9<sup>th</sup> edition of Lowi, Ginsberg, and Shepsle, *American Government*. New York: W.W. Norton. Summer 2005.
- Textbook essays, "Behind the Lines: Understanding the News." Sixteen essays analyzing news stories for the 9<sup>th</sup> edition of Lowi, Ginsberg, and Shepsle, *American Government*. New York: W.W. Norton. Summer 2005.
- OpEd, "Electing to Change How We Vote; Use of mail-in ballots -- however cheap and convenient they might be -- could erode democratic choice." *Los Angeles Times*, Editorial, October 16, 2003.
- Book Review, Bartels, Larry and Lynn Vavreck (eds). *Campaign Reform*. In *American Political Science Review* 95(December 2001).

Book Review, Krasno, John. Challengers, Competition, and Reelection. In Congress and the Presidency 1996 (Fall).

#### WORKING AND CONFERENCE PAPERS (PREVIOUS 10 YEARS)

- 2020. With Jay Lee. "The Problems of Minimal Support: Considerations for an Establishment Survey of Local Election Officials." Paper presented at the Annual Meeting of the Southern Political Science Association, San Juan, PR.
- 2020. With Paul Manson and Natalie Adona. "Staffing the Stewards of Democracy: the Demographic and Professional Profile of America's Local Election Officials." Paper presented at the Annual Meeting of the Southern Political Science Association, San Juan, PR.
- 2019. With Ellen Seljan and Matthew Yancheff. "Happy Birthday! You Get To Vote!" Paper presented at the Annual Meeting of the American Political Science Association, Washington, DC.
- 2019. With Christopher Mann and Natalie Adona. "Framing Automatic Voter Registration: Partisanship and Public Understanding of Automatic Voter Registration." Paper presented at the Annual Meeting of the Midwest Political Science Association, Chicago, IL.
- 2019. With Evan Crawford and Paul Manson. "Surveying Local Election Officials in the United States: Methodological Considerations." Paper presented at the Annual Conference of the Southern Political Science Association, Austin, TX.
- 2018. With Robert Griffin, Eric McGhee, and Mindy Romero. "AVR, Voter Registration, and Voter Turnout in Oregon." Paper presented at the Annual Meeting of the American Political Science Association, Washington, DC.
- 2018. With Jack Santucci. "Can We Bolster Voter Confidence through Election Administration?" Paper presented at the Annual Meeting of the Midwest Political Science Association, Chicago, IL.
- 2017. With Robert Griffin, Eric McGhee, and Mindy Romero. "Voter Registration and Turnout under `Oregon Motor Voter': A Second Look." Paper presented at the Election Sciences, Reform, and Administration Conference,

Portland OR, July 2017. Revised version presented at the Annual Meeting of the American Political Science Association, San Francisco, CA, September 2017.

- 2017. With Bryant, Lisa. "A First Look at Voter Confidence and Trust in American Elections in 2016." Paper presented at the Annual Meeting of the Midwest Political Science Association, Chicago IL.
- 2015. With Phillip Ardoin and Martha Kropf. "Town vs. Gown: College Students and Voting in College Towns." Paper presented at the Annual Meeting of the Midwest Political Science Association, Chicago IL.
- 2015. With William D. Hicks, Seth C. McKee, Charles Stewart, and James Dunham. "Voter ID Laws: A View from the Public." Paper presented at the Annual Meeting of the Midwest Political Science Association, Chicago IL.
- 2013. "Are we confident in voter confidence? Observations on perceptual measures of electoral integrity." Paper presented at Workshop of the Electoral Integrity Project, Cambridge, MA, June 3, 2013.
- 2013. With Charles Stewart III. "Early Voting in Florida." Paper presented at the Annual Meeting of the Midwest Political Science Association, Chicago, IL.
- 2012. With Jacob Canter. "Voter Confidence and the Quality of the Vote Count." Paper presented at the Measuring Democracy Conference, Massachusetts Institute of Technology, Boston MA, June 2012.
- 2011. With Kambiz GhaneaBassiri. September, 2011. "Explaining American Anti Muslim Opinion." Paper presented at the "Muslims in the US and Europe: Islamophobia, Integration, Attitudes, and Rights." Indiana University, Bloomington, IN.
- 2011. With Darius Rejali and James Hicks. "Explaining American Support for the use of Torture." Paper presented at the Annual Conference of the International Society for Political Psychology. Istanbul, Turkey.
- 2011. With James Hicks. "Bush v. Gore: A Critical Juncture in Early Voting?" Paper presented at "Bush v. Gore: Ten Years After." Center for the Study of Democracy, University of California, Irvine, April 16-17, 2011.
- 2009. With James Hicks. "Early Voting: The Rhetoric and The Reality of Election Reform." Paper presented at the Annual meeting of the Midwest Political Science Association.
- 2009. With Peter Miller. "Voting by Mail in Washington and Turnout." Working paper.

#### SYMPOSIA, COLLOQUIA, NOTABLE SPEAKING ENGAGEMENTS

#### MEDIA AND OTHER PUBLIC APPEARANCES

Election night analyst, KATU-TV, May 17-18, 2016.

Invited panelist, Portland City Club Event "The Supreme Court Speaks on Marriage Equality". June 28, 2013

Moderator, Portland City Club Debate for Metro Council President. October 2010.

Invited to speak in opposition, City Club Debate on Measure 65 (Top Two Primary), October 2008.

Thousands of appearances in press outlets as an expert on early voting, election reform, and elections.

- Television appearances include regular appearances on "Your Voice: Your Vote" (KATU-TV, Portland OR); 2012 and 2010 election night commentary (KGW-TV, Portland OR), and numerous on camera interviews on local and national outlets, including KGW, KATU, NBC Today Show, the O'Reilly "Factor", and other local and regional newscasts.
- Radio commentary on Oregon Public Radio's "Think Out Loud," interviews on NPR national and regional news programs (All Things Considered, Weekend Edition, etc.), and many other regional and national outlets

#### ELECTION REFORM AND ADMINISTRATION ACTIVITIES

Invited Speaker, Auburn Symposium on Election Administration, Auburn, AL. Oct. 14-16, 2019.

Invited Speaker, California Association of Clerks, Recorders, and Elections Officials, San Francisco, CA, July 25, 2019. Invited Speaker, Western States Elections Conference, Stevenson, WA, July 7th, 2019. Invited Panel Participant, Election Assistance Commission's Election Data Summit, Washington D.C., June 27, 2019.

- Invited Speaker and Breakout Group Leader, Expanding Voting Options Conference, Washington D.C., June 20th, 2019.
- Invited Speaker, "How Data and Academic Research Can Improve Election Administration." Oregon County Clerk Winter Meeting, February 2018.
- Invited Speaker, "Increasing Voter Turnout -the Academic Perspective." NASED, August 24, 2017.

Invited speaker, Election Policy Summit, Pennsylvania Department of State. "Early Voting/No Excuse Absentee Voting." April 19, 2017.

- Invited speaker and participant, U.S. Election Assistance Commission Election Data Summit, August 12-13, 2015.
- Panelist and Moderator, "Oregon's Automatic Voter Registration and Other Registration Initiatives," National Conference of State Legislature Legislative Summit, Seattle, WA, August 3, 2015.
- Expert Witness, Presidential Commission on Election Administration, Denver, CO, August 8, 2013 .
- Invited speaker, Pew Center on the States' Election Initiatives "Voting in America 2012 Post-Election Summit," Washington DC, Dec. 10-11, 2012.
- Invited speaker, National Association of County Officials annual meeting, Portland, OR July 2011.
- Invited speaker, National Association of Clerks, Recorders, and County Officials annual meeting, Portland, OR July 2011.
- Witness, DC City Council Subcommittee on Government Operations and the Environment, Hearing on the election readiness for the April 26, 2011 special election, January 19, 2011.
- Invited speaker, Pew Center on the States Journalists' briefing for the 2010 election, San Francisco, CA. October 2010.
- Invited participant, DEMOS Planning Conference, Washington DC. September 4, 2010.
- Invited participant and steering committee member, "Performance Index of Elections," an initiative of the Pew Center on the States, Providence, RI, July 2010-ongoing.
- Invited participant, DEMOS Conference on Election Day Registration, Chicago, IL. April 2010.
- Organizer and Host, "Time Shifting the Vote: The Early Voting Revolution in America." Conference organized by the Early Voting Information Center at Reed College under the auspices of the Pew Center on the States. The conference brought thirty-five academic experts, election officials, and policy makers together to present research and craft policy recommendations. October 9-10, 2009.
- Invited Speaker, Maryland Association of Election Officials. Rocky Gap, MD. June 7-9 2009.
- Discussion Leader, AEI/Brookings Election Reform Project Conference on Election Reform. June 2, 2009.
- Committee member, 2008/2009 Study Group on the Future of Elections in Kansas. Office of the Kansas Secretary of State.
- Invited speaker, 2009 winter meeting of the National Association of Secretaries of State, Washington DC.
- Plenary speaker, panel leader, and panel organizer, "Voting in America: The Road Ahead." Conference organized by the Pew Charitable Trusts' Make Voting Work project. Washington, DC. December 8-10, 2008.
- Invited Speaker, "Making Elections Work: The Law and the Process After November." December 4, 2008 conference co-sponsored by the AEI/Brookings Election Reform project, the *Election Law Journal*, and the University of California Washington Center.
- Invited Speaker, Journalists Briefing in Preparation for the 2008 General Election. Democratic and Republican National Conventions. August and September 2008.
- Organizer, "Data for Democracy Conference." Conference sponsored by the Pew Center on the States. Washington, DC. May 2008.
- Invited Speaker, Journalists' Briefing in Preparation for the 2008 Primaries. Pew Charitable Trusts and electionline.org, San Francisco, CA. December 2007.

Invited participant and presenter. "The Growth of Early Voting: When, Why, and Prospects for the Future." Legislatures and Election Reform Institute, Aspen, CO. November 14-16, 2007.

Invited speaker, 2007 Summer Meeting of the National Association of Secretaries of State, Portland, OR.

Invited participant, Biannual Meeting of the Northwest Association of County Election Officials, Portland, OR. May 2006.

#### **ELECTION MONITORING**

With the OSCE Office for Democratic Institutions and Human Rights: Russia Presidential Election, Spring 2018 Ukraine Presidential Election, Summer 2014 Albania Parliamentary Elections, June 2013 Kyrgyzstan Presidential Elections, October 2011

#### OTHER ACADEMIC CONFERENCES AND INVITED LECTURES

- Co-Organizer and Convener, Inaugural Election Sciences, Reform, and Administration Conference. July 27-29, 2017. Portland State University and Reed College. <u>https://blogs.reed.edu/election-science/</u>
- Organizer, Election Sciences Working Group for the American Political Science Association Annual Meeting, Philadelphia, PA, 2016.
- Invited presenter, "Measures of American Elections Conference," Massachusetts of Technology, June 18-19. 2012.
- Invited participant and presenter. "Political Science in the Liberal Arts." AALAC Workshop, Amherst College, Amherst MA, November 11-12, 2011.
- Invited participant and presenter. "Muslims as Enemy? Explaining American Anti-Muslim Attitudes." Paper presented at the Islam in the Public Sphere Conference, WISER Center at the University of Washington, Seattle, WA. June 2011.
- Invited participant and presenter. "Bush v. Gore: Ten Years After." Center for the Study of Democracy, University of California, Irvine. April 16-17, 2011.
- Invited participant and presenter. "Democracy Index Conference." Moritz School of Law, Columbus, OH. September 28-29, 2007.
- Invited participant and presenter. "Academic Conference on Elections Research." AEI/Brookings Election Reform Project, Washington DC. May 18, 2007.
- Invited participant and presenter. "Early Voting and Technology." Caltech/MIT Voting Technology Project Vendor's Conference, Pasadena CA. March 13, 2007.
- Invited participant. "Conference on Election Reform." Conference sponsored by the AEI/Brookings Election Reform Project, Washington DC. May 23, 2006.
- Paper presenter and participant. "Early Voting and Progressive Mobilization." Presented at the Progressive Targeting Conference, sponsored by the Center for American Progress, Washington DC.
- Invited participant. "Vote by Mail: The Academic Perspective." Pew Conference on Vote by Mail and Campaign Conduct, Portland OR, November 2003.
- Invited Lecture. "Disdaining the Media: Changing American Attitudes Toward the News." University of Washington, April 2001.

# COLLEGE AND DEPARTMENTAL LEADERSHIP POSITIONS

Co-Chair, Ad Hoc Committee on Governance, 2017-18.

Chair, Reed College Institutional Review Board, 2016-17.

Member. Dean's Search Committee. 2009-10.

- Chair. Department of Political Science, Reed College. September 2001-August 2004; January 2005-August 2007; July 2009-2010
- Member (campus-wide elective position). Committee on Academic Planning and Policy. 2006-2007.
- Chair. tenure track Environmental Politics Search 2009-10; visiting American Politics Search 2006-7; tenure track IR/Comparative Search, 2005-6; visiting searches (various fields) 2009-10, 2005-6, 2003-4.
- Director. Reed Public Policy Workshop. 2001-2002; 2005-present
- Organizer and coordinator. Ducey and Munk-Darling International Affairs lecture series. 2002-2007 (http://web.reed.edu/public\_policy\_series), 2009-present
- Official Representative. Inter University Consortium for Political and Social Research. 2001-present.
- Elected member. Duke University Arts and Sciences Council. 1998-9.

#### OTHER INSTITUTIONAL AND DEPARTMENTAL ACTIVITIES

#### Campus wide lectures:

Post Election Roundtable for Parent/Family Weekend, November 2010 and November 2008.

Alumni Affairs and College Development:

Reed Reunions 2017:

Class of '67 Salon: "What Happened? And What Happens Next?"

Public Lecture: "Perspectives on the 2016 Election and Beyond"

Presentation and Discussion, "Collaborative Learning in the Age of Big Data"

Forum for Advancing Reed Lunch Speaker, September 17, 2016.

Reed Alumni Travel-Study Group Leader: LBJ and the Hill Country, April 2013 and April 2014 Major gifts outreach visit, Redmond WA, June 2011

Foster-Scholz Lecturer for the Foster-Scholz Club (Reed alumni living in Portland), 2004

"Reed on the Road" Alumni speakers series, Fall 2004 in Chicago and Washington DC

Reed alumni board national meeting, invited speaker, Fall 2004

Lecturer on American Politics and Campaigns, Duke University Alumni Program (1995-1999).

#### Trustee events:

- Participant on a roundtable discussion with Board of Trustees, "Impacts of the new administration on the academy", February 2017
- Moderator for a 2012 Spring Trustee Dinner Roundtable: Running for Office, with Mark Weiner '04 and Suzan Delbene '83
- Amanda Reed Lecture, Annual Trustee and CAT/CAPP Dinner. "Finding Snow White Among the Many Dwarves: The Modern Presidential Nomination System." October 5, 2007.

#### Student Affairs / Student Life:

- Organizer and Emcee, "How to Change the World (and Get Paid Doing It), Reed Student and Alumni Career Development
- Faculty Associate, Kilgo Quad (1998-1999), Trent Hall Dormitory (1999-2000)
  - Faculty in Residence, Pegram Dormitory (1995-98)

Committee membership (Reed College)

Institutional Research Board Co-Chair (2016-17); Facilities (2013-14); Staff/Faculty Benefits (2011-13); Emergency Planning (2010-11); Ad Hoc Committee to Establish an Environmental Studies Program at Reed College (2004-2006); Computing Policy Committee (2001-2004); Art Management (2001-2004); Ad Hoc One-Card (2001-02).

Committee membership (Duke University)

University-wide Teaching Award (1998-2000); Department Undergraduate Affairs (1992-94, 1999-2000).

# DISCIPLINARY AND SCHOLARLY LEADERSHIP POSITIONS

#### Professional Associations

American Political Science Association. Chair, Committee for the John Sullivan Award for Best Paper, 2016 Annual Meeting, Elections, Public Opinion, and Voting Behavior Organized Section Parliamentarian, 2016 All-Members Meeting Member, Executive Council of the American Political Science Association, 2011-13 Member, Audit Committee, 2011-2013 Member, Ad Hoc Committee on the Public Understanding of Political Science, 2010-11 Member, Trust and Development Committee, 2005-2006 Western Political Science Association. Council Member, 2005-2008. Organized Section on Elections, Public Opinion, and Voting Behavior (APSA) Communications Director and Council Member, 2003-2006 Conferences International Joint Conference on Electronic Voting (E-VOTE-ID). Program Committee, 2016 and 2015. Section head Teaching and Learning, 2014 Southern Political Science Association Annual Meeting Communications and the Media, 2007 Southern Political Science Association Annual Meeting Elections, 2004 Western Political Science Association Annual Meeting.

Tenure and promotion reviews

Tufts University; Stetson University; University of North Carolina, Charlotte; John Jay College; Bucknell College; University of Vermont; University of Utah; Randolph Macon College; Colorado College; Grinnell College

# REFERENCES

Available upon request.

Last Updated November 11, 2019

# **APPENDIX B**

# APPENDIX B

# Materials Reviewed

2018 Current Population Survey, Voting and Registration Supplement, Table 10, https://www.census.gov/data/tables/time-series/demo/voting-and-registration/p20-583.html, accessed February 26, 2020.

Aldrich, John H., 1993, "Rational Choice and Turnout." American Journal of Political Science 37(1).

Ashok, V., Feder, D., McGrath, M., & Hersh, E. (2016). The Dynamic Election: Patterns of Early Voting Across Time, State, Party, and Age. Election Law Journal: Rules, Politics, and Policy, 15(2).

Brady, Henry E., and John E. McNulty. 2011. "Turning Out to Vote: The Costs of Finding and Getting to the Polling Place." American Political Science Review 105(01).

Bree Baccaglini et al., "Rehearsal for November: An Analysis of Sixteen State Elections," August, 25, 2020, https://healthyelections.org/sites/default/files/2020-08/august\_primaries\_memo.pdf.

Cao, et al. (August 20, 2020), "Pennsylvania Election Analysis" at 24, 28. See https://healthyelections.org/sites/default/files/2020-08/Pennsylvania%20Memo.pdf, accessed September 6, 2020.

Carroll Doherty, Jocelyn Kiley, and Nida Ascher. April, 2020. "Two-Thirds of Americans Expect Presidential Election Will Be Disrupted by COVID-19." Report of the Pew Research Center, Washington DC, https://www.people-press.org/2020/04/28/two-thirds-of-americans-expect-presidential-election-will-be-disrupted-by-covid-19.

Centers for Disease Control, "Recommendations for Election Polling Locations." March 27, 2020; https://www.cdc.gov/coronavirus/2019ncov/community/election-polling-locations.html, accessed May 21, 2020.

Collingwood, L., McGuire, W., Gonzalez O'Brien, B., Baird, K., & Hampson, S. (2018). Do Drop Boxes Improve Voter Turnout? Evidence from King County, Washington. Election Law Journal: Rules, Politics, and Policy, 17(1).

Covidstates.org. May 22, 2020, "The State of the Nation: A 50-State COVID-19 Survey: Report."

Cox, E., Viebeck, E., Bogage, J., & Ingraham, C. (n.d.). "Postal Service warns 46 states their voters could be disenfranchised by delayed mail-in ballots." Washington Post. Retrieved August 20, 2020, from https://www.washingtonpost.com/local/md-politics/usps-states-delayed-mail-in-ballots/2020/08/14/64bf3c3c-dcc7-11ea-8051-d5f887d73381 story.html.

Cybersecurity and Infrastructure Security Agency (CISA) Elections Infrastructure Government Coordinating Council and Sector Coordinating Council's Joint COVID Working Group. "Ballot Drop Box". Available at https://www.eac.gov/sites/default/files/electionofficials/vbm/Ballot\_Drop\_Box.pd f.

Election Assistance Commission, "The Election Administration and Voting Survey, 2016 Comprehensive Report." (2016https://www.eac.gov/sites/default/files/eac\_assets/1/6/2016\_EAVS\_Compre hensive\_Report.pdf.

Emily Previti and Katie Meyer, May 23, 2020, "With PA's Polling Place Changes, Voters Might Get Conflicting Information on Where to Go June 2." PA Post; https://papost.org/2020/05/23/with-pa-s-polling-place-changes-votersmight-get-conflicting-information-on-where-to-go-june-2/.

"Excuses to Vote Absentee / By Mailed Ballot", Table 2 of "Voting Outside the Polling Place: Absentee, All-Mail and other Voting at Home Options", National Conference of State Legislatures, July 10, 2020; https://www.ncsl.org/research/elections-and-campaigns/absentee-and-earlyvoting.aspx/, accessed August 17, 2020.

Federal Voting Assistance Programs, "Military and Overseas Voter Empowerment Act." See https://www.fvap.gov/uploads/FVAP/Policies/moveact.pdf.

Fortier, John C. 2006. Absentee and Early Voting: Trends, Promises, and Perils. Washington, D.C.: AEI Press.

Fullmer, Elliott B. 2015. "Early Voting: Do More Sites Lead to Higher Turnout?" Election Law Journal: Rules, Politics, and Policy 14(2).

Gerber, A. S., Huber, G. A., & Hill, S. J. (2013). "Identifying the Effect of All-Mail Elections on Turnout: Staggered Reform in the Evergreen State." Political Science Research and Methods, 1(01).

Gimpel, J. G., and J. E. Schuknecht. 2003. "Political Participation and the Accessibility of the Ballot Box." Political Geography 22(5).

"Governor Wolf signs historic election reform bill including new mail-in voting." Press release from the Office of Governor Tom Wolf, October 31, 2019. See https://www.governor.pa.gov/newsroom/governor-wolf-signs-election-reform-bill-including-new-mail-in-voting/.

Haspel, Moshe, and H. Gibbs Knotts. 2005. "Location, Location: Precinct Placement and the Costs of Voting." Journal of Politics 67(2).

Hufford, A. (2020, August 27). "The Rise of Ballot Drop Boxes Due to the Coronavirus." Lawfare. https://www.lawfareblog.com/rise-ballot-drop-boxes-due-coronavirus/.

Jan E. Leighley and Jonathan Nagler. 2014. Who Votes Now? Princeton, NJ: Princeton University Press.

Jerry Yan, Nicole Collins, Bill Wermuth, Jeffrey Rodriguez, Marco Massey, Sarah Maung, and Sreya Guha, June 25, 2020, "The 2020 Pennsylvania Primary Election," Healthyelections.org, https://live-healthyelections.pantheonsite.io/sites/default/files/2020-06/pennsylvania\_pre-\_and\_postmortem\_memo.pdf.

Kate Rabinowitz and Brittany Renee Mayes. August 14, 2020. "At least 77% of American voters can cast ballots by mail this fall." Washington Post. https://www.washingtonpost.com/graphics/2020/politics/vote-by-mail-states/ Accessed August 17, 2020.

Kathy Boockvar, June 22, 2020. "Historic primary paves way for successful general election in Pennsylvania." Brookings Institute Blog. https://www.brookings.edu/blog/fixgov/2020/06/22/historic-primary-paves-way-for-successful-general-election-in-pennsylvania/.

Lai, J. (May 7, 2020). "Pennsylvania allows big reduction in poll workers for 2020 primary election to help counties during pandemic." https://www.inquirer.com/politics/election/pennsylvania-2020-primary-poll-worker-reduction-20200507.html, retrieved August 20, 2020.

Lissandra Villa, August 20, 2020. "Ballot Drop Boxes Are Emerging as a Vote-By-Mail Alternative—But They Have Critics, Too". Time magazine https://time.com/5881310/ballot-drop-boxes-usps.

Losco, J., Scheele, R., & Hall, S. R. 2010. "The impact of vote centers on early voting in Indiana." Paper prepared for delivery at the Western Political Science Association Annual Meeting, San Francisco, CA.

Mark Niesse, June 4, 2020, "Absentee ballot drop boxes set up for Georgia's June 9 primary", Atlanta Journal and Constitution, https://www.ajc.com/news/state--regional-govt--politics/where-find-ballot-drop-boxes-metro-atlanta/eNbdsawjWjqXTppWxhzq6J/.

Megan Wolfe, "Absentee Ballot Return Options – COVID-19"." March 31, 2020. https://elections.wi.gov/node/6798.

Menger, A., & Stein, R. M. (2019). Choosing the Less Convenient Way to Vote: An Anomaly in Vote by Mail Elections: Political Research Quarterly.

Meredith, M., & Endter, Z. May 14, 2016. Aging into Absentee Voting: Evidence from Texas. Working Paper. https://www.sas.upenn.edu/~marcmere/workingpapers/AgingIntoAbsentee.pdf.

Michael Tanenbaum, May 13, 2020. "Philly plans sharp reduction of polling places for June 2 election." Philly Voice. https://www.phillyvoice.com/philly-polling-places-primary-election-june-2-2020-poll-workers-mail-in-absentee-ballot/.

Michigan.gov, "Michigan Ballot Drop Box Locations." September 5, 2020. https://www.michigan.gov/documents/sos/Ballot\_Dropbox\_Locations\_697191\_7. pdf. Miller, P., & Powell, S. (2016). Overcoming Voting Obstacles: The Use of Convenience Voting by Voters With Disabilities. American Politics Research, 44(1).

National Conference of State Legislatures "Voting Outside the Polling Place: Absentee, All-Mail, and Other Voting at Home Options," https://www.ncsl.org/research/elections-and-campaigns/absentee-and-earlyvoting.aspx.

National Conference of State Legislatures, "Verification of Absentee Ballots." https://www.ncsl.org/research/elections-and-campaigns/verification-of-absentee-ballots.aspxhttps://www.ncsl.org/research/elections-and-campaigns/verification-of-absentee-ballots.aspx.

National Conference of State Legislatures, Source"Voting Outside the Polling Place: Absentee, All-Mail and other Voting at Home Options." August 28, 2020.: https://www.ncsl.org/research/elections-and-campaigns/absentee-and-early-voting.aspxhttps://www.ncsl.org/research/elections-and-campaigns/absentee-and-early-voting.aspx.

National Vote at Home Institute. May 2020. "Vote At Home Policy Actions: COVID-19 Response." https://voteathome.org/wp-content/uploads/2020/07/NVAHI-50-State-Policy-Analysis.pdf.

Pennsylvania Department of State, "Voting & Election Statistics." https://www.dos.pa.gov/VotingElections/OtherServicesEvents/VotingElectionStat istics/Pages/VotingElectionStatistics.aspxhttps://www.dos.pa.gov/VotingElection s/OtherServicesEvents/VotingElectionStatistics/Pages/VotingElectionStatistics.as px.

Personal communication with the author for the Oregon Secretary of State, Division of Elections, August 17, 2020.

Pew Charitable Trusts, "Vote-by-Mail Rates More than Double since 2000." https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2015/4/29/vote-by-mail-practices-more-than-double-since-2000https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2015/4/29/vote-by-mail-practices-more-than-double-since-2000.

Richardson, Lilliard E., and Grant W. Neeley. 1996. "The Impact of Early Voting on Turnout: The 1994 Elections in Tennessee." State and Local Government Review 28(3).

Riker, William H., and Peter C. Ordeshook, 1968, "A Theory of the Calculus of Voting." American Political Science Review 62(1).

Rosenstone, Steven, and John Mark Hansen. 1993. Mobilization, Participation, and Democracy in America. New York: Macmillan.

Scott Bauer, August 19, 2020, "Milwaukee adding drop boxes to help protect absentee voting." Associated Press. https://madison.com/wsj/news/local/govt-and-politics/milwaukee-adding-drop-boxes-to-help-protect-absentee-voting/article\_0237af44-b8b5-53ad-b8a2-553842de2275.html.

Shanton, K. L., & Eckman, S. J. (April 23, 2020). "Mail Voting and COVID-19: Developments and Potential Challenges. Congressional Research Service." https://crsreports.congress.gov/product/pdf/IN/IN11356.

Stein, Robert M, and Greg Vonnahme. 2008. "Engaging the Unengaged Voter: Vote Centers and Voter Turnout." The Journal of Politics 70(02).

Stein, Robert M., and Patricia A. García-Monet. 1997. "Voting Early but Not Often." Social Science Quarterly 78(3).

Thompson, D. M., Wu, J., Yoder, J., & Hall, A. B. April, 2020.. The Neutral Partisan Effects of Vote-by-Mail: Evidence from County-Level Roll-Outs. Stanford Institute for Economic Policy Research Working Paper No. 20-015. https://siepr.stanford.edu/sites/default/files/publications/20-015.pdf.

VoteArmor product page from Laserfabusa.com. http://votearmor.laserfabusa.com/.

VotesPA.cCom, "2020 Primary County Drop Locations.": https://www.votespa.com/Voting-in-PA/Documents/2020Primary-County-DropLocations.pdf.

"Voting and Registration." U.S. Census Bureau. https://www.census.gov/topics/public-sector/voting.html. William McGuire, Benjamin Gonzalez O'Brien, Katherine Baird, Benjamin Corbett, and Loren Collingwood. (undated). "Evaluating the Impact of Drop Boxes on Voter Turnout." MIT Election Data and Science Lab, http://electionlab.mit.edu/sites/default/files/2019-01/mcguire\_et\_al\_2017summary.pdf.

# **EXHIBIT 6**

# AFFIDAVIT OF LORRAINE C. MINNITE, Ph.D.

# Pennsylvania Democratic Party, et al., v. Kathy Boockvar, et al., NO. 133 MM 2020 In the Supreme Court of Pennsylvania

# I. BACKGROUND AND QUALIFICATIONS

1. I am a political scientist and Associate Professor and Chair of the Department of Public Policy and Administration at Rutgers University-Camden. I received a Bachelor of Arts degree in History from Boston University, and two Master's Degrees and a Ph.D. in Political Science from the City University of New York. One of my areas of expertise is American Politics with a specialization in elections and the political process.

2. Specifically, I have studied voter fraud in U.S. elections for nearly twenty years. In 2003, I co-authored a study of voter fraud with David Callahan for

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the public policy research and advocacy organization, Demos, titled, "Securing the Vote: An Analysis of Voter Fraud." I updated this study with new material in 2007.<sup>1</sup> At that time, Demos published a preliminary report I wrote on voter fraud and sameday registration,<sup>2</sup> and in March of 2007, I published a report, "The Politics of Voter Fraud," for Project Vote, a national nonpartisan, nonprofit voting rights organization.<sup>3</sup> In June 2010, Cornell University Press published *The Myth of Voter* Fraud, my full-length scholarly treatment of the subject and the politics surrounding the uses of voter fraud allegations to shape electoral policy. The book analyzes the evidence of voter fraud and concludes that the widespread allegation that voter fraud is a rampant problem of unknown proportions in contemporary U.S. elections is unsupported by evidence, and that actual voter fraud is extremely rare. In *The Myth* of Voter Fraud, I argue and provide evidence to show that having no basis in fact, these allegations are motivated by political interests, and are designed to make voting

<sup>&</sup>lt;sup>1</sup> Lorraine C. Minnite, "An Analysis of Voter Fraud," (New York: Demos, 2007), available at <u>http://www.demos.org/publication/analysis-voter-fraud-united-states-adapted-2003-report-securing-vote</u> (last accessed August 4, 2020).

<sup>&</sup>lt;sup>2</sup> Lorraine C. Minnite, "Election Day Registration: A Study of Voter Fraud Allegations and Findings on Voter Roll Security," (New York: Demos, 2007), available at <u>https://www.issuelab.org/resource/election-day- registration-a-study-of-voter-fraud-allegations-</u> <u>and-findings-on-voter-roll-security.html</u> (last accessed August 4, 2020).

<sup>&</sup>lt;sup>3</sup> Lorraine C. Minnite, "The Politics of Voter Fraud," (Washington, D.C.: Project Vote, 2007), available at

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=2ahUKEwjc\_tPst YPmAhXNvZ4K

HXTUC8AQFjAAegQIBRAC&url=http%3A%2F%2Fwww.projectvote.org%2Fwpcontent%2Fuploads%2F2007%2F03%2FPolitics\_of\_Voter\_Fraud\_Final.pdf&usg=AOvVaw1jUd V8sW1HtHfxbtXs m66W (last accessed August 4, 2020).

harder for certain populations. I provide an analysis of the role of the voter fraud myth in the contemporary voter identification debate in "Voter Identification Laws: The Controversy over Voter Fraud," published by Routledge in 2012 book edited by Matthew J. Streb titled, *Law and Election Politics*.

3. I have testified as an expert witness on the question of voter fraud in eight federal voting rights cases, and two voting rights cases before state courts (in Pennsylvania and New Hampshire), and participated in four other state and federal cases. I testified before Congress and the U.S. Commission on Civil Rights on the subject of voter fraud, and have been a party to several amicus filings on the incidence of voter fraud, including in an important U.S. Supreme Court case challenging a state voter identification requirement.<sup>4</sup>

4. I have been retained by counsel for *amici curiae* the League of Women Voters of Pennsylvania, Common Cause Pennsylvania, the Black Political Empowerment Project, Make the Road PA, and individual voters Patricia M. DeMarco, Danielle Graham Robinson, and Kathleen Wise (collectively, "amici") to provide expert testimony in the matter of *Pennsylvania Democratic Party v*. *Boockvar*, pending in the Pennsylvania Supreme Court, under Case No. 133 MM 2020. In particular, I have been asked to address the incidence of voter fraud in U.S.

<sup>&</sup>lt;sup>4</sup> See Crawford v. Marion County Election Board, 553 U.S. 181 (2008).

elections, in general, and more specifically in recent elections in Pennsylvania, including purported incidents of absentee ballot fraud.

5. I submit this affidavit, which incorporates all of the research I have conducted on the subject of voter fraud and voter ID laws since 2001, cited above and published in peer-reviewed books and journals<sup>5</sup> to assist the Court in its analysis of the instant case. To expand my research on the evidence of voter fraud in Pennsylvania (or lack thereof) I reviewed the following:

- Materials I collected when conducting my research for *The Myth of Voter Fraud*;
- Materials I collected and reviewed for my expert report, and litigation and court records in *Applewhite v. Commonwealth of Pennsylvania* (Pa. Cmwlth., No. 330 MD 2012);
- Materials produced by U.S. federal government agencies, including the Government Accountability Office, and the Public Integrity Section of the Justice Department's Criminal Division;
- Materials subpoenaed in prior litigation or obtained through public records requests from 56 of Pennsylvania's 67 district attorneys concerning cases of election fraud from roughly 2000 to 2012;
- Reports and data collected by advocacy groups such as the Brennan Center for Justice at New York University School of Law and the Heritage Foundation;
- Plaintiffs' interrogatory response regarding alleged voter fraud in Donald J. Trump for President Inc. et al. v. Boockvar, et al., No. 20-cv-

<sup>&</sup>lt;sup>5</sup> A complete list of my peer reviewed publications is set forth in my Curriculum Vitae at Appendix A.

966 (W.D. Pa.), and the documents cited by Plaintiffs as evidence of alleged voter fraud in that interrogatory response.

Additional materials consulted are cited in the report's footnotes.

# II. SUMMARY OF OPINIONS<sup>6</sup>

6. Voter fraud is the intentional corruption of the voting process by voters. The best available social science research consistently finds that the incidence of voter fraud in contemporary U.S. elections is exceedingly rare, including the incidence of voter impersonation fraud committed through the use of mail-in absentee ballots. This is the case both nationally, and in Pennsylvania.

# **III. METHODOLOGY**

7. There are no official routinely compiled national or statewide statistics reliably reporting instances or cases of voter fraud, or any other kind of election fraud, for that matter. It is difficult and time-consuming, therefore, to empirically assess the degree to which fraud or even the risk of fraud is allegedly "real" or a problem in contemporary U.S. elections.<sup>7</sup> In evaluating the current landscape, it is not enough to point to flagrant or folkloric examples of electoral corruption from America's past. Context, facts, and a systematic methodology for assembling those

<sup>&</sup>lt;sup>6</sup> This report is based on information that is currently available for my review. I reserve the right to update my report and opinions upon review of any additional documents or information previously unavailable to me.

<sup>&</sup>lt;sup>7</sup> Justice Stevens, plurality opinion in *Crawford v. Marion County Election Board*, 553 U.S. 181, 196 (2008).

facts rather than the presentation of sensational anecdotes are most critical to the research enterprise. A compilation of news stories reporting on election fraud allegations from here and there, from the past and present, is simply a pile of stories from which a social scientist would know not to draw reliable inferences about the incidence of voter fraud.<sup>8</sup>

8. I spent nearly ten years collecting and analyzing data and evidence using a wide variety of social science methods to evaluate the incidence of voter fraud in contemporary U.S. elections for *The Myth of Voter Fraud*. My main research question was, what is the incidence of voter fraud (defined as the intentional corruption of the electoral process by voters, as discussed below) in contemporary U.S. elections? After analyzing original data and concluding that voter fraud is exceedingly rare, I asked, what then explains the persistent and growing chorus of evidence-free allegations that voter fraud is in fact an unchecked threat to the integrity of U.S. elections? In other words, my book also addresses the question of how we might make sense of the disjuncture between stubborn claims that voter fraud is a significant threat to the integrity of U.S. elections, and the contradictory facts.

<sup>&</sup>lt;sup>8</sup> Lorraine C. Minnite, *Myth of Voter Fraud* (Ithaca, N.Y.: Cornell University Press, 2010), 11-14.

9. To answer these questions, for *The Myth of Voter Fraud* I used what is known in the social sciences as a "mixed methods" or "multimethod" research framework.<sup>9</sup> This intuitive approach to empirical inquiry, which has been called the "third methodological movement" in the social sciences following the developments of quantitative ("traditionalist") and then qualitative ("revolutionary") methodologies,<sup>10</sup> integrates quantitative, and qualitative and archival styles of evidence and modes of analysis to triangulate independent and imperfect sources of information from which the researcher then draws inferences. It is particularly suited to research projects where the sources of evidence are scattered and incomplete, or where any one source is otherwise too limited on its own to serve as the basis for reliable analysis and valid inference.

10. Mixed methods is therefore, the best methodological approach for the kind of research problems I faced. Since the publication of *The Myth of Voter Fraud*, the few other political scientists who have studied voter fraud in U.S. elections have used mostly quantitative methods. While I believe that such methods can be useful in detecting anomalous patterns in registration lists or other sources of electoral data,

<sup>&</sup>lt;sup>9</sup> See John W. Creswell and Vicki L. Plano Clark, eds., *Designing and Conducting Mixed Methods Research*, 3rd Ed., (Los Angeles: Sage Publications, Inc., 2017).

<sup>&</sup>lt;sup>10</sup> Charles Teddlie and Abbas Tashakkori, "Major Issues and Controversies in the Use of Mixed Methods in the Social and Behavioral Sciences," in Abbas Tashakkori and Charles Teddlie, eds., *Handbook of Mixed Methods in Social and Behavioral Research* (Thousand Oaks, Calif.: Sage Publications, Inc., 2003), 5.

the most that we can learn from them is that anomalous patterns may (or may not) exist in the data. Moreover, the mere existence of anomalous data is insufficient to demonstrate actual voter fraud.

11. The information presented in this affidavit relies on my previous mixedmethods research on the incidence of voter fraud in contemporary U.S. elections, and applies the same style of analysis and inference in which multiple sources of data and evidence are cross-checked for validity of the findings, to new evidence collected about election fraud and specifically, the presence or absence of any such absentee ballot fraud in Pennsylvania.

12. In the next section, I discuss the definition of voter fraud, and summarize my conclusions about the incidence of voter fraud nationally, and in Pennsylvania, where I focus my analysis on the presence or absence of any such absentee ballot fraud and Pennsylvania's practices to safeguard mail-in balloting.

# IV. DISCUSSION

# **A.** Voter Fraud is Defined as the Intentional Corruption of the Voting Process by Voters

13. It is important to the policymaking process and the improvement of electoral policy that we analyze whether fraud is being committed by voters or other actors in order to assess whether fraud-prevention measures are necessary and

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whether policies held out as such in fact serve that purpose (especially when those policies make it harder to vote).

14. The first step in assessing whether we have a problem with voter fraud is to define what it is. Indeed, the process of formulating precise definitions is critical in the social sciences for accurate measurement of empirical phenomena.<sup>11</sup> Most statutes criminalizing what we might think of as voter fraud do not specifically define the term. Instead, nefarious election-related practices are prevented by state laws making "double voting" or "falsifying records," or "voting by unqualified elector," and the like, illegal.<sup>12</sup> For example, Pennsylvania's election code refers to one form of voter fraud, double voting, as "repeat" voting, and states, "[i]f any person shall vote in more than one election district, or otherwise fraudulently vote more than once at the same primary or election" he or she may be convicted of a

<sup>&</sup>lt;sup>11</sup> W. Phillips Shively, *The Craft of Political Research*, 5th ed. (Upper Saddle River, New Jersey: Prentice Hall, 2001), 30-8.

<sup>&</sup>lt;sup>12</sup> For example, in Georgia, "Any person who votes or attempts to vote at any primary or election, knowing that such person does not possess all the qualifications of an elector at such primary or election, as required by law, or...who knowingly gives false information to poll officers in an attempt to vote in any primary or election..." commits a felony. O.C.G.A. § 21-2-571 (2010). California prohibits specific election related activity like fraudulent registration, voting in an election which one is not entitled to vote in, voting more than once or to try to buy a vote with the promise of a job. Cal. Elec. Code § 18520 (1994). In Minnesota, it is a felony to submit more than one absentee ballot or to assist another in submitting more than one absentee ballot, or alter another's absentee ballot. Minn. Stat. § 203B.03 (1999). In New Jersey, it is a third-degree crime to "fraudulently vote…or in any manner so interfere…with the voters lawfully exercising their rights of voting at the election, as to prevent the election or canvass from being fairly had and lawfully conducted." N.J. Stat. Ann. § 19:34-11 (2011).

felony in the third-degree punishable to up to seven years in prison and/or a fine of up to \$15,000.<sup>13</sup>

15. In the U.S., voter eligibility requirements are fairly standard across the states: one must be alive when casting a ballot, 18 years of age, a U.S. citizen, and in many states not under a sentence of incarceration or state supervision for a conviction of a felony crime. There are some variations to these rules, for example, states differ with respect to the terms of disfranchisement of persons with felony convictions. In our geographically-based system of representation, voters are required to vote in the jurisdiction where they live.

16. In nearly every state, people who knowingly abrogate eligibility rules commit voter fraud, for example, when they intentionally provide false information concerning their own voter eligibility credentials (i.e., citizenship status, age, permanent address), or when they knowingly cast more than one ballot ("double voting"), or cast a ballot knowing that they are not eligible to vote. This may also include so-called "felon" voting by people who have been convicted of a felony and not had their voting rights restored as required by state law. Voting in the name of a dead person is fraudulent when the person casting the ballot intentionally impersonates the dead voter. The voter fraud outlined here can be committed in

<sup>&</sup>lt;sup>13</sup> 25 P.S. § 3535.

person at the polls or early voting sites, or through the use of absentee or mail-in ballots.

17. Innocent, unintentional administrative errors on the part of election officials and confusion on the part of voters can cause technically invalid ballots to be cast, however, there is an important distinction to be made between invalid registration and ballots, and fraudulent registration and ballots. Fraudulent registration and ballots are illegal; but not all invalid registration and ballots are fraudulent.

18. Accordingly, for purposes of social scientific research on the incidence of voter fraud, I define the concept of voter fraud as "the *intentional corruption* of the *voting process* by *voters*."<sup>14</sup> And in measuring the incidence of voter fraud, it is important to first determine the validity of registrations and ballots, and then, to identify, if possible, the intent on the part of the registrant or voter to register and

<sup>&</sup>lt;sup>14</sup> The U.S. Department of Justice prosecutes election crimes committed when there is a federal candidate on the ballot, or in cases where there is jurisdiction to enforce federal criminal laws that potentially apply to both federal and non-federal elections when there is no federal candidate on the ballot. The federal government's definition of "election fraud" centers on the corruption in "the obtaining and marking of ballots, the counting and certification of election results, or the registration of voters," and is over-broad for the purpose of measuring election crime committed by voters, the focus of my research, because it includes acts of official malfeasance, such as ballot box stuffing or corruption of the count, criminal acts that voters cannot commit because they do not possess official authority over election administration or the counting of ballots. *See* Richard C. Pilger, ed., *Federal Prosecution of Election Offenses*, 8th ed., U.S. Department of Justice, Criminal Division, Public Integrity Section (Washington, D.C.: Government Printing Office, 2017, 22-26, https://www.justice.gov/criminal/file/1029066/download (last accessed August 3, 2020).

vote and whether the ineligible or invalid registrant or voter knew that it was illegal to do so.

19. The reasoning and logic I use to derive a definition of voter fraud for purposes of measurement lead to the following conclusions:

a) it is important to identify who is committing the fraud – the electoral process is complex and multi-staged; not all actors in the process have access to all parts of the process; therefore, not all forms of electoral fraud may be committed by all actors in the process;

b) thus, there is an important distinction to be made between *voter* fraud and broader *election* fraud; voter fraud is the intentional or motivated corruption of the electoral process *by voters*; election fraud encompasses all other forms of intentional corruption of the electoral process;

c) invalid registration and balloting, which may be detected as anomalies or irregularities in electoral mechanics, may not be fraudulent; therefore, there are competing explanations for electoral anomalies and irregularities: invalid registration and balloting may be caused by simple human error, confusion or mistakes and are not *prima facie* evidence of fraud.

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## **B.** Fraud Committed by Voters Is Exceedingly Rare, Including Impersonation Fraud Using An Absentee Ballot

20. In the absence of reliable or official data, to write my book I gathered

my own from a wide range of sources.<sup>15</sup> My conclusions in *The Myth of Voter Fraud* about the rarity of voter fraud rely on all of this data, the evidence of which points

<sup>&</sup>lt;sup>15</sup> These included, but were not limited to: a review of all of the scholarly literature by historians, political scientists, and legal scholars on voter fraud in American history (of which, given the extensive literature on American elections and electoral behavior, there is very little); review and analysis of all pertinent federal and state election statutes erected to ensure the integrity of elections and criminalizing certain behaviors; broad and deep database searches of hundreds of news sources across the U.S. at the state and local levels (including wire services); searches of legal databases and case law, and review of relevant legal materials and opinions at the state and federal levels; documents and material produced through public records requests sent to thousands of election and law enforcement officials in every state; Freedom of Information Act requests to various agencies within the U.S. Department of Justice; analysis of a longitudinal data set produced by the Administrative Office of the United States Courts; analysis of voluminous records of contested federal and state elections; interviews with a wide range of people with relevant expertise, including, but not limited to, prosecutors, defense lawyers, election officials, voters, academics, and advocates working on voter registration drives; in-depth case studies in four states of the worst alleged cases of voter fraud since 2000; collection and review of a wide range of reports, evaluations, studies, testimony and the like produced by the federal government (i.e., audits by the U.S. Government Accountability Office; reports to Congress by the Congressional Research Service; reports produced by the U.S. Elections Commission and the U.S. Commission on Civil Rights; transcripts and materials from congressional hearings), state legislatures and state government agencies (i.e., data from the Elections Fraud Investigations Unit of the California Secretary of State's Office; a public complaints file from the Minnesota Secretary of State's Office established to comply with the federal Help America Vote Act of 2002; a report from a broad investigation of allegations of voter fraud by the New Hampshire Attorney General's Office), national election reform task forces (i.e., the Commission on Federal Election Reform, the Social Science Research Council National Research Commission on Elections and Voting), and a wide range of organizations, including party groups, good government and civic organizations, and other advocacy organizations, especially those claiming to find alarming evidence of voter fraud (i.e., a report by an organization called the American Center for Voting Rights that claimed to be "the most comprehensive and authoritative review of the facts surrounding allegations of vote fraud, intimidation and suppression made during the 2004 presidential election:" reports compiled by the conservative Heritage Foundation and the Public Interest Legal Foundation).

clearly to the conclusion that fraud committed by voters, including absentee ballot fraud, is exceedingly rare.

21. Over the last decade since the publication of *The Myth of Voter Fraud*, I have continued to track the issue of election fraud, updating my knowledge through my participation in litigation as an expert witness, and staying abreast of the scholarly research on the subject. Looking at that research since 2010, the three most important sources of evidence and analysis of the incidence of voter and/or election fraud are 1) social scientific studies; 2) official government reports and investigations; and 3) publicly-accessible databases compiled by the Heritage Foundation and the News21 journalism project at Arizona State University. I summarize the findings from each of these sources below.

### i. <u>Social Scientific Studies</u>

22. Social scientific research finds very little evidence of voter fraud in contemporary U.S. elections.

23. In 2014, the U.S. Government Accountability Office ("GAO") published a performance audit of issues related to state voter identification laws.<sup>16</sup>

<sup>&</sup>lt;sup>16</sup> U.S. Government Accountability Office, GAO-14-634, "Elections: Issues Related to State Voter Identification Laws," (September 19, 2014; Released October 8, 2014; Reissued February 27, 2015), <u>https://www.gao.gov/products/GAO-14-634</u> (last accessed August 3, 2020). For this report, the GAO was tasked only with identifying the challenges to determining a complete measure of inperson voter fraud, not with estimating the incidence of voter fraud overall.

For their report, the GAO was tasked only with identifying the challenges to determining a complete measure of in-person voter fraud, not with estimating the incidence of voter fraud overall.

24. Part of the study involved a review of "academic literature, organizational studies, peer-reviewed journals, books, and other regularlycited research published from January 2004 through April 2014 to identify studies that attempted to estimate in-person voter fraud, using a documented methodology."<sup>17</sup> More than 300 studies were analyzed to determine whether they contained data on in-person voter fraud and provided an adequate description of the methodology used for collecting the data. Studies based on anecdotal reports of in-person voter fraud were excluded from the analysis. Only five studies, including my book, *The Myth of Voter Fraud*, met the criteria.<sup>18</sup>

<sup>&</sup>lt;sup>17</sup> *Ibid.*, 7.

<sup>&</sup>lt;sup>18</sup> The five studies are: John S. Ahlquist, Kenneth R. Mayer, and Simon Jackman, "Alien Abduction and Voter Impersonation in the 2012 U.S. General Election: Evidence from a Survey List Experiment," *Election Law Journal* 13(4): 460-475; Ray Christensen and Thomas J. Schultz, "Identifying Election Fraud Using Orphan and Low Propensity Voters," *American Politics Research*, vol. 42 (2): 311-337; M.V. Hood III and William Gillespie, "They Just Do Not Vote Like They Used To: A Methodology to Empirically Assess Election Fraud," *Social Science Quarterly*, 93(1): 76-94; Lorraine C. Minnite, *The Myth of Voter Fraud* (Ithaca: Cornell University Press, 2010); and Corbin Carson, "Exhaustive Database of Voter Fraud Cases Turns Up Scant Evidence That It Happens," News21, August 12, 2012, available at <a href="https://votingrights.news21.com/article/election-fraud-explainer/">https://votingrights.news21.com/article/election-fraud-explainer/</a> (last accessed September 12, 2019).

25. While all of the scientific studies had various limitations for estimating a complete count of cases of in-person voter impersonation, two GAO analysts and a GAO statistician reviewed each and determined that, "…the design, implementation, and analyses of the studies were sufficiently sound to support the studies' results and conclusions based on generally accepted social science principles."<sup>19</sup>

26. The five scientifically sound studies identified by the GAO find very little evidence of voter fraud in contemporary U.S. elections. Three use quantitative methods to identify anomalies in registration and voting data as proxies for voter fraud, finding very little fraud.<sup>20</sup> Carson's report *Exhaustive* 

Database of Voter Fraud Cases Turns Up Scant Evidence That It Happens (this

<sup>&</sup>lt;sup>19</sup> GAO, "Elections: Issues Related to State Voter Identification Laws," 3-4.

<sup>&</sup>lt;sup>20</sup> Hood and Gillespie performed an audit of the 2006 general election in Georgia "to ascertain the extent to which deceased registrants are being used in a fraudulent manner." Using a data mining technique, they initially identified 66 suspect ballots out of a total of approximately 2.1 million cast. Only four of the suspect ballots were cast in-person. Further research determined conclusively that none of the in-person ballots and almost none of the absentee ballots (57 of the remaining 62 suspect ballots) were fraudulently cast. Hood and Gillespie were not able to obtain enough information from county registrars to make a determination one way or the other about five of the absentee ballots, and it is possible, therefore, that none of the absentee ballots were fraudulent. They found "no evidence that election fraud was committed under the auspices of deceased registrants" in Georgia's 2006 election (Hood and Gillespie, "They Just Do Not Vote Like They Used To," 76). Ahlquist, Mayer and Jackman use a different technique to search for proxies for voter impersonation in the 2012 national general election, finding "no evidence of systematic voter impersonation" in that election (Ahlquist et al., "Alien Abduction and Voter Impersonation in the 2012 U.S. General Election," 30). Christensen and Schultz use yet another quantitative methods technique to search for anomalies in election returns that might indicate the presence of fraud. Their findings "... support the conclusion that electoral fraud, if it occurs, is an isolated and rare occurrence in modern U.S. elections" (Christensen and Schultz, "Identifying Election Fraud Using Orphan and Low Propensity Voters," 313).

is the News21 evidence discussed in more detail below) and *The Myth of Voter Fraud* do not rely solely on quantitative methodologies, focusing instead on identifying actual instances of voter fraud in recent elections.

27. Only a few other empirical social scientific studies of the incidence of voter fraud have been conducted since the 2014 GAO report, specifically, two academic papers that rely on quantitative methodologies and proxy measures to estimate the probability of fraud.<sup>21</sup>

<sup>&</sup>lt;sup>21</sup> Not included in this discussion is a set of methodology papers addressing various elections forensics techniques, including anomalous digit distributions in election data as a means for detecting election fraud. See, for example, Bernd Beber and Alexandra Scacco, "What the Numbers Say: A Digit-Based Test for Election Fraud," Political Analysis 20(2):211-234; C. Breunig and A. Goerres, "Searching for Electoral Irregularities in an Established Democracy: Applying Benford's Law Tests to Bundestag Elections in Unified Germany," Electoral Studies 30(3): 534-545; Joseph Deckert, Mikhail Myagkov, and Peter C. Ordeshook, "Benford's Law and the Detection of Election Fraud," Political Analysis 19(3): 245-268; Walter Mebane, "Election Forensics: The Second Digit Benford's Law Test and Recent American Presidential Elections," in R. Michael Alvarez, Thad E. Hall, and Susan D. Hyde, Election Fraud (Washington, D.C.: Brookings Institution, 2008); Juraj Medzihorsky, "Election Fraud: A Latent Class Framework for Digit-Based Tests," Political Analysis 23(4): 506-517; Jacob M. Montgomery, et al., "An Informed Forensics Approach to Detecting Vote Irregularities," Political Analysis 23(4): 488-505. Most of this work focuses on developing statistical techniques for addressing anomalous patterns in election data at the national level, laying no claim to proving fraud. In addition, I exclude a discredited paper published in 2014 the peer-reviewed journal, Electoral Studies, by Richman, Chattha, and Earnest that analyzes survey data and concludes that "non-citizens participate in U.S. elections, and that this participation has been large enough to change meaningful election outcomes including Electoral College votes, and Congressional elections." The methodology used by the authors was widely criticized as faulty, including by the political scientists who generated the survey data. See, Jesse T. Richman, Gulshan A. Chattha, and David C. Earnest, "Do Non-citizens Vote in U.S. Elections?" Electoral Studies 36 (2014): 149-157; and rebuttal, Stephen Ansolabehere, Samantha Luks, and Brian F. Schaffner, "The Perils of Cherry-Picking Low Frequency Events in Large Sample Surveys," Electoral Studies 40 (2015):" 409-410.

28. In the first, Sharad Goel and colleagues use statistical techniques to look for proxy evidence of double voting in the 2012 presidential election.<sup>22</sup> They find that "double voting is not currently carried out in such a systematic way that it presents a threat to the integrity of American elections."<sup>23</sup> They estimate that "at most," by which they mean if the error rate caused by administrative mistakes was zero, a human impossibility, one in 4,000 votes (i.e., 0.025%, or 1/40th of one percent) out of approximately 126 million votes cast in 2012, were double votes. "[M]easurement error in turnout records," the authors write, could "...possibly explain...a significant portion, if not all, of this."<sup>24</sup> The authors estimate that, "In fact, a 1.3% clerical error rate would be sufficient to explain all of these apparent double votes."<sup>25</sup> In other words, given the level of imprecision in the statistical methods used in the study, a tiny level of clerical mistakes could account for what otherwise appear to be duplicate votes.

29. A second paper, by Cottrell, Herron and Westwood, investigates claims made by President Donald J. Trump that his election in 2016 was tainted by massive

<sup>&</sup>lt;sup>22</sup> Sharad Goel, Marc Meredith, Michael Morse, David Rothschild, and Houshmand Shirani-Mehr, "One Person, One Vote: Estimating the Prevalence of Double Voting in U.S. Presidential Elections, *American Political Science Review* 114(2), 456-469.

<sup>&</sup>lt;sup>23</sup> *Ibid.*, 467.

<sup>&</sup>lt;sup>24</sup> *Ibid*.

<sup>&</sup>lt;sup>25</sup> *Ibid.*, 457.

voter fraud. The researchers use a variety of statistical modeling techniques and county-level election returns, census data, and other federal and state government data to estimate the likelihood of invalid non-citizen voting in that election. "Our empirical results share a common theme," they write. "[T]hey are inconsistent with fraud allegations made by Trump. The results are, however, consistent with various state-level investigations conducted in the initial months of 2017, all of which have failed to find any evidence of widespread voter fraud in the 2016 General Election."<sup>26</sup>

## ii. <u>Government Reports and Investigations</u>

30. Recent findings from another GAO report examining the federal enforcement effort against election fraud are consistent with my prior findings regarding the scant record of voter fraud.<sup>27</sup> Here, the GAO analyzes data drawn from two different U.S. Department of Justice case management systems used by the two Department components responsible for prosecuting election fraud, the Criminal Division's Public Integrity Section, and the U.S. Attorneys' Offices, for the period 2001 through 2017.

<sup>&</sup>lt;sup>26</sup> David Cottrell, Michael C. Herron, and Sean J. Westwood, "An Exploration of Donald Trump's Allegations of Massive Voter Fraud in the 2016 General Election," *Electoral Studies* 51 (2018): 123-142, 140.

<sup>&</sup>lt;sup>27</sup> U.S. Government Accountability Office, GAO-19-485, "Voter Registration: Information on Federal Enforcement Efforts and State and Local List Management" (June 27, 2019), https://www.gao.gov/products/GAO- 19-485 (last accessed August 3, 2020).

31. The federal government defines election fraud broadly to include the corruption of "the obtaining and marking of ballots, the counting and certification of election results, or the registration of voters."<sup>28</sup> The data analyzed by the GAO goes beyond the careful and precise definition of voter fraud I have developed to measure the incidence of fraud intentionally committed by voters to include crimes committed by public officials, politicians and their campaigns, and fraud committed through voter intimidation, such as vote-buying conspiracies in which the powerful use money and other inducements to lure the powerless into selling their votes.<sup>29</sup> The GAO assessed the reliability of the DOJ case management databases and "found the data sufficiently reliable to provide information on the nature and characteristics of DOJ's efforts to address potential instances of election fraud."<sup>30</sup>

32. Keeping in mind that the GAO's analysis is overbroad for the purpose of this affidavit, their principle findings are consistent with my own as reported in

<sup>&</sup>lt;sup>28</sup> See footnote 14.

<sup>&</sup>lt;sup>29</sup> "Public Integrity Section officials stated the Section did not focus its efforts on particular types of election fraud, but vote buying...was the most frequent type of election fraud related crime the Section prosecuted during the period of our review. Officials said vote buying is the most common type of election fraud related crime that has come to their attention in recent decades and noted that it tends to occur in communities that are more insular and isolated and have higher levels of poverty. For example, officials observed that in rural communities with high levels of poverty, some residents may be more vulnerable to vote-buying efforts due to their difficult circumstances or the power of local officials who seek to buy votes to provide or cut off needed services." GAO, "Voter Registration," 34-35.

<sup>&</sup>lt;sup>30</sup> *Ibid.*, 4.

*The Myth of Voter Fraud*, that overall, voter fraud in U.S. elections is exceedingly rare:

a) Over the period of fiscal years 2001 through 2017, the Public Integrity Section initiated 1,408 criminal investigations or "matters," filing charges in 695 cases.<sup>31</sup> Of the total number of matters initiated, about two percent (33 matters) were categorized by Section attorneys as election fraud-related, which includes instances of absentee ballot fraud; of the total number of cases filed as a result of the Section's investigations, 19 cases involving 37 individual defendants were election fraud-related;<sup>32</sup>

b) Over the same study period, U.S. Attorneys' Offices initiated more than 2.2 million criminal investigations, of which 525 were election fraud-related, two one-hundredths of a percent of their overall criminal matters. The U.S. Attorneys' Office filed just over one million criminal cases during this time period; of these, 185 cases were election fraud-related, or the same two one-hundredths of a percent of their overall caseload. Fifteen of these cases were jointly filed by the U.S. Attorneys Offices and the Public Integrity Section

<sup>&</sup>lt;sup>31</sup> *Ibid.*, 30.

<sup>&</sup>lt;sup>32</sup> *Ibid.*, 29-30.

(and double counted in the Public Integrity Section equivalent category cited above);<sup>33</sup>

c) In sum, "[A]ccording to officials from EOUSA [the Executive Office of the U.S. Attorneys], which provides guidance, direction, and oversight to the U.S. Attorneys' Offices, election fraud was one of the *least* frequent crimes addressed by U.S. Attorneys' Offices." The GAO report continues: "Officials further noted that *election fraud related cases were taken seriously and thoroughly investigated when facts supporting such charges were uncovered*" (emphasis added).<sup>34</sup>

33. Investigations conducted by state agencies responsible for the administration of elections, and state law enforcement and auditing agencies provide other important official sources of data for analyzing the incidence of voter fraud in U.S. elections. I review several such reports in *The Myth of Voter Fraud*,<sup>35</sup> and also in several subsequent expert reports prepared for plaintiffs in litigation challenging

<sup>&</sup>lt;sup>33</sup> *Ibid.*, 35-36.

<sup>&</sup>lt;sup>34</sup> *Ibid.*, 36.

<sup>&</sup>lt;sup>35</sup> For example, as a result of public records requests sent to all Attorneys General and Secretaries of State, I obtained and analyzed all election fraud complaints referred to the California Secretary of State's Office for the period of 1994 to 2007; voter complaints collected by the Minnesota Secretary of State's Office from 2005 to 2006; investigation logs maintained by the Election Division of the Oregon Secretary of State's Office for all election law complaints for the period of 1991 to 2006; and a report of a broad investigation by the New Hampshire Attorney General's Office into concerns about voter fraud in the 2004 general election. See chapter 4 of *The Myth of Voter Fraud*.

various election laws.<sup>36</sup> My case study of election administration records in Oregon is of particular interest here because the state began experimenting with mail balloting forty years ago, and in 2000, became the first state in the nation to conduct a presidential election entirely by mail.<sup>37</sup> When I conducted my research on Oregon, I concluded it had the best system for keeping records of election law complaints in the nation. Complaints were channeled from county election officials up to the Secretary of State's Office and over to the attorney general for further investigation, and then reported back to the secretary of state so that the complaint case records and logs could be updated and closed.

34. I obtained a complete file from the secretary of state's Election Division of 6,605 election law complaints over a fifteen-year period from 1991 to 2006, excluding campaign finance report-related matters. I extracted all cases involving complaints or allegations of violations of the laws governing registration and voting processes, excluding all others pertaining to political parties, candidates, initiative,

<sup>&</sup>lt;sup>36</sup> See my expert reports in Expert Witness, *League of Women Voters of New Hampshire v. Gardner*, State of New Hampshire Superior Court, Hillsborough, SS, Southern District, 2018; Fish v. Kobach, U.S. District Court for the District of Kansas, 2016-2018; One Wisconsin Institute v. *Nichols et al.*, U.S. District Court for the Western District of Wisconsin, 2016; Lee v. Virginia State Board of Elections, U.S. District Court for the Eastern District of Virginia, 2016; Ohio Democratic Party v. Husted, U.S. District Court for the Southern District of Ohio, 2015; North Carolina State Conference of the NAACP v. McCrory, U.S. District Court for the Middle District of North Carolina, 2014-2016; Veasey v. Perry, U.S. District Court for the Southern District for the Southern District of Texas, 2014-2015; and Frank v. Walker/LULAC (formerly Jones) et al. v. Deininger, U.S. District Court for the Eastern District of Wisconsin, 2012-2013.

<sup>&</sup>lt;sup>37</sup> Minnite, *The Myth of Voter Fraud*, 69-76.

referendum and recall petitions, the printing of sample ballots, electioneering and potential crimes that did not implicate the voter. I found that of the resulting 5,400 complaints implicating voters, 55 pertained to voter registration (i.e., false statement or swearing by voter on registration card, or non-citizen registration), and the rest concerned various aspects of Oregon's vote-by-mail system, including "nonqualified" voting, ballot signature problems, double voting, sale of ballots, and other miscellaneous prohibitions on voting. Excluding the voter registration complaints, of the remaining 5,345 vote-by-mail-related complaints, investigations found no criminal violation in 2,748 cases (51.4 percent); and administrative actions were taken in 2,023 cases (37.8 percent) in which voter or administrative error was the source of the problem and investigators found no intent to commit fraud. Only 21 cases (.4 percent) resulted in convictions or guilty pleas for criminal violations of Oregon's election laws, or about one per year.<sup>38</sup>

35. Notably for the issues raised in the extant litigation, officials in
Colorado, Oregon, Washington, as well as Delaware and Maryland, participated in a
months-long study of voting irregularities in the 2016 presidential election.
Colorado, Oregon and Washington are three of the five states that conduct elections

<sup>&</sup>lt;sup>38</sup> The outcome for 553 cases was undetermined at the time the complaint file and complaint logs were produced for me by Division of Elections compliance specialist Ms. Norma Buckno. See, Minnite, *The Myth of Voter Fraud*, 69-76, especially Table 4.4.

entirely by mail (the other two, Utah and Hawaii, have more recently adopted allmail balloting). Out of some 11.5 million votes cast in the five study states, there were 112 total instances of *possible* improper voting, primarily duplicate voting. In Colorado, where roughly 2.6 million of the total 2.9 million votes cast were mail-in ballots, there were 48 instances of possible improper ballots, or 0.0016 percent of all ballots cast.<sup>39</sup> State officials were careful to not label the irregularities "voter fraud" because administrative error could not be ruled out without further investigation. Similar analysis of data from other all-mail-balloting states finds very little evidence of fraud in mail-in ballots.<sup>40</sup>

36. Despite variation in the context, scope, type of fraud examined, time period covered, and investigating agency involved, the government studies summarized here demonstrate a clear and consistent pattern of findings: very little actual voter fraud. Most potential instances involved irregularities and anomalies in

<sup>40</sup> See, for example, Elise Viebeck, "Minuscule Number of Potentially Fraudulent Ballots in States with Universal Mail Voting Undercuts Trump Claims About Election Risks," *Washington Post*, June 8, 2020, <u>https://www.washingtonpost.com/politics/minuscule-number-of-potentially-fraudulent-ballots-in-states-with-universal-mail-voting-undercuts-trump-claims-about-election-risks/2020/06/08/1e78aa26-a5c5-11ea-bb20- ebf0921f3bbd\_story.html (last accessed August 3, 2020); Chris Lehman, "10 Oregon Voters Plead Guilty to Voter Fraud in 2016 Presidential Election," *The Oregonian/OregonLive*, April 29, 2019. https://www.oregonlive.com/politics/2019/04/10-oregon-voters-plea-guilty-to-voter-fraud-in-2016-presidential-election.html (last accessed August 3, 2020).</u>

<sup>&</sup>lt;sup>39</sup> Jesse Paul, "10 People in Colorado May Have Cast Two Ballots in 2016 Election, While 38 Might Have Also Voted in Another State, Study Says," Denver Post, September 15, 2017, <u>https://www.denverpost.com/2017/09/15/colorado-2016-improper-voting-study/</u> (last accessed August 3, 2020).

the data that are more likely the result of administrative or voter error or confusion than they are voter fraud.<sup>41</sup>

## iii. Other Sources of Data on Election and Voter Fraud

37. The Heritage Foundation has created an online, publicly accessible database of what it calls, "A Sampling of Recent Election Fraud Cases from Across the United States."<sup>42</sup> There is no explanation of the methodology used to create the database or the criteria for inclusion of cases. The website for the database contains a disclaimer that "this database is not an exhaustive or comprehensive list...[but] is intended to demonstrate...the many ways in which fraud is committed," although specific numbers of what are called "proven instances of voter fraud," in addition to criminal convictions, civil penalties, and diversion programs are tallied and reported

<sup>&</sup>lt;sup>41</sup> A number of states in recent years have conducted investigations of alleged voter fraud including those cited earlier in footnote 35, and in some of my expert reports cited in footnote 36, and others, for example: A multi- year investigation by the Iowa Secretary of State resulted in 27 prosecutions out of approximately 1.6 million votes cast; see Iowa Secretary of State Matt Schultz, "DCI Voter Fraud Investigations Report," May 8, 2014, available at <a href="http://publications.iowa.gov/16874/1/DCI%20Voter%20Fraud%20Report%205-8-14.pdf">http://publications.iowa.gov/16874/1/DCI%20Voter%20Fraud%20Report%205-8-14.pdf</a> (last accessed August 3, 2020); a 2013 voter fraud investigation by the Colorado Secretary of State alleged 155 non-citizens had illegally voted; however, upon further investigation by local prosecutors, almost none were charged (four people were charged, but only one man was eventually convicted of a false registration charge (see, "Gessler Voter Sting Nets 1 Conviction Despite Accusation of Widespread Fraud," *The Sentinel*, March 13, 2015, <a href="http://sentinelcolorado.com/news/gessler-voter-sting-nets-1-conviction-despite-accusation-widespread-fraud/">http://sentinelcolorado.com/news/gessler-voter-sting-nets-1-conviction-despite-accusation-widespread-fraud/</a> (last accessed August 3, 2020).

<sup>&</sup>lt;sup>42</sup> See, the Heritage Foundation's website, (<u>https://www.heritage.org/voterfraud</u>), last accessed August 3, 2020. As recently as last November, the database was labeled "Election Fraud Cases from Across the United States." Calling it now just a "sampling" of cases is misleading because no information is provided about the universe from which the so-called sample was drawn or how the sample was drawn.

on the database homepage (i.e., "1,290 Proven instances of voter fraud"). And, contrary to the claim of "proven instances of voter fraud," the database lumps relatively few instances of voters committing fraud with all other forms of election or public corruption and malfeasance, such as cases of 'altering the vote count,' 'ballot petition fraud,' and 'buying votes,' crimes voters in their capacity as voters cannot commit.

38. Despite these shortcomings, the Heritage Foundation's election fraud database is useful because it represents the evidence the organization has relied on for the last decade or more to promote the idea that voter fraud is "real," by which they mean rampant, easy to commit, and easy to hide.<sup>43</sup> While the full database itself does not appear to be publicly available as a downloadable spreadsheet file, there is a helpful online interface that allows users to select cases based on type of fraud, one of which is "Fraudulent Use of Absentee Ballot." The database contains 206 so

<sup>&</sup>lt;sup>43</sup> After the Brennan Center for Justice at New York University School of Law analyzed the Heritage Foundation's data and concluded, "There is nothing in the database to confirm claims of rampant voter fraud," (*See*, Rudy Mehrbani, "Heritage Fraud Database: An Assessment," Brennan Center for Justice, September 8, 2017, <u>https://www.brennancenter.org/our-work/research-reports/heritage-fraud-database-assessment</u>), Jason Snead, a Senior Policy Analyst at the Heritage Foundation provided a Commentary on the organization's website in which he states, "...Heritage's database is the tip of the iceberg...Why is the Brennan Center spending so much time and effort trying to 'debunk' our database? Perhaps it is because liberal groups – including the Brennan Center – have insisted for years that evidence of fraud is nonexistent. Heritage took that as a challenge and has produced nearly 1,100 irrefutable, proven examples of a wide range of election misconduct." *See* Jason Snead, "Brennan Center's Attacks on Heritage Voter Fraud Database Are Baseless," Heritage Foundation, September 11, 2017, https://www.heritage.org/election-integrity/commentary/brennan-centers-attacks-heritage-voter-fraud-database-are-baseless (last accessed August 4, 2020).

labeled cases in the U.S. dating back to 1988, or roughly six or seven cases per year over the last three decades. Notably, in federal elections alone, more than 1.6 billion votes were cast during this period. Thus, by the Heritage Foundation's own evidence, absentee ballot fraud in the U.S. is exceedingly rare.

39. The same scant record of evidence of voter fraud of any kind, both nationally and in Pennsylvania, is corroborated by the research conducted by the News21 journalism project at the Walter J. Cronkite School of Journalism and Mass Communications at Arizona State University. The year-long project compiled cases of alleged voter fraud in the United States between 2000 and 2012, replicating the data collection methodology I used in *The Myth of Voter Fraud*, by sending out more than 2,000 public records requests to state elections and law enforcement authorities in every state, and to the U.S. Department of Justice (and FBI).<sup>44</sup> The student journalists followed up these document requests with phone calls and emails, and reviewed more than 5,000 court documents, official records and media reports. They found just over 2,000 alleged cases of a variety of forms of election or voter fraud nationwide, including just under 500 cases of alleged absentee ballot fraud nationally

<sup>&</sup>lt;sup>44</sup> Project Website, Who Can Vote?, <u>https://votingrights.news21.com/</u>, (last accessed August 3, 2020). I served as an (unpaid) consultant on the research design and conducted a seminar for the students on the research methodology used in *The Myth of Voter Fraud*. Their work replicates my approach and produces similar results with respect to a documented low incidence of voter fraud in contemporary U.S. elections.

over the twelve-year study period. Whereas the Heritage Foundation's database is limited to cases in which there is some kind of official final judgment, the News21 database contains alleged (or "accused") cases of fraud, cases in which the accused was acquitted, and cases that were not resolved at the time the database was constructed in 2012.

40. Like the Heritage Foundation database, the News21 database may be searched and sorted by type of fraud and by state, but also by "type of accused," providing a further refinement of the Heritage Foundation's organization of its database. The News21 database contains records for 491 cases of alleged absentee ballot fraud; however, filtering out cases that do not involve voters reduces that number to 103. Further filtering on cases resulting in conviction, guilty pleas or consent orders reduces the number further to 72, or about six actual cases per year nationally over the twelve-year study period, the same rate estimated from the Heritage Foundation database covering the longer 1988 to 2018 period.

# iv. <u>Evidence of Alleged Voter Fraud Relied on by the Trump</u> <u>Campaign</u>

41. I understand that on several dates in August, 2020, Plaintiffs in *Trump* for President v. Boockvar<sup>45</sup> produced documents in response to defendants'

<sup>&</sup>lt;sup>45</sup> U.S. District Court for the Western District of Pennsylvania, *Trump for President v. Boockvar*, Civil Action No. 2:20-CV-966. I have been retained as an expert in that case by Defendant Intervenors Citizens for Pennsylvania's Future and the Sierra Club.

discovery requests seeking, among other things, evidence of voter fraud. I reviewed these documents and found that none of them provided evidence of widespread election fraud or corruption of the absentee balloting process, including in the June 2020 Pennsylvania presidential primary. None of them provided evidence of misuse of ballot drop-boxes or that ballot box drop-off boxes raised the risk of fraud. Many of the materials produced in this discovery proceeding pertained to email communications between Mr. James Fitzpatrick, the Pennsylvania Election Day Operations Director for Donald J. Trump for President, Inc., with Pennsylvania county officials regarding public records requests made by Mr. Fitzpatrick. Other documents raised issues about election administration procedures or alleged snafus in the balloting process during the June 2020 Pennsylvania presidential primary. Furthermore, the written interrogatory responses from the Trump Campaign acknowledged that they do not allege that any voter fraud had actually occurred in the primary.<sup>46</sup>

42. Before I turn to an examination of the evidence of absentee ballot fraud in Pennsylvania, I discuss how absentee and mail-in voting differs from polling place voting, and the safeguards that counteract any vulnerability absentee ballot voters

<sup>&</sup>lt;sup>46</sup> Pls. Supp. Objections and Responses to Democratic Interveners Document Request No 1, (Aug. 14, 202) (" Neither the original Complaint nor the Amended Complaint contains an allegation that "ballot harvesting," "manipulating and destroying ballots," double voting, and/or voter fraud from mail-in and absentee ballots actually occurred during the Primary Election.").

may have to intimidation, the main concern of critics of absentee or mail-in voting. I briefly illustrate how on occasion even the most restrictive rules for absentee balloting can be overwhelmed by a corrupt conspiracy, though cases like the one I highlight remain quite rare. I conclude the next section by walking through the available empirical evidence of absentee ballot fraud in Pennsylvania.

## C. There Is Little Evidence that Pennsylvania's Mail-in Ballot Practices Are Susceptible to Fraud

43. There are no large-scale, systematic studies of absentee ballot fraud in the U.S., but there appears to be a general consensus among experts that even if U.S. elections are relatively free of fraud, if fraud is to occur, it likely will take the form of abuse or misuse of absentee ballots. To be clear, the consensus is that absentee balloting may be just slightly less secure than in-person voting, which is not the same thing as alleging that absentee voting is "substantially fraudulent," as President Trump has tweeted, or claiming that absentee ballot fraud is rampant based on a handful of well-known cases of attempted election rigging by politicians and campaigns through the abuse of absentee ballots.<sup>47</sup>

44. Compared to in-person or polling place voting, mail balloting has one feature that could make it uniquely vulnerable to fraud if safeguards are not put in

 <sup>&</sup>lt;sup>47</sup> See the President's May 26, 2020 Twitter feed at
 <u>https://twitter.com/realDonaldTrump/status/1265255835124539392</u> (last accessed August 3, 2020).

place. With mail ballots, what election administrators call the ballot 'chain of custody,' which is controlled entirely by election administrators in the case of polling place voting, is broken when the ballot leaves their oversight and goes into the mail, out to the voter, and back. This creates the possibility that the secrecy of the ballot could be compromised, and in the case of states that have permissive rules for third-party involvement in the process, the possibility of voter intimidation, or other forms of corruption of the voting process.<sup>48</sup> (As discussed below, Pennsylvania does not have permissive rules for third-party involvement in the process).

45. At the same time, the National Council of State Legislatures (NCSL) has identified several security measures that protect the integrity of absentee ballots. First, these ballots are hand-marked paper ballots, "considered the gold standard of election security."<sup>49</sup> They provide an auditable paper trail that can be investigated if there is suspicion of tampering or meddling. Second, the identity of absentee voters

<sup>&</sup>lt;sup>48</sup> Hans von Spakovsky, "Four Stolen Elections: The Vulnerabilities of Absentee and Mail-In Ballots," Legal Memorandum No. 268, Heritage Foundation, July 16, 2020.

<sup>&</sup>lt;sup>49</sup> National Council of State Legislatures, "Voting Outside the Polling Place: Absentee, All-Mail and Other Voting at Home Options," (July 10, 2020), <u>https://www.ncsl.org/research/elections-and-campaigns/absentee-and- early-voting.aspx</u> (last accessed August 3, 2020).

can be secured by requiring the voter to sign an affirmation of truthfulness. Pennsylvania law requires that all absentee and mail ballot applications are signed.<sup>50</sup>

46. The NCSL also cites the use of bipartisan teams of ballot counters as enhancing the security of the absentee balloting process, a feature of Pennsylvania law.<sup>51</sup> In addition, the Help America Vote Act of 2002<sup>52</sup> requires that first-time voters who register to vote by mail must include a copy of personal identification unless they provided a copy with their registration application. And in Pennsylvania, voters must request an absentee ballot or mail-in ballot in writing and include the voter's name and registration address.<sup>53</sup> Additionally in Pennsylvania, when an absentee ballot or mail ballot is returned, during the canvass in Pennsylvania, the county boards of elections are required to examine the declaration on the ballot envelope to verify the proof of identification provided and satisfy that the declaration is sufficient, and verify the eligibility of the elector to vote.<sup>54</sup>

<sup>&</sup>lt;sup>50</sup> 25 P.S. § 3146.21 Act of Oct. 31, 2019 (P.L. 552, No. 77), 2019 Pa. Legis. Serv. Act. 2019-77 (S.B. 421) (West). *See also* the mail ballot application at https://www.votespa.com/Register-to-Vote/Documents/PADOS\_MailInApplication.pdf.

<sup>&</sup>lt;sup>51</sup> Absentee and Mail ballots in Pennsylvania are canvassed by the county boards of elections, 25 P.S. § 3146.8, and those boards must include both majority and minority party representation. 25 P.S. § 2641.

<sup>&</sup>lt;sup>52</sup> 52 U.S.C. § 21083(b).

<sup>&</sup>lt;sup>53</sup> 25 P. S. § 3302; Act of Oct. 31, 2019 (P.L. 552, No. 77), 2019 Pa. Legis. Serv. Act. 2019-77 (S.B. 421) (West).

<sup>&</sup>lt;sup>54</sup> 25 P.S. § 3146.8; Act of Oct. 31, 2019 (P.L. 552, No. 77), 2019 Pa. Legis. Serv. Act. 2019-77 (S.B. 421) (West).

47. It is worth noting that these security measures also function not just to deter, but to detect voter fraud in absentee ballots. Thus, where procedures such as these are in effect it is erroneous to claim that the minimal evidence of absentee voter fraud is due to an inability to detect it. At the same time, even the most restrictive absentee ballot regulations may not always prevent the most egregious efforts to criminally corrupt an election.

48. For a recent example, we can consider a serious case of election fraud involving absentee ballots, which occurred in the 9th Congressional District during the 2018 midterm election in Bladen and Robson Counties, North Carolina, a state with an absentee ballot witness requirement.

49. In March of 2019, the North Carolina State Board of Elections (NCSBE) ordered a new election after an investigation found substantial fraud in the mail-in absentee balloting process, with voters claiming they never requested ballots cast in their names and other irregularities.<sup>55</sup> North Carolina law stipulates that an absentee ballot can be marked only by the voter or a qualified assistant following the voter's instructions while in the voter's presence; that the voter or qualified assistant must seal the ballot in the container envelope in the voter's presence; that two

<sup>&</sup>lt;sup>55</sup> In Re. Investigation of Election Irregularities Affecting Counties Within the 9th Congressional District, North Carolina State Board of Elections, (March 13, 2019).

witnesses or a notary must see the voter mark her ballot, sign the container return envelope, and "respect the secrecy of the ballot and the privacy of the absentee voter."<sup>56</sup> Only a voter or near relative of the voter can return the ballot to the county board of elections or mail the ballot.

50. Despite these safeguards, the NCSBE found that a paid political consultant of the Republican incumbent candidate, Mark Harris, engaged in a campaign of fraud to rig the election in Harris' favor. The consultant, McCrae Dowless, hired workers he paid in cash to collect absentee request forms (\$150 per 50 absentee ballot request forms), to collect absentee ballots (\$125 per 50 absentee ballots), and to falsify absent ballot witness certifications.<sup>57</sup> A declaration by Mr. Marshall Tutor about the North Carolina case is instructive.<sup>58</sup> A declaration by Mr.

<sup>&</sup>lt;sup>56</sup> N.C. Gen. Stat., 163-231. In June 2020, the North Carolina legislature amended the law to reduce the number of witnesses from two to one for the November 2020 election only. See the "Voting an Absentee Ballot" page of the North Carolina State Board of Elections' website, https://www.ncsbe.gov/Voting-Options/Absentee-Voting (last accessed August 4, 2020).

<sup>&</sup>lt;sup>57</sup> Evidentiary Hearing: Preview of Evidence, North Carolina State Board of Elections, (Dec. 12, 2018).

https://s3.amazonaws.com/dl.ncsbe.gov/State\_Board\_Meeting\_Docs/Congressional\_District\_9\_Por tal/Executive%2 0Director's%20Preview%20of%20the%20Evidence.pdf (last accessed August 3, 2020). *See also*, Michael C. Herron, "Mail-In Absentee Ballot Anomalies in North Carolina's 9th Congressional District," *Election Law Journal: Rules, Politics, and Policy* 18(3), 191-213.

<sup>&</sup>lt;sup>58</sup> U.S. District Court for the Middle District of North Carolina, *Democracy North Carolina v. North Carolina State Board of Elections*, Civil Action No. 20-CV-457 (Declaration of Marshall Tutor, June 3, 2020).

witness requirements may not prevent fraud when it is organized, motivated, and funded.<sup>59</sup>

51. Mr. Tutor is a seasoned investigator with nearly 25 years of experience,

including 15 years as an Elections Investigator and Lead Investigator for the North

Carolina State Board of Elections (NCSBE). He investigated Mr. Dowless for two

years prior to his departure from the NCSBE just before the 2018 election. Mr.

Tutor's sworn statement states in relevant part as follows:

In both 2016 and 2018, Mr. Dowless hired people who, often in twoperson teams, would visit households that had been mailed absentee ballots by the Bladen County Board of Elections. His teams would show up with marked sample ballots in hand and would encourage these voters to mark their ballots the same way. Dowless's teams would offer to take the ballots and turn them in.

Instead, the ballots collected went directly to Mr. Dowless; some made it to the Bladen County Board of Elections and some did not.

The ballots were collected with or without witness signatures. When there was no witness signature, Dowless' teams would forge the signatures, and they would sign those ballots out of the presence of the voter. I never detected a forgery just by reviewing the face of the absentee ballot envelope.

Mr. Dowless' illegal mail-in absentee ballot fraud enterprise was almost totally dependent on his daily access to the names and addresses of those who requested absentee ballots from the Bladen County Board of Elections. Mr. Dowless was known to have had a very long and cordial relationship with the staff at the Bladen County Board of

<sup>&</sup>lt;sup>59</sup> U.S. District Court for the Middle District of North Carolina, *Democracy North Carolina v. North Carolina State Board of Elections*, Civil Action No. 20-CV-457 (Declaration of Marshall Tutor, June 3, 2020).

Elections. He would either call the county board staff or come by on a daily basis to get the list of absentee ballot requests. At that time, the names and addresses of those requesting a mail-in absentee ballot were public record.

Now that the law has been changed so that the identities of voters requesting mail-in absentee ballots is not a public record until Election Day, I do not believe anyone can fraudulently manipulate the system as Mr. Dowless did. A person would need an accomplice working in a county board of elections office to break the law in order to get this confidential information.

52. We have to go back more than 25 years to find as egregious an

example of political corruption involving absentee ballots in Pennsylvania.

The fraud was committed by the campaign of William Stinson, the Democratic candidate for Pennsylvania's second senatorial district in a 1993 special election called to fill the office after the death of the (Democratic) incumbent, Francis Lynch. Stinson's opponent was Republican Bruce S. Marks, and although the district favored Democrats, a pre-election poll found Marks slightly ahead as the election neared. The election was crucial to party balance in the state senate; whoever won would swing control to his party and be favorably set up for the regular election the next year.<sup>60</sup>

<sup>&</sup>lt;sup>60</sup> The factual details of this case are drawn from *Marks v. Stinson*, U.S. District Court for the Eastern District of Pennsylvania, Civil Action No. 93-6157; Michael Decourcy Hinds, "Vote-Fraud Ruling Shifts Pennsylvania Senate," *New York Times*, February 19, 1994; and Michelle L. Robertson, "Election Fraud – Winning At All Costs: Election Fraud in the Third Circuit," *Villanova Law Review* 40(1995): 869-925.

53. To ensure his victory, the Stinson campaign organized a "new way to vote" effort in which campaign workers went door-to-door in the black and Latino neighborhoods of the Philadelphia district, and told voters, many of whom were not native English speakers, that there was a "new way to vote" from the comfort of home. The campaign workers read from scripts and helped people fill out absentee ballot applications, and as would be shown later in court, the ballots themselves. They were paid \$1 per application, and a federal court later found the Stinson campaign spent between \$500 and \$700 dollars this way. All-in-all, the Stinson campaign collected about 1,000 absentee ballot applications from minority sections of the district.

54. At the time, to qualify to vote by absentee ballot, a voter had to swear that he or she was going to be out of the county of residence on Election Day "because his duties, occupation or business require him to be elsewhere during the entire period of polls are open," or was physically unable to go to the polls, in which case, the voter was required to describe his disability and submit the name, address, and telephone number of the attending physician. In other words, it was quite difficult to qualify to vote by mail in Pennsylvania at the time, and many of those targeted by the campaign did not qualify. Inexplicably, the absentee ballot application used in Philadelphia did not include this provision of the law.

55. Stinson won the election by a narrow margin, 461 out of over 40,000 ballots cast. Marks won the polling place vote by 564 ballots, but Stinson eked out a victory on the strength of his campaign's "new way to vote" initiative, receiving four times as many absentee votes as Marks (1,396 for Stinson, 371 for Marks). Marks pursued various remedies available to him, including a variety of legal pleadings all the way up to the Pennsylvania Supreme Court, and an election contest before the Philadelphia Board of Elections, but could not get a hearing on evidence he believed demonstrated fraud in the absentee balloting process.

56. After exhausting his remedies, Marks, the Pennsylvania Republican State Committee and eight voters filed suit in the U.S. District Court for the Eastern District of Pennsylvania. That court found that in violation of state law, Stinson campaign workers "executed applications, ballots, and declarations without the voter understanding the nature of the document...Many voters who cast absentee ballots testified that they were unaware that they had signed absentee ballot applications."

57. In addition, the Stinson campaign could count on collusion with election officials.<sup>61</sup> For example, about 400 of the absentee ballot applications submitted to

<sup>&</sup>lt;sup>61</sup> (The district court in a February 1994, preliminary injunction opinion found that, "If the Commissioners would have observed and enforced the Election Code, the Stinson Campaign could not have illegally altered the outcome of the election. Not only did the Commission not correct the known illegal activities, the Commission also facilitated the scheme and then attempted to conceal the conspiracy.")

the Board of Elections were rejected because the applicants were not registered voters. But these rejected applications were then returned to the Stinson campaign by a Commissioner without keeping a record of the rejections, as required by state law. Worse, the two Democratic City Commissioners<sup>62</sup> and several of the Board employees working with them appeared to be in on the scheme. All of the absentee ballot applications collected by the illicit effort were delivered to the Board by the Stinson campaign. Upon receipt, Board workers turned over the absentee ballot packages to the campaign rather than mail them back to the voters, as required by law. The court found that in some instances, "Stinson workers instructed the voter to check certain places on the ballot, or filled out and forged the ballot," again, in flagrant violation of state law which required voters to fill out their ballots "in secret." Ultimately, the court found substantial evidence of "massive absentee ballot fraud, deception, intimidation, harassment, and forgery," voided all 1,757 absentee ballots, and declared Marks the winner.<sup>63</sup>

58. As the *Marks v. Stinson* case and the preceding one from a recent election in North Carolina demonstrate, the most concerted efforts of people with the

<sup>&</sup>lt;sup>62</sup> The Office of the Philadelphia City Commissioners (board of elections) is comprised of three elected City Commissioners, two of whom were Democrats, with one Republican, at the time.

<sup>&</sup>lt;sup>63</sup> The U.S. Appeals Court for the Third Circuit upheld the district court's injunction but remanded the case for further analysis of whether Marks would have won the election had Stinson not engaged in fraud. The district court held another hearing and concluded that based on the evidence, Marks would have won, a decision then later upheld by the Third Circuit.

most to gain in the outcome of an election can sometimes override the procedural safeguards in place to ensure the integrity of those outcomes. To do so, the corruption usually has to run deep and wide, conspiracies have to remain veiled, and people have to be willing to risk considerable penalties to achieve their goals. These are not the normal conditions of contemporary elections in the U.S.

### D. Pennsylvania Law has Robust Protections Against Fraud

59. Pennsylvania has substantial safeguards in place to regulate elections and protect against fraudulent activity. The safeguards help explain why there is very little evidence of absentee ballot fraud in Pennsylvania over at least the past two decades.

60. First, there are several provisions that provide robust protections against fraud specifically during absentee and mail voting. Pennsylvania law prohibits third parties from collecting ballots on behalf of any non-disabled voter.<sup>64</sup> Pennsylvania law (including following the passage of Act 77), therefore, safeguards against third-party interference. An additional security measure in Pennsylvania during the absentee and mail voting process, is if a voter has requested an absentee or mail-in ballot, that information is marked on the poll book so that if the voter appears in-person at his or her polling place, unless the voter can produce the spoiled ballot, he

<sup>&</sup>lt;sup>64</sup> 25 P.S. §§ 3146.6(a) & 3150.16(a); *see also* In re Canvass of Absentee Ballots of Nov. 4, 2003 Gen. Election, 843 A.2d 1223, 1225 (Pa. 2004).

or she is prohibited from voting a regular ballot.<sup>65</sup> Instead, the voter will be offered a provisional ballot, which will not be counted unless and until it is reconciled to the mailed in ballots that have been received and canvassed.<sup>66</sup> This process helps to prevent the risk of double voting.

61. Second, article III of the Pennsylvania Election Code creates county boards of elections, that, among other things monitor all elections in the state.<sup>67</sup> Each County Board must report on a regular basis to the secretary of the commonwealth, who is the chief elections officer in the state.<sup>68</sup> And Section 2650 of the code permits any candidate to appoint "watchers," who can observe polling places or any Board of Elections meeting.

62. Finally, Pennsylvania has a substantial number of penalties related to fraudulent behavior in elections:

<sup>&</sup>lt;sup>65</sup> Act of Oct. 31, 2019 (P.L. 552, No. 77), 2019 Pa. Legis. Serv. Act. 2019-77 (S.B. 421) (West); *Pennsylvania Applications and Balloting Guidance: Mail-in and Absentee Ballots and Voter Registration Changes*, PA. DEP'T STATE at 4–5 (Jan. 10, 2020), https://www.dos.pa.gov/VotingElections/OtherServicesEvents/Documents/PADOS\_Act%2077\_Ab sentee%20and%20Mail-in%20Guidance.pdf.

<sup>&</sup>lt;sup>66</sup> *Pennsylvania Provisional Voting Guidance*, PA. DEP'T STATE, at 4-5 (March 5, 2020), <u>https://www.dos.pa.gov/VotingElections/OtherServicesEvents/Documents/PADOS\_ProvisionalBal</u> <u>lots\_guidance\_1.0.pdf</u>.

<sup>&</sup>lt;sup>67</sup> 25 P.S. § 2642.

<sup>&</sup>lt;sup>68</sup> Ibid.

- 25 P.S. § 3525 makes it illegal for an elections officer to defraud the election system by falsifying the count, casting falsified votes, and various other listed offenses, and upon conviction, imposes a sentence to pay a fine not exceeding fifteen thousand (\$15,000) dollars, or to undergo an imprisonment of not more than seven (7) years.
- 25 P.S. § 3539 imposes a punishment of up to seven years and \$15,000 for giving or receiving money in exchange for voting a certain way in an election.
- 25 P.S. § 3502 punishes anyone committing perjury "regarding any material matter or thing relating to any subject being investigated, heard, determined or acted upon by any county board of elections, or member thereof, or by any court or judge thereof, judge of election, inspector of election, or overseer" up to five years in prison and a \$10,000 fine. Any person voting when he or she is not registered to vote or voting more than once can be punished the same.<sup>69</sup> Several offenses are punishable by up to two years and \$5,000 fine.

<sup>&</sup>lt;sup>69</sup> 25 P.S. § 3533 (2001).

- 25 P.S. § 3516 prohibits the unlawful possession or counterfeiting of ballots, and upon conviction, imposes a sentence to pay a fine not exceeding five thousand (\$5,000) dollars, or to undergo an imprisonment of not more than two (2) years.
- 25 P.S. § 3517 prohibits illegally destroying or falsifying a ballot and upon convictions, imposes a sentence to pay a fine not exceeding five thousand (\$5,000) dollars, or to undergo an imprisonment of not more than two (2) years.
- 25 P.S. § 3547 prohibits threatening or coercing someone in hopes of affecting his or her vote (including by employers with offers of raises/bonuses, or threats of salary reduction or termination), and imposes a sentence to pay a fine not exceeding five thousand (\$5,000) dollars, or such person or the officers, directors or agents of such corporation responsible for the violation of this section, shall be sentenced to undergo an imprisonment of not more than two (2) years.

### E. There is Little Evidence of Absentee Ballot Fraud in Pennsylvania

63. The available evidence demonstrates that there is very little absentee ballot fraud in Pennsylvania over at least the past two decades. I used the used the Heritage Foundation's election fraud database and searched for specific Pennsylvania incidents. Dating back to 1998, the Pennsylvania file contains 17 cases of various forms of election fraud involving 27 people, most of whom were election workers, politicians, or people associated with campaigns or voter registration drives who engaged in conspiracies to corrupt elections by intimidating voters, stuffing ballot boxes, and the like, rather than voters.

64. Focusing on cases rather than individuals, we find that five of the 17 cases involved absentee ballots. Four of these five cases were conspiracies to rig elections by former elected officials and politicians, a former police chief, and a city council member, as follows:

65. The first dates back to a 1997 district justice primary race, and the efforts of two brothers, one of them the mayor of Carbondale in Lackawanna County, and a third brother, the candidate. The conspirators illegally obtained and falsely filled out absentee ballots to boost the candidate's chances of winning.

66. Second, another case from the same May primary cycle, involved former U.S. Representative Austin Murphy who forged absentee ballots for senior citizens living in a nursing home in an election for a township election judge position. The candidate was his wife.<sup>70</sup>

<sup>&</sup>lt;sup>70</sup> Marylynne Pitz, "Murphy Arraigned on Vote-Fraud Charges," *Pittsburgh Post-Gazette*, May 25, 1999, <u>http://old.post-gazette.com/regionstate/19990525murphy6.asp</u>, (last accessed August 17,

67. Third, a decade later, Richard Allan Toney, the former police chief of Harmar Township, similarly attempted to manipulate the absentee ballot laws by applying for absentee ballots for people who were not going to be absent on Election Day. Like Rep. Murphy, Toney was trying to help his wife, who was running in a primary for a seat on the local town council.

68. Fourth, in 2015, a city council candidate, Eugene Gallagher, pleaded guilty to persuading six non-residents of his borough to use an address in the borough to apply for absentee ballots in a November 2013 borough council election. The six victims signed ballot envelopes for ballots Gallagher then allegedly filled out.

69. The fifth absentee ballot fraud case in the Heritage Foundation database is a strange story about a 79-year-old man who in 2018, confessed to illegally obtaining absentee ballots and 'picking up girls' in the Port Richmond section of Philadelphia, who he brought back to his residence in Delaware County to forge the

<sup>2020);</sup> Bill Heltzel, "Six of Seven Charges Against Austin Murphy Dismissed," *Pittsburgh Post-Gazette*, June 22, 1999, <u>http://old.post-gazette.com/regionstate/19990622murphy6.asp</u> (last access August 17, 2020).

signatures of deceased individuals. The man pleaded guilty to one count of forgery, one count of false use of an absentee ballot, and two counts of criminal conspiracy.<sup>71</sup>

70. Congruent with the data on absentee ballot fraud compiled by the Heritage Foundation, there are no cases of absentee ballot fraud recorded in the News21 database file for Pennsylvania for the more limited time period of 2000 to 2012.<sup>72</sup>

71. As noted above, the News21 journalism project data was gathered directly from administrative records produced through public records requests to all Pennsylvania county district attorneys and the Administrative Office of Pennsylvania Courts. The latter ran a report on cases charging violations of various Pennsylvania election laws, including those pertaining to absentee voting, for the period 2000 to 2012.<sup>73</sup> The report included the following six cases:

<sup>&</sup>lt;sup>71</sup> Alex Rose, "Collingdale Man Charged with Voter Fraud," *Delco Daily Times*, November 21, 2018, <u>https://www.delcotimes.com/news/collingdale-man-charged-with-voter-</u>fraud/article cb571234-ed0f-11e8-86ed-ef972a825af1.html, (last accessed August 17, 2020).

<sup>&</sup>lt;sup>72</sup> The Toney absentee ballot fraud case occurred during a 2009 Harmar Township Democratic primary election for township supervisor; however, Toney was not indicted until September 2012. He plead guilty to the charges in 2014. See, Torsten Ove, "Ex-Harmar Police chief Pleads Guilty to Ballot Tampering," *Pittsburgh Post-Gazette*, September 26, 2014, <u>https://www.post-gazette.com/local/north/2014/09/26/Ex-Harmar-police-chief-pleads-guilty-to-ballot-tampering-Toney/stories/201409260172</u> (last accessed September 5, 2020).

<sup>&</sup>lt;sup>73</sup> The journalism project requested all cases filed statewide since January 1, 2000 (to June 2012, when the request was made) for violations of Title 25 Sections 3515, 3516, 3517, 3518, 3523, 3525, 3527, 3528, 3529, 3533, 3535, 3536, 3538, 3539, 3547, 3548, 3553, and 3554, and to include

- 2 people in Westmoreland County pleaded guilty to unlawful voting in 2002 and 2003;
- 1 person in Lehigh County pleaded guilty to unlawful voting in 2004;
- 1 person in Lehigh County charged with tampering with voting machine in 2006, charges withdrawn;
- 1 person in Monroe County charged with interference with primary election in 2009, case dismissed due to death of defendant;
- 1 person in Chester County pleaded guilty to unlawful voting in 2012.

72. I have not been able to confirm that all of the people charged with 'unlawful voting' did not use an absentee ballot because neither district attorney office in Chester nor Westmoreland Counties cooperated with the public records request. The Lehigh County case involved a person who pled guilty to voting twice in one election, in Lehigh County and in Philadelphia. Given that Pennsylvania explicitly codifies violations of its absentee balloting laws,<sup>74</sup> and none of the four

county, defendant name, charge description, disposition of case, and other identifying information. Sections 3553 and 3554 pertain to the absentee balloting and voting processes.

<sup>&</sup>lt;sup>74</sup> 25 P.S. §§ 3553 & 3554..

people charged with unlawful voting were charged with violating these provisions, it is unlikely absentee ballots were involved.

73. Another excellent source of data on local investigation and prosecution of cases of election fraud in Pennsylvania comes from litigation in 2012, challenging a new voter photo identification law.<sup>75</sup> Plaintiffs in that case subpoenaed all 67 district attorneys for all cases of voter fraud, defined as violations of various Pennsylvania laws, including Title 25 Sections 3553 ("violations of provisions relating to absentee electors ballots") and 3554 ("violation of provisions relating to absentee voting"), over the prior ten year period. The request included information regarding the date, location, circumstances, and names of all persons with knowledge of the incidents prosecuted or closed, legal details of the cases and the final disposition of each charge.

74. Forty-five of the 67 district attorneys responded to the subpoenas.<sup>76</sup> Of this number, only two cited any cases (four individuals altogether whose charges were unrelated to absentee balloting); 36 indicated that they had no cases to report;

<sup>&</sup>lt;sup>75</sup> Applewhite v. Commonwealth of Pennsylvania (Pa. Cmwlth., No. 330 MD 2012). I provided an expert report and testified at trial for plaintiffs in this case.

<sup>&</sup>lt;sup>76</sup> Of the 22 counties that failed to respond at all to the Applewhite Plaintiff subpoenas, ten responded to the News21 journalism project's public records request. Both the subpoenas and these requests were made at the same time, June 2012.

four claimed they were not able to search their records; and three refused to comply with the subpoena on various grounds.

75. Taking all of the available evidence together, it is clear that over at least the last 20 years, there has been very little absentee ballot fraud in Pennsylvania, including the most common form of absentee ballot fraud when it does occur, which is fraud perpetrated on the voters by corrupt elected officials, campaign workers, candidates or election workers.

# V. CONCLUSION

76. The incidence of fraud committed by voters, both nationally and in Pennsylvania, including absentee ballot fraud, is miniscule relative to the number of ballots routinely cast in U.S. elections, including in Pennsylvania.

I hereby certify that the foregoing statements are true and correct to the best of my own personal knowledge, information, and belief. This verification is made subject to the penalties of 18 Pa.C.S. § 4904 relating to unsworn falsification to authorities.

Executed this 8<sup>th</sup> day of September, 2020, in Millerton, New York.

Tomaine C. Ministe

Lorraine C. Minnite

# **APPENDIX** A

# **APPENDIX A**

# LORRAINE CAROL MINNITE

Rutgers, State University of New Jersey-Camden Dept. of Public Policy & Administration 401 Cooper Street Camden, New Jersey 08102 <u>lcm130@camden.rutgers.edu</u> Tel. (856) 225-2526

# **EDUCATION**

#### The Graduate School and University Center of the City University of New York

**Ph.D.** in Political Science, 2000 *Dissertation:* "Identity, Voting Rights and the Remapping of Political Representation in New York City" *Honors:* Distinction

**M.Phil.** in Political Science, 1994 *Major field:* American Politics *Minor field:* Public Policy

**M.A.** in Political Science, 1992 *Master's Thesis:* "The Ecology of the Underclass: William Julius Wilson and the Chicago School"

## Boston University, College of Liberal Arts

**B.A.** in History, 1983 *Area of Concentration:* American Civilization

# ACADEMIC EXPERIENCE

#### **Associate Professor**

*Rutgers, The State University of New Jersey – Camden Campus, 2011 to present.* Teach graduate courses in public policy and community development, and undergraduate courses in urban studies and voting rights.

#### Assistant Professor Barnard College, Columbia University, January 2000 to 2011. Taught undergraduate courses in American politics and urban studies.

#### **Associate Director**

*The Center for Urban Research and Policy, Columbia University, December 1993 to 2000.* Responsible for the day-to-day management of the Center; wrote grant proposals and helped secure funding from government and private sources for all activities totaling nearly \$2,000,000.

#### **Instructor and Research Associate**

*Metropolitan Studies Department, New York University, Spring 1991.* Designed and taught a core course for undergraduates on the political and economic development of post-war American cities.

#### **Assistant Program Director**

#### Borough of Manhattan Community College, City University of New York, 1987 to 1990.

Assisted the Director in all administrative aspects of the BMCC Summer Immersion Program, a non-traditional, intensive, remedial education program.

#### **Research Assistant and Data Analyst**

#### CUNY Data Service, The Graduate School, City University of New York, 1987 to 1991.

Programmed and analyzed large data sets from the 1980 STF and PUMS (microdata) Census files, and the New York City Housing and Vacancy Surveys.

#### **Research Assistant**

Department of Political Science, The Graduate School, City University of New York, 1985 to 1987. Worked on various research projects for Prof. Marilyn Gittell.

# **OTHER EMPLOYMENT**

#### **Research Director**

#### Project Vote, 2010 to 2011.

Developed a research program and conducted research for a non-profit organization that runs voter registration drives, litigates violations of the National Voter Registration Act of 1993, and advocates for the voting rights of minorities, youth and the poor.

#### **Issues Director**

#### The Committee for David N. Dinkins, II, New York City, 1991 to 1993.

Conducted research for Mayor David N. Dinkins' campaign committee on a wide range of public policy issues and problems facing New York City.

#### **Campaign Manager**

#### McCabe for City Council, Brooklyn, New York, 1991.

Organized and administered a successful campaign for the Democratic Party nomination and the New York City Council seat in the 38th Council District.

#### **Union Organizer**

# *District 65/UAW, (AFL-CIO), Northeast Regional Office, Boston, Massachusetts, 1984 to 1985, Summer 1986.* Participated in the planning and implementation of a union organizing campaign; served as editor of a union local's newsletter; assisted negotiating committee in contract negotiations.

# ACADEMIC AND PROFESSIONAL HONORS

Distinguished Alumni Award, Department of Political Science, CUNY Graduate School, 2014 Jay Sigler Award for Teaching Excellence, Rutgers-Camden Public Administration Student Association, 2013 Affiliated Faculty, Center for Community Leadership, Rutgers-Camden, 2013 to 2018 Affiliated Faculty, Center for Urban Research and Education, Rutgers-Camden, 2012 to present Civic Engagement Faculty Fellow, Rutgers-Camden, 2012 Selected a "Top Wonk" in Democracy and Elections, The Agenda Project, 2012 2011 *Choice* Magazine "Outstanding Academic Title" for *The Myth of Voter Fraud* Carnegie Corporation of New York Special Opportunities Fund Award (\$50,000), 2007 Senior Fellow, Dēmos – A Network for Ideas and Action, 2006 to 2014 Member, Working Group on Immigration Challenges, The Century Foundation Homeland Security Project, 2004 Faculty Fellow, Institute for Social and Economic Research and Policy, Columbia University, 2002 to 2011 Member, Working Group on New York's Recovery from 9-11, Russell Sage Foundation, 2002 to 2005 Curriculum Development Award (\$1,500), Barnard Project on Diaspora and Migration, 2000 CUNY Graduate School Dissertation Year Fellowship (\$10,000), 1996-1997

# **PROFESSIONAL AFFILIATIONS**

American Political Science Association American Sociological Association Association for Public Policy Analysis and Management Scholars Strategy Network Social Science History Association Southern Political Science Association Urban Affairs Association

# **TEACHING ACTIVITIES**

#### **Doctoral Supervision: Chair**

#### **Rutgers-Camden**

Lew Bivona, *in-progress* Jackie Bradley-McFarlane, *in progress* Sarah DeGiorgis, *in progress* Shaina Gaines, *in-progress* Peggy Jean Craig McCaffery, *in-progress* Dan Tarng, *in-progress* Galadriel Thoman, *in-progress* Rasheda Weaver, *completed 5/17* Curtis Williams, *in-progress* Zachary Wood, *completed 5/18* 

#### **Doctoral Supervision: Committee Member**

#### **Rutgers-Camden**

Spencer Clayton, *completed 5/18* Ashley Nickels, *completed 5/16* Wendy Osefo, *completed 7/16* Anetha Perry, *in progress* Jason Rivera, *completed 7/15* 

#### External Examiner (Ph.D.)

*Fielding Graduate School* Gregory Williams, *completed 10/18* 

#### **Courses Taught**

#### **Rutgers University-Camden (Graduate)**

Alternative Development Strategies for Distressed Cities (Ph.D.) Civic Engagement, Nonprofits and Community Development (Ph.D.) Foundations of Policy Analysis (MPA and Executive MPA) Politics of Community Development (Ph.D.) Practicum in Community Development (Ph.D.) Research Workshop (MPA) Theory and History of Community Development (Ph.D.) Urbanism and Sustainable Development in Cuba (Undergraduate and Graduate-level Study Trip)

#### Rutgers University-Camden (Undergraduate)

Honors College Seminar: Democracy and the Right to Vote Poverty and the Urban Environment

#### Barnard College, Columbia University (Undergraduate)

American Urban Politics Contemporary Urban Problems Dynamics of American Politics Participation and Democracy Senior Research Seminar in American Politics Urban Myths and the American City

*New York University (Undergraduate)* The Crisis of the Modern American City

**Graduate Committee Examiner** 

Rutgers University, Ph.D. Program in Public Affairs/Community Development, Dissertation Committees (see above) Fielding Graduate University, Program in Human and Organizational Development, External Examiner, 12/18. Columbia University Ph.D. Program in Political Science, Dissertation Committee, 12/00, 5/03, 5/09. Columbia University School of Architecture, Planning and Preservation, Dissertation Proposal Committee, 2/08. Columbia University School of Architecture, Planning and Preservation, Dissertation Committee, 4/10. CUNY Graduate Center Ph.D. Program in Political Science, Dissertation Committee, 4/05, 5/06, 8/06. CUNY Graduate Center Ph.D. Program in Political Science, Oral Doctoral Exam, 12/00.

# **PEER-REVIEWED PUBLICATIONS**

#### Books

The Myth of Voter Fraud, Ithaca, New York: Cornell University Press, 2010.

*Keeping Down the Black Vote: Race and the Demobilization of American Voters*, New York: The New Press, 2009; co-authored with Frances Fox Piven and Margaret Groarke.

#### Journal Articles

"New Challenges in the Study of Right-wing Propaganda: Priming the Populist Backlash to 'Hope and Change," New Political Science 34:4 (2012), 506-526.

"Modeling Problems in the Voter ID-Voter Turnout Debate," *Election Law Journal* 8:2 (2009), 85-102; co-authored with Robert S. Erikson.

"Models, Assumptions, and Model Checking in Ecological Regressions," *Journal of the Royal Statistical Society* 164, Part 1 (2001), 101-118; co-authored with Andrew Gelman, David K. Park, Stephen Ansolabehere, and Phillip N. Price.

#### **Chapters in Edited Volumes**

"Voter Suppression," in Levon Chorbajian and Daniel Egan, eds., *Power and Inequality: Critical Readings for a New Era*, New York: Routledge, *forthcoming*; co-authored with Frances Fox Piven.

"Competing Concepts of Social Class: Implications and Applications for Community Development," in Mae Shaw and Marjorie Mayo, eds., *Class, Inequality and Community Development*, Bristol, UK: Policy Press at the University of Bristol, 2016; co-authored with Frances Fox Piven.

"The Voter Fraud Myth," in Benjamin E. Griffith, ed., America Votes! Challenges to Election Law and Voting Rights, Chicago: American Bar Association, 2016.

"Making Policy in the Streets," in James DeFilippis, ed., *Urban Policy in the Time of Obama*, Minneapolis: University of Minnesota Press, 2016; co-authored with Frances Fox Piven.

"Poor People's Politics," in David Brady and Linda Burton, eds., Oxford Handbook of the Social Science of Poverty, New York: Oxford University Press, 2016; co-authored with Frances Fox Piven.

"Crisis, Convulsion and the Welfare State," in Kevin Farnsworth and Zoë Irving, eds. *Social Policy in an Age of Austerity*, Policy Press, 2015; co-authored with Frances Fox Piven.

"Voter Identification Laws: The Controversy Over Voter Fraud," in Matthew J. Streb, ed., *Law and Election Politics: The Rules of the Game*, 2<sup>nd</sup> Ed., New York: Routledge, 2012.

"Lost in Translation? A Critical Reappraisal of the Concept of Immigrant Political Incorporation," in Jennifer Hochschild and John H. Mollenkopf, eds., *Bringing Outsiders In: Transatlantic Perspectives on Immigrant Political Incorporation*, Ithaca, New York: Cornell University Press, 2009.

"Environmental Risk and Childhood Disease in an Urban Working Class Caribbean Neighborhood," in Sherrie L. Baver and Barbara Lynch Deutsch, ed., *Beyond Sun and Sand: Caribbean Environmentalisms*, New Brunswick, NJ: Rutgers University

Press, 2006; co-authored with Immanuel Ness.

"Outside the Circle: The Impact of Post-9/11 Responses on the Immigrant Communities of New York City," in John H. Mollenkopf, ed., *Contentious City: The Politics of Recovery in New York City*, New York: Russell Sage Foundation, 2005.

"Between White and Black: Asian and Latino Political Participation in the 2000 Presidential Election in New York City," in William E. Nelson, Jr. and Jessica Lavariega Monforti, eds., *Black and Latino/a Politics: Issues in Political Development in the United States*, Miami: Barnhardt and Ash, 2005; co-authored with John Mollenkopf.

"The Changing Arab New York Community," in Kathleen Benson and Philip M. Kayal, eds., *A Community of Many Worlds: Arab Americans in New York City*, Syracuse: Syracuse University Press, 2002; co-authored with Louis Abdellatif Cristillo.

"Social Capital, Political Participation and the Urban Community," in Susan Saegert, J. Phillip Thompson, and Mark Warren, eds., *Social Capital and Poor Communities*, New York: Russell Sage Foundation, 2001; co-authored with Ester R. Fuchs and Robert Y. Shapiro.

"Patterns of Neighborhood Change," in John H. Mollenkopf and Manuel Castells, eds., *Dual City: Restructuring New York*, New York: Russell Sage, 1991; co-authored with Frank F. DeGiovanni.

# **OTHER PUBLICATIONS**

#### **Chapter in Conference Proceedings**

"The Political Participation of Immigrants in New York," in *In Defense of the Alien: Proceedings of the 2000 Annual National Legal Conference on Immigration and Refugee Policy*, Vol. XXIII. New York: Center for Migration Studies, 2001; co-authored with Jennifer Holdaway and Ronald Hayduk.

#### **Encyclopedia Entries**

"Voter Participation," in *The Encyclopedia of Macro Social Work*, New York: Oxford University Press, *forthcoming* (2021); co-authored with Frances Fox Piven.

"Voter Participation," in *The Encyclopedia of Social Work*, 20<sup>th</sup> ed., New York: Oxford University Press, 2008, online version, 2013; online update *forthcoming*; co-authored with Frances Fox Piven.

"The Underclass," in *The International Encyclopedia of Social and Behavioral Sciences*, 2<sup>nd</sup> Ed., Waltham, Mass.: Elsevier, 2016; co-authored with Paul J. Jargowsky.

"Welfare," in *The International Encyclopedia of Social and Behavioral Sciences*, 2<sup>nd</sup> Ed., Waltham, Mass.: Elsevier, 2016; co-authored with Joan Maya Mazelis.

"The Working Families Party," in Immanuel Ness, ed. *The Encyclopedia of American Third Parties*, Armonk, New York: M.E. Sharpe, Inc., 2000.

#### **Book Reviews**

Waiting for the Cemetery Vote, by Tom Glaze, American Review of Politics, (Spring/Summer 2012).

*Election Fraud: Detecting and Deterring Electoral Manipulation* edited by R. Michael Alvarez, Thad Hall and Susan D. Hyde, *Election Law Journal* 8:3 (2009).

*Governing From Below: Urban Regions and the Global Economy* by Jefferey M. Sellers, Cambridge University Press, 2002, in *Political Science Quarterly* Vol. 118, No. 4 (Winter 2003-2004).

Social Class, Politics, and Urban Markets: The Makings of Bias in Policy Outcomes by Herman L. Boschken, Stanford, CA: Stanford University Press, 2002, in *The International Journal of Urban and Regional Research*, Vol. 27, No. 4 (December 2003).

*The Miami Fiscal Crisis: Can A Poor City Regain Prosperity?* by Milan J. Dluhy and Howard A. Frank, Westport, Connecticut: Praeger Publishers, 2002, in *Political Science Quarterly* Vol. 117, No. 4 (Winter 2002-2003).

#### Research Reports, Memoranda and Briefs

The Misleading Myth of Voter Fraud in American Elections, Key Findings Brief, Scholars Strategy Network, February 2014.

Latino New Yorkers in the 2008 Presidential Election: The New Americans Exit Poll, New York Latino Research Network (NYLARNet) at The University of Albany, Fall 2011.

Research Memo: First-time Voters in the 2008 Election, Project Vote, Washington, D.C., April 2011.

An Analysis of Who Voted (And Who Didn't Vote) in the 2010 Election, Project Vote, Washington, D.C., November 2010.

Research Memo: Debunking the Tea Party's Election Night Message, Project Vote, Washington, D.C., October 26, 2010.

What Happened to Hope and Change? A Poll of 2008 Voters, Project Vote, Washington, D.C., September 2010.

*Election Day Registration: A Study of Voter Fraud Allegations and Findings on Voter Roll Security*, Dēmos – A Network for Ideas and Action, New York, November 2007.

The Politics of Voter Fraud, Project Vote, Washington, D.C., March 2007.

Securing the Vote: An Analysis of Election Fraud, Dēmos – A Network for Ideas and Action, 2003, New York; updated 2007; co-authored with David Callahan.

#### Journalism

My expertise on elections and voter fraud was sought and widely cited and I was quoted in print and broadcast media in every federal election since 2008, including, for example, in the following: *The New Yorker Magazine, The New Yorker Radio Hour, The New Republic, Mother Jones, The Wall Street Journal, In These Times, American Prospect, Washington Monthly, Monthly Review, New Left Review, The New York Times, The Washington Post, The Christian Science Monitor, Associated Press, McClatchy, Al Jazeera English (Fault Lines, Washington, D.C.), WZBC (News, Boston), WBAI (Democracy Now!, New York), WNYC (The Brian Lehrer Show, New York), WHYY (Radio Times, Philadelphia), NPR (Morning Edition, Washington, D.C.), CBS News, ABC News Radio, Salon.com, Talking Points Memo, Alternet, The Huffington Post, Slate Magazine, and CQ Researcher, among many others.* 

"Why the Democrats and Movements Need Each Other," *In These Times* (cover story), October 17, 2017; co-authored with Frances Fox Piven.

"The Power of Disruption: An Interview with Frances Fox Piven," *Global Dialogue: Newsletter for the International Sociological Association* 5(4): December 2015.

"The Myth of Voter Fraud," BillMoyers.com, March 9, 2015.

"Movements Need Politicians - And Vice Versa," The Nation, October 22, 2012; co-authored with Frances Fox Piven.

"The Other Campaign: Who Gets To Vote," New Labor Forum, May 2012; co-authored with Frances Fox Piven.

"Why We Need ACORN," Los Angeles Times, April 22, 2010; co-authored with Frances Fox Piven.

"Re-Drawing the Map of U.S. Politics," Red Pepper, April, 2008; co-authored with Frances Fox Piven.

"N.C. Rejects Politics of Fear," The Charlotte Observer, Charlotte, North Carolina, July 18, 2007.

"They Are Arriving: Immigrants Are Gaining Power in New York's Voting Booths," *New York Daily News*, New York, July 24, 2005.

"Albany's Making Bad Elections Worse," New York Daily News, New York, August 22, 2004.

# **UNPUBLISHED PAPERS, PRESENTATIONS AND REPORTS**

#### Works in Progress

"Demosprudence and Grassroots Struggles to Protect and Expand the Right to Vote"

"Does Concentration Worsen Poverty? The Case of Philadelphia"

"Human Error in Election Administration"

"Felony Disfranchisement and the New Three-Fifths Rule"

"The Voting Rights of the Poor"

"The Forgotten History of Mobilization for Youth"

Black Suffrage and American Democracy (monograph)

#### **Conference Participation, Papers and Invited Presentations**

Discussant, "Local Election Officials and Election Management," Conference Within a Conference, 91<sup>st</sup> Annual Meeting of the Southern Political Science Association, San Juan, Puerto Rico, January 9-11, 2020.

"Human Error in Election Administration," paper presented at the 89<sup>th</sup> Annual Meeting of the Southern Political Science Association, New Orleans, January 4-6, 2018.

Invited Panelist, "Impasses: Beyond Social Democracy," Transcending Pessimism, Reimagining Democracy: A Conference in Honor of Leo Panitch, York University, Toronto, October 6-7, 2017.

Invited Lecture, "The Politics of Voting: Who Shall Be the Electors?" Saul O. Sidore Lecture Series, Centers on Race, Class and Gender in a Divided America, University of New Hampshire-Manchester, Manchester, New Hampshire, March 21, 2017.

"Deadwood and Disenfranchisement: Maintaining Election Lists in the United States," paper presented at the 87<sup>th</sup> Annual Meeting of the Southern Political Science Association, New Orleans, January 12-14, 2017; co-authored with Margaret Groarke.

Invited Speaker, "Defending Democracy: How Political Scientists Are Engaging in the Fight Over Voting Rights (And Why You and Your Dept. Should Too)," roundtable presented by the Scholars Strategy Network at the 112<sup>th</sup> Annual Meeting of the American Political Science Association, Philadelphia, September 1-4, 2016.

Invited Panelist, "Beyond Neoliberalism: Social Justice after the Welfare State," Symposium Sponsored by the Center for the Study of Social Difference, Women Creating Change, the Heyman Center for the Humanities, and the History Department at Columbia University, New York City, April 2, 2016.

Invited Panelist, "Voting Rights at 50," 22<sup>nd</sup> Annual First Monday Celebration, Eric R. Neisser Public Interest Program, Rutgers School of Law, Newark, New Jersey, October 7, 2015.

Panel Organizer and Chair, "Electoral Rules, Voting and Turnout: New Pathways for Research," panel at the 111<sup>th</sup> Annual Meeting of the American Political Science Association, San Francisco, September 3-6, 2015.

"Community and Class in a Neoliberal Age," paper presented at the 110<sup>th</sup> Annual Meeting of the American Sociological Association, Chicago, August 22-25, 2015; co-authored with Frances Fox Piven.

"Black Urban Liberalism: A Case Study of Democratic Inclusion and Economic Exclusion in Philadelphia, 1970-2010," paper presented at the 45<sup>th</sup> Annual Meeting of the Urban Affairs Association, Miami, April 8-11, 2015.

Invited Speaker, "Does Concentration Worsen Poverty? The Philadelphia Case," Center for Urban Research and Education, Rutgers University, Camden, December 12, 2014.

Invited Speaker, "The State of Voting Rights," sponsored by the Atlanta Chapter of the Scholars Strategy Network, Atlanta, December 2, 2014.

"The Poverty of Politics in a Northern City: A Case Study of Democratic Inclusion and Economic Exclusion in Philadelphia, 1970-2000," paper presented at the 39<sup>th</sup> Annual Meeting of the Social Science History Association, Toronto, November 6-9, 2014.

"Crisis, Convulsion and the Welfare State," roundtable presentation at the 109<sup>th</sup> Annual Meeting of the American Sociological Association, San Francisco, August 16-19, 2014; co-authored with Frances Fox Piven.

"Making Policy in the Streets," paper presented at the 44<sup>th</sup> Annual Meeting of the Urban Affairs Association, San Antonio, March 20, 2014; co-authored with Frances Fox Piven.

Invited Panelist, "Voter Suppression, Equal Rights, and the Promise of Democracy," sponsored by the Scholars Strategy Network, the Center for American Political Studies, and the Malcolm Wiener Center for Social Policy, Harvard University, March 6, 2014.

"Crisis, Convulsion and the Welfare State," paper presented at the 11<sup>th</sup> Annual Meeting of the European Sociological Association, Torino, Italy, August 28-31, 2013; co-authored with Frances Fox Piven.

Invited Panelist, "Anatomy of A Public Interest Lawsuit: Voter ID Legislation – A Public Interest Legal Challenge," sponsored by Penn Law Clinical Programs, Lawyering in the Public Interest, Toll Public Interest Center, American Constitution Society and the Civil Rights Law Project, University of Pennsylvania Law School, Philadelphia, Pennsylvania, November 5, 2012.

Invited Panelist, "Disenfranchise This: The Cost of Voter Suppression," 19<sup>th</sup> Annual First Monday Celebration, Eric R. Neisser Public Interest Program, Rutgers School of Law, Newark, New Jersey, October 3, 2012.

Invited Panelist, "The Voting Rights Act: Where Do We Go From Here?" Rutgers University Law Review Symposium, Trenton, New Jersey, April 13, 2012.

Invited Panelist, "Voting Rights," Civil Rights Law Society, Columbia University Law School, New York City, March 20, 2012.

Invited Panelist, "Race and Public Policy," conference at George Mason University School of Public Policy, Arlington, Virginia, October 10, 2011.

Invited Panelist, "Organizing the Poor for Rights: The Work of Frances Fox Piven," 107<sup>th</sup> Annual Meeting of the American Political Science Association, Seattle, September 1-4, 2011.

"Is Political Polarization Good or Bad for Democracy?," paper presented at the 69<sup>th</sup> Annual Meeting of the Midwest Political Science Association, Chicago, March 30-April 2, 2011.

Invited Roundtable Participant, "Voter Disenfranchisement in American Politics," 82<sup>nd</sup> Annual Meeting of the Southern Political Science Association, New Orleans, January 6-8, 2011.

Invited Panelist, "Voter Participation," New York City Charter Revision Commission, New York City, June 2, 2010.

Discussant, "Immigrant Voters: Asian Americans and the 2008 Election," Immigration Seminar Series, Graduate School and University Center of the City University of New York, May 4, 2009.

"Purging Voters Under the NVRA," paper presented at the 67<sup>th</sup> Annual Meeting of the Midwest Political Science Association, Chicago, April 2-5, 2009; co-authored with Margaret Groarke.

Invited Panelist, "Democracy in America: The African-American Experience - Then, Now and Future," U.S. Mission to the

United Nations, New York, March 17, 2009.

Invited Speaker, "Voter Suppression in the 2008 Presidential Election," Funders Committee for Civic Participation, Washington, D.C., December 9, 2008.

Invited Panelist, "Stealing the Vote in 2008," A Panel Discussion at New York University, October 16, 2008.

Invited Panelist, "Keeping Down the Vote: Vote Suppression and the 2008 Election," Sarah Lawrence College, September 23, 2008.

"Modeling Problems in the Voter ID-Voter Turnout Debate," paper presented at the 8<sup>th</sup> Annual State Politics and Policy Conference, Temple University, Philadelphia, May 30-31, 2008; co-authored with Robert S. Erikson.

Panelist, "Keeping Down the Black Voter: Race and the Demobilization of American Voters," *Left Forum*, New York, March 16, 2008.

Panel Discussant, "Group Mobilization, Partisanship, Ideas, and Leadership: The Los Angeles and New York Mayoral Elections of 2005," 102<sup>nd</sup> Annual Meeting of the American Political Science Association, Philadelphia, August 31-September 3, 2006.

"Re-thinking Immigrant Political Incorporation," paper presented at the 36<sup>th</sup> Annual Meeting of the Urban Affairs Association, Montreal, Canada, April 19-22, 2006.

"Immigrant Politics in an Age of Terror," paper presented at the 101<sup>st</sup> Annual Meeting of the American Political Science Association, Washington, D.C., September 1-4, 2005.

Panel Discussant, "Immigrants As Local Political Actors," 100<sup>th</sup> Annual Meeting of the American Political Science Association, Chicago, September 1-4, 2004.

Invited Lecturer, "Literature of Immigration," New Jersey Council for the Humanities Teacher Institute, Monmouth University, Long Branch, New Jersey, August 5, 2004.

"The Impact of 9/11 on Immigrant Politics in New York, With a Focus on Arab, Muslim, and South Asian Immigrant Communities," Columbia University Seminar on the City, New York City, March 23, 2004.

Invited Participant, "The Impact of Post-9/11 Immigration and Law Enforcement Policies," The Century Foundation, New York City, February 4, 2004.

Workshop Participant, Multi-race Study Group, *Harvard CAPS Workshop on Methodologies to Study Immigrant Political Incorporation*, Harvard University, Cambridge, October 30-31, 2003.

Invited Lecturer, "Literature of Immigration," New Jersey Council for the Humanities Teacher Institute, Monmouth University, Long Branch, New Jersey, July 10, 2003.

Panelist, "Rebuilding Post-War Iraq: Domestic and International Implications;" Community Forum, Barnard College, New York City, April 21, 2003.

"Political Participation and the Neglected Role of Spatial Form;" paper presented at the 33<sup>rd</sup> Annual Meeting of the Urban Affairs Association, Cleveland, Ohio, March 27-30, 2003.

Invited Speaker, "Teach-In on Iraq;" Barnard College, New York City, November 8, 2002.

Panelist, "Colloquium on Responding to Violence," in honor of Virginia C. Gildersleeve Lecturer, Jody Williams, Barnard Center for Research on Women, Barnard College, New York City, October 25, 2002.

Panel Moderator, "Who is Brooklyn?" at The Future of Brooklyn Conference, Brooklyn College, June 7, 2002.

"Asian and Latino Participation in New York City: The 2000 Presidential Election," paper presented at the 97<sup>th</sup> Annual Meeting of the American Political Science Association, San Francisco, August 29 – September 2, 2001; co-authored with

John H. Mollenkopf.

Organizer and Panelist, *The Changing Face of New York's Electorate: The Immigrant Vote in 2000 and Beyond*, A Panel Discussion and Media Briefing sponsored by the New York Immigration Coalition and Barnard College, New York City, May 2, 2001.

Organizer and Panelist, *The Muslim Communities in New York City Project; A One-Day Conference*, sponsored by the Center for Urban Research and Policy and the Middle East Institute at the School of International and Public Affairs, Columbia University, New York City, April 30, 2001.

Panelist, *Democratizing New York City; Re-imagining City Government*, sponsored by the Center for Humanities, CUNY Graduate Center, New York City, March 27, 2001.

Organizer and Panel Moderator, *Independent Politics in A Global World*, sponsored by the Independent Politics Group, CUNY Graduate Center, New York City, October 6-7, 2000.

"Political Capital and Political Participation," paper presented at the 96<sup>th</sup> Annual Meeting of the American Political Science Association, Washington, D.C., August 31-September 3, 2000; co-authored with Ester R. Fuchs and Robert Y. Shapiro.

"The Political Participation of Immigrants in New York," at *Immigrant Political Participation in New York City; A One-Day Working Conference*, sponsored by the Center for Urban Research/CUNY and the International Center for Migration, Ethnicity, and Citizenship, New York City, June 16, 2000

"The Muslim Community in New York City Project," with Louis Abdellatif Cristillo; *Muslims in New York: An Educational Program for Religious Leaders in New York City*, seminar on faith traditions in New York; sponsored by the Interfaith Center of New York and the Imans Council of New York, New York City, June 14, 2000.

"The Political Participation of Immigrants in New York," Session VI on *Integration of Immigrants and Their Descendents*, Center for Migration Studies 20<sup>th</sup> Annual National Legal Conference on Immigration and Refugee Policy, Washington, D.C., March 30-31, 2000.

"The Changing Arab New York Community," with Louis Abdellatif Cristillo; *A Community of Many Worlds: Arab Americans in New York City*, symposium sponsored by the Museum of the City of New York, New York City, February 5-6, 2000.

"The Political Incorporation of Immigrants in New York," paper presented at the 95<sup>th</sup> Annual Meeting of the American Political Science Association, Atlanta, September 1-4, 1999; co-authored with Jennifer Holdaway and Ronald Hayduk.

"Political Capital and Political Participation," co-authored with Ester R. Fuchs and Robert Y. Shapiro; paper presented at the 58<sup>th</sup> Annual Meeting of the Midwest Political Science Association, Chicago, April 15-17, 1999.

"Racial and Ethnic and Urban/Suburban Differences in Public Opinion and Policy Priorities," paper presented at the 58<sup>th</sup> Annual Meeting of the Midwest Political Science Association, Chicago, April 15-17, 1999; co-authored with Ester R. Fuchs, Robert Y. Shapiro, and Gustavo Cano.

"The Importance of Full Disclosure of Non-response Due to Refusals and the Nature of Potential Bias in Phone Surveys," with Robert Y. Shapiro, evening workshop presentation to the New York City chapter of the American Association for Public Opinion Research, New York City, March 9, 1999.

"White, Black and Latino Voter Turnout in the 1993 New York City Mayoral Election: A Comparison of Ecological Regression Techniques and Exit Poll Data," paper presented at the 94<sup>th</sup> Annual Meeting of the American Political Science Association, Boston, September 4, 1998; co-authored with David K. Park and Daniel M. Slotwiner.

Panel Discussant, "Race, Rights, and American Politics;" panel at the 27<sup>th</sup> Annual Meeting of the Northeastern Political Science Association and International Studies Association-Northeast, Newark, New Jersey, November 9-11, 1995.

"Assessing the Quality of Political Reform: Redistricting and the Case of New York City," paper presented at the Annual Meeting of the New York State Political Science Association, Albany, New York, April 22, 1994.

#### **Research Reports**

How to Think About Voter Participation, White Paper, New York City Charter Revision Commission, July 2010.

The Myth of Voter Fraud, White Paper, Dēmos – A Network for Ideas and Action, May 2002.

Evaluation of the New York Immigration Coalition's '200,000 in 2000: New Americans Pledging to Strengthen Democracy and New York' Initiative, Final Report to the New York Foundation, with John H. Mollenkopf, August 2001.

A Study of Attitudes Among Low-Income Parents Toward Environmental Health Risks and Childhood Disease: The Brooklyn College COPC Survey, with Immanuel Ness, June 2001.

*Political Participation and Political Representation in New York City; With a Special Focus on Latino New Yorkers*, Report of the Columbia University/Hispanic Education and Legal Fund Opinion Research Project, co-authored with Robert Y. Shapiro and Ester R. Fuchs, December 1997.

#### Expert Participation in Federal and State Voting Rights Cases

Expert Report, Fair Fight Action v. Raffensperger, U.S. District Court for the Northern District of Georgia, Atlanta Division, 2019.

Expert Report, North Carolina State Conference of the NAACP v. Cooper, U.S. District Court for the Middle District of North Carolina, 2019.

Expert Witness, *League of Women Voters of New Hampshire v. Gardner*, State of New Hampshire Superior Court, Hillsborough, SS, Southern District, 2018.

Expert Witness, Fish v. Kobach, U.S. District Court for the District of Kansas, 2016-2018.

Expert Witness, One Wisconsin Institute v. Nichols et al., U.S. District Court for the Western District of Wisconsin, 2016.

Expert Witness, Lee v. Virginia State Board of Elections, U.S. District Court for the Eastern District of Virginia, 2016.

Expert Witness, Ohio Democratic Party v. Husted, U.S. District Court for the Southern District of Ohio, 2015.

Expert Witness, North Carolina State Conference of the NAACP v. McCrory, U.S. District Court for the Middle District of North Carolina, 2014-2016.

Expert Witness, Veasey v. Perry, U.S. District Court for the Southern District of Texas, 2014-2015.

Expert Witness, Frank v. Walker/LULAC (formerly Jones) et al. v. Deininger, U.S. District Court for the Eastern District of Wisconsin, 2012-2013.

Expert Witness, Applewhite v. Commonwealth of Pennsylvania, Commonwealth Court of Pennsylvania, 2012-2013.

Expert Report, Rutgers University Student Assembly et al. v. Middlesex County Board of Elections, Superior Court of New Jersey/Middlesex County, 2011.

Expert Witness, *Democratic National Committee, et al. v. Republican National Committee, et al.*, U.S. District Court in the District of New Jersey, 2008-2009.

#### Amicus Filings and Congressional and Other Testimony

*Missouri State Conference of the NAACP v. State of Missouri*, Missouri Supreme Court, Brief of Amicus Curiae Lorraine C. Minnite, June 8, 2020.

U.S. Commission on Civil Rights Briefing, "An Assessment of Minority Voting Rights Obstacles in the United States," Raleigh, North Carolina, February 2, 2018 (oral and written testimony).

Shelby County, Alabama v. Holder; U.S. Supreme Court, Brief of Historians and Social Scientists as Amici Curiae in Support of Respondents, February 1, 2013 (signatory).

*League of Women Voters v. Rokita;* Supreme Court of Indiana, Brief of *Amici Curiae* Lonna Rae Atkeson, Matt A. Barreto, Lorraine C. Minnite, Jonathan Nagler, Stephen A. Nuño and Gabriel Ramon Sanchez in Opposition to Defendant's Petition to Transfer, November 2009.

U.S. Senate Committee on Rules and Administration, *Hearing on In-Person Voter Fraud: Myth and Trigger for Voter Disenfranchisement?*, March 12, 2008 (invited written testimony).

Expert Witness, U.S. House Committee on the Judiciary, Subcommittee on the Constitution, Civil Rights and Civil Liberties, *Oversight Hearing on Voter Suppression*, February 26<sup>th</sup>, 2008 (oral and written testimony).

William Crawford, et al. v. Marion County Election Board, et al.; Indiana Democratic Party, et al. v. Todd Rokita et al.; U.S. Supreme Court, Brief of Amici Curiae The Brennan Center for Justice, Demos: A Network for Ideas and Action, Lorraine C. Minnite, Project Vote, and People for the American Way Foundation in Support of Petitioners, November 2007.

William Crawford, et al. v. Marion County Election Board, et al.; Indiana Democratic Party, et al. v. Todd Rokita et al.; U.S. Supreme Court, Brief of Amici Curiae of Historians and Other Scholars in Support of Petitioners, November 2007 (signatory).

Fact Witness, ACORN et al. v. Bysiewicz, U.S. District Court in the District of Connecticut, 2004-2005.

# **RESEARCH AND OTHER GRANTS**

*Principle Investigator*, "Urbanism and Sustainable Development in Cuba," Rutgers Global Study Abroad - International Service-Learning Innovation Grant, 2020-2022 (\$5,000).

Principle Investigator, "Camden City Exit Poll," Rutgers Research Council Award, 2018-2019 (\$2,000).

Co-Recipient, Rutgers University Centers for Global Advancement and International Affairs, 2016 (\$10,000).

Recipient, Rutgers-Camden Learning Abroad Office, Course Development Grant, 2015 (\$1,000).

Principle Investigator, "The Political Exclusion of the Urban Poor," Rutgers Research Council Award, 2013-2014 (\$3,000).

*Recipient*, RU FAIR ADVANCE (NSF) Rutgers-Camden Travel Award, March/April 2013 (\$1,590). Funded by the Rutgers University Office for the Promotion of Women in Science, Engineering, and Mathematics (SciWomen) Institutional Transformation grant from the ADVANCE program of the National Science Foundation.

*Principal Investigator*, "University Collaborative Exit Poll," November 2008 to October 2009 (\$30,000). Funded by Columbia University Institute of Social and Economic Research and Policy, Center for Urban Research at the Graduate School and University Center of the City University of New York, and the New York Latino Research and Resources Network at the University of Albany, State University of New York.

*Co-Principal Investigator*, "2006 New Americans Exit Poll," November 2006 to October 2007 (\$10,000). Funded by the Graduate School of Arts and Sciences, Columbia University.

*Recipient*, Special Assistant Professor Leave Travel Grant, September 2003 to September 2005 (\$7,700). Funded by the Provost's Office, Winston Fund, Barnard College.

*Recipient*, Conference Grant, September 2003 to September 2005 (\$3,000). Funded by the Provost's Office, Forman Fund, Barnard College.

*Member*, Working Group on New York's Recovery from September 11<sup>th</sup>, June 2002 to June 2005 (\$30,000). Funded by the Russell Sage Foundation.

*Principal Investigator*, "2002 New Americans Exit Poll," December 2002 to March 2003 (\$1,800). Funded by the Faculty Research Fund of Barnard College.

*Principal Investigator*, "Evaluation of the New York Immigration Coalition's '200,000 in 2000' Campaign," July 2000 to July 2001 (\$40,000). Barnard College, Columbia University. Funded by the New York Foundation.

*Co-Principal Investigator*, "Muslim Communities in New York City," July 1998 to July 2001 (\$350,000). The Center for Urban Research and Policy, Columbia University. Funded by the Ford Foundation.

#### SERVICE

#### College and University

Invited Panelist, Screening: "Rigged, the Voter Suppression Playbook," in observation of National Voter Registration Day, Rutgers University Libraries, September 22, 2020.

Invited Panelist, "Voting Law in the 2016 Election: Perspectives from Political Science, Public Policy and Public Law," Rutgers University, Camden, New Jersey, December 7, 2016.

Member, Steering Committee, Rutgers University-Camden International Conference on Sustainable Community Development and STEAM Fields: What We Can Learn from A Changing Cuba," October 31 – November 3, 2016.

Chair, Department of Public Policy and Administration, Rutgers-Camden, July 2016 to present.

Member, Advisory Committee, Continuing Education Program in Historic Preservation, Rutgers-Camden, 2016 to present. Member, Global Research and Education Committee, Rutgers-Camden, 2016-2017.

Member, Tenure and Third-Year Review Committees, Department of Political Science, Rutgers-Camden, 2015 to present. Member, Rutgers-Camden Department of Public Policy & Administration Ph.D. Committee, 2014-present.

Co-Organizer, "Symposia on Urban Poverty and Inequality," Rutgers University-Camden, February 4, February 19, April 2, and April 22, 2014.

Member, Rutgers-Camden Department of Public Policy & Administration Ph.D. Exam (Theory) Committee, 2013-2016. Member, General Education Committee, Subcommittee on Engaged Civic Learning, Rutgers-Camden, 2013-2014, 2015.

Marshal, Rutgers-Camden Commencement, 2013, 2014.

Member, Rutgers-Camden Department of Political Science Search Committee, 2013.

Member, Rutgers-Camden Department of Public Policy & Administration Search Committee, 2012, 2013, 2018-2020.

Director, Undergraduate Urban Studies Program, Rutgers-Camden, 2011 to 2016.

Member, Ford Faculty Seminar on Inequality in New York, Barnard College, 2009-2010.

Panelist, "Obama and the Immigrant Vote," Barnard Forum on Migration, October 30, 2008.

Panel Moderator, "Is Democracy Democratic?" at the Thirty-Third Annual *The Scholar and the Feminist Conference*, Barnard College, March 11, 2008.

Participant, Mellon 23 Assembly, Macalester College, St. Paul, Minnesota, February 15-17, 2008.

Panelist, "Election Reflections: The Bush Legacy and the Coming Presidential Elections," Barnard College, Oct. 8, 2007.

Member, *The Scholar and the Feminist Conference* Planning Committee, Barnard Center for Research on Women, 2006.

Member, Faculty Programs and Governance Committee, 2005-2007 (on leave Spring 2007).

Member, Faculty Committee, Barnard Leadership Initiative, 2005-2007 (on leave Spring 2007).

Member, Medalist Committee, Barnard College, 2004-2006, 2007-2009 (on leave Spring 2007).

Member, Columbia University Seminar in Political and Social Thought, 2004 to 2011.

Faculty Mentor, Francene Rodgers Scholarship Program, Barnard College, Summer 2004.

Panel Moderator, "Governance by the Media: Feminists and the Coming Election," at the Twenty-Ninth Annual *The Scholar* and the Feminist Conference, Barnard College, April 3, 2004.

Member, Ph.D. Subcommittee in Urban Planning, Columbia University School of Architecture, Planning and Preservation, 2003 to 2011.

Member, Columbia University Seminar on Globalization, Labor, and Popular Struggles, 2001 to 2011.

Member, Columbia University Seminar on the City, 2001 to 2011.

Faculty Mentor, Columbia University Graduate School of Arts and Sciences Summer Research Program, 2001.

Advisory Board Member, Barnard Center for Research on Women, 2000 to 2011.

First Year Adviser, Barnard College, 2000 to 2004, 2009 to 2011.

One-Year Replacement Member, Committee on Programs and Academic Standing, Barnard College, 2000-2001.

#### Professional

I have reviewed numerous journal articles for the American Political Science Review, American Journal of Political Science, American Review of Politics, British Journal of Industrial Relations, Community Development Journal, Election Law Journal, Ethnic and Racial Studies, Journal of Electoral Studies, Journal of Ethnic and Migration Studies, Law and Society Review, New Political Science, Perspectives on Politics, Political Behavior, Political Communication, Political Research Quarterly, Political Science Quarterly, Public Opinion Quarterly, Urban Affairs Review, and Working U.S.A.: The Journal of Labor and Society; and book proposals and manuscripts for Blackwell Publishers, Lexington Books, Routledge, M.E. Sharpe, Inc., New York University Press, and The New Press.

Chair, Social Science History Association President's Book Award Selection Committee, 2018.

Co-Organizer, "Insurgency from Below and the Future of American Democracy: A Conference in Celebration of the Work of Frances Fox Piven and Richard A. Cloward," Graduate School and University Center of the City University of New York, New York City, October 11, 2017.

Member, Social Science History Association President's Book Award Selection Committee, 2017.

Invited Speaker, Voting Rights Institute Expert Witness Training Conference, sponsored by The Campaign Legal Center, the American Constitution Society and Harvard University Center for Governmental and International Studies, Cambridge, September 14, 2016.

Dissertation Fellowship Reviewer, Center for Engaged Scholarship, 2016-present.

Faculty Presenter, American Bar Association, "The Voter Fraud Myth, Voter ID, Immigration and Voting Rights, and State Legislative Reapportionment," February 18, 2016 (1.5 CLE credits).

Co-Chair, Scholars Strategy Network, New Jersey Chapter, 2015 to present.

Consulting Expert, U.S. Government Accountability Office, Issues Related to State Voter Identification Laws, May 2013.

Guest Seminar Speaker, Carnegie-Knight News21 Initiative Reporting Seminar on Voting Rights, The Walter Cronkite School of Journalism and Mass Communication, Arizona State University, February 2, 2012.

Member, Best Book Committee, Urban Section, American Political Science Association, 2010-2011, 2012-2013.

Executive Council Member, Urban Section, American Political Science Association, 2005-2006, 2008-2010.

Member, Charles A. McCoy Career Achievement Award, New Politics Section, APSA, 2008-2009.

Member, Best Dissertation Committee, Urban Section, American Political Science Association, 2008-2009.

Co-chair, Local Host Committee, American Sociological Association Annual Conference, 2006-2007.

Nominating Committee, Urban Section, American Political Science Association, 2006-2007.

Chair, Piven and Cloward Award Committee, New Political Science Section, American Political Science Assoc., 2005-6.

Member, Best Paper Committee, Urban Section, American Political Science Association, 2005-2006.

Editorial Board Member, Working USA: The Journal of Labor and Society, 2004 to present.

Grant Reviewer, Research Award Program, The City University of New York, 2003.

Member, New York Colloquium on American Political Development, 2001 to 2011.

#### Community

- Invited Keynote Speaker, League of Women Voters of Burlington County, New Jersey, Annual Fall Conference, Moorestown Friends, Moorestown, New Jersey, October 7, 2020.
- Invited Speaker, National Organization for Women, South Jersey 'Alice Paul' Chapter, Moorestown, New Jersey, February 14, 2018.

Invited Speaker, Annual Fall Meeting of the Mercer County Division of Elections, Clerks Workshop, October 3, 2017.

Invited Keynote Speaker, League of Women Voters of Burlington County, New Jersey, Annual Fall Conference, Moorestown Friends, Moorestown, New Jersey, September 18, 2017.

Poll Worker, Gloucester County Board of Elections, (Republican Party Representative), 2017 to present.

Faculty Adviser and Organizer, Graduate Student Conference on State and Local Economic Development Policy, The Neighborhood Center, Camden, New Jersey, April 17, 2016; March 28, 2017.

Invited Panelist, "Voting Fraud, Voter Suppression: Myths and Realities," League of Women Voters of Connecticut Education Fund Annual Fall Conference, Darien Library, Darien, Connecticut, October 24, 2015.

Member, Participatory Budgeting in New York City Research Board, Community Development Project of the Urban Justice Center, 2013-2015.

Invited Speaker, Registrar's of Voters Association of Connecticut, Annual Meeting, Cromwell, CT, April 12, 2012.

Keynote Speaker, Federal Aviation Administration William J. Hughes Technical Center 2012 Black History Month Celebration, Atlantic City, New Jersey, February 15, 2012.

Organizer, "National Teach-in on Debt, Austerity and How People Are Fighting Back," Judson Memorial Church, New York City, April 11, 2011.

Host Committee, New York State Immigrant Action Fund, 2010.

Board Member, The Left Forum, 2009 to 2013.

Member, New York City Comptroller-Elect John Liu Transition Committee Working Group on External Affairs, 2009. Board Member, Project Vote, 2008-2009.

Speaker, "The Immigrant Voter in New York City," New York Voter Assistance Commission, New York City, May 19, 2005; Citizens Union, New York City, May 18, 2005; New York Immigration Coalition, New York City, February 17, 2005; New York City Central Labor Council, New York City, April 28, 2004.

Speaker, "The Post-9/11 Crackdown on Immigrants," Coney Island Avenue Project, Brooklyn, New York, March 25, 2004. Volunteer, *New York Immigration Coalition*, Voter Registration at INS Naturalization Ceremonies, 1998 to 2002.

# PAID CONSULTANTSHIPS

#### Lawrence & Bundy, LLC, 2019.

Wrote expert report for plaintiffs in Fair Fight Action v. Raffensperger, U.S. District Court for the Northern District of Georgia, Atlanta Division.

#### American Civil Liberties Union Voting Rights Project, 2016-2018

Wrote expert reports and testified at trial for plaintiffs in Fish v. Kobach, U.S. District Court for the District of Kansas.

#### Perkins Coie, LLP, 2015-2018.

Wrote expert reports and testified at trial for plaintiffs in *Ohio Democratic Party v. Husted*, U.S. District Court for the Southern District of Ohio, Eastern Division; *Lee v. Virginia State Board of Elections*, U.S. District Court for the Eastern District in Virginia, Richmond Division; *One Wisconsin v. Wisconsin Government Accountability Board* in the U.S. District of the Western District of Wisconsin; and *League of Women Voters of New Hampshire v. Gardner*, State of New Hampshire Superior Court, Hillsborough SS., Southern District.

#### Kirkland & Ellis, LLP, 2014-2016.

Wrote expert reports and testified at trial for plaintiffs in North Carolina State Conference of NAACP v. McCrory, U.S. District Court for the Middle District of North Carolina.

#### Dechert, LLP, 2014

Wrote expert report for plaintiffs and testified at trial in *Veasey v. Perry*, U.S. District Court for the Southern District of Texas.

#### Arnold & Porter LLP, 2012-2013; 2019.

Wrote expert reports for plaintiffs (2012, 2013) and testified (2012) at trial in *Applewhite v. Commonwealth of Pennsylvania*, Commonwealth Court of Pennsylvania. Wrote expert report for plaintiffs (2019) in *North Carolina State Conference of the NAACP v. Cooper*, U.S. District Court for the Middle District of North Carolina.

#### New York City Charter Revision Commission, 2010.

Analyzed the problem of voter participation in New York City and possible solutions for consideration by Commissioners as they prepared ballot referenda to be placed before the voters in 2010.

#### New York Latino Research and Resources Network at the University of Albany, State University of New York, 2008.

Analyzed survey and other data and wrote report on Latino political participation in New York City and New York State in the 2008 presidential election.

#### New York Immigration Coalition, New York, New York, 2006.

Provided technical assistance to a three-city exit poll survey project for the 2006 national midterm elections.

#### Brennan Center for Justice at New York University School of Law, 2004-2005.

Provided expert report on voter fraud and testified as a fact witness in ACORN, et al. v. Bysiewicz, Civil Action No. 3:04-CV-1624 (MRK), U.S. District Court for the District of Connecticut.

# Howard Samuels State Management and Policy Center, Graduate School and University Center of CUNY, 2002.

Consulted on survey design for a project on the efficacy of community-based organizations.

#### Dēmos, New York, New York, 2001 to 2002.

Researched and wrote a study of voter fraud in contemporary American politics.

#### 1199 Child Care Fund, New York, New York, 2000 to 2002.

Prepared demographic data for Fund-eligible union members and their children.

# **APPENDIX B**

#### APPENDIX B

Alex Rose, "Collingdale Man Charged with Voter Fraud," *Delco Daily Times*, November 21, 2018, https://www.delcotimes.com/news/collingdale-man-charged-with-voter-fraud/article\_cb571234-ed0f-11e8-86ed-ef972a825af1.html, (last accessed August 17, 2020).

Amended Answers of Respondents to Petitioners' First Set of Interrogatories, *Applewhite v. Commonwealth of Pennsylvania* (Pa. Cmwlth., No. 330 MD 2012), June 7, 2012.

Applewhite v. Commonwealth of Pennsylvania (Pa. Cmwlth., No. 330 MD 2012).

Bernd Beber and Alexandra Scacco, "What the Numbers Say: A Digit-Based Test for Election Fraud," *Political Analysis* 20(2).

Bill Heltzel, "Six of Seven Charges Against Austin Murphy Dismissed," *Pittsburgh Post-Gazette*, June 22, 1999, http://old.post-gazette.com/regionstate/19990622murphy6.asp (last accessed August 17, 2020).

C. Breunig and A. Goerres, "Searching for Electoral Irregularities in an Established Democracy: Applying Benford's Law Tests to Bundestag Elections in Unified Germany," *Electoral Studies* 30(3).

Charles Teddlie and Abbas Tashakkori, "Major Issues and Controversies in the Use of Mixed Methods in the Social and Behavioral Sciences," in Abbas Tashakkori and Charles Teddlie, eds., *Handbook of Mixed Methods in Social and Behavioral Research* (Thousand Oaks, Calif.: Sage Publications, Inc., 2003).

Chris Lehman, "10 Oregon Voters Plead Guilty to Voter Fraud in 2016 Presidential Election," *The Oregonian/OregonLive*, April 29, 2019. https://www.oregonlive.com/politics/2019/04/10-oregon-voters-pleaguilty-to-voter-fraud-in-2016-presidential- election.html (last accessed August 3, 2020).

Corbin Carson, "Exhaustive Database of Voter Fraud Cases Turns Up Scant Evidence That It Happens," News21, August 12, 2012, available at https://votingrights.news21.com/article/election-fraud-explainer/ (last accessed September 12, 2019).

David Cottrell, Michael C. Herron, and Sean J. Westwood, "An Exploration of Donald Trump's Allegations of Massive Voter Fraud in the 2016 General Election," *Electoral Studies* 51 (2018).

Donald Trump's May 26, 2020 Twitter feed at https://twitter.com/realDonaldTrump/status/1265255835124539392 (last accessed August 3, 2020).

Elise Viebeck, "Minuscule Number of Potentially Fraudulent Ballots in States with Universal Mail Voting Undercuts Trump Claims About Election Risks," *Washington Post*, June 8, 2020, https://www.washingtonpost.com/politics/minuscule-number-of-potentially-fraudulent-ballots-in-states-with-universal-mail-voting-undercuts-trump-claims-about-election-risks/2020/06/08/1e78aa26-a5c5-11ea-bb20-ebf0921f3bbd story.html (last accessed August 3, 2020).

Evidentiary Hearing: Preview of Evidence, North Carolina State Board of Elections, (Dec. 12, 2018). https://s3.amazonaws.com/dl.ncsbe.gov/State\_Board\_Meeting\_Docs/Congressional\_District\_9\_Portal/Executive %2 0Director's%20Preview%20of%20the%20Evidence.pdf (last accessed August 3, 2020).

"Gessler Voter Sting Nets 1 Conviction Despite Accusation of Widespread Fraud," *The Sentinel*, March 13, 2015, https://sentinelcolorado.com/news/gessler-voter-sting-nets-1-conviction-despite-accusation-widespread-fraud/ (last accessed August 3, 2020).

Hans von Spakovsky, "Four Stolen Elections: The Vulnerabilities of Absentee and Mail-In Ballots," Legal Memorandum No. 268, Heritage Foundation, July 16, 2020.

Heritage Foundation's website, https://www.heritage.org/voterfraud (last accessed August 3, 2020).

In Re. Investigation of Election Irregularities Affecting Counties Within the 9th Congressional District, North Carolina State Board of Elections (March 13, 2019).

Iowa Secretary of State Matt Schultz, "DCI Voter Fraud Investigations Report," May 8, 2014, available at http://publications.iowa.gov/16874/1/DCI%20Voter%20Fraud%20Report%205-8-14.pdf (last accessed August 3, 2020).

Jason Snead, "Brennan Center's Attacks on Heritage Voter Fraud Database Are Baseless," Heritage Foundation, September 11, 2017, https://www.heritage.org/election-integrity/commentary/brennan-centers-attacks-heritage-voter-fraud-database-are- baseless (last accessed August 4, 2020).

Jesse Paul, "10 People in Colorado May Have Cast Two Ballots in 2016 Election, While 38 Might Have Also Voted in Another State, Study Says," *Denver Post*, September 15, 2017, https://www.denverpost.com/2017/09/15/colorado-2016-improper-voting-study/ (last accessed August 3, 2020).

Jesse T. Richman, Gulshan A. Chattha, and David C. Earnest, "Do Non-citizens Vote in U.S. Elections?," *Electoral Studies* 36 (2014).

John S. Ahlquist, Kenneth R. Mayer, and Simon Jackman, "Alien Abduction and Voter Impersonation in the 2012 U.S. General Election: Evidence from a Survey List Experiment," *Election Law Journal* 13(4).

John W. Creswell and Vicki L. Plano Clark, eds., *Designing and Conducting Mixed Methods Research*, 3rd Ed. (Los Angeles: Sage Publications, Inc., 2017).

Joseph Deckert, Mikhail Myagkov, and Peter C. Ordeshook, "Benford's Law and the Detection of Election Fraud," *Political Analysis* 19(3).

Juraj Medzihorsky, "Election Fraud: A Latent Class Framework for Digit-Based Tests," *Political Analysis* 23(4): 506-517; Jacob M. Montgomery, et al., "An Informed Forensics Approach to Detecting Vote Irregularities," *Political Analysis* 23(4).

Justice Stevens, plurality opinion in Crawford v. Marion County Election Board, 553 U.S. 181, 196 (2008).

Lorraine C. Minnite Expert Report in Fish v. Kobach, U.S. District Court for the District of Kansas, 2016-2018.

Lorraine C. Minnite Expert Report in *Frank v. Walker/LULAC (formerly Jones) et al. v. Deininger*, U.S. District Court for the Eastern District of Wisconsin, 2012-2013.

Lorraine C. Minnite Expert Report in *League of Women Voters of New Hampshire v. Gardner*, State of New Hampshire Superior Court, Hillsborough, SS, Southern District, 2018.

Lorraine C. Minnite Expert Report in *Lee v. Virginia State Board of Elections*, U.S. District Court for the Eastern District of Virginia, 2016.

Lorraine C. Minnite Expert Report in *North Carolina State Conference of the NAACP v. McCrory*, U.S. District Court for the Middle District of North Carolina, 2014-2016.

Lorraine C. Minnite Expert Report in *Ohio Democratic Party v. Husted*, U.S. District Court for the Southern District of Ohio, 2015.

Lorraine C. Minnite Expert Report in *One Wisconsin Institute v. Nichols et al.*, U.S. District Court for the Western District of Wisconsin, 2016.

Lorraine C. Minnite Expert Report in Perry, U.S. District Court for the Southern District of Texas, 2014-2015.

Lorraine C. Minnite, "An Analysis of Voter Fraud," (New York: Demos, 2007), available at http://www.demos.org/publication/analysis-voter-fraud-united-states-adapted-2003-report-securing-vote (last accessed August 4, 2020).

Lorraine C. Minnite, "Election Day Registration: A Study of Voter Fraud Allegations and Findings on Voter Roll Security," (New York: Demos, 2007), available at https://www.issuelab.org/resource/election-day-registration-a-study-of-voter-fraud-allegations-and-findings-on-voter-roll-security.html (last accessed August 4, 2020).

Lorraine C. Minnite, "The Politics of Voter Fraud," (Washington, D.C.: Project Vote, 2007), available at https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=2ahUKEwjc\_tPstYPmAhXNvZ4 K HXTUC8AQFjAAegQIBRAC&url=http%3A%2F%2Fwww.projectvote.org%2Fwp-content%2Fuploads%2F2007%2F03%2FPolitics\_of\_Voter\_Fraud\_Final.pdf&usg=AOvVaw1jUdV8sW1HtHfxbt Xs m66W (last accessed August 4, 2020).

Lorraine C. Minnite, Myth of Voter Fraud (Ithaca, N.Y.: Cornell University Press, 2010).

M.V. Hood III and William Gillespie, "They Just Do Not Vote Like They Used To: A Methodology to Empirically Assess Election Fraud," *Social Science Quarterly*, 93(1).

Marylynne Pitz, "Murphy Arraigned on Vote-Fraud Charges," *Pittsburgh Post-Gazette*, May 25, 1999, http://old.post-gazette.com/regionstate/19990525murphy6.asp (last accessed August 17, 2020).

Michael C. Herron, "Mail-In Absentee Ballot Anomalies in North Carolina's 9th Congressional District," *Election Law Journal: Rules, Politics, and Policy* 18(3).

Michael Decourcy Hinds, "Vote-Fraud Ruling Shifts Pennsylvania Senate," New York Times, February 19, 1994.

Robertson, "Election Fraud – Winning At All Costs: Election Fraud in the Third Circuit," *Villanova Law Review* 40 (1995).

National Council of State Legislatures, "Voting Outside the Polling Place: Absentee, All-Mail and Other Voting at Home Options," (July 10, 2020), https://www.ncsl.org/research/elections-and-campaigns/absentee-and-early-voting.aspx (last accessed August 3, 2020).

Pennsylvania Applications and Balloting Guidance: Mail-in and Absentee Ballots and Voter Registration Changes, PA. DEP'T STATE (Jan. 10, 2020),

https://www.dos.pa.gov/VotingElections/OtherServicesEvents/Documents/PADOS\_Act%2077\_Absentee%20and %20Mail-in%20Guidance.pdf.

*Pennsylvania Provisional Voting Guidance*, PA. DEP'T STATE, (March 5, 2020), https://www.dos.pa.gov/VotingElections/OtherServicesEvents/Documents/PADOS\_ProvisionalBallots\_guidance\_1.0.pdf.

Project Website, Who Can Vote?, https://votingrights.news21.com/ (last accessed August 3, 2020).

Ray Christensen and Thomas J. Schultz, "Identifying Election Fraud Using Orphan and Low Propensity Voters," *American Politics Research*, vol. 42 (2).

Richard C. Pilger, ed., *Federal Prosecution of Election Offenses*, 8th ed., U.S. Department of Justice, Criminal Division, Public Integrity Section (Washington, D.C.: Government Printing Office, 2017, https://www.justice.gov/criminal/file/1029066/download (last accessed August 3, 2020).

Rudy Mehrbani, "Heritage Fraud Database: An Assessment," Brennan Center for Justice, September 8, 2017, https://www.brennancenter.org/our-work/research-reports/heritage-fraud-database-assessment.

Sharad Goel, Marc Meredith, Michael Morse, David Rothschild, and Houshmand Shirani-Mehr, "One Person, One Vote: Estimating the Prevalence of Double Voting in U.S. Presidential Elections, *American Political Science Review* 114(2).

Stephen Ansolabehere, Samantha Luks, and Brian F. Schaffner, "The Perils of Cherry-Picking Low Frequency Events in Large Sample Surveys," *Electoral Studies* 40 (2015).

VotePA, "Mail-In Application." https://www.votespa.com/Register-to-Vote/Documents/PADOS MailInApplication.pdf.

Torsten Ove, "Ex-Harmar Police chief Pleads Guilty to Ballot Tampering," *Pittsburgh Post-Gazette*, September 26, 2014, https://www.post-gazette.com/local/north/2014/09/26/Ex-Harmar-police-chief-pleads-guilty-to-ballot-tampering-Toney/stories/201409260172 (last accessed September 5, 2020).

U.S. District Court for the Middle District of North Carolina, *Democracy North Carolina v. North Carolina State Board of Elections*, Civil Action No. 20-CV-457 (Declaration of Marshall Tutor, June 3, 2020).

U.S. Government Accountability Office, GAO-14-634, "Elections: Issues Related to State Voter Identification Laws" (September 19, 2014; Released October 8, 2014; Reissued February 27, 2015), https://www.gao.gov/products/GAO-14-634 (last accessed August 3, 2020).

U.S. Government Accountability Office, GAO-19-485, "Voter Registration: Information on Federal Enforcement Efforts and State and Local List Management" (June 27, 2019), https://www.gao.gov/products/GAO-19-485 (last accessed August 3, 2020).

"Voting an Absentee Ballot," North Carolina State Board of Elections, https://www.ncsbe.gov/Voting-Options/Absentee-Voting (last accessed August 4, 2020).

W. Phillips Shively, *The Craft of Political Research*, 5th ed. (Upper Saddle River, New Jersey: Prentice Hall, 2001).

Walter Mebane, "Election Forensics: The Second Digit Benford's Law Test and Recent American Presidential Elections," in R. Michael Alvarez, Thad E. Hall, and Susan D. Hyde, *Election Fraud* (Washington, D.C.: Brookings Institution, 2008).

# **EXHIBIT 7**

# IN THE SUPREME COURT OF PENNSYLVANIA

PENNSYLVANIA DEMOCRATIC PARTY, et al.,

No. 133 MM 2020

Petitioners,

v.

KATHY BOOCKVAR, et al.,

Respondents.

# AFFIDAVIT OF AMBER MCREYNOLDS

September 8, 2010

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## I. INTRODUCTION AND QUALIFICATIONS

1. I am the Chief Executive Officer for the National Vote at Home Institute (NVAHI), a nonprofit, nonpartisan organization dedicated to making sure every American can vote in secure, safe, accessible, and equitable elections by expanding vote-at-home systems in all 50 states. NVAHI works with election officials around the country in optimizing their administration processes and governing laws for both mail ballot and in-person voting methods. NVAHI works to remove legislative and administrative barriers to vote-at-home systems and educate the public on the benefits of voting at home while still preserving the ability to vote in person for those who may want or need it.

2. I have more than 13 years of experience in administering elections. Between 2011 and August 15, 2018, I was the Elections Director for the City and County of Denver Colorado. Between 2008 and 2011, I was the Deputy Director of Elections for the City and County of Denver. Between 2005 and 2008, I served as an Operations Manager/Coordinator for the City and County of Denver. Denver has approximately 500,000 registered voters and conducts between 2 and 4 elections each year. Those elections include municipal general and municipal run-off, school board, special district, primary, general, and presidential elections. The State of Colorado conducts all federal and state elections by mail ballot.

3. During my tenure, the Denver Elections Division earned national awards from the Election Center and the National Association of Counties for Ballot TRACE (a first-in-the-nation ballot tracking, reporting, and communication engine), iAPP (iPad Accessibility Pilot Project), and eSign (a first-in-the-nation Digital Petition and Voter Registration Drive Application). Additionally, Denver Elections was also recognized with two International Electoral Awards by the International Centre for Parliamentary Studies for technology and innovation for both Ballot TRACE and eSign.

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4. In 2013, the Colorado legislature passed a bill to mandate proactively sending mail ballots to all active registered voters before each election while preserving in-person voting options at vote centers for voters for wish to vote in-person. This system replaced a traditional system of voting paper ballots in the neighborhood precincts counted by precinct optical scanners or central count optical scanners, depending on the county. Denver has become a national leader in election management and innovation and officials from around the country and the world regularly visit to learn best practices.

5. I currently serve on the National Task Force for Elections Crises, Advisory Committee for the Massachusetts Institute of Technology (MIT) Election and Data Science Lab, Secure the Vote Advisory Board, Circle of Advisors for the Democracy Fund's Election Validation Project, Michigan Election Modernization Advisory Committee, and various statewide and national committees and working groups.

6. I have served as an expert witness on the administration of elections, assisted with legislative and policy development, and have been invited to participate with various national and state professional organizations to identify and implement best practices in election administration. I recently gave testimony in support of Kansas's SB 412, which would add a permanent absentee ballot choice for Kansas voters, testimony for the New York Senate and NYS Assembly Committees on Elections and Local Governments, for the House of Representatives Subcommittee on Cybersecurity, Infrastructure Protection, & Innovation, for the House of Representatives Committee on House Administration regarding voting safely in a pandemic (on August 29, 2020), and in support of legislation for various states in the past few years.

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7. I have a Masters of Science in Comparative Politics from the London School of Economics & Political Science (2002) and a Bachelor of Arts in Political Science and Speech Communications from the University of Illinois (2001).

8. I also hold the following professional certifications, memberships, and affiliations:

- Certified Elections/Registration Administrator (CERA) from the Election Center (2010–Present)
- Certified Colorado Election Official (2007–2018)
- Advisory Committee, MIT Election Data and Science Lab
- The Election Center (National Association of Election Officials)
- Circle of Advisors, Democracy Fund, Election Validation Project
- Leadership Denver 2016-2017, Denver Leadership Foundation
- Women's Foundation of Colorado
- Women's Chamber of Commerce, Denver, Colorado
- Represent Women Board of Directors
- City Year Denver Board of Directors
- Alumni and Friends of the London School of Economics USA
- University of Illinois Alumni Association

9. Since the fall of 2018, in my capacity as CEO of NVAHI, I have been advising state and local election officials, including in Pennsylvania, regarding best practices for vote by mail programs.

10. A copy of my curriculum vitae is attached to this report as Appendix A.

#### II. ASSIGNMENT

11. I have been retained by counsel for amici curiae the League of Women Voters of Pennsylvania, Common Cause Pennsylvania, the Black Political Empowerment Project, Make the Road, PA, and individual voters Patricia M. DeMarco, Danielle Graham Robinson, and Kathleen Wise (collectively, "amici") to provide expert testimony in the matter of *Pennsylvania Democratic Party v. Boockvar*, pending in the Pennsylvania Supreme Court, under Case No. 133 MM 2020.

12. I have been asked to provide testimony on: ballot drop-box use and implementation, ballot drop-box security, counting ballots lacking secrecy envelopes, curing mail-in ballot defects, and extending the deadline to receive mail-in ballots.

13. I am being compensated at a rate of \$225 per hour for my work on this case, including any testimony. My compensation is not contingent on the nature of my findings or the outcome of this litigation.

 A complete list of the documents I have reviewed or considered appears in Appendix B.

15. I have previously testified regarding ballot access and voting security, including being accepted as an expert witness in several cases. A list of my prior testimony appears in Appendix C.

# III. SUMMARY OF CONCLUSIONS

- 16. My opinions, which are explained in detail below, are:
- a) Ballot drop-boxes can be an important component of implementing expanded mail-in voting. Drop boxes provide an important option for voters to return their mail-in ballot to election officials. Drop boxes are generally more secure than putting a ballot in post office boxes. Drop boxes are managed by election

officials, are delivered to election officials more quickly than delivery through the U.S. postal system, and are secure.

- b) A secrecy envelope is an envelope provided in a voter packet with the return envelope and the ballot whose purpose is to provide the voter with additional privacy regarding how they have cast their votes. They are not designed to address voter fraud and do not serve that function. Some jurisdictions, including in Colorado, no longer use them. One of the challenges in requiring secrecy envelopes is that Pennsylvania does not audit its mailings to voters to ensure that secrecy envelopes are delivered to voters. Pennsylvania, therefore, currently has not implemented procedures to assure that secrecy envelopes have been delivered to voters, and should not disregard ballots returned without them.
- Many jurisdictions permit voters to cure defects in their mail ballots. The resources necessary to implement cure processes are minimal and are feasible to implement before the General Election. For example, a text-to-cure system, discussed more below, should cost around \$50,000 for the entire state. Evidence shows text-to-cure systems significantly increase the cure rates.
- d) The Secretary of State's support of extending the deadline for the receipt of mailin ballots is consistent with best practices I have observed in other jurisdictions.<sup>1</sup> This change is needed for the November 2020 General Election in light of a number of unusual factual circumstances creating additional burdens to vote by mail. A large number of voters are expected to vote by mail in the Pennsylvania

<sup>&</sup>lt;sup>1</sup> Præcipe to Withdraw Certain of Respondents' Preliminary Objections, *Crossey v. Boockvar*, No. 108 MM 2020 (Pa. Aug. 13, 2020).

General Election and this is in part because many voters have concerns about health risks from voting in person during the COVID-19 pandemic. Voting by mail may be more difficult in Pennsylvania because there is not a large infrastructure for drop boxes in most counties and there have been delays in the delivery of mail by the U.S. Postal Service. Jurisdictions that are trying to facilitate the counting of properly cast votes by registered voters could reasonably address these facts by extending the deadline to receive ballots so long as processes are designed to reflect that the ballot was cast before 8:00 PM on the date of the election.

17. My work and analysis are ongoing, and I reserve the right to supplement, make any necessary corrections or additions to this report and the topics covered therein in light of new information, additional discovery, or expert testimony and opinion in this case.

# IV. PENNSYLVANIA'S ACT 77 AND ACT 12

18. In October 2019, the Pennsylvania General Assembly passed 2019 Act 77,<sup>2</sup> which reformed the state's Election Code. The Act provided for the introduction of no-excuse mail-in voting as an option for all qualified electors in Pennsylvania. It also created an option to permanently receive a ballot by mail. In implementing these changes, Pennsylvania joined 31 other states and Washington D.C., as jurisdictions that use a broad mail-in voting system. Pennsylvania also became the twelfth state to provide voters with a permanent option to receive ballots by mail.

<sup>&</sup>lt;sup>2</sup> Press Release, *Governor Wolf Signs Historic Election Reform Bill Including New Mailin Voting*, GOV. TOM WOLF (Oct. 31, 2019), https://www.governor.pa.gov/newsroom/governorwolf-signs-election-reform-bill-including-new-mail-in-voting.

19. Act 77 improved voting access and options for Pennsylvania voters.

Pennsylvania now joins the majority of states in providing a no-excuse absentee option to voters so that they can vote in a safe, secure, and convenient way.

20. In the midst of the COVID-19 crisis, Pennsylvania Governor Tom Wolf signed Pennsylvania 2020 Act 12.<sup>3</sup> Act 12 rescheduled the 2020 primary election and made further changes to the elections process, such as extending the deadline to apply for mail-in or absentee ballots and allowing counties to consolidate polling places.

21. Act 12 made additional improvements and addressed specific challenges related to the public health crisis. These changes are positive for voters and election officials alike and are consistent with laws that exist in other states.

22. Over 1.5 million Pennsylvania voters applied for and cast their ballots by mail in the June 2020 primary.<sup>4</sup>

#### V. OPINIONS

# A. Ballot Drop-Box Use and Implementation

23. As the Director of Elections in Denver, my office helped to expand mail-in and drop box options in Colorado. I helped to craft the legislation in 2013 by providing my expertise and experience as an election official to ensure the legislation enacted would enact positive changes for voters and simultaneously improve the administration of elections. The Colorado

<sup>&</sup>lt;sup>3</sup> Press Release, *Nearly 1 Million Pennsylvanians Have Applied for a Mail-in Ballot for June 2 Primary Election*, GOV. TOM WOLF (May 4, 2020), https://www.governor.pa.gov/newsroom/nearly-1-million-pennsylvanians-have-applied-for-a-mail-in-ballot-for-june-2-primary-election.

<sup>&</sup>lt;sup>4</sup> Pennsylvania 2020 Primary Election: Act 35 of 2020 Report, PENN. DEP'T STATE at 4 (Aug. 1, 2020), https://www.dos.pa.gov/VotingElections/Documents/2020-08-01-Act35Report.pdf.

legislature determined the minimal number of drop boxes that should be used in counties, based on population size.

24. Colorado provided for accessibility standards, video surveillance, and the use of drop box wrapping information (information such as the election board's phone number and website provided on a decal wrapped around drop boxes). Denver rolled out its first drop-box near the Denver Election Board's office in 2012.

25. In Colorado, counties have physically placed drop boxes in areas designed to provide access to voters. These locations include libraries, public transportation hubs, elections offices, grocery stores, and other accessible locations.

26. Other jurisdictions have consulted with Colorado and NVAHI about the use of drop boxes. I have advised many states and counties on implementing mail-in and drop-box voting systems. NVAHI is currently working with approximately thirty states on how to implement mail-in voting and drop boxes.

27. For the June 2020 primary, some counties in Pennsylvania used ballot drop-boxes to allow voters to hand-deliver their mail-in ballots. I am familiar with the guidance issued on January 10, 2020 from Pennsylvania Secretary of State, Kathy Boockvar.<sup>5</sup> The Secretary encouraged counties to enable maximum flexibility and convenience to voters by allowing ballots to be dropped off outside of normal business hours. For example, the guidance said that when choosing the location for a drop-box, "counties should consider, at a minimum" whether the "locations serve heavily populated urban/suburban areas, as well as rural areas." This

<sup>&</sup>lt;sup>5</sup> Pennsylvania Applications and Balloting Guidance: Mail-in and Absentee Ballots and Voter Registration Changes, PA. DEP'T STATE at 4–5 (Jan. 10, 2020), https://www.dos.pa.gov/VotingElections/OtherServicesEvents/Documents/PADOS\_Act%2077\_ Absentee%20and%20Mail-in%20Guidance.pdf.

included "accessible locations near heavy traffic areas such as commercial corridors, large residential areas, major employers and public transportation routes" or "[i]n rural areas, locations . . . that are easily recognizable and accessible within the community." The guidance also indicated counties should consider "select[ing] locations in areas in which there have historically been delays at existing polling locations, and areas with historically low turnout." Generally, these recommendations are consistent with best practices, including the advice that NVAHI provides.

28. On May 6, 2020, Erie County Pennsylvania announced the purchase of Pennsylvania's first mail-in ballot drop-box, to be placed in front of the Erie County Courthouse.<sup>6</sup> Here is a picture from the cited press release:



<sup>&</sup>lt;sup>6</sup> Press Release, *A PA First! Ballot Drop Box Available to Voters in Erie County*, ERIE CTY. PA. (May 6, 2020), https://eriecountypa.gov/wp-content/uploads/2020/05/media-release-ballot-drop-box-5-6-20.pdf.

29. The Erie County ballot drop-box is similar to ballot drop-off boxes that have been implemented in other states and designed and constructed by a vendor that specializes in designing and creating secure ballot drop-off boxes. Below are some other photos of ballot drop-off boxes from around the United States.



30. In Southeastern Pennsylvania, Philadelphia, Bucks, Delaware, Chester, and Montgomery Counties, officials announced the addition of several ballot drop-boxes throughout the counties.<sup>7</sup> Philadelphia County also implemented several temporary and mobile ballot dropboxes in the days before the primary.

31. I have reviewed Philadelphia County's Interrogatory Responses from *Donald J. Trump for President, Inc. v. Boockvar*, No. 2:20-CV-966 (W.D. Penn.)<sup>8</sup> regarding mobile drop boxes. *See* Exhibit 1. The security measures described, including that the election officials were involved in the operation of the mobile sites, and that the ballots were collected by election

<sup>&</sup>lt;sup>7</sup> Allie Miller, *Where to Find Ballot Drop-Boxes in Philadelphia and Surrounding Counties*, Philly Voice (May 30, 2020), https://www.phillyvoice.com/voting-primary-election-mail-in-ballot-drop-boxes-june-2-philadelphia-delaware-chester-montgomery-bucks-counties.

<sup>&</sup>lt;sup>8</sup> I have been retained as expert in this case as well.

officials in A. Rifkin secured ballot collection bags, are reasonably designed to provide voter access and ballot security. The mobile sites provide voter access (which is the goal of any election system). As explained *infra* in paragraph 62, Pennsylvania election officials engage in verification measures upon receipt of the ballot.

32. The ballot drop-boxes used in Philadelphia County were different in type than those used in Erie County. Philadelphia County used converted USPS mailboxes that were stamped with a ballot drop-off sticker and bolted to the ground.

33. The type of ballot drop-off boxes a county selects will depend on the jurisdiction's election plan and budget. Drop boxes come in several sizes and utilize different construction materials designed to withstand vandalism and inclement weather and to prevent removal. Generally, there are three types of ballot drop-off options: a 24-hour permanent box, a temporary indoor box, and a temporary drive-through ballot drop-off. A 24-hour ballot drop box mimics a USPS blue mailbox and has enhanced security options built into the design. It is a permanent metal structure accessible by vehicle or on foot in the public right-of-way, and should be well-secured to the ground. These can be installed on the jurisdiction's property, or can be installed at a partnering public agency or business and usually requires a written agreement with the property owners for installing and securing these drop boxes. Guidance that NVAHI provides to states includes:

- a. The drop box should be a permanent fixture or a temporary structure that is secured in place to prevent removal or tampering.
- b. The ballot drop box must have robust locking mechanisms for both the ballot slot and storage compartment. For best practices, procedures should be implemented

to ensure that the ballots cannot be tampered with while in the drop box, nor removed by anyone other than the authorized ballot retrieval team.

- c. The opening slot should be large enough to deposit ballot envelopes and ideally designed to keep anyone from pouring liquid into the drop box, or for rainwater to seep into it.
- d. Drop boxes should be easily recognizable by voters. Election officials should purchase or produce permanent, weather-proof decals to label the drop boxes with at least the agency name, logo, contact information and the words "Official Ballot Drop Box." Consistent decals should be used on all 24-hour boxes.
- e. Additional language may include:
  - i. No Postage Required
  - ii. Closes at 8 p.m. on Election Day
  - iii. This Box Under Video Surveillance (if applicable)
  - iv. If required, list any statutory language, such as the number of ballots that can be dropped off by one person in any election.

34. 24-hour secure ballot boxes range in price and are contingent on the jurisdictions' need. But they are an efficient and cost-effective solution to provide a drop-off solution that is secure and does not have to be staffed by election judges, which is expensive if available 24 hours a day. Ballot drop-off boxes range in price from \$1200 to \$5000 depending on the size. So, if a county offered the same service 24 hours a day for 8 days staffed with election judges, the cost would be approximately \$7,680. Additionally, logistical consideration to support election judges including chairs, cover from the elements, or access to the inside of a building would add additional costs. The cost would increase with more time. Thus, 24x7 permanent

ballot drop-off boxes are far more cost effective for counties struggling with budgets. Finally, there are vendors that have different solutions and the window is closing rapidly for counties to place orders and implement.

35. I have reviewed the Absentee and Mail-in Ballot Return Guidance issued on August 19, 2020 from Pennsylvania Secretary of State, Kathy Boockvar.<sup>9</sup> The recommendations in this guidance include the location of ballot return sites (Section 1.2.1), types of ballot return sites (Section 2.1), secure receptacles (Section 2.2), signage (Section 2.3), and security (Section 2.5). The recommendations in these sections are all consistent with best practices and advice that NVAHI has provided across jurisdictions.

36. In contrast, some counties, like Allegheny County (with a population estimated over 1.2 million people<sup>10</sup>), did not provide any drop-boxes outside of the County Office Building.

37. To choose ballot drop-off box locations, election officials should consider these factors at a minimum: concentrations of population; concentrations of historically higher mail-voting populations; geographic distance and features; voter convenience; proximity to public transportation; community-based locations; and security, including lighting, visibility, and security cameras.

<sup>&</sup>lt;sup>9</sup> Pennsylvania Absentee and Mail-in Ballot Return Guidance, PA. DEP'T STATE (Aug. 19, 2020),

https://www.dos.pa.gov/VotingElections/OtherServicesEvents/Documents/PADOS\_BallotRetur n\_Guidance\_1.0.pdf.

<sup>&</sup>lt;sup>10</sup> Quick Facts: Allegheny County, Pennsylvania, CENSUS BUREAU, https://www.census.gov/quickfacts/alleghenycountypennsylvania.

38. King County, Washington produced a ballot drop-off expansion plan.<sup>11</sup> The Center for Tech and Civic Life (CTCL) created a Ballot Drop-off Location Criteria Planner to help jurisdictions evaluate potential ballot drop-off locations.<sup>12</sup>

39. Often, voters in rural counties in jurisdictions with widespread mail-in voting tend to send their ballots back through the postal service since they have larger distances from the city or town. However, many rural communities utilize drop-box locations at city halls, existing government buildings such as libraries, or grocery stores to ensure the options are available to the public.

40. While voters like to receive their unvoted ballot via the postal service, large numbers of voters prefer to drop-off their voted ballot in-person. There are a few reasons for this but often it is to ensure they meet the deadline for returning the ballot. As an example, over 70% of voters in Colorado consistently drop-off their ballots in person, which demonstrates the customer-driven use. *E.g.*, Derek Draplin, *Colorado Secretary of State Touts State 's Ballot Drop Box System* (Aug. 12, 2020), https://www.thecentersquare.com/colorado/colorado-secretary-of-state-touts-state-s-ballot-drop-box-system/article\_d4b18db6-dcf3-11ea-adc8-97c58c84fa19.html. Providing the option so that voters can choose to drop-off or mail the voted ballot is important to supporting vote by mail programs in every state.

41. With USPS boxes, collection happens at specific times on specific days and that is managed by the U.S. Postal Service. 24-hour drop-off boxes are managed by election officials

<sup>&</sup>lt;sup>11</sup> Ballot Drop Off Locations: A Plan to Improve Voter Access, KING CTY. ELECTIONS, available at https://kingcounty.gov/~/media/depts/elections/about-us/reports/bdol-expansion-plan.ashx?la=en (last visited Sept. 4, 2020).

<sup>&</sup>lt;sup>12</sup> Organizing Ballot Dropoff Locations, CTR. FOR TECH. & CIVIC LIFE, https://www.techandciviclife.org/wp-content/uploads/2020/06/Organizing-Ballot-Dropoff-Locations.pdf (last visited Sept. 4, 2020).

and thus, they can decide when they will empty the ballots and increase the frequency closer to Election Day as more ballots come in. This also eliminates the turnaround time for the ballot to be mailed so it reaches the election officials daily and more directly than the trip through USPS, which adds time.

42. I have reviewed the Trump Campaign's complaint captioned *Donald J. Trump for President, Inc. v. Boockvar*, Case No. 2:20-cv-00966 (W.D. Penn.) ("Trump Campaign complaint"). It includes allegations about drop box uniformity.<sup>13</sup> In particular, the Trump Campaign complaint states that there is a "lack of statewide standards governing" drop-boxes.<sup>14</sup> There is no logical reason why ballot receptacles such as drop boxes must be uniform across different counties; particularly because the verification of the voter is determined by election officials upon receipt of the ballot. Counties vary in size and need. Across the country, best practices dictate that counties determine what type of box and size works for them. The needs of a large county are very different from the needs of a smaller county.

#### B. Ballot Drop-Box Security

43. I have more than 13 years of experience in managing elections in Denver that used drop boxes. During this period, Denver pioneered many drop-box security measures.

44. Drop-boxes do not create an increased opportunity for fraud. Drop-boxes provide for more rapid receipt of ballots by the county boards of elections than U.S. postal boxes. Dropboxes for utility payments, tax payments, or to return library books have been used by state and local governments for decades without issue.<sup>15</sup>

<sup>&</sup>lt;sup>13</sup> E.g., Amended Complaint (Dkt. 232) ¶¶ 124-126, 130, 164, 192, 201, 211.

<sup>&</sup>lt;sup>14</sup> *Id.* ¶ 164.

<sup>&</sup>lt;sup>15</sup> See, e.g., Utility Billing/Payment, Penn. Municipal Service, <u>http://www.pamunicipalservice.com/utility-billing-payment</u> (last visited Sept. 3, 2020) ("Outside

45. In all my work as an election official and a consultant, I am unaware of any incident of tampering with ballot boxes.

46. I have reviewed the Trump Campaign complaint's allegations about drop box security. In particular, the complaint alleges that "Permitting absentee and mail-in ballots of non-disabled electors to be collected at locations other than the offices of the county boards of elections and/or through 'drop boxes' ... allows illegal absent and mail-in voting, ballot harvesting, and other fraud to occur and/or go undetected, and will result in dilution of validly cast ballots."<sup>16</sup> These allegations are not consistent with my experience with drop box security, particularly given the strong voter verification procedures that are followed by election officials throughout the country and in Pennsylvania (*see infra* paragraph 62).

47. A drop-box provided by a county board of elections is secure, and has additional safeguards that are not available through a United States Postal Service mailbox. Regardless of the receptacle used for acceptance of the ballot (drop box versus USPS mailbox), ballot validation occurs when the ballot is received by the county board of elections. The validation is the same regardless of how the ballots are collected or who delivers the ballot, even where that delivery contravenes state law.

48. Reconciliation procedures adopted by election officials – including in Pennsylvania – protect against the potential risk of double voting. Pennsylvania's balloting system requires that those who request a mail-in vote and do not return the ballot (or spoil the

<sup>16</sup> Amended Complaint at ¶ 202, Dkt. 232.

mail slot for payment or correspondence drop off."); *Treasurer Office*, Delaware Cty. Penn., <u>https://www.delcopa.gov/treasurer/index.html</u> (last visited Sept. 3, 2020) ("A secure drop box has been installed at the Government Center (201 W. Front St., Media, PA) and the Courthouse lobby designated 'Tax Claim Bureau Payments' for residents to deliver delinquent tax payments by check.").

mail-in ballot at their polling place), can only vote a provisional ballot. Poll workers are provided with poll books and supplemental poll books that indicate which voters received a mail ballot. The provisional ballots are not counted until all the mail and absentee ballots are canvassed. If a mail-in or absentee ballot was submitted by an individual, their provisional ballot is not counted. These systems ensure that a voter casts only one vote.

49. Accessible drop boxes also reduce the risk of mass collection of ballots or ballot harvesting. When voters are given more options to return their ballots directly to elections officials such as via drop boxes, they are less likely to seek or accept an intermediary's assistance with returning their ballots.

50. Drop-boxes are designed to reduce ballot tampering. The ballot drop-boxes created by Vote Armor, for example, are made of several-inch thick steel and are durable. The ballot insertion slot is designed to reduce the number of ballots that can be inserted at once. They are fire proof and designed so that fluids cannot easily be dropped into the box. There are many different types of drop boxes, and they all offer security measures.

51. To enhance voter access, drop-boxes should be placed in visible areas. Boxes can be wrapped to include additional information, including contact information for the county elections office and such other information as the county of elections prescribes, including statements about continuous monitoring. County election officials should also determine optimal collection of ballots from drop boxes. In Denver, bi-partisan ballot security teams typically emptied ballot drop-boxes once a day in the weeks before election day, and multiple times on election day, and sometimes more frequently depending on volume.

52. Best practices will vary by county based on the county's available resources, population, needs, and assessment of risk. Some counties may implement video surveillance of

drop boxes. Other counties may conclude that such features are not required. Colorado, for example, allows rural counties with small populations to opt-out of video monitoring (if feasibility was a challenge) in favor of other surveillance methods, such as placing the drop-box near a sheriff's office or government building and wrapping the drop-box in a decal warning of monitoring. Larger urban populations with greater resources may use video surveillance. County boards of election have the information necessary to assess the risks in their communities.

53. Counties with drop boxes have developed many approaches to surveillance and security of drop boxes. There are numerous cost-effective approaches to security, often by using existing security infrastructure. Counties have placed drop-boxes in the line of sight of existing surveillance infrastructure. Video surveillance owned by private businesses have been used for this purpose, by entering agreements with the businesses to gain access to the video surveillance feeds. Existing cameras have been temporarily repositioned to observe the drop-boxes during the election. In Denver, a traffic camera outside of the election office was temporarily repositioned during elections to observe the drop-box stationed there. Police departments may also have temporary video surveillance equipment with built-in servers that they can lend to the election office for use during elections. Some counties, including small counties, may conclude that video surveillance is not necessary.

54. Although purchasing a ballot drop-box from a vendor like Vote Armor provides several security advantages, counties with less resources have other secure options for receiving ballots. For example, counties in Minnesota are considering the use of utility payment drop-boxes as temporary ballot drop-boxes. Counties have also reconditioned old postal service boxes as secure ballot drop boxes.

55. Some counties have established drive-thru ballot drop-off locations. Denver has used drive-thru ballot drop-off locations since 2008. Denver now has 30 drive-thru ballot dropoff locations. In Denver, drive-thru drop-off locations are located outside of polling places or satellite locations. Voters do not need to exit their car to drop off their ballot. The locations are often put in the middle of a street so that drivers can approach in either direction. These drivethru locations are monitored by elections judges who directly collect the ballot on site. Drivethru locations are accessible not only by motor vehicles, as voters can also walk or ride a bicycle to the drop-off location. Denver also has a mobile voting center that functions like a pop-up store.

56. Drop boxes are merely receptacles for ballots. Safeguarding against fraud primarily occurs in the election office when the ballots are pre-canvassed and canvassed. Those fraud prevention measures are identical regardless of whether the ballots were mailed from someone's home, placed in a postal box, dropped off at an election's office, or placed in a drop box.

57. When drop-off boxes are implemented, an important and final step at the close of polls at 8 p.m. is to have election judges at the location just before to be prepared to lock the box just like closing the polls. Similar to polling locations, voters in line to drop-off their ballot should be allowed to do so and then the box is locked. Bi-partisan election judge teams then empty the ballot drop-off boxes into secure transfer cases and move the ballots to the main office for counting and processing.

58. The security measures discussed here are relatively simple and can easily be implemented before the November General Election.

### C. Counting Ballots Lacking Secrecy Envelopes

59. As Election Director, I was involved in finalizing ballot design and each item that was included in mail-in ballot packets that were sent to eligible voters. Denver transitioned to a combined instruction sheet/secrecy sleeve with mail-in ballots in 2015, when it began using automated ballot extraction equipment. Additionally, Colorado law was modified to not require a full secrecy sleeve. And Colorado never rejected a ballot due to a lack of a secrecy sleeve.

60. The purpose of a secrecy envelope is to provide extra ballot privacy to the voter so that their voting selections are private. Secrecy envelopes have no other function. Many jurisdictions, like Denver, discontinued the use of secrecy envelopes when they invested in ballot extraction equipment.

61. Pennsylvania mail-in and absentee ballots are usually delivered to electors with a secrecy sleeve as well as a return envelope. The outside of the return envelope is where the voter provides all the necessary information so that election officials can verify the voter's identity and eligibility to vote. The secrecy sleeve or envelope is a second envelope where the voter can place their actual ballot and then place both in the return envelope, providing the voter with additional privacy when the election officials removes their ballot from the return envelope after verification.

62. Secrecy envelopes are not part of ballot integrity procedures. Ballot extraction occurs in two steps. First, the eligibility and identity of the voter to cast a ballot is examined by an election judge who reviews and confirms all the personal identify information provided on the outside envelope. A ballot will advance to the second step only if it is determined that it is an eligible ballot. Once voter eligibility is confirmed, the ballot is extracted and separated from the outside envelope to ensure the ballot remains secret. During this step, election judges confirm that there is only one ballot in the envelope and checks for potential defects, such as tears in the

ballot. A secrecy envelope helps with anonymity from the election official removing the ballot at this stage, but it is not necessary.

63. Lack of a secrecy envelope is not typically a reason to exclude the ballot. Although some jurisdictions have procedures to assure that the voter received a secrecy envelope with their ballot, Pennsylvania currently does not have sophisticated printers, with auditing of bar codes, to confirm that secrecy envelopes were even delivered to voters.

64. For this and other reasons, states generally count ballots that do not contain a secrecy envelope. I am not aware of any state that has a policy of rejecting ballots that lack secrecy envelopes. Some states, such as Washington and Oregon, provide a secrecy envelope along with their ballot instruction packages, but make returning the ballot within the secrecy envelope optional.

65. I have reviewed the Trump Campaign complaint's request that the court "bar county election boards from counting absentee and mail-in ballots that lack a secrecy envelope."<sup>17</sup> Such a demand for an unnecessary piece of paper adds an additional burden to the goal of crediting the votes cast by eligible voters. The purpose of a secrecy envelope is to provide the voter with confidentiality (to the extent the voter wants confidentiality) on his or her candidate choice. It is not essential to counting a mail ballot or protecting the integrity of the election.

66. The secrecy envelope/sleeve is not even necessary to help maintain anonymity when processing ballots. Some counties use equipment to extract the ballots from the envelopes and this is designed to ensure anonymity. Some counties extract ballots from the envelopes using a process that does not involve any machinery and is designed to protect voter's privacy,

<sup>&</sup>lt;sup>17</sup> Amended Complaint at ¶ 5, Dkt. 232.

including procedures such as placing the envelopes with the name face down on the table so that as election judges separate the ballot from the envelope, they cannot see the name of the voter.

67. In Colorado, ballots are removed from envelopes with a high speed envelope opener/extractor.<sup>18</sup> Opex makes an envelope extraction desk:

https://www.youtube.com/watch?v=Z3J8qlj\_2mw. This equipment is relatively inexpensive compared to the return on investment and savings in staff time for this task. There is still time for counties to procure this equipment but the time to order is closing.

68. Using equipment such as the Opex model above or other extraction equipment can significantly speed up the process for extraction while also ensuring voter privacy. Absent equipment, the jurisdiction should set up efficient processes and procedures that include privacy protection protocols to ensure voter's choices are protected.

#### D. Curing Mail-In Ballot Defects

69. Many jurisdictions have procedures to notify voters of defects in their ballot and allowing voters to cure those defects. I have experience with these processes, both as a former election official and through my work at NVAHI.

70. In Pennsylvania's June 2020 Primary, voters who requested absentee or mail-in ballots but did not vote those ballots or were otherwise unsure whether their ballot was delivered on time were allowed to vote only a provisional ballot in-person on Election Day. I further understand that in the upcoming November General Election, voters will be allowed to spoil their mail-in or absentee ballots by surrendering them at a polling place and vote a regular ballot in person. This process aligns with other states' practices around the country that can vary based on individual laws and the check-in process at polling stations.

<sup>&</sup>lt;sup>18</sup> A video of this machine can be found at: https://youtu.be/uQhQr4JZZSY.

71. The following are the types of "defects" that numerous jurisdictions permit to be cured: signature discrepancies (signatures commonly change as voters age), missing signature, or to satisfy identification requirements that exist for first-time voters in some states.

72. Jurisdictions that notify voters of potential defects have done so by letter, e-mail, and a text-to-cure system. In a text-to-cure system, a voter is notified of any defect in their ballot by text message and is provided with instructions on how to cure the defect. This system also allows for the correction of defects by text message, including allowing voters to sign an affidavit and return a picture of the signed affidavit and their identification via text message. The text-to-cure system is relatively inexpensive and grants from nonprofits to purchase the system in advance of the November election are available for this purpose.

73. Data shows that the text-to-cure system increases the cure rate. *See* Exhibit 2.

### E. Counting Ballots Cast Before the Close of the Election But Received After Election Day

74. Numerous jurisdictions have implemented reasonable processes for accepting ballots that are cast by Election Day, but which are received after Election Day. I have personal experience with such processes, both as the Elections Director in Denver and in my work as an election consultant.

75. I have reviewed the Secretary of State's recent withdrawal of objections against extending the deadline by which mail-in ballots should be counted.<sup>19</sup> The Secretary of State stated that she withdrew those objections because a letter from the Postal Service "indicated the likelihood of widespread, continuing, multiple-day mail-delivery delays presenting an overwhelming, statewide risk of disenfranchisement for significant numbers of voters utilizing

<sup>&</sup>lt;sup>19</sup> Præcipe to Withdraw Certain of Respondents' Preliminary Objections, *Crossey v. Boockvar*, No. 108 MM 2020 (Pa. Aug. 13, 2020).

mail-in ballots.<sup>20</sup> The Secretary of State has stated that ballots should be counted if they are postmarked by 8:00 PM on Election Day or if ballots lacking a postmark or other indicia are received before the third day following Election Day (because they would be presumed to have been mailed by 8:00 PM on Election Day). Now, fourteen states plus the District of Columbia accept ballots that are postmarked by election day, an additional four states accept ballots that are postmarked by the day before election day but received after.<sup>21</sup>

76. In my professional opinion, this change is needed for the November 2020 General Election in light of the unusual factual circumstances creating additional burdens to vote by mail and follows best practices I have observed in other states and that NVAHI has recommended.

77. Pennsylvania currently accepts ballots that are received by 8 pm on Election Day. The animating purpose behind this requirement is to ensure that ballots are properly voted by Election Day. Should ballots be allowed to be mailed by 8 pm on Election Day in light of COVID and mail delays, there are several methods that can be used as indicia of the time of mailing. Postmarks are one indicia, but this is not an exclusive evidentiary basis of mailing because they are not used universally and are not always legible. Another method to assess mailing time is an intelligent mail barcode electronic scan, which tracks the ballot's movements and uses more precise timestamps. Some jurisdictions apply a two-day rule, meaning that ballots received up to two days after an election are presumed to have been deposited by the date of the election. Kansas applies a three-day rule and Alaska has a ten-day rule. Ohio accepts ballots for seven days post-election if the ballot was postmarked by the day before Election Day. In my

<sup>&</sup>lt;sup>20</sup> *Id.* at 3.

<sup>&</sup>lt;sup>21</sup> VOPP: Table 11: Receipt and Postmark Deadlines for Absentee Ballots, NAT'L CONFERENCE OF STATE LEGISLATURES (Aug. 17, 2020), <u>https://www.ncsl.org/research/elections-and-campaigns/vopp-table-11-receipt-and-postmark-deadlines-for-absentee-ballots.aspx</u> (last visited Sept. 7, 2020).

professional opinion, and given the postal service's expressed delivery concerns, I would recommend aligning the receipt date with the date already required for UOCAVA ballots, which is seven days.<sup>22</sup> I understand the Secretary has taken the position that ballots received by the county boards of election by November 6, 2020 "that lack a postmark or other proof of mailing, or for which the postmark or other proof of mailing is illegible, should enjoy a presumption that they were mailed by Election Day." In my professional opinion, this is also a reasonable approach in the current circumstances.

78. A change to the receipt deadline is needed for November 2020 Election because a large number of voters are expected to vote by mail in the Pennsylvania General Election. Concerns about the health risks during in-person voting created by the COVID-19 pandemic is part of the reason that voters will choose to vote by mail. Moreover, there is not currently a large infrastructure for drop boxes in most counties in Pennsylvania, and there have been delays in the delivery of mail by the U.S. Postal Service and warnings from the U.S. Postal Service about future delays. Jurisdictions trying to ensure that all votes by eligible registered voters caste on or before Election Day are counted could reasonably address these additional barriers by extending the deadline to receive ballots so long as the processes are designed to reflect that the ballot was cast before 8:00 PM on the date of the election.

<sup>&</sup>lt;sup>22</sup> Information for Military and Overseas Voters, VOTES PA, <u>https://www.votespa.com/Voting-in-PA/Pages/Military-and-Overseas-Voters.aspx</u> (last visited Sept. 7, 2020).

I hereby certify that the foregoing statements are true and correct to the best of my own personal knowledge, information, and belief. This verification is made subject to the penalties of 18 Pa.C.S. § 4904 relating to unsworn falsification to authorities.

\* \* \*

Executed this 7th day of September, 2020 in Denver, Colorado.

Bonker Mckymlds

Amber F. McReynolds

## **APPENDIX** A



## ABOUT ME

Democracy Entrepreneur | Election Administration Expert & Innovator Author | Speaker | Civic Engagement Enthusiast

I believe in designing voter-centric processes that put the voter first. As an experienced election official and former Director of Elections for the City and County of Denver, I know how to improve systems to make them more responsive and effective for voters and customers. Under my leadership, Denver Elections was transformed to become one of the top election offices in the country, earning international and national recognition for various technical innovations. We created systems to better serve voters such as Ballot TRACE and eSign and increased transparency and accountability in the process. I also played an integral role in the 2013 Election Modernization Reforms that have made Colorado one of the top states for security, voter registration, and voter engagement.

Elections are about people and process. I believe we must continually improve the entire election system which will lead to higher engagement, increased public confidence in elections and in government, and more effective service for the public.

# Amber McReynolds

Denver, Colorado, USA amber@voteathome.org @ AmberMcReynolds M medium.com/@ambermcreynolds in linkedin.com/in/ambermcreynolds Co-Author <u>When Women Vote</u>, January 2020

### Experience

Chief Executive Officer | National Vote at Home Institute & Coalition | VoteAtHome.org | @VoteAtHome

The Vote at Home Institute is a non-profit non-partisan 501(c)(3), created to increase voter engagement by supporting and encouraging the effective implementation of Vote at Home systems, policies, and laws across the United States. Vote at Home systems provide for convenient, secure, and accessible voting processes.

### Principal and Consultant | Strategy Rose LLC

Provide strategic consulting and expertise on election administration, technical innovation, and strategic advice on election policy.

Election Official | Director of Elections City and County of Denver, CO (2005-2018) DenverVotes.org | @DenverElections

As Director of Elections, I was responsible for a large and diverse team, oversaw pivotal elections, and developed innovative techniques in election administration which earned the office numerous awards.

Regional Project Manager, New Voters Project, Iowa (2004-2005)

Program Director, 14th Judicial Circuit, State of Illinois, (2002-2004)

Parliamentary Research Associate, United Kingdom Parliament - UK Solicitor General, Rt. Hon. Harriet Harman, QC MP, London, England (2000-2002)

## Education

Masters of Science | Comparative Politics | London School of Economics & Political Science | 2002

Bachelor of Arts | Political Science and Speech Communications | University of Illinois | 2001

### Skills

Executive Leadership Public Speaking Election Official Innovator Strategy Data Analytics Policy Innovation Project Management Strategic Communication

## Boards

National Task Force on Election Crises MIT Election Data Science Lab Advisory Board Represent Women Board of Directors Vot-ER Advisor City Year Denver Board of Directors NANR Board of Directors Empowerment Council, Women's Foundation of Colorado Colorado Women's Chamber of Commerce Public Policy Committee

### Awards

2020 Top 25 Women in Business -Colorado Women's Chamber of Commerce 2018 Public Official of the Year -**Governing Magazine** ICPS – International Center for Parliamentary Studies - 2017 ICPS – International Center for Parliamentary Studies - 2015 EAC Clearie Award - 2017 Election Center Eagle's Award for Technology – 2017 Election Center Democracy Award for Innovation - 2015, 2013 NACO Achievement Award - 2013 Michelle Burton Excellence in Election Service Award - 2015

## Publications/Speeches

TedEx Mile High 2020 Speaker – Link to come soon.

Voter-Centered Approach to Election Administration Medium.com | June 2018

Opinion: Amendments Y and Z let us do what's right instead of fighting about who's right Colorado Sun | October 2018

View It from a Different Angle – How to Improve Efficiency While Serving Voters Better U.S. Elections Assistance Commission | December 2015

Innovating the Voter Experience RepresentUS | March 2018

Governing by the Numbers – Pew and Route Fifty Pew/Route Fifty Event | October 2016

### News

Meet the Leading Lady of Vote by Mail Ozy | April 2020 How to Run Mail Ballot Elections Washington Monthly | April 2020 Inside the Fight to Save November's Elections Mother Jones | April 2020 Revolutionizing the Voting Process Comcast NBC Newsmakers | January 2019 How Treating Voting Like a Business Could Actually Improve It Colorado Biz Magazine | September 2019

Model City: Denver Cleaned Up Its Voter Rolls & Boosted Turnout, Too NBC News | August 2017

**Denver Wins Another International Election Administration Award** City and County of Denver | January 2017

**Denver Elections Division Honored With a "Clearie" For Innovation** U.S. Election Assistance Commission | November 2017

Illinois Elections Officials Explore Vote by Mail Programs Block Club Chicago | October 2018

Denver Elections Director & CIO Share Advice to Secure Elections Efficient Gov | October 2018

Cybersecurity and Elections NPR | February 2018

Increasing Voter Turnout for 2018 and Beyond New York Times | June 2017

How other states have modernized elections offers lessons for Florida Miami Herald | January 2016

### **Amber to Leave Denver Elections**

Colorado Politics | August 2018

## **APPENDIX B**

### **Appendix B: Documents Reviewed**

Allie Miller, *Where to Find Ballot Drop-Boxes in Philadelphia and Surrounding Counties*, PHILLY VOICE (May 30, 2020), https://www.phillyvoice.com/voting-primary-election-mail-in-ballot-drop-boxesjune-2-philadelphia-delaware-chester-montgomery-bucks-counties.

*Ballot Drop Off Locations: A Plan to Improve Voter Access*, KING CTY. ELECTIONS, https://kingcounty.gov/~/media/depts/elections/about-us/reports/bdol-expansion-plan.ashx?la=en (last visited Sept. 4, 2020).

*Ballot Preparation,* DENVER ELECTIONS DIVISION (June 25, 2020), https://youtu.be/uQhQr4JZZSY.

Defendants' Verified Amended Complaint for Declaratory & Injunctive Relief, *Donald J. Trump for President, Inc. et al. v. Boockvar et al.*, Case No. 2:20-cv-00966 (W.D. Pa. July 27, 2020), ECF No. 232.

Derek Draplin, *Colorado Secretary of State Touts State's Ballot Drop Box System*, CENTER SQUARE (Aug. 12, 2020), https://www.thecentersquare.com/colorado/colorado-secretary-of-state-toutsstate-s-ballot-drop-box-system/article\_d4b18db6-dcf3-11ea-adc8-97c58c84fa19.html.

Information for Military and Overseas Voters, VOTES PA, https://www.votespa.com/Voting-in-PA/Pages/Military-and-Overseas-Voters.aspx (last visited Sept. 7, 2020).

*Organizing Ballot Dropoff Locations*, CTR. FOR TECH. & CIVIC. LIFE, https://www.techandciviclife.org/wp-content/uploads/2020/06/Organizing-Ballot-Dropoff-Locations.pdf (last visited Sept. 4, 2020).

Pennsylvania 2020 Primary Election: Act 35 of 2020 Report, PENN. DEP'T STATE (Aug. 1, 2020), https://www.dos.pa.gov/VotingElections/Documents/2020-08-01-Act35Report.pdf. Pennsylvania Absentee and Mail-in Ballot Return Guidance, PENN. DEP'T STATE (Aug. 19, 2020), https://www.dos.pa.gov/VotingElections/OtherServicesEvents/Documents/PAD OS\_BallotReturn\_Guidance\_1.0.pdf.

Pennsylvania Applications and Balloting Guidance: Mail-in and Absentee Ballots and Voter Registration Changes, PENN. DEP'T STATE (Jan. 10, 2020), https://www.dos.pa.gov/VotingElections/OtherServicesEvents/Documents/PAD OS\_Act%2077\_Absentee%20and%20Mail-in%20Guidance.pdf.

Philadelphia County's Interrogatory Responses, *Donald J. Trump for President, Inc. v. Boockvar*, No. 2:20-CV-966 (W.D. Pa. Aug. 5, 2020).

Præcipe to Withdraw Certain of Respondents' Preliminary Objections, *Crossey v. Boockvar*, No. 108 MM 2020 (Pa. Aug. 13, 2020).

Press Release, A PA First! Ballot Drop Box Available to Voters in Erie County, ERIE CTY. PA. (May 6, 2020), https://eriecountypa.gov/wp-content/uploads/2020/05/media-release-ballot-drop-box-5-6-20.pdf.

Press Release, *Governor Wolf Signs Historic Election Reform Bill Including New Mail-in Voting*, GOV. TOM WOLF (Oct. 31, 2019), https://www.governor.pa.gov/newsroom/governor-wolf-signs-election-reformbill-including-new-mail-in-voting.

Press Release, *Nearly 1 Million Pennsylvanians Have Applied for a Mail-in Ballot for June 2 Primary Election*, GOV. TOM WOLF (May 4, 2020), https://www.governor.pa.gov/newsroom/nearly-1-million-pennsylvanians-have-applied-for-a-mail-in-ballot-for-june-2-primary-election.

*Quick Facts: Allegheny County, Pennsylvania*, CENSUS BUREAU, https://www.census.gov/quickfacts/alleghenycountypennsylvania.

*The OPEX Model 72 Mail Extraction Desk with Milling Cutter*, OPEX CORP. (Mar. 13, 2014), https://www.youtube.com/watch?v=Z3J8qlj\_2mw.

*Treasurer Office*, DELAWARE CTY. PENN., https://www.delcopa.gov/treasurer/index.html (last visited Sept. 3, 2020). *Utility Billing/Payment*, PENN. MUNICIPAL SERV., http://www.pamunicipalservice.com/utility-billing-payment (last visited Sept. 3, 2020).

*VOPP: Table 11: Receipt and Postmark Deadlines for Absentee Ballots*, NAT'L CONFERENCE OF STATE LEGISLATURES (Aug. 17, 2020), https://www.ncsl.org/research/elections-and-campaigns/vopp-table-11-receiptand-postmark-deadlines-for-absentee-ballots.aspx (last visited Sept. 7, 2020).

## **APPENDIX C**

### **APPENDIX C: PRIOR TESTIMONY**

Gessler v. Johnson, 2011-cv-6588 (Colo. Dist. Ct. 2013)

United to Protect Democracy v. Presidential Advisory Comm. on Election Integrity, No. 17-cv-02016 (D.D.C. 2017)

32

Martin v. Kemp, 18-cv-04776 (N.D. Ga. 2018)



### IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF PENNSYLVANIA

DONALD TRUMP FOR PRESIDENT, INC.; <i>et al.</i> ,	Civil Action
Plaintiffs,	: : No.: 2:-20-CV-966
V.	
KATHY BOOCKVAR; et al.,	
Defendants.	: Judge J. Nicholas Ranjan :

### DEFENDANT PHILADELPHIA COUNTY BOARD OF ELECTIONS' OBJECTIONS AND RESPONSES TO PLAINTIFFS' FIRST SET OF INTERROGATORIES AND REQUESTS FOR PRODUCTION DIRECTED TO COUNTY BOARDS OF ELECTIONS

Pursuant to Federal Rules of Civil Procedure 26, 33, and 34 and the Court's July 17, 2020

Scheduling Order, Defendant the Board of Elections of Philadelphia County (the "Board of

Elections") serves the following Objections and Responses to the First Set of Interrogatories and

Requests for Production of Documents (collectively the "Requests") Directed to County Boards

of Elections by Plaintiffs Donald J. Trump for President, Inc., Glenn Thompson, Mike Kelly,

John Joyce, Guy Reschenthaler, the Republican National Committee, Melanie Stringhill

Patterson, and Clayton David Show ("Plaintiffs").

### **OBJECTIONS AND RESPONSES TO INTERROGATORIES**

1. Please identify all Procedures, Practices, Rules, Regulations, and/or Instructions You implemented, used, followed, and/or communicated in the June 2, 2020 Primary Election, and all Procedures, Practices, Rules, Regulations, and/or Instructions that You intend to implement, use, follow, and/or communicate in the November 3, 2020 General Election, concerning or relating to the processing, verification, acceptance, and/or rejection of applications for absentee and/or mail-in ballots, including without limitation whether You mail applications to all qualified electors within Your county and/or whether You frank or prepay the postage for any or all completed and returned applications, and if there are any differences, please identify the reasons why You are making a change in such Procedures, Practices, Rules, Regulations, and/or Instructions for the November 3, 2020 General Elections. **RESPONSE:** The Board of Elections objects to this Interrogatory No. 1 because information relating to the "processing, verification, acceptance, and/or rejection of applications for absentee and/or mail-in ballots" falls outside the scope of the Court's July 17, 2020 Scheduling Order (ECF 124). The Scheduling Order provides only for discovery narrowly tailored to Plaintiffs' original Complaint (ECF 4), which did not seek relief related to ballot applications. Plaintiffs served their discovery pursuant to the Scheduling Order on July 24, 2020 and filed an Amended Complaint adding significant new allegations and seeking additional relief on July 27, 2020 (ECF 234), but Plaintiffs have not sought an amendment to the Scheduling Order to expand or otherwise alter the scope of discovery. Any discovery concerning ballot applications is therefore not authorized by and outside the scope of the Scheduling Order, and Plaintiffs' attempt to circumvent the expedited timeline that Plaintiffs themselves requested, and thus unilaterally expand the scope of expedited discovery, should not be permitted. For the reasons stated above, the Board of Elections also objects to this Request as untimely, unduly burdensome, and disproportional. The burden and expense of discovery concerning Plaintiffs' new allegations, especially on the expedited schedule requested by Plaintiffs, outweighs its likely benefit.

The Board of Elections further objects to this Interrogatory No. 1 to the extent it requests information contained in the report issued by the Pennsylvania Department of State (the "Department") on August 1, 2020 pursuant to 71 P.S. § 279.6 (the "Act 35 Report") and thus is not required to be produced by the Board of Elections under the Scheduling Order. The Board of Elections further object to this Interrogatory No. 1 to the extent that the information sought is publicly available from the Counties, the Office of the Secretary of the Commonwealth (the "Secretary"), the Department, and/or other entities, and thus equally accessible to Plaintiffs. The Board of Elections also objects to this Interrogatory No. 1 because it should more properly be

directed to the Secretary to the extent it requests Procedures, Practices, Rules, Regulations and/or Instructions that have been or will be promulgated or established by the Secretary or the Department. The Board of Elections further objects to this Interrogatory No. 1 to the extent it requests information that is protected by the attorney-client privilege, work product doctrine, deliberative process privilege, and/or other applicable privileges or protections from disclosure.

2. Please identify all correspondence, memoranda, email messages, postings, or other communications, whether in writing or made orally, that (a) were made by, to, and/or between You and any other person, including without limitation (i) any political party or body, political committee, political action committee, non-profit organization, or other body of citizens; (ii) any voter/elector in the Commonwealth of Pennsylvania; (iii) any other County Election Board; (iv) any District Election Board; (v) any of Your employees, agents, or other representatives acting on Your behalf; and/or (vi) Secretary Boockvar and/or the Elections Department; and (b) concern, relate to, describe, explain, or justify the Procedures, Practices, Rule, Regulations, and/or Instructions identified in Your answer to the preceding Interrogatory, including without limitation any incidents, complaints, concerns, changes, modifications, or supplementation to such Procedures, Practices, Rules, Regulations, and/or Instructions.

**RESPONSE:** The Board of Elections objects to this Interrogatory No. 2 because documents relating to the "processing, verification, acceptance, and/or rejection of applications for absentee and/or mail-in ballots" fall outside the scope of the Scheduling Order. The Scheduling Order provides only for discovery narrowly tailored to Plaintiffs' original Complaint (ECF 4), which did not seek relief related to ballot applications. Plaintiffs served their discovery pursuant to the Scheduling Order on July 24, 2020 and filed an Amended Complaint adding significant new allegations and seeking additional relief on July 27, 2020 (ECF 234), but Plaintiffs have not sought an amendment to the Scheduling Order to expand or otherwise alter the scope of discovery. Any discovery concerning allegations or relief that were not part of Plaintiffs' original Complaint is therefore not authorized by and outside the scope of the Scheduling Order, and Plaintiffs' attempt to circumvent the expedited timeline that Plaintiffs themselves requested, and thus unilaterally expand the scope of discovery, should not be permitted. For the reasons stated above, the Board of Elections also objects to this Request as untimely, unduly burdensome, and

disproportional. The burden and expense of discovery concerning Plaintiffs' new allegations, especially on the expedited schedule requested by Plaintiffs, outweighs its likely benefit.

The Board of Elections further objects to this Interrogatory No. 2 to the extent it requests information contained in the Act 35 Report and thus is not required to be produced by the Board of Elections under the Scheduling Order. The Board of Elections further objects to this Interrogatory No. 2 to the extent that the information sought is publicly available from the Counties, the Secretary, the Department, and/or other entities, and thus equally accessible to Plaintiffs. The Board of Elections also objects to this Interrogatory No. 2 because it should more properly be directed to the Secretary to the extent it requests identification of materials related to Procedures, Practices, Rules, Regulations and/or Instructions that have been or will be promulgated or established by the Secretary or the Department.

The Board of Elections further objects to this Interrogatory No. 2 to the extent that it seeks disclosure of any information other than 1) the policies and rules that were in effect for the June 2, 2020 Primary Election and 2) the policies and rules that will be in effect for the November 3, 2020 General Election (to the extent these have been established), and to the extent that it seeks communications beyond official Board of Elections communications to the public, because this information is irrelevant, disproportional to the needs of the case, and not narrowly tailored in accordance with the Scheduling Order. The Board of Elections further objects to this Interrogatory No. 2 to the extent it requests information that is protected by the attorney-client privilege, work product doctrine, deliberative process privilege, and/or other applicable privileges or protections from disclosure.

**3.** Please identify all Procedures, Practices, Rules, Regulations, and/or Instructions You implemented, used, followed, and/or communicated in the June 2, 2020 Primary Elections, and all Procedures, Practices, Rules, Regulations, and/or Instructions that You intend to implement, use, follow, and /or communicate in the November 3, 2020 General Election,

concerning or relating to the return or delivery by electors of voted absentee and/or mail-in ballots, including without limitation whether You frank or prepay the postage for any or all absentee ballots and/or mail-in ballots and/or whether third parties may deliver in person absentee and/or mail-ballots cast by non-disabled electors, and if there are any differences, please identify the reasons why You are making a change in such Procedures, Practices, Rules, Regulations, and/or Instructions for the November 3, 2020 General Election.

**RESPONSE:** The Board of Elections objects to this Interrogatory No. 3 as overly broad, not narrowly tailored, and disproportional because it calls for "all Procedures, Practices, Rules, Regulations, and/or Instructions" relating to "the return or delivery by electors of voted absentee and/or mail-in ballots," without limitation to the specific allegations and relief requested in Plaintiffs' Complaint. Indeed, this Interrogatory No. 3 specifically seeks information about the prepayment of postage "for any and all absentee and/or mail-in ballots," but Plaintiffs' Complaint includes no allegations concerning, and requests no relief regarding, any such prepayment of postage. Thus, the burden and expense of this proposed discovery outweighs its likely benefit.

The Board of Elections further objects to this Interrogatory No. 3 to the extent it requests information contained in the Act 35 Report and thus is not required to be produced by the Board of Elections under the Scheduling Order. The Board of Elections further objects to this Interrogatory No. 3 to the extent that the information sought is publicly available from the Counties, the Secretary, the Department, and/or other entities, and thus equally accessible to Plaintiffs. The Board of Elections also objects to this Interrogatory No. 3 because it should more properly be directed to the Secretary to the extent it requests Procedures, Practices, Rules, Regulations and/or Instructions that have been or will be promulgated or established by the Secretary or the Department. The Board of Elections further objects to this Interrogatory No. 3 to the extent it requests information that is protected by the attorney-client privilege, work product

doctrine, deliberative process privilege, and/or other applicable privileges or protections from disclosure.

Subject to and without waiving these objections, the Board of Elections states that it followed the Pennsylvania Election Code, 25 Pa. Stat. Ann. §§ 2600 *et seq.* (the "Election Code"), and guidance issued by the Secretary and the Department concerning the return or delivery of absentee and mail-in ballots for the June 2, 2020 Primary Election, including the prohibition of third-party delivery of absentee and/or mail ballots cast by non-disabled electors.

The Board of Elections plans to follow the Election Code and such guidance concerning the return or delivery of absentee and mail-in ballots for the November 3, 2020 General Election, including concerning whether third-parties are permitted to deliver absentee and/or mail ballots cast by non-disabled electors. In making determinations about which policies to implement as the General Election approaches, the Board of Elections will consider all developing conditions that might affect Philadelphians' ability to vote safely and securely. Important considerations may include the spread of the COVID-19 pandemic, public health recommendations, availability of poll workers, transit and transportation issues, and potential security concerns. At all times, the Board of Elections will strive to administer an orderly election while protecting the franchise for all Philadelphians.

In the week before the Primary Election, the Board of Elections established and administered three categories of drop-off locations, at which voters who had received an absentee or mail-in ballot could return their ballots in person: (1) 24/7 Drop-Off Locations at the two County Board of Elections Offices, City Hall and 520 N. Columbus Blvd.; (2) Mobile Drop-Off Locations, open between May 30, 2020 and June 1, 2020; and (3) Election Day Drop-Off Offices, open on June 2, 2020 only.

#### 24/7 Drop-Off Locations

The Board of Elections created two 24/7 Drop-Off Locations for voters to return their absentee and mail-in ballots in person. Each 24/7 Drop-Off Location consisted of a converted mail box, bolted to the ground. The front of each box bore signage stating the following: "NO U.S. MAIL. BALLOT DROP OFF ONLY. VOTERS MUST DROP OFF <u>THEIR OWN</u> <u>BALLOT</u> DROP OFF DEADLINE IS ELECTION DAY JUNE 2<sup>ND</sup> AT 8PM." The signage also included the same information in Spanish. Both 24/7 Drop-Off Locations were under 24-hour video surveillance.

At each 24/7 Drop-Off Location, ballots were collected at least daily, with more frequent ballot collections closer to Primary Day. On Primary Day, Board of Elections personnel made the last ballot collection at each location at 8:00 p.m. During ballot collection, Board of Elections personnel maintained custody of returned absentee and mail-in ballots at all times. Immediately after collection, Board of Elections personnel transported returned ballots directly to the Board of Elections for verification and processing. The Board of Elections' procedures thus ensured the chain of custody of all ballots returned at 24/7 Drop-Off Locations.

The two Drop-Off Locations were:

- City Hall installed on the south side of City Hall on May 22, 2020 and moved slightly to another location also on the south side of City Hall on May 29, 2020.
- Board of Elections Office at 520 N. Columbus Blvd (Spring Garden entrance) installed on May 28, 2020

### **Mobile Drop-Off Locations**

The two 24/7 Drop-Off Locations were both located in the central part of Philadelphia. At the best of times, residents of Philadelphia's far-flung neighborhoods would have a timeconsuming journey to reach these locations; because of the pandemic, road closures stemming from civil unrest, and the inaccessibility of public transportation, cross-city travel during the days before the election was difficult, dangerous, and, at points, impossible. The City Commissioners therefore approved establishing, for ten "zones" of Philadelphia,<sup>1</sup> a two-hour Mobile Drop-Off Location at which voters could return their absentee and mail-in ballots in person before Primary Day.

Mobile Drop-Off Locations were staffed by City Commissioner Al Schmidt and/or three members of his staff: Chief Deputy Commissioner Seth Bluestein, Deputy Commissioner Michelle Montalvo, and Election and Voter Registration Clerk 2 Darrylisha Flippen (collectively the "Mobile Drop-Off Location Personnel"). Commissioner Schmidt and Deputy Commissioner Bluestein each attended part or all of each Mobile Drop-Off Location. Mobile Drop-Off Location Personnel provided for the security of ballots returned at each Mobile Drop-Off Locations by, *inter alia*, using secured ballot bags manufactured by A. Rifkin Co. specifically for ballot collection purposes. The A. Rifkin Co. secured ballot bags were chosen because they could fit the number of ballots that were anticipated and were able to be sealed. There were two types of secured ballots bags: a smaller and larger version. Each secured ballot bag features a doublesealing mechanism which, once employed, prevents the removal of ballots from the secured ballot bag or addition of ballots to the secured ballot bag without breaking the seals.

Mobile Drop-Off Location Personnel used two secured ballot bags at each Mobile Drop-Off Location. When a secured ballot bag was filled, Mobile Drop-Off Location Personnel would

<sup>&</sup>lt;sup>1</sup> For the June Primary, Philadelphia Polling Places were divided into ten "zones." Center City, Far Northeast; Lower Northeast; North; Northwest; River; South; Southwest; Upper North; and West. The Board of Elections did not provide a Mobile Drop-Off Location in Center City because Center City already had two 24/7 Drop-Off Locations. The Board of Elections also provided two Mobile Drop-Off Locations in the "North" zone, to ensure access to Spanish speaking residents via Spanish language outreach and instructions.

seal the secured ballot bag, and Commissioner Schmidt or Deputy Commissioner Bluestein would personally bring it to the Board of Elections for verification and processing, and then return to the Mobile Drop-Off Location with the emptied secured ballot bag. At the same time, other Mobile Drop-Off Location Personnel remained at the Mobile Drop-Off Location using the second secured ballot bag. At the end of the day, Commissioner Schmidt or Deputy Commissioner Bluestein would return both secured ballot bags to the Board of Elections for verification and processing of their contents.

Only Mobile Drop-Off Location Personnel handled secured ballot bags at each Mobile Drop-Off Location. Mobile Drop-Off Location Personnel maintained possession of each secured ballot bag up to and including bringing each sealed, secured ballot bag to the Board of Elections for verification and processing. The Board of Elections' procedures thus ensured the chain of custody of all ballots returned at Mobile Drop-Off Locations. The Board of Elections partnered with a nonprofit, nonpartisan group, the Committee of Seventy, in implementing the Mobile Drop-Off Locations. The Committee of Seventy helped advertise the locations and provided a vehicle, the "votesmobile," that carried a table and canopy and served as a prop at the locations. The "votesmobile" was not used to collect or transport ballots, and the Mobile Drop-Off Location Personnel did not ride in it.

Mobile Drop-Off Location Personnel did not authorize third parties to return ballots unless they were in possession of a declaration from a disabled elector. In the event a third-party attempted to return a ballot without the appropriate declaration authorizing the third-party to act as the agent of a disabled elector, Mobile Drop-Off Location Personnel instructed the third party that he or she could not return a ballot on any other voter's behalf, unless the third-party (1) was acting on behalf of a disabled voter, (2) secured a declaration from the disabled voter, and (3) returned with the executed declaration along with the disabled voter's ballot. Each Mobile Drop-

Off Location had available copies of a form declaration provided by the Department.

Region	Location	Address	Date	Time
West	Boys Latin of Philadelphia Charter High School	5501 Cedar Ave Philadelphia, PA 19143	Saturday, May 30, 2020	9:00 AM- 11:00 AM
Southwest	John Bartram High School	2401 S 67th St Philadelphia, PA 19142	Saturday, May 30, 2020	12:00 PM- 2:00 PM
South	South Philadelphia High School	2101 S Broad St Philadelphia, PA 19148	Saturday, May 30, 2020	3:00 PM-5:00 PM
Far Northeast	George Washington High School	10175 Bustleton Ave Philadelphia, PA 19116	Sunday, May 31, 2020	8:00 AM- 10:00 AM
Lower Northeast	Rising Sun Plaza Shopping Center	Rising Sun & Adams Aves Philadelphia, PA 19120	Sunday, May 31, 2020	11:00 AM- 1:00 PM
North (East of Broad)	25th District PAL Center	3199 D Street Philadelphia, PA 19134	Sunday, May 31, 2020	2:00 PM-4:00 PM
River <sup>2</sup>	Fishtown Crossing Shopping Center	2401 Aramingo Ave Philadelphia, PA 19125	Sunday, May 31, 2020	5:00 PM-7:00 PM
Northwest	Shawmont Elementary School	535 Shawmont Ave Philadelphia, PA 19128	Monday, June 1, 2020	9:00 AM- 11:00 AM
Upper North	Central High School	1700 W Olney Ave Philadelphia, PA 19141	Monday, June 1, 2020	12:00 PM- 2:00 PM
North (West of Broad)	Tanner Duckrey Public School	1501 W Diamond St Philadelphia, PA 19121	Monday, June 1, 2020	3:00 PM-5:00 PM

The Mobile Drop-Off Locations were:

<sup>&</sup>lt;sup>2</sup> The Board of Elections canceled the Fishtown Mobile Drop-Off Location because of security concerns arising from social unrest in the area.

## Election Day Drop-Off Offices

As Election Day approached, the City Commissioners approved establishing, for each council district in Philadelphia, one Election Day Drop-Off Office for voters to return their absentee and mail-in ballots in person on Primary Day.

Each Election Day Drop-Off Office was operated by city employees who, in accordance with the City's usual practice for election day staffing, were temporarily designated as Board of Elections staff for Primary Day only (the "Election Day Drop-Off Office Personnel") Election Day Drop-Off Office Personnel were trained on the proper procedures for the return of absentee and mail-in ballots, including that voters could only return their own ballots unless they possessed completed forms regarding their designation as an agent to deliver the ballot of a disabled voter.

Election Day Drop-Off Office Personnel provided for the security of ballots returned at each Election Day Drop-Off Office by, *inter alia*, using secured ballot bags manufactured by A. Rifkin Co. specifically for ballot collection purposes. Each secured ballot bag features a doublesealing mechanism which, once employed, prevents the removal of ballots from the secured ballot bag or addition of ballots to the secured ballot bag without breaking the seal.

Each Election Day Drop-Off Office received one secured ballot bag to collect ballots. Election Day Drop-Off Office Personnel were instructed to (1) maintain custody of the secured ballot bag at all times, (2) stop accepting ballots and seal the secured ballot bag at 8 p.m. on Primary Day, and (3) return the secured ballot bag to the Board of Elections after 8 p.m. on Primary Day to allow for ballot verification and processing.

Election Day Drop-Off Office Personnel were instructed not to authorize third parties to return ballots unless they were in possession of a declaration from a disabled elector.

Council District 1	Philadelphia City Commissioner's Office	520 N. Columbus Boulevard	19123
Council District 2	Tilden Middle School	6601 Elmwood Avenue	19142
Council District 3	Lucien Blackwell Library	52nd and Sansom Streets	19139
Council District 4	Hillside Recreation Center	203 Fountain Street	19128
Council District 5 <sup>3</sup>	Council President's District Office	2815 Ridge Ave, Ste B	19121
Council District 6	Councilperson Henon's District Office	6730 Torresdale Avenue	19135
Council District 7	Harrowgate PAL Center	851 E Tioga Street	19134
Council District 8	Councilperson Bass District Office	4439A Germantown Avenue	19144
Council District 9	West Oak Lane Library	2000 Washington Lane	19138
Council District 9	Wadsworth Library	1500 Wadsworth Avenue	19150
Council District 10	Councilperson O'Neill's District Office	Bustleton Ave and Bowler Streets	19115

The Election Day Drop-Off Offices were:

Investigation remains ongoing, so the Board of Elections reserves the right to supplement

this Response.

4. Please identify all correspondence, memoranda, email messages, postings, or other communications, whether in writing or made orally, that (a) were made by, to, and/or between You and any other person, including without limitation: (i) any political party or body, political committee, political action committee, non-profit organization, or other body of citizens; (ii) any voter/elector in the Commonwealth of Pennsylvania; (iii) any other County Election Board; (iv) any District Election Board; (v) any of Your employees, agents, or other representatives acting on Your behalf; and/or (vi) Secretary Boockvar and/or the Elections Department; and (b) concern, relate to, describe, explain, or justify the Procedures, Practices, Rules, Regulations, and/or Instructions identified in Your answer to the preceding Interrogatory, including without limitation any incidents, complaints, concerns, changes, modifications, or supplementation to such Procedures, Practices, Rules, Regulations, and/or Instructions.

**RESPONSE:** The Board of Elections objects to this Interrogatory No. 4 as overly broad, not

narrowly tailored, and disproportional because it calls for "all correspondence, memoranda,

<sup>3</sup> Because of damage to the Council President's District Office, the Council District 5 Election Day Drop-Off Office was moved to a location in the parking lot of the Council Office. Election Day Drop-Off Office Personnel operated the secured ballot bags pursuant to the abovelisted procedures. The "votesmobile," was parked in the parking lot to provide additional signage. email messages, postings, or other communications" that "were made by, to, and/or between You and any other person," concerning the information requested in Interrogatory No. 3, which was not limited to the specific allegations and relief requested in Plaintiffs' Complaint. As noted in response to Interrogatory No. 3, Plaintiffs' Complaint includes no allegations concerning, and requests no relief regarding, prepayment of postage "for any and all absentee and/or mail-in ballots." Thus, the burden and expense of this proposed discovery outweighs its likely benefit.

The Board of Elections further objects to this Interrogatory No. 4 to the extent it requests information contained in the Act 35 Report and thus is not required to be produced by the Board of Elections under the Scheduling Order. The Board of Elections further objects to this Interrogatory No. 4 to the extent that the information sought is publicly available from the Counties, the Secretary, the Department, and/or other entities, and thus equally accessible to Plaintiffs. The Board of Elections also objects to this Interrogatory No. 4 because it should more properly be directed to the Secretary to the extent it requests identification of materials related to Procedures, Practices, Rules, Regulations and/or Instructions that have been or will be promulgated or established by the Secretary or the Department.

The Board of Elections further objects to this Interrogatory No. 4 to the extent that it seeks disclosure of any information other than 1) the policies and rules that were in effect for the June 2, 2020 Primary Election and 2) the policies and rules that will be in effect for the November 3, 2020 General Election (to the extent these have been established), and to the extent that it seeks communications beyond official Board of Elections communications to the public, because this information is irrelevant, disproportional to the needs of the case, and not narrowly tailored in accordance with the Scheduling Order. The Board of Elections further objects to this Interrogatory No. 4 to the extent it requests information that is protected by the attorney-client

privilege, work product doctrine, deliberative process privilege, and/or other applicable

privileges or protections from disclosure.

Subject to and without waiving these objections, the Board of Elections identifies the

following information concerning the June 2, 2020 Primary Election:

- The Board of Elections website page entitled "Mail-In and Absentee Ballots" <u>https://www.philadelphiavotes.com/en/voters/mail-in-and-absentee-ballots</u>
- The Board of Elections website page entitled "Mobile Drop Off Locations for Mail-In-Ballot" <u>https://www.philadelphiavotes.com/en/home/item/1814-</u> mobile\_drop\_off\_location\_for\_mail\_in\_ballot
- The Board of Elections website page entitled "Election Day Drop-Off Offices" <u>https://www.philadelphiavotes.com/en/home/item/1815-election\_day\_drop-off\_offices</u>
- Communications regarding procurement of secured ballot bags and images of secured ballot bags
- Training materials provided to Election Day Drop-Off Office Personnel
- Transcripts/Minutes of City Commissioners' resolutions regarding Mobile Drop-Off Locations and Election Day Drop-Off Offices
- A copy of the instructions/signage affixed to the drop boxes at the 24/7 Drop-Off Locations
- Screenshots of the City Commissioners' social media pages, including Facebook, Twitter, and Instagram
- Copies of the declarations that were available to any individual who attempted to return an absentee or mail-in ballot on behalf of someone other than him or herself

Investigation remains ongoing, so the Board of Elections reserves the right to supplement

this Response.

**5.** Please identify all Procedures, Practices, Rules, Regulations, and/or Instructions You implemented, used, followed, and/or communicated in the June 2, 2020 Primary Election, and all Procedures, Practices, Rules, Regulations, and/or Instructions that You intend to implement, use, follow, and/or communicate in the November 3, 2020 General Election, concerning or relating to the use, type, number, location, security, monitoring, advertisement, funding, and other factors or best practices for using drop boxes, mobile ballot collection centers,

polling places, or other collection/drop-off locations for the return or delivery of voted absentee and/or mail-in ballots, including without limitation documenting security and chain of custody of such delivered ballots, and if there are any differences, please identify the reasons why You are making a change in such Procedures, Practices, Rules, Regulations, and/or Instructions for the November 3, 2020 General Election.

**RESPONSE:** The Board of Elections objects to this Interrogatory No. 5 to the extent it requests information contained in the Act 35 Report and thus is not required to be produced by the Board of Elections under the Scheduling Order. The Board of Elections further objects to this Interrogatory No. 5 to the extent that the information sought is publicly available from the Counties, the Secretary, the Department, and/or other entities, and thus equally accessible to Plaintiffs. The Board of Elections also objects to this Interrogatory No. 5 because it should more properly be directed to the Secretary to the extent it requests Procedures, Practices, Rules, Regulations and/or Instructions that have been or will be promulgated or established by the Secretary or the Department. The Board of Elections further objects to this Interrogatory No. 5 as duplicative of Interrogatory No. 3.

The Board of Elections further objects to this Interrogatory No. 5 to the extent it calls for information regarding the return of ballots to "polling places," because such information falls outside the scope of the Scheduling Order. The Scheduling Order provides only for discovery narrowly tailored to Plaintiffs' original Complaint (ECF 4), which did not seek relief related to return of ballots to polling places. Plaintiffs served their discovery pursuant to the Scheduling Order on July 24, 2020 and filed an Amended Complaint adding significant new allegations and seeking additional relief on July 27, 2020 (ECF 234), but Plaintiffs have not sought an amendment to the Scheduling Order to expand or otherwise alter the scope of discovery. Any discovery concerning allegations or relief that were not part of Plaintiffs' original Complaint is therefore not authorized by and outside the scope of the Scheduling Order, and Plaintiffs' attempt to circumvent the expedited timeline that Plaintiffs themselves requested, and thus

unilaterally expand the scope of discovery, should not be permitted. For these reasons, the Board of Elections also objects to this Request as untimely, unduly burdensome, and disproportional. The burden and expense of the discovery concerning Plaintiffs' new allegations, especially on the expedited schedule requested by Plaintiffs, outweighs its likely benefit. The Board of Elections further objects to this Interrogatory No. 5 to the extent it requests information that is protected by the attorney-client privilege, work product doctrine, deliberative process privilege, and/or other applicable privileges or protections from disclosure.

Subject to and without waiving these objections, the Board of Elections states that it followed the Election Code and guidance issued by the Secretary and the Department concerning the return or delivery of absentee and mail-in ballots for the June 2, 2020 Primary Election, including the prohibition of third-party delivery of absentee and/or mail ballots cast by non-disabled electors.

The Board of Elections plans to follow the Election Code and such guidance concerning the return or delivery of absentee and mail-in ballots for the November 3, 2020 General Election, including concerning whether third-parties are permitted to deliver absentee and/or mail ballots cast by non-disabled electors.

By way of further response, the Board of Elections incorporates its response to Interrogatory No. 3.

Investigation remains ongoing, so the Board of Elections reserves the right to supplement this Response.

**6.** Please identify all correspondence, memoranda, email messages, postings, or other communications, whether in writing or made orally, that (a) were made by, to, and/or between You and any other person, including without limitation: (i) any political party or body, political committee, political action committee, non-profit organization, or other body of citizens; (ii) any voter/elector in the Commonwealth of Pennsylvania; (iii) any other County Election Board; (iv) any District Election Board; (v) any of Your employees, agents, or other

representatives acting on Your behalf; and/or (vi) Secretary Boockvar and/or the Elections Department; and (b) concern, relate to, describe, explain, or justify the Procedures, Practices, Rules, Regulations, and/or Instructions identified in Your answer to the preceding Interrogatory, including without limitation any incidents, complaints, concerns, changes, modifications, or supplementation to such Procedures, Practices, Rules, Regulations, and/or Instructions.

**RESPONSE:** The Board of Elections objects to this Interrogatory No. 6 to the extent it requests information contained in the Act 35 Report and thus is not required to be produced by the Board of Elections under the Scheduling Order. The Board of Elections further objects to this Interrogatory No. 6 to the extent that the information sought is publicly available from the Counties, the Secretary, the Department, and/or other entities, and thus equally accessible to Plaintiffs. The Board of Elections also objects to this Interrogatory No. 6 because it should more properly be directed to the Secretary to the extent it requests identification of materials related to Procedures, Practices, Rules, Regulations and/or Instructions that have been or will be promulgated or established by the Secretary or the Department.

The Boards of Elections further object to this Interrogatory No. 6 as overly broad, not narrowly tailored, and disproportional because it calls for "all correspondence, memoranda, email messages, postings, or other communications" that "were made by, to, and/or between You and any other person," concerning the information requested in Interrogatory No. 5, which was not limited to the specific allegations and relief requested in Plaintiffs' Complaint. As noted in response to Interrogatory No. 5, Plaintiffs' Complaint includes no allegations concerning, and requests no relief regarding, return of ballots to polling places. Thus, the burden and expense of this proposed discovery outweighs its likely benefit.

The Board of Elections further objects to this Interrogatory No. 6 to the extent that it seeks disclosure of any information other than 1) the policies and rules that were in effect for the June 2, 2020 Primary Election and 2) the policies and rules that will be in effect for the November 3, 2020 General Election (to the extent these have been established), and to the extent

that it seeks communications beyond official Board of Elections communications to the public, because this information is irrelevant, disproportional to the needs of the case, and not narrowly tailored in accordance with the Scheduling Order. The Board of Elections further objects to this Interrogatory No. 6 to the extent it requests information that is protected by the attorney-client privilege, work product doctrine, deliberative process privilege, and/or other applicable privileges or protections from disclosure.

Subject to and without waiving these objections, the Board of Elections incorporates its response to Interrogatory No. 4.

Investigation remains ongoing, so the Board of Elections reserves the right to supplement

this Response.

7. Please identify all Procedures, Practices, Rules, Regulations, and/or Instructions You implemented, used, followed, and/or communicated in the June 2, 2020 Primary Elections, and all Procedures, Practices, Rules, Regulations, and/or Instructions that You intend to implement, use, follow, and/or communicate in the November 3, 2020 General Election, concerning or relating to the pre-canvassing, canvassing, counting, and/or tabulation of voted absentee and/or mail-in ballots, including without limitation (a) the timing of when such precanvassing, canvassing, and/or counting shall occur; (b) whether absentee and/or mail-in ballots that have been (i) cast either without inner secrecy envelopes, with inner secrecy envelopes with marks, text, or symbols, or without the outside envelope's declaration being filled out, dated, and signed, and/or (ii) delivered in-person by someone other than the electors who voted the ballots should be processed, handled, counted, or disallowed; and (c) whether poll watchers can be present during any such pre-canvassing, canvassing, and/or counting, and if there are any differences, please identify the reasons why You are making a change in such Procedures, Practices, Rules, and/or Instructions for the November 3, 2020 General Election.

**RESPONSE:** The Board of Elections objects to this Interrogatory No. 7 to the extent it requests

information contained in the Act 35 Report and thus is not required to be produced by the Board

of Elections under the Scheduling Order. The Board of Elections further objects to this

Interrogatory No. 7 to the extent that the information sought is publicly available from the

Counties, the Secretary, the Department, and/or other entities, and thus equally accessible to

Plaintiffs. The Board of Elections also objects to this Interrogatory No. 7 because it should more

properly be directed to the Secretary to the extent it requests Procedures, Practices, Rules, Regulations and/or Instructions that have been or will be promulgated or established by the Secretary or the Department.

The Board of Elections further objects to this Interrogatory No. 7 to the extent it calls for information regarding the return of ballots that cast without "the outside envelope's declaration being filled out, dated, and signed," because such information falls outside the scope of the Scheduling Order. The Scheduling Order provides only for discovery narrowly tailored to Plaintiffs' original Complaint (ECF 4), which did not seek relief related to the return of ballots cast without the outside envelope's declaration being filled out, dated, and signed. Plaintiffs served their discovery pursuant to the Scheduling Order on July 24, 2020 and filed an Amended Complaint adding significant new allegations and seeking additional relief on July 27, 2020 (ECF 234), but Plaintiffs have not sought an amendment to the Scheduling Order to expand or otherwise alter the scope of discovery. Any discovery concerning allegations or relief that were not part of Plaintiffs' original Complaint is therefore not authorized by and outside the scope of the Scheduling Order, and Plaintiffs' attempt to circumvent the expedited timeline that Plaintiffs themselves requested, and thus unilaterally expand the scope of discovery, should not be permitted. For these reasons, the Board of Elections also objects to this Request as untimely, unduly burdensome, and disproportional. The burden and expense of the discovery concerning Plaintiffs' new allegations, especially on the expedited schedule requested by Plaintiffs, outweighs its likely benefit. The Board of Elections further objects to this Interrogatory No. 7 to the extent it requests information that is protected by the attorney-client privilege, work product doctrine, deliberative process privilege, and/or other applicable privileges or protections from disclosure.

Subject to and without waiving these objections, the Board of Elections states that it followed the Election Code, guidance issued by the Secretary and the Department, Executive Orders of Governor Tom Wolf concerning pre-canvassing, canvassing, counting, and/or tabulation of voted absentee and/or mail-in ballots in the June 2, 2020 Primary Election.

The Board of Elections plans to follow the Election Code and such guidance concerning pre-canvassing, canvassing, counting, and/or tabulation of voted absentee and/or mail-in ballots in the November 3, 2020 General Election.

With regard to the June 2, 2020 Primary Election, Philadelphia County implemented the following procedures, as set forth on the Philadelphia Votes website page for "2020 Primary

Absentee and Mail-in Canvas Procedures and XL Pre-Canvass Ballot Procedure":

- Beginning on the evening of June 2, 2020 through the completion of the canvass, returned ballots shall be guarded overnight by a Philadelphia police officer.
- Pre-canvass activities for the alternative, absentee, mail-in, and provisional ballots will begin early as 7:00 a.m. on Wednesday, June 3, 2020 at 520 Columbus Blvd, 6th Floor. All staff and those assisting in the pre-canvass and ballot scanning shall be sworn-in.
- All alternative, absentee, and mail-in declaration envelopes received by the board prior to the sending of the electronic files for the printing of the poll books shall be reviewed and opened and the ballot (unless there is no ballot inside said envelope) scanned, with the best efforts taken to process ballots from contested primary elections for State Senate and State House with the largest number of submitted ballots first.
- All absentee, and mail-in ballots received by the board after the sending of electronic files for the printing of the poll books shall be checked against the poll book to ensure that the voter did not cast a provisional ballot in-person on June 2nd. If a voter who cast a provision ballot is found to have cast an absentee or mail-in ballot, their provisional ballot shall not be opened. If the voter did not cast an in-person ballot, then their declaration envelope shall be reviewed and opened and the ballot scanned, with the best efforts taken to process ballots from contested primary elections for State Senate and State House with the largest number of submitted ballots first.

- Results shall be uploaded at least twice daily, or more if determined practical by the staff conducting the canvas, to results.philadelphiavotes.com. One time shall be around noon and the other shall be at the conclusion of canvass activities for the day.
- Due to the COVID-19 pandemic and the need to keep the staff conducting the canvass safe, those permitted to be present for the canvass will be limited per 25 P.S. § 2650 and 25 P.S. § 3146.8 of the Pennsylvania Election Code to candidates and watchers. Through a partnership with the Committee of 70, the canvass of the alternative, absentee, mail-in, and provisional ballots will be streamed live online for those unable to attend in person. Watcher certificates for the canvass will be issued as follows:
  - Any party or political body or body of citizens which now is, or hereafter may be, entitled to have watchers at any registration, primary or election may appoint watchers who are qualified electors of Philadelphia or attorneys representing said party or body. The number who may be present at any one time shall be limited to not more than three for each party, political body or body of citizens.
  - Every candidate may be present in-person. Candidates may appoint a watcher who is an attorney representing them. Either the candidate or the attorney may be present at one time. Or candidate may appoint one authorized representative to be a watcher for the canvass of the absentee and mail-in canvas.
- Those entitled to watchers must email vote@phila.gov with the name of each appointed watchers, the watcher's addresses, and if the watcher is their attorney. To the extent the number of watchers requesting to be present at any given time exceeds the number consistent with social distancing guidelines, the Board of Elections will limit in-person viewing by endeavoring to allow watchers to view in-person on a rotating basis.
- Any candidate, attorney, or watcher present may raise objections to ballots, which will be decided by the Philadelphia County Board of Elections at a later date.

Investigation remains ongoing, so the Board of Elections reserves the right to supplement

## this Response.

8. Please identify all correspondence, memoranda, email messages, posting, or other communications, whether in writing or made orally, that (a) were made by, to, and/or between You and any other person, including without limitation: (i) any political party or body, political committee, non-profit organization, or other body of citizens; (ii) any voter/elector in the Commonwealth of Pennsylvania; (iii) any other County Election Board; (iv) any District Election Board; (v) any of Your employees, agents, or other representatives acting on Your behalf; and/or (vi) Secretary Boockvar and/or the Elections Department; and (b) concern, relate to, describe, explain, or justify the Procedures, Practices, Rules, Regulations, and/or Instructions identified in Your answer to the preceding Interrogatory, including without limitation any

incidents, complaints, concerns, changes, modifications, or supplementation to such Procedures, Practices, Rules, Regulations, and/or Instructions.

**RESPONSE:** The Board of Elections objects to this Interrogatory No. 8 to the extent it requests information contained in the Act 35 Report and thus is not required to be produced by the Board of Elections under the Scheduling Order. The Board of Elections further objects to this Interrogatory No. 8 to the extent that the information sought is publicly available from the Counties, the Secretary, the Department, and/or other entities, and thus equally accessible to Plaintiffs. The Board of Elections also objects to this Interrogatory No. 8 because it should more properly be directed to the Secretary to the extent it requests identification of materials related to Procedures, Practices, Rules, Regulations and/or Instructions that have been or will be promulgated or established by the Secretary or the Department.

The Boards of Elections further object to this Interrogatory No. 8 as overly broad, not narrowly tailored, and disproportional because it calls for "all correspondence, memoranda, email messages, postings, or other communications" that "were made by, to, and/or between You and any other person," concerning the information requested in Interrogatory No. 7, which was not limited to the specific allegations and relief requested in Plaintiffs' Complaint. As noted in response to Interrogatory No. 7, Plaintiffs' Complaint includes no allegations concerning, and requests no relief regarding, the return of ballots cast without the outside envelope's declaration being filled out, dated, and signed. Thus, the burden and expense of this proposed discovery outweighs its likely benefit.

The Board of Elections further objects to this Interrogatory No. 8 to the extent that it seeks disclosure of any information other than 1) the policies and rules that were in effect for the June 2, 2020 Primary Election and 2) the policies and rules that will be in effect for the November 3, 2020 General Election (to the extent these have been established), and to the extent

that it seeks communications beyond official Board of Elections communications to the public, because this information is irrelevant, disproportional to the needs of the case, and not narrowly tailored in accordance with the Scheduling Order. The Board of Elections further objects to this Interrogatory No. 8 to the extent it requests information that is protected by the attorney-client privilege, work product doctrine, deliberative process privilege, and/or other applicable privileges or protections from disclosure.

Subject to and without waiving these objections, the Board of Elections identifies the following information concerning the June 2, 2020 Primary Election:

- The Board of Elections website page entitled "Pre-Canvass" https://www.philadelphiavotes.com/en/home/item/1817-pre-canvass
- The City Commissioners Office Election Board Training for the 2020 Primary Election <u>https://files7.philadelphiavotes.com/election-</u> workers/2020\_PRIMARY\_ELECTION\_PP.pdf#\_ga=2.76375829.1442739614.15964 92241-451378711.1596323331
- The City Commissioners Guide for Election Board Officials in Philadelphia County <u>https://files7.philadelphiavotes.com/election-</u> <u>workers/Primary\_2020\_Election\_Board\_Training\_Guide.pdf#\_ga=2.76375829.14427</u> <u>39614.1596492241-451378711.1596323331</u>
- The Board of Elections website page entitled "2020 Primary Absentee and Mail-in Canvas Procedures and XL Pre-Canvas Ballot Procedure" <u>https://www.philadelphiavotes.com/en/home/item/1819-pre-canvass-procedure</u>
- The Board of Elections Pre-Canvass Ballot Procedure <u>https://files7.philadelphiavotes.com/announcements/Pre-</u> <u>Canvas Ballot Procedure.pdf# ga=2.113010820.1442739614.1596492241-</u> <u>451378711.1596323331</u>
- Transcripts/Minutes of City Commissioners' meetings regarding pre-canvassing and canvassing

Investigation remains ongoing, so the Board of Elections reserves the right to supplement

this Response.

**9.** Please identify all Procedures, Practices, Rules, Regulations, and/or Instructions You implemented, used, followed, and/or communicated in the June 2, 2020 Primary Election, and all Procedures, Practices, Rules, Regulations, and/or Instructions that You intend to implement, use, follow, and/or communicate in the November 3, 2020 General Election, concerning or relating to ensuring that electors who voted via absentee or mail-in ballot do not vote again in-person on Election Day, or if they do, they do not have more than one of their votes counted, including without limitation notifying the District Elections Boards which voters are entitled to vote on Election Day, either by way of a paper ballot, on a machine, or via a provisional ballot and making or supplementing the poll books that are delivered to the District Election Boards with such information, and if there are any differences, please identify the reasons why You are making a change in such Policies, Practices, Rules, Regulations, and/or Instructions for the November 3, 2020 General Election.

**RESPONSE:** The Board of Elections objects to this Interrogatory No. 9 to the extent it requests information contained in the Act 35 Report and thus is not required to be produced by the Board of Elections under the Scheduling Order. The Board of Elections further objects to this Interrogatory No. 9 to the extent that the information sought is publicly available from the Counties, the Secretary, the Department, and/or other entities, and thus equally accessible to Plaintiffs. The Board of Elections also objects to this Interrogatory No. 9 because it should more properly be directed to the Secretary to the extent it requests Procedures, Practices, Rules, Regulations and/or Instructions that have been or will be promulgated or established by the Secretary or the Department.

The Board of Elections further objects to this Interrogatory No. 9 to the extent it calls for information regarding the ability of voters who applied for but did not vote their mail-in or absentee ballots to spoil those ballots at polling places and vote in-person on Election Day, because the statutory provision allowing for the spoiling of mail-in and absentee ballots was not in force during the June 2, 2020 Primary Election, and because such information falls outside the scope of the Scheduling Order. The Scheduling Order provides only for discovery narrowly tailored to Plaintiffs' original Complaint (ECF 4), which did not seek relief related to the spoiling of mail-in and absentee ballots at polling places. Plaintiffs served their discovery pursuant to the

Scheduling Order on July 24, 2020 and filed an Amended Complaint adding significant new allegations and seeking additional relief on July 27, 2020 (ECF 234), but Plaintiffs have not sought an amendment to the Scheduling Order to expand or otherwise alter the scope of discovery. Any discovery concerning allegations or relief that were not part of Plaintiffs' original Complaint is therefore not authorized by and outside the scope of the Scheduling Order, and Plaintiffs' attempt to circumvent the expedited timeline that Plaintiffs themselves requested, and thus unilaterally expand the scope of discovery, should not be permitted. For these reasons, the Board of Elections also objects to this Request as untimely, unduly burdensome, and disproportional. The burden and expense of the discovery concerning Plaintiffs' new allegations, especially on the expedited schedule requested by Plaintiffs, outweighs its likely benefit. The Board of Elections further objects to this Interrogatory No. 9 to the extent it requests information that is protected by the attorney-client privilege, work product doctrine, deliberative process privilege, and/or other applicable privileges or protections from disclosure.

Subject to and without waiving these objections, the Board of Elections states that it followed the Election Code and guidance issued by the Secretary and the Department in order to prevent the casting and counting of two votes by a single voter in the June 2, 2020 Primary Election.

The Board of Elections plans to follow the Election Code and such guidance concerning the casting and counting of two votes by a single voter in the November 3, 2020 General Election.

With regard to the June 2, 2020 Primary Election, the Guide for Election Board Officials in Philadelphia County provided the following instructions to Election Board Officials, to be followed for each voter who arrived at the polls to vote on Primary day:

- Check the poll book. The Election Board officer in charge of the poll books must locate the voter's name in the poll book and call out the person's name so that others in the polling place can hear it
  - If the person's voter registration record is listed in the Division's poll book, then they are registered and eligible to vote.
  - Check supplemental poll book pages (if any). Election Officials must check any supplemental poll book pages. Supplemental poll book pages are located in a manila envelope that was provided along with the Election Materials Box. If you cannot locate the supplemental poll book pages, call 215-686-1530. If the person's voter registration record is listed in the supplemental poll book pages, then they are registered and eligible to vote.
  - If the person's voter registration record is not listed in the Division's poll book:
    - Re-check the poll book and supplemental poll book sheets (if any) carefully to ensure that the voter's name is not listed. If the voter's name is not listed in the Division's poll book or on the supplemental sheets, Election Board Officials should do the following:
      - Ask for the voter's Voter Registration Card. Election Board Officials should ask to see the voter's Voter Registration Card to ensure that the voter is at the right Division polling place.
      - Check under the voter's prior last name or alternate spellings. If the voter was recently married or has otherwise had his or her name changed, Election Board Officials should check the poll book to see if the voter is listed under a prior last name. If the voter has a hyphenated last name, or has more than one last name, check all variations of the name, (i.e., for Smith-Doe, check both Smith and Doe). Check first name last and last name first.
      - Call the voter registration office. If the voter's name cannot be located in the poll book or supplemental poll book pages under any variation of the voter's name, an Election Board Official or the voter should call the Voter Registration office. Department staff will check the central computer files to determine the voter's eligibility and to inform the voter of his or her correct polling place.
  - If the person has requested a Mail-in or Absentee Ballot, Provide the Voter with a Provisional Ballot. If Election Board Officials are unable to locate the voter's name in the poll book or supplemental poll book pages under any

variation of the voter's name, and the Voter Registration office cannot locate the voter's record in the central computer files or that person applied for a Mail-in or Absentee Ballot, then the person MUST be afforded the opportunity to vote by Provisional Ballot.

Election Board Officials were explicitly instructed that they were not permitted to grant an individual the right to vote on the Voting Machines if the voter's name is not listed in the poll book or supplemental sheets, or if they applied for a Mail-in or Absentee Ballot as indicated in the poll book or Mail-in and Absentee List, even if the Election Board Officials believe the registration records to be in error.

Investigation remains ongoing, so the Board of Elections reserves the right to supplement

this Response.

**10.** Please identify all correspondence, memoranda, email messages, posting, or other communications, whether in writing or made orally, that (a) were made by, to, and/or between You and any other person, including without limitation: (i) any political party or body, political committee, non-profit organization, or other body of citizens; (ii) any voter/elector in the Commonwealth of Pennsylvania; (iii) any other County Election Board; (iv) any District Election Board; (v) any of Your employees, agents, or other representatives acting on Your behalf; and/or (vi) Secretary Boockvar and/or the Elections Department; and (b) concern, relate to, describe, explain, or justify the Procedures, Practices, Rules, Regulations, and/or Instructions identified in Your answer to the preceding Interrogatory, including without limitation any incidents, complaints, concerns, changes, modifications, or supplementation to such Procedures, Practices, Rules, Regulations, and/or Instructions.

**RESPONSE:** The Board of Elections objects to this Interrogatory No. 10 to the extent it requests

information contained in the Act 35 Report and thus is not required to be produced by the Board

of Elections under the Scheduling Order. The Board of Elections further objects to this

Interrogatory No. 10 to the extent that the information sought is publicly available from the

Counties, the Secretary, the Department, and/or other entities, and thus equally accessible to

Plaintiffs. The Board of Elections also objects to this Interrogatory No. 10 because it should

more properly be directed to the Secretary to the extent it requests identification of materials

related to Procedures, Practices, Rules, Regulations and/or Instructions that have been or will be promulgated or established by the Secretary or the Department.

The Board of Elections further object to this Interrogatory No. 10 as overly broad, not narrowly tailored, and disproportional because it calls for "all correspondence, memoranda, email messages, postings, or other communications" that "were made by, to, and/or between You and any other person," concerning the information requested in Interrogatory No. 9, which was not limited to the specific allegations and relief requested in Plaintiffs' Complaint. As noted in response to Interrogatory No. 9, Plaintiffs' Complaint includes no allegations concerning, and requests no relief regarding, the ability of voters to spoil their mail-in and absentee ballots at polling places and to vote in-person on Election Day. Thus, the burden and expense of this proposed discovery outweighs its likely benefit.

The Board of Elections further objects to this Interrogatory No. 10 to the extent that it seeks disclosure of any information other than 1) the policies and rules that were in effect for the June 2, 2020 Primary Election and 2) the policies and rules that will be in effect for the November 3, 2020 General Election (to the extent these have been established), and to the extent that it seeks communications beyond official Board of Elections communications to the public, because this information is irrelevant, disproportional to the needs of the case, and not narrowly tailored in accordance with the Scheduling Order. The Board of Elections further objects to this Interrogatory No. 10 to the extent it requests information that is protected by the attorney-client privilege, work product doctrine, deliberative process privilege, and/or other applicable privileges or protections from disclosure.

Subject to and without waiving these objections, the Board of Elections identifies the following information concerning the June 2, 2020 Primary Election:

- The City Commissioners Guide for Election Board Officials in Philadelphia County https://files7.philadelphiavotes.com/electionworkers/Primary\_2020\_Election\_Board\_Training\_Guide.pdf#\_ga=2.76375829.14427 39614.1596492241-451378711.1596323331
- The City Commissioners Office Election Board Training for the 2020 Primary Election <u>https://files7.philadelphiavotes.com/election-</u> workers/2020\_PRIMARY\_ELECTION\_PP.pdf#\_ga=2.76375829.1442739614.15964 92241-451378711.1596323331
- The City Commissioners Office Primary 2020 Election Board Checklist <u>https://files7.philadelphiavotes.com/candidates/Primary\_2020\_Election\_Board\_Checklist.pdf#\_ga=2.46564391.1442739614.1596492241-451378711.1596323331</u>
- The City Commissioners Office 2020 Primary Election Training Seminar Schedule https://files7.philadelphiavotes.com/electionworkers/2020\_Primary\_Seminar\_Schedule.pdf#\_ga=2.88475803.1442739614.15964 92241-451378711.1596323331

Investigation remains ongoing, so the Board of Elections reserves the right to supplement

this Response.

**11.** Please identify all incidents known or reported to You from the June 2, 2020 Primary Election of: (a) electors who applied for and/or voted an absentee or mail-in ballot and also voted in-person, either on a voting machine or via a paper or provisional ballot, on Election Day at a polling place; (b) electors who received and/or voted more than one absentee or mail-in ballot; (c) non-disabled electors whose absentee or mail-in ballots were mailed or delivered inperson by a person other than the non-disabled electors who voted the absentee or mail-in ballots; and/or (d) electors who claimed that someone had impersonated them and/or cast either in-person, absentee, and/or mail-in ballots for them without their knowledge, consent, or authorization, and for each such incident, state what review or investigation was undertaken by You in response to the incident, including all determinations made on the incident, legal actions filed, and referrals to law enforcement.

**RESPONSE:** The Board of Elections objects to this Interrogatory No. 11 to the extent it requests

information contained in the Act 35 Report and thus is not required to be produced by the Board

of Elections under the Scheduling Order. The Board of Elections further objects to this

Interrogatory No. 11 to the extent that the information sought is publicly available from the

Counties, the Secretary, the Department, and/or other entities, and thus equally accessible to

Plaintiffs. The Board of Elections further objects to this Interrogatory No. 11 to the extent it calls

for the Board of Elections to "identify all incidents known or reported to You from the June 2, 2020 Primary Election" relating to "electors who claimed that someone had impersonated them and/or cast either in-person, absentee, and/or mail-in ballots for them without their knowledge, consent, or authorization." Such information falls outside the scope of the Scheduling Order. The Scheduling Order provides only for discovery narrowly tailored to Plaintiffs' original Complaint (ECF 4), which did not seek relief related to electors who claimed that someone had impersonated them and/or cast either in-person, absentee, and/or mail-in ballots for them without their knowledge, consent, or authorization. Plaintiffs served their discovery pursuant to the Scheduling Order on July 24, 2020 and filed an Amended Complaint adding significant new allegations and seeking additional relief on July 27, 2020 (ECF 234), but Plaintiffs have not sought an amendment to the Scheduling Order to expand or otherwise alter the scope of discovery. Any discovery concerning allegations or relief that were not part of Plaintiffs' original Complaint is therefore not authorized by and outside the scope of the Scheduling Order, and Plaintiffs' attempt to circumvent the expedited timeline that Plaintiffs themselves requested, and thus unilaterally expand the scope of discovery, should not be permitted. For these reasons, the Board of Elections also objects to this Request as untimely, unduly burdensome, and disproportional. The burden and expense of the discovery concerning Plaintiffs' new allegations, especially on the expedited schedule requested by Plaintiffs, outweighs its likely benefit. The Board of Elections further objects to this Interrogatory No. 11 to the extent it requests information that is protected by the attorney-client privilege, work product doctrine, deliberative process privilege, and/or other applicable privileges or protections from disclosure.

Subject to and without waiving these objections, with regard to the four categories of voters described above for the June 2, 2020 Primary Election, the Board of Elections states:

- a) The Board of Elections is aware of instances of electors who applied for and/or voted an absentee or mail-in ballot and also voted in-person, either on a voting machine or via a paper or provisional ballot, on Election Day at a polling place. Election Board Officials were instructed not to allow any voter to vote in person if a poll book or supplemental poll book reflected that the voter had already cast an absentee ballot or mail-in ballot, and not to allow any voter to vote via voting machine if a poll book or supplemental poll book reflected that the voter had already applied for an absentee ballot or mail-in ballot. Nonetheless, approximately 40 voters whose absentee or mail-in ballots were counted also cast in person votes. Of those 40 votes, approximately four votes were actually counted. The Board of Elections evaluated these incidents and concluded that they resulted from a human error, which can be attributed to the challenges of administering mail-in balloting for the first time in any Pennsylvania election and during a pandemic. Additionally, some voters who applied for an absentee or mail-in ballot but did not actually cast that ballot were permitted to vote in person using a voting machine rather than via provisional ballot. This also resulted from human error arising from the unique circumstances of the primary election. As in any election, human error is largely preventable but not entirely avoidable. That is especially true when administering new voting procedures for the first time.
- b) The Board of Elections is not aware of any electors who received and voted more than one absentee or mail-in ballot. The Board of Elections is aware that a small number of voters received, separately, two absentee or mail-in ballots because of a glitch in the SURE system.
- c) The Board of Elections is not aware of any non-disabled electors whose absentee or mail-in ballots were mailed or delivered in-person by a person other than the non-disabled electors who voted the absentee or mail-in ballots, and counted. However, the Board of Elections is aware of at least two such voters whose ballots were not counted. During the social unrest in Center City Philadelphia, one voter who was unable to access a 24/7 Drop-Off Location because of protests approached a police officer with two absentee or mail-in ballots. The police officer took receipt of those ballots and relayed them to another police officer, who delivered them to Board of Elections staff. Because the ballots were not properly delivered to the Board of Elections, the Board of Elections did not count the two ballots.

Investigation remains ongoing, so the Board of Elections reserves the right to supplement

this Response.

**12.** Please identify all Procedures, Practices, Rules, Regulations, and/or Instructions You implemented, used, followed, and/or communicated in the June 2, 2020 Primary Election, and all Procedures, Practices, Rules, Regulations, and/or Instructions that You intend to implement, use, follow, and/or communicate in the November 3, 2020 General Election, concerning or relating to the accreditation of poll watchers, the issuance and verification of poll watcher's certificates, and whether poll watchers are permitted to monitor the issuance, return, casting, and counting of all ballots, including without limitation absentee and/or mail-in ballots, and if there are any differences, please identify the reasons why You are making a change in such Procedures, Practices, Rules, Regulations, and/or Instructions by the November 3, 2020 General Election.

**RESPONSE:** The Board of Elections objects to this Interrogatory No. 12 as overly broad, not narrowly tailored, and disproportional because it calls for "all Procedures, Practices, Rules, Regulations, and/or Instructions" relating to "the accreditation of poll watchers, the issuance and verification of poll watcher's certifications, and whether poll watchers are permitted to monitor the issuance, return, casting, and counting of all ballots," without limitation to the specific allegations and relief requested in Plaintiffs' Complaint. Plaintiffs' Complaint requests very narrow relief concerning poll watchers – the ability to poll watchers to serve in counties outside their county of residence and to observe and participate in the pre-canvass of ballots. Thus, the burden and expense of this proposed discovery outweighs its likely benefit. The Board of Elections further objects to this Interrogatory No. 12 to the extent that the information sought is publicly available from the Counties, the Secretary, the Department, and/or other entities, and thus equally accessible to Plaintiffs. The Board of Elections also objects to this Interrogatory No. 12 because it should more properly be directed to the Secretary to the extent it requests Procedures, Practices, Rules, Regulations and/or Instructions that have been or will be promulgated or established by the Secretary or the Department. The Board of Elections further objects to this Interrogatory No. 12 to the extent it requests information that is protected by the attorney-client privilege, work product doctrine, deliberative process privilege, and/or other applicable privileges or protections from disclosure.

Subject to and without waiving these objections, the Board of Elections states that it followed the Election Code and guidance issued by the Secretary and the Department concerning the accreditation of poll watchers, issuance and verification of poll watcher's certifications,

whether poll watchers are permitted to monitor the issuance, return, casting, and counting of all ballots in the June 2, 2020 Primary Election.

The Board of Elections will follow the Election Code and guidance issued by the Secretary and the Department concerning these matters in the November 3, 2020 General Election.

With regard to the June 2, 2020 Primary Election, the Guide for Election Board Officials in Philadelphia County provided the following instructions to Election Board Officials regarding Poll Watchers: Poll Watchers are issued Watcher Certificates by the City Commissioners, as requested by candidates or political parties, after a review of the potential Poll Watchers' voter registration files. Watchers do not have to live in the Division in which they watch, but they must be registered electors in Philadelphia.

During the Primary election, each candidate is entitled to request two (2) Watcher Certificates per Division for his or her district. Parties may not request Watcher Certificates during the Primary Election.

Watchers are only permitted to be issued one Certificate for one Election District, but are permitted to use that Certificate to watch in any Ward/Division in Philadelphia. Each Watcher Certificate has the Watcher's name, address, and the Ward and Division in which the Watcher has requested to work listed on the certificate. Certified Watchers are permitted to be present in any polling place during Election Day and during the tabulation of results after the polls close at 8:00 PM.

Additionally, poll watchers are not permitted to monitor the issuance, return, casting, or counting of absentee or mail-in ballots. Rather, under 25 P.S. § 3146.8 and as per guidance issued by the Secretary and Department, each campaign and political party is permitted to

designate watchers to attend the pre-canvass and canvass of absentee and mail-in ballots. The number permitted to be present at any one time was limited to not more than three for each party, political body or body of citizens. During the Primary Election, Plaintiff Donald Trump For President, Inc. designated one such watcher in Philadelphia County, who was permitted to monitor the pre-canvass and canvass of absentee and mail-in ballots.

Investigation remains ongoing, so the Board of Elections reserves the right to supplement this Response.

**13.** Please identify all correspondence, memoranda, email messages, postings, or other communications, whether in writing or made orally, that (a) were made by, to, and/or between You any other person, including without limitation: (i) any political party or body, political committee, non-profit organization, or other body of citizens; (ii) any voter/elector in the Commonwealth of Pennsylvania; (iii) any other County Election Board; (iv) any District Election Board; (v) any of Your employees, agents, or other representatives acting on Your behalf; and/or (vi) Secretary Boockvar and/or the Elections Department; and (b) concern, relate to, describe, explain, or justify the Procedures, Practices, Rules, Regulations, and/or Instructions identified in Your answer to the preceding Interrogatory, including without limitation any incidents, complaints, concerns, changes, modifications, or supplementation to such Procedures, Practices, Rules, Regulations, and/or Instructions.

**RESPONSE:** The Board of Elections objects to this Interrogatory No. 13 as overly broad, not narrowly tailored, and disproportional because it calls for "all correspondence, memoranda, email messages, postings, or other communications" that "were made by, to, and/or between You and any other person," concerning the information requested in Interrogatory No. 12, which was not limited to the specific allegations and relief requested in Plaintiffs' Complaint. As noted in response to Interrogatory No. 12, Plaintiffs' Complaint requests very narrow relief concerning poll watchers – the ability to poll watchers to serve in counties outside their county of residence and to observe and participate in the pre-canvass of ballots. Thus, the burden and expense of this Interrogatory No. 13 to the extent that the information sought is publicly available from the Counties, the Secretary, the Department, and/or other entities, and thus equally accessible to

Plaintiffs. The Board of Elections also objects to this Interrogatory No. 13 because it should more properly be directed to the Secretary to the extent it requests identification of materials related to Procedures, Practices, Rules, Regulations and/or Instructions that have been or will be promulgated or established by the Secretary or the Department.

The Board of Elections further objects to this Interrogatory No. 13 to the extent that it seeks disclosure of any information other than 1) the policies and rules that were in effect for the June 2, 2020 Primary Election and 2) the policies and rules that will be in effect for the November 3, 2020 General Election (to the extent these have been established), and to the extent that it seeks communications beyond official Board of Elections communications to the public, because this information is irrelevant, disproportional to the needs of the case, and not narrowly tailored in accordance with the Scheduling Order. The Board of Elections further objects to this Interrogatory No. 13 to the extent it requests information that is protected by the attorney-client privilege, work product doctrine, deliberative process privilege, and/or other applicable privileges or protections from disclosure.

Subject to and without waiving these objections, the Board of Elections identifies the following information concerning the June 2, 2020 Primary Election.

- The City Commissioners Guide for Election Board Officials in Philadelphia County https://files7.philadelphiavotes.com/electionworkers/Primary\_2020\_Election\_Board\_Training\_Guide.pdf#\_ga=2.76375829.14427 39614.1596492241-451378711.1596323331
- The City Commissioners Office Election Board Training for the 2020 Primary Election <u>https://files7.philadelphiavotes.com/election-</u> workers/2020\_PRIMARY\_ELECTION\_PP.pdf#\_ga=2.76375829.1442739614.15964 92241-451378711.1596323331
- The City Commissioners Office Primary 2020 Election Board Checklist https://files7.philadelphiavotes.com/candidates/Primary\_2020\_Election\_Board\_Checklist.pdf#\_ga=2.46564391.1442739614.1596492241-451378711.1596323331

• The City Commissioners Office 2020 Primary Election Training Seminar Schedule https://files7.philadelphiavotes.com/electionworkers/2020\_Primary\_Seminar\_Schedule.pdf#\_ga=2.88475803.1442739614.15964 92241-451378711.1596323331

Investigation remains ongoing, so the Board of Elections reserves the right to supplement

this Response.

- **14.** Please identify from the June 2, 2020 Primary Election:
  - (a) The total number of absentee and mail-in ballots that were returned to You by mail and of this total, the number of mail-returned ballots that were (i) precanvassed and counted; (ii) pre-canvassed and not counted; (iii) challenged and counted; (iv) challenged and not counted; (v) canvassed and counted; (vi) canvassed and not counted; and (vii) not canvassed and not counted;
  - (b) The total number of absentee and mail-in ballots that were returned to You in person at Your official registered office, and of this total, the number of in-person/office-returned ballots that were: (i) pre-canvassed and counted; (ii) pre-canvassed and not counted; (iii) challenged and counted; (iv) challenged and not counted; (v) canvassed and counted; (vi) canvassed and not counted; and (vii) not canvassed and not counted; and
  - (c) The total number of absentee and mail-in ballots that were returned to You in person to a drop-box, mobile ballot collection center, polling place, or other collection/drop-off location other than inside Your official registered office, and of this total, the number of in-person/office-returned ballots that were: (i) pre-canvassed and counted; (ii) pre-canvassed and not counted; (iii) challenged and counted; (iv) challenged and not counted; (v) canvassed and counted; (vi) canvassed and not counted; and (vii) not canvassed and not counted.

**RESPONSE:** The Board of Elections objects to this Interrogatory No. 14 to the extent it requests information contained in the Act 35 Report and thus is not required to be produced by the Board of Elections under the Scheduling Order. The Board of Elections further objects to this Interrogatory No. 14 to the extent that the information sought is publicly available from the Counties, the Secretary, the Department, and/or other entities, and thus equally accessible to Plaintiffs. The Counties further object to this Interrogatory No. 14 as overly broad, not narrowly tailored, and disproportional because it requests that the Counties differentiate between the

number of ballots returned to different locations under their control, some of which were closed or had restricted access due to the COVID-19 pandemic, and thus the burden and expense of the proposed discovery outweighs its likely benefit.

The Board of Elections further objects to this Interrogatory No. 14 because documents relating to the return of ballots to "polling places" fall outside the scope of the Scheduling Order. The Scheduling Order provides only for discovery narrowly tailored to Plaintiffs' original Complaint (ECF 4), which did not seek relief related to the return of ballots to polling places. Plaintiffs served their discovery pursuant to the Scheduling Order on July 24, 2020 and filed an Amended Complaint adding significant new allegations and seeking additional relief on July 27, 2020 (ECF 234), but Plaintiffs have not sought an amendment to the Scheduling Order to expand or otherwise alter the scope of discovery. Any discovery concerning allegations or relief that were not part of Plaintiffs' original Complaint is therefore not authorized by and outside the scope of the Scheduling Order, and Plaintiffs' attempt to circumvent the expedited timeline that Plaintiffs themselves requested, and thus unilaterally expand the scope of discovery, should not be permitted. For the reasons stated above, the Board of Elections also objects to this Request as untimely, unduly burdensome, and disproportional. The burden and expense of discovery concerning Plaintiffs' new allegations, especially on the expedited schedule requested by Plaintiffs, outweighs its likely benefit. The Board of Elections further objects to this Interrogatory No. 14 to the extent it requests information that is protected by the attorney-client privilege, work product doctrine, deliberative process privilege, and/or other applicable privileges or protections from disclosure.

Subject to and without waiving these objections, with regard to categories (b) and (c), the Board of Elections rejected absentee and mail-in ballots as follows:

- Returned after Deadline: 5,695 (includes both non-postmarked ballots returned between 6/4 and 6/9 and all ballots returned 6/10 or later)
- No Signature: 1,051
- Not in Declaration Envelope: 137
- Other (as described in Interrogatory Response 11(c)): 2

The Board of Elections did not keep records of the methods by which these rejected ballots were delivered.

Investigation remains ongoing, so the Board of Elections reserves the right to supplement this Response.

## **RESPONSES AND OBJECTIONS TO REQUESTS FOR PRODUCTION**

1. Please produce all documents You referenced, relied upon, reviewed, or consulted when answering the above Interrogatories.

**RESPONSE:** The Board of Elections objects to this Request No. 1 as overly broad, not narrowly tailored, and disproportional because it calls for "all documents relied upon, reviewed, or consulted when answering" any of the Interrogatories, without limitation to the specific allegations and relief requested in Plaintiffs' Complaint, and thus the burden and expense of this proposed discovery outweighs its likely benefit. The Board of Elections further objects to this Request No. 1 to the extent it requests documents and/or information contained in the Act 35 Report and thus is not required to be produced by the Board of Elections under the Scheduling Order. The Board of Elections further objects to this Request No. 1 to the extent that the documents sought are publicly available from the Counties, the Secretary, the Department, and/or other entities, and thus equally accessible to Plaintiffs. The Board of Elections will not produce documents that are generally publicly available and accessible, such as the Election Code. The Board of Elections also object to this Request No. 1 because it calls for documents

that are in the possession, custody, or control of entities other than the Board of Elections, including but not limited to the Secretary or the Department.

The Board of Elections further objects to this Request as more properly directed to the Secretary because it requests documents concerning procedures, practices, rules, regulations and/or instructions that have been or will be promulgated or established by the Secretary or the Department. The Board of Elections will not produce documents that have been or will be promulgated by the Secretary or the Department, as the Secretary is a party to this Action and is able to produce those documents, and any production of such documents by the Boards of Elections would be duplicative. The Board of Elections further objects to this Request No. 1 to the extent it calls for the production of documents protected by the attorney-client privilege, work product doctrine, deliberative process privilege, and/or other applicable privileges and protections from disclosure.

Subject to and without waiving these objections, the Board of Elections will conduct a reasonable search for non-privileged, responsive documents relied upon, reviewed, or consulted when answering the Interrogatories the places where such documents are most likely to be found, and the Board of Elections will produce non-privileged documents that are responsive to this Request No. 1 located after a reasonable search that are sufficient to show the following:

- Board of Elections public statements, including statements on County or Board of Elections websites and social media accounts, and press releases, regarding ballot collection point locations, dates and hours of availability, instructions for use, and restrictions on who may return ballots.
- Signage at ballot collection point locations provided by the Boards of Elections to the public;

- Information concerning who could make use of ballot collection points provided by the Boards of Elections to the public;
- Official policies and procedures, if any, regarding the maintenance, monitoring, and collection of ballots from ballot collection points;
- The kinds of ballot collection receptacles used;
- Instructions mailed to each voter that requested an absentee or mail ballot;
- Board of Elections public statements, including statements on County or Board of Elections websites and social media accounts, and press releases, regarding precanvassing, canvassing, counting, and/or tabulation of voted absentee and/or mail-in ballots;
- Official Board of Elections training manuals, guidance, and handbooks, if any, for pre-canvassing, canvassing, counting, and/or tabulation of voted absentee and/or mail-in ballots.
- Official instructions, if any, provided to poll workers concerning poll watchers, supplemental poll books, and the casting of provisional ballots;
- Information sufficient to show the poll watcher certifications issued and verified by each County, the person or entity that requested the poll watcher certifications, and the polling places for which those certifications were issued; and
- Official Board of Elections training manuals, guidance, and handbooks, if any, for determining whether a voter who had cast a provisional ballot had returned an absentee or mail ballot, and whether the provisional ballot should be counted or not counted.

Investigation is ongoing, and the Board of Elections reserves the right to supplement this

Response.

Please produce all Procedures, Practices, Rules, Regulations, and/or Instructions 2. You implemented, used, followed, and/or communicated in the June 2, 2020 Primary Election, and all Procedures, Practices, Rules, Regulations, and/or Instructions that You intend to implement, use, follow, and/or communicate in the November 3, 2020 General Election, concerning or relating to the receipt, storage, review, delivery, collection, and counting of paper ballots, including but not limited to absentee, mail-in, provisional, and alternative emergency ballots, and all correspondence, memoranda, email messages, postings, or other documents reflecting communications, whether in writing or made orally, that (a) were made by, to, and/or between You and any other person, including without limitation: (i) any political party or body, political committee, non-profit organization, or other body of citizens; (ii) any voter/elector in the Commonwealth of Pennsylvania; (iii) any other County Election Board; (iv) any District Election Board; (v) any of Your employees, agents, or other representatives acting on Your behalf; and/or (vi) Secretary Boockvar and/or the Elections Department; and (b) concern, relate to, describe, explain, or justify the Procedures, Practices, Rules, Regulations, and/or Instructions, including without limitation any incidents, complaints, concerns, changes, modifications, or supplementation to such Procedures, Practices, Rules, Regulations, and/or Instructions.

**RESPONSE:** The Board of Elections objects to this Request No. 2 as overly broad, not narrowly

tailored, and disproportional because it calls for "all Procedures, Practices, Rules, Regulations, and/or Instructions" relating to "the receipt, storage, review, delivery, collection, and counting of paper ballots," without limitation to the specific allegations and relief requested in Plaintiffs' Complaint. Indeed, this Request No. 2 specifically seeks information about "alternative emergency ballots," but Plaintiffs' Complaint includes no allegations concerning, and requests no relief regarding, any such emergency ballots. Thus, the burden and expense of this proposed discovery outweighs its likely benefit.

The Board of Elections further objects to this Request No. 2 to the extent it is duplicative of Request No. 1. The Board of Elections further objects to this Request No. 2 to the extent it requests documents and/or information contained in the Act 35 Report and thus is not required to be produced by the Boards of Elections under the Scheduling Order. The Board of Elections further objects to this Request No. 2 to the extent that the documents sought are publicly

available from the Counties, the Secretary, the Department, and/or other entities, and thus equally accessible to Plaintiffs. The Board of Elections will not produce documents that are generally publicly available and accessible, such as the Election Code. The Board of Elections also objects to this Request No. 2 because it calls for documents that are in the possession, custody, or control of entities other than the Board of Elections, including but not limited to the Secretary or the Department.

The Board of Elections further objects to this Request as more properly directed to the Secretary because it requests documents concerning procedures, practices, rules, regulations and/or instructions that have been or will be promulgated or established by the Secretary or the Department. The Board of Elections will not produce documents that have been or will be promulgated by the Secretary or the Department, as the Secretary is a party to this Action and is able to produce those documents, and any production of such documents by the Boards of Elections would be duplicative. The Board of Elections further objects to this Request No. 2 to the extent it calls for the production of documents protected by the attorney-client privilege, work product doctrine, deliberative process privilege, and/or other applicable privileges and protections from disclosure.

Subject to and without waiving these objections, the Board of Elections will produce the documents discussed in their Response to Request No. 1. Investigation remains ongoing, so the Board of Elections reserves the right to supplement this Response.

3. Please produce all Procedures, Practices, Rules, Regulations, and/or Instructions You implemented, used, followed, and/or communicated in the June 2, 2020 Primary Election, and all Procedures, Practices, Rules, Regulations, and/or Instructions that You intend to implement, use, follow, and/or communicate in the November 3, 2020 General Election, concerning or relating to the pre-canvassing, canvassing, and/or counting of absentee and/or mail-in ballots, including without limitation (a) the timing of when such pre-canvassing, canvassing, and/or counting shall occur; (b) whether absentee and/or mail-in ballots that have been (i) cast either without inner secrecy envelopes, with inner secrecy envelopes with marks, text, or symbols, or without the outside envelope's declaration being filled out, dated, and signed, and/or (ii) delivered in-person by someone other than the electors who voted the ballots should be processed, handled, counted, or disallowed; and (c) whether poll watchers can be present during any such pre-canvassing, canvassing, and/or counting, and all correspondence, memoranda, email messages, postings, or other documents reflecting communications, whether in writing or made orally, that (a) were made by, to, and/or between You and any other person, including without limitation: (i) any political party or body, political committee, non-profit organization, or other body of citizens; (ii) any voter/elector in the Commonwealth of Pennsylvania; (iii) any other County Election Board; (iv) any District Election Board; (v) any of Your employees, agents, or other representatives acting on Your behalf; and/or (vi) Secretary Boockvar and/or the Elections Department; and (b) concern, relate to, describe, explain, or justify the Procedures, Practices, Rules, Regulations, and/or Instructions, or supplementation to such Procedures, Practices, Rules, Regulations, and/or Instructions.

**RESPONSE:** The Board of Elections objects to this Request No. 3 to the extent it calls for information regarding the return of ballots cast "without the outside envelope's declaration being filled out, dated, and signed," because such information falls outside the scope of the Scheduling Order. The Scheduling Order provides only for discovery narrowly tailored to Plaintiffs' original Complaint (ECF 4), which did not seek relief related to the return of ballots cast without the outside envelope's declaration being filled out, dated, and signed. Plaintiffs served their discovery pursuant to the Scheduling Order on July 24, 2020 and filed an Amended Complaint adding significant new allegations and seeking additional relief on July 27, 2020 (ECF 234), but Plaintiffs have not sought an amendment to the Scheduling Order to expand or otherwise alter the scope of discovery. Any discovery concerning allegations or relief that were not part of Plaintiffs' original Complaint is therefore not authorized by and outside the scope of the Scheduling Order, and Plaintiffs' attempt to circumvent the expedited timeline that Plaintiffs themselves requested, and thus unilaterally expand the scope of discovery, should not be permitted. For these reasons, the Board of Elections also objects to this Request as untimely, unduly burdensome, and disproportional. The burden and expense of the discovery concerning

Plaintiffs' new allegations, especially on the expedited schedule requested by Plaintiffs, outweighs its likely benefit

The Board of Elections further objects to this Request No. 3 to the extent it is duplicative of Request No. 1. The Board of Elections further objects to this Request No. 3 to the extent it requests documents and/or information contained in the Act 35 Report and thus is not required to be produced by the Boards of Elections under the Scheduling Order. The Board of Elections further objects to this Request No. 3 to the extent that the documents sought are publicly available from the Counties, the Secretary, the Department, and/or other entities, and thus equally accessible to Plaintiffs. The Board of Elections will not produce documents that are generally publicly available and accessible, such as the Election Code. The Board of Elections also objects to this Request No. 3 because it calls for documents that are in the possession, custody, or control of entities other than the Board of Elections, including but not limited to the Secretary or the Department.

The Board of Elections further objects to this Request as more properly directed to the Secretary because it requests documents concerning procedures, practices, rules, regulations and/or instructions that have been or will be promulgated or established by the Secretary or the Department. The Board of Elections will not produce documents that have been or will be promulgated by the Secretary or the Department, as the Secretary is a party to this Action and is able to produce those documents, and any production of such documents by the Boards of Elections would be duplicative. The Board of Elections further objects to this Request No. 3 to the extent it calls for the production of documents protected by the attorney-client privilege, work product doctrine, deliberative process privilege, and/or other applicable privileges and protections from disclosure.

Subject to and without waiving these objections, the Board of Elections will produce the documents discussed in their Response to Request No. 1. Investigation remains ongoing, so the Board of Elections reserves the right to supplement this Response.

4. Please produce all Procedures, Practices, Rules, Regulations, and/or Instructions You implemented, used, followed, and/or communicated in the June 2, 2020 Primary Election, and all Procedures, Practices, Rules, Regulations, and/or Instructions that You intend to implement, use, follow, and/or communicate in the November 3, 2020 General Election, concerning or relating to the use, type, number, location, security, monitoring, advertisement, funding, and other factors or best practices for using drop boxes, mobile ballot collection centers, polling places, or other collection/drop-off locations to receive voted absentee and/or mail-in ballots, including without limitation documenting security and chain of custody of such delivered ballots, and all correspondence, memoranda, email messages, postings, or other documents reflecting communications, whether in writing or made orally, that (a) were made by, to, and/or between You and any other person, including without limitation: (i) any political party or body, political committee, non-profit organization, or other body of citizens; (ii) any voter/elector in the Commonwealth of Pennsylvania; (iii) any other County Election Board; (iv) any District Election Board; (v) any of Your employees, agents, or other representatives acting on Your behalf; and/or (vi) Secretary Boockvar and/or the Elections Department; and (b) concern, relate to, describe, explain, or justify the Procedures, Practices, Rules, Regulations, and/or Instructions, including without limitation any incidents, complaints, concerns, changes, modifications, or supplementation to such Procedures, Practices, Rules, Regulations, and/or Instructions.

**RESPONSE:** The Board of Elections objects to this Request No. 4 as overly broad, not narrowly tailored, and disproportional because it calls for "all Procedures, Practices, Rules, Regulations, and/or Instructions" relating to "the receipt, storage, review, delivery, collection, and counting of paper ballots," without limitation to the specific allegations and relief requested in Plaintiffs' Complaint. Indeed, this Request No. 4 specifically seeks information about the "funding" of drop boxes, but Plaintiffs' Complaint includes no allegations concerning, and requests no relief regarding, the funding of drop boxes. Thus, the burden and expense of this proposed discovery outweighs its likely benefit.

The Board of Elections further objects to this Request No. 4 to the extent it is duplicative of Request No. 1. The Board of Elections further objects to this Request No. 4 to the extent it requests documents and/or information contained in the Act 35 Report and thus is not required to

be produced by the Boards of Elections under the Scheduling Order. The Board of Elections further objects to this Request No. 4 to the extent that the documents sought are publicly available from the Counties, the Secretary, the Department, and/or other entities, and thus equally accessible to Plaintiffs. The Board of Elections will not produce documents that are generally publicly available and accessible, such as the Election Code. The Board of Elections also objects to this Request No. 4 because it calls for documents that are in the possession, custody, or control of entities other than the Board of Elections, including but not limited to the Secretary or the Department.

The Board of Elections further objects to this Request as more properly directed to the Secretary because it requests documents concerning procedures, practices, rules, regulations and/or instructions that have been or will be promulgated or established by the Secretary or the Department. The Board of Elections will not produce documents that have been or will be promulgated by the Secretary or the Department, as the Secretary is a party to this Action and is able to produce those documents, and any production of such documents by the Boards of Elections would be duplicative. The Board of Elections further objects to this Request No. 4 to the extent it calls for the production of documents protected by the attorney-client privilege, work product doctrine, deliberative process privilege, and/or other applicable privileges and protections from disclosure.

Subject to and without waiving these objections, the Board of Elections will produce the documents discussed in their Response to Request No. 1. Investigation remains ongoing, so the Board of Elections reserves the right to supplement this Response.

5. Please produce all Procedures, Practices, Rules, Regulations, and/or Instructions You implemented, used, followed, and/or communicated in the June 2, 2020 Primary Election, and all Procedures, Practices, Rules, Regulations, and/or Instructions that You intend to implement, use, follow, and/or communicate in the November 3, 2020 General Election,

concerning or relating to the circumstances under which a person other than the non-disabled elector may return or deliver an absentee or mail-in ballot for that non-disabled elector, and all correspondence, memoranda, email messages, postings, or other documents reflecting communications, whether in writing or made orally, that (a) were made by, to, and/or between You and any other person, including without limitation: (i) any political party or body, political committee, non-profit organization, or other body of citizens; (ii) any voter/elector in the Commonwealth of Pennsylvania; (iii) any other County Election Board; (iv) any District Election Board; (v) any of Your employees, agents, or other representatives acting on Your behalf; and/or (vi) Secretary Boockvar and/or the Elections Department; and (b) concern, relate to, describe, explain, or justify the Procedures, Practices, Rules, Regulations, and/or Instructions, including without limitation any incidents, complaints, concerns, changes, modifications, or supplementation to such Procedures, Practices, Rules, Regulations, and/or Instructions.

**RESPONSE:** The Board of Elections objects to this Request No. 5 to the extent it is duplicative

of Request No. 1. The Board of Elections further objects to this Request No. 5 to the extent it requests documents and/or information contained in the Act 35 Report and thus is not required to be produced by the Boards of Elections under the Scheduling Order. The Board of Elections further objects to this Request No. 5 to the extent that the documents sought are publicly available from the Counties, the Secretary, the Department, and/or other entities, and thus equally accessible to Plaintiffs. The Board of Elections will not produce documents that are generally publicly available and accessible, such as the Election Code. The Board of Elections also objects to this Request No. 5 because it calls for documents that are in the possession, custody, or control of entities other than the Board of Elections, including but not limited to the Secretary or the Department.

The Board of Elections further objects to this Request as more properly directed to the Secretary because it requests documents concerning procedures, practices, rules, regulations and/or instructions that have been or will be promulgated or established by the Secretary or the Department. The Board of Elections will not produce documents that have been or will be promulgated by the Secretary or the Department, as the Secretary is a party to this Action and is able to produce those documents, and any production of such documents by the Boards of

Elections would be duplicative. The Board of Elections further objects to this Request No. 5 to the extent it calls for the production of documents protected by the attorney-client privilege, work product doctrine, deliberative process privilege, and/or other applicable privileges and protections from disclosure. Furthermore, the Board of Elections objects to this Request No. 5 because it presumes the fact that there "are circumstances under which a person other than the non-disabled elector may return or deliver an absentee or mail-in ballot for that non-disabled elector."

Subject to and without waiving these objections, the Board of Elections will produce the documents discussed in their Response to Request No. 1. Investigation remains ongoing, so the Board of Elections reserves the right to supplement this Response.

Please produce all Procedures, Practices, Rules, Regulations, and/or Instructions 6. You implemented, used, followed, and/or communicated in the June 2, 2020 Primary Election, and all Procedures, Practices, Rules, Regulations, and/or Instructions that You intend to implement, use, follow, and/or communicate in the November 3, 2020 General Election, concerning or relating to the processing, verification, acceptance, and/or rejection of applications for absentee and/or mail-in ballots, including without limitation whether to mail applications to all registered voters or qualified electors within Your county without a signed written request or application, and whether to frank or prepay the postage for any or all completed and returned applications, and all correspondence, memoranda, email messages, postings, or other documents reflecting communications, whether in writing or made orally, that (a) were made by, to, and/or between You and any other person, including without limitation: (i) any political party or body, political committee, non-profit organization, or other body of citizens; (ii) any voter/elector in the Commonwealth of Pennsylvania; (iii) any other County Election Board; (iv) any District Election Board; (v) any of Your employees, agents, or other representatives acting on Your behalf; and/or (vi) Secretary Boockvar and/or the Elections Department; and (b) concern, relate to, describe, explain, or justify the Procedures, Practices, Rules, Regulations, and/or Instructions, including without limitation any incidents, complaints, concerns, changes, modifications, or supplementation to such Procedures, Practices, Rules, Regulations, and/or Instructions.

**RESPONSE:** The Board of Elections objects to this Request No. 6 because information relating

to the "processing, verification, acceptance, and/or rejection of applications for absentee and/or

mail-in ballots" falls outside the scope of the Court's July 17, 2020 Scheduling Order (ECF 124).

The Scheduling Order provides only for discovery narrowly tailored to Plaintiffs' original

Complaint (ECF 4), which did not seek relief related to ballot applications. Plaintiffs served their discovery pursuant to the Scheduling Order on July 24, 2020 and filed an Amended Complaint adding significant new allegations and seeking additional relief on July 27, 2020 (ECF 234), but Plaintiffs have not sought an amendment to the Scheduling Order to expand or otherwise alter the scope of discovery. Any discovery concerning ballot applications is therefore not authorized by and outside the scope of the Scheduling Order, and Plaintiffs' attempt to circumvent the expedited timeline that Plaintiffs themselves requested, and thus unilaterally expand the scope of expedited discovery, should not be permitted. For the reasons stated above, the Board of Elections also objects to this Request as untimely, unduly burdensome, and disproportional. The burden and expense of discovery concerning Plaintiffs' new allegations, especially on the expedited schedule requested by Plaintiffs, outweighs its likely benefit.

The Board of Elections further objects to this Request No. 6 to the extent it requests documents and/or information contained in the Act 35 Report and thus is not required to be produced by the Boards of Elections under the Scheduling Order. The Board of Elections further objects to this Request No. 6 to the extent that the documents sought are publicly available from the Counties, the Secretary, the Department, and/or other entities, and thus equally accessible to Plaintiffs. The Board of Elections will not produce documents that are generally publicly available and accessible, such as the Election Code. The Board of Elections also objects to this Request No. 6 because it calls for documents that are in the possession, custody, or control of entities other than the Board of Elections, including but not limited to the Secretary or the Department.

The Board of Elections further objects to this Request as more properly directed to the Secretary because it requests documents concerning procedures, practices, rules, regulations

and/or instructions that have been or will be promulgated or established by the Secretary or the Department. The Board of Elections will not produce documents that have been or will be promulgated by the Secretary or the Department, as the Secretary is a party to this Action and is able to produce those documents, and any production of such documents by the Boards of Elections would be duplicative. The Board of Elections further objects to this Request No. 6 to the extent it calls for the production of documents protected by the attorney-client privilege, work product doctrine, deliberative process privilege, and/or other applicable privileges and protections from disclosure.

7. Please produce all Procedures, Practices, Rules, Regulations, and/or Instructions You implemented, used, followed, and/or communicated in the June 2, 2020 Primary Election, and all Procedures, Practices, Rules, Regulations, and/or Instructions that You intend to implement, use, follow, and/or communicate in the November 3, 2020 General Election, concerning or relating to the issuance of absentee and/or mail-in ballots to registered voters, including without limitation sending absentee or mail-in ballots to all registered voters or qualified electors in Your county without a signed written request or application form from such voters or electors, and/or franking or pre-paying the postage for voted absentee and/or mail-in ballots, and all correspondence, memoranda, email messages, postings, or other documents reflecting communications, whether in writing or made orally, that (a) were made by, to, and/or between You and any other person, including without limitation: (i) any political party or body, political committee, non-profit organization, or other body of citizens; (ii) any voter/elector in the Commonwealth of Pennsylvania; (iii) any other County Election Board; (iv) any District Election Board; (v) any of Your employees, agents, or other representatives acting on Your behalf; and/or (vi) Secretary Boockvar and/or the Elections Department; and (b) concern, relate to, describe, explain, or justify the Procedures, Practices, Rules, Regulations, and/or Instructions, including without limitation any incidents, complaints, concerns, changes, modifications, or supplementation to such Procedures, Practices, Rules, Regulations, and/or Instructions.

**RESPONSE:** The Board of Elections objects to this Request No. 7 because information relating to the "issuance of absentee and/or mail-in ballots to registered voters" falls outside the scope of the Court's July 17, 2020 Scheduling Order (ECF 124). The Scheduling Order provides only for discovery narrowly tailored to Plaintiffs' original Complaint (ECF 4), which did not seek relief related to ballot applications. Plaintiffs served their discovery pursuant to the Scheduling Order on July 24, 2020 and filed an Amended Complaint adding significant new allegations and

seeking additional relief on July 27, 2020 (ECF 234), but Plaintiffs have not sought an amendment to the Scheduling Order to expand or otherwise alter the scope of discovery. Any discovery concerning ballot applications is therefore not authorized by and outside the scope of the Scheduling Order, and Plaintiffs' attempt to circumvent the expedited timeline that Plaintiffs themselves requested, and thus unilaterally expand the scope of expedited discovery, should not be permitted. For the reasons stated above, the Board of Elections also objects to this Request as untimely, unduly burdensome, and disproportional. The burden and expense of discovery concerning Plaintiffs' new allegations, especially on the expedited schedule requested by Plaintiffs, outweighs its likely benefit.

The Board of Elections further objects to this Request No. 7 to the extent it requests documents and/or information contained in the Act 35 Report and thus is not required to be produced by the Boards of Elections under the Scheduling Order. The Board of Elections further objects to this Request No. 7 to the extent that the documents sought are publicly available from the Counties, the Secretary, the Department, and/or other entities, and thus equally accessible to Plaintiffs. The Board of Elections will not produce documents that are generally publicly available and accessible, such as the Election Code. The Board of Elections also objects to this Request No. 7 because it calls for documents that are in the possession, custody, or control of entities other than the Board of Elections, including but not limited to the Secretary or the Department.

The Board of Elections further objects to this Request as more properly directed to the Secretary because it requests documents concerning procedures, practices, rules, regulations and/or instructions that have been or will be promulgated or established by the Secretary or the Department. The Board of Elections will not produce documents that have been or will be

promulgated by the Secretary or the Department, as the Secretary is a party to this Action and is able to produce those documents, and any production of such documents by the Boards of Elections would be duplicative. The Board of Elections further objects to this Request No. 7 to the extent it calls for the production of documents protected by the attorney-client privilege, work product doctrine, deliberative process privilege, and/or other applicable privileges and protections from disclosure.

8. Please produce all Procedures, Practices, Rules, Regulations, and/or Instructions You implemented, used, followed, and/or communicated in the June 2, 2020 Primary Election, and all Procedures, Practices, Rules, Regulations, and/or Instructions that You intend to implement, use, follow, and/or communicate in the November 3, 2020 General Election, concerning or relating to the accreditation of poll watchers, the issuance and verification of poll watcher's certificates, and whether poll watchers are permitted to monitor the issuance, return, casting, and counting of all ballots, including without limitation absentee and/or mail-in ballots, and all correspondence, memoranda, email messages, postings, or other documents reflecting communications, whether in writing or made orally, that (a) were made by, to, and/or between You and any other person, including without limitation: (i) any political party or body, political committee, non-profit organization, or other body of citizens; (ii) any voter/elector in the Commonwealth of Pennsylvania; (iii) any other County Election Board; (iv) any District Election Board; (v) any of Your employees, agents, or other representatives acting on Your behalf; and/or (vi) Secretary Boockvar and/or the Elections Department; and (b) concern, relate to, describe, explain, or justify the Procedures, Practices, Rules, Regulations, and/or Instructions, including without limitation any incidents, complaints, concerns, changes, modifications, or supplementation to such Procedures, Practices, Rules, Regulations, and/or Instructions.

**RESPONSE**: The Board of Elections objects to this Request No. 8 as overly broad, not narrowly

tailored, and disproportional because it calls for "all Procedures, Practices, Rules, Regulations, and/or Instructions" relating to "the accreditation of poll watchers, the issuance and verification of poll watcher's certifications, and whether poll watchers are permitted to monitor the issuance, return, casting, and counting of all ballots," without limitation to the specific allegations and relief requested in Plaintiffs' Complaint. Plaintiffs' Complaint requests very narrow relief concerning poll watchers – the ability to poll watchers to serve in counties outside their county of residence and to observe and participate in the pre-canvass of ballots. Thus, the burden and expense of this proposed discovery outweighs its likely benefit.

The Board of Elections further objects to this Request No. 8 to the extent it is duplicative of Request No. 1. The Board of Elections further objects to this Request No. 8 to the extent that the documents sought are publicly available from the Counties, the Secretary, the Department, and/or other entities, and thus equally accessible to Plaintiffs. The Board of Elections will not produce documents that are generally publicly available and accessible, such as the Election Code. The Board of Elections also objects to this Request No. 8 because it calls for documents that are in the possession, custody, or control of entities other than the Board of Elections, including but not limited to the Secretary or the Department.

The Board of Elections further objects to this Request as more properly directed to the Secretary because it requests documents concerning procedures, practices, rules, regulations and/or instructions that have been or will be promulgated or established by the Secretary or the Department. The Board of Elections will not produce documents that have been or will be promulgated by the Secretary or the Department, as the Secretary is a party to this Action and is able to produce those documents, and any production of such documents by the Boards of Elections would be duplicative. The Board of Elections further objects to this Request No. 8 to the extent it calls for the production of documents protected by the attorney-client privilege, work product doctrine, deliberative process privilege, and/or other applicable privileges and protections from disclosure.

Subject to and without waiving these objections, the Board of Elections will produce the documents discussed in their Response to Request No. 1. Investigation remains ongoing, so the Board of Elections reserves the right to supplement this Response.

9. Please produce all Procedures, Practices, Rules, Regulations, and/or Instructions You implemented, used, followed, and/or communicated in the June 2, 2020 Primary Election, and all Procedures, Practices, Rules, Regulations, and/or Instructions that You intend to implement, use, follow, and/or communicate in the November 3, 2020 General Election,

concerning or relating to how You ensure that electors who voted via absentee or mail-in ballot do not vote again in-person on Election Day, or if they do, they do not have more than one of their votes counted, including without limitation how You notify or inform the District Election Board which voters are entitled to vote on Election Day, either by way of a paper ballot, on a machine, or via a provisional ballot, and how You mark or supplement the poll books that are delivered to the District Election Boards with such information, and all correspondence, memoranda, email messages, postings, or other documents reflecting communications, whether in writing or made orally, that (a) were made by, to, and/or between You and any other person, including without limitation: (i) any political party or body, political committee, non-profit organization, or other body of citizens; (ii) any voter/elector in the Commonwealth of Pennsylvania; (iii) any other County Election Board; (iv) any District Election Board; (v) any of Your employees, agents, or other representatives acting on Your behalf; and/or (vi) Secretary Boockvar and/or the Elections Department; and (b) concern, relate to, describe, explain, or justify the Procedures, Practices, Rules, Regulations, and/or Instructions, including without limitation any incidents, complaints, concerns, changes, modifications, or supplementation to such Procedures, Practices, Rules, Regulations, and/or Instructions.

**RESPONSE:** The Board of Elections objects to this Request No. 9 to the extent it calls for information regarding the ability of voters who applied for but did not vote their mail-in or absentee ballots to spoil those ballots at polling places and vote in-person on Election Day, because the statutory provision allowing for the spoiling of mail-in and absentee ballots was not in force during the June 2, 2020 Primary Election, and because such information falls outside the scope of the Scheduling Order. The Scheduling Order provides only for discovery narrowly tailored to Plaintiffs' original Complaint (ECF 4), which did not seek relief related to the spoiling of mail-in and absentee ballots at polling places. Plaintiffs served their discovery pursuant to the Scheduling Order on July 24, 2020 and filed an Amended Complaint adding significant new allegations and seeking additional relief on July 27, 2020 (ECF 234), but Plaintiffs have not sought an amendment to the Scheduling Order to expand or otherwise alter the scope of discovery. Any discovery concerning allegations or relief that were not part of Plaintiffs' original Complaint is therefore not authorized by and outside the scope of the Scheduling Order, and Plaintiffs' attempt to circumvent the expedited timeline that Plaintiffs themselves requested, and thus unilaterally expand the scope of discovery, should not be permitted. For these reasons, the

Board of Elections also objects to this Request as untimely, unduly burdensome, and disproportional. The burden and expense of the discovery concerning Plaintiffs' new allegations, especially on the expedited schedule requested by Plaintiffs, outweighs its likely benefit.

The Board of Elections further objects to this Request No. 9 to the extent it is duplicative of Request No. 1. The Board of Elections further objects to this Request No. 9 to the extent it requests documents and/or information contained in the Act 35 Report and thus is not required to be produced by the Boards of Elections under the Scheduling Order. The Board of Elections further objects to this Request No. 9 to the extent that the documents sought are publicly available from the Counties, the Secretary, the Department, and/or other entities, and thus equally accessible to Plaintiffs. The Board of Elections will not produce documents that are generally publicly available and accessible, such as the Election Code. The Board of Elections also objects to this Request No. 9 because it calls for documents that are in the possession, custody, or control of entities other than the Board of Elections, including but not limited to the Secretary or the Department.

The Board of Elections further objects to this Request as more properly directed to the Secretary because it requests documents concerning procedures, practices, rules, regulations and/or instructions that have been or will be promulgated or established by the Secretary or the Department. The Board of Elections will not produce documents that have been or will be promulgated by the Secretary or the Department, as the Secretary is a party to this Action and is able to produce those documents, and any production of such documents by the Boards of Elections would be duplicative. The Board of Elections further objects to this Request No. 9 to the extent it calls for the production of documents protected by the attorney-client privilege,

work product doctrine, deliberative process privilege, and/or other applicable privileges and

protections from disclosure.

Subject to and without waiving these objections, the Board of Elections will produce the

documents discussed in their Response to Request No. 1. Investigation remains ongoing, so the

Board of Elections reserves the right to supplement this Response.

10. Please produce all documents concerning or relating to all incidents known or reported to You during the June 2, 2020 Primary Election and involving either:

- a. Electors who applied for and/or voted an absentee or mail-in ballot and also voted in-person, either on a voting machine or via a paper or provisional ballot, on Election Day at a polling place;
- b. Electors who received and/or voted more than one absentee or mail-in ballot;
- c. Non-disabled electors whose absentee or mail-in ballots were mailed or delivered in-person by a person other [than] the non-disabled electors who voted the absentee or mail-in ballots; and/or
- d. Electors who claimed that someone had impersonated them and/or cast either in-person, absentee, and/or mail-in ballots for them without their knowledge, consent, or authorization;

including without limitation all investigative or case files, law enforcement or other civil, criminal, or administrative referrals or proceedings, notes, memoranda, correspondence, email messages, and other documents reflecting communications, whether in writing or made orally, that (a) were made by, to, and/or between You and any other person, including without limitation: i)) any political party or body, political committee, non-profit organization, or other body of citizens; (ii) any voter/elector in the Commonwealth of Pennsylvania; (iii) any other County Election Board; (iv) any District Election Board; (v) any of Your employees, agents, or other representatives acting on Your behalf; and/or (vi) Secretary Boockvar and/or the Elections Department; and (b) concern, relate to, describe, or explain such incidents and the determinations made about such incidents.

**RESPONSE:** The Board of Elections objects to this Request No. 10 to the extent it calls for the

Board of Elections to product "all documents concerning" "electors who claimed that someone

had impersonated them and/or cast either in-person, absentee, and/or mail-in ballots for them

without their knowledge, consent, or authorization." Such information falls outside the scope of

the Scheduling Order. The Scheduling Order provides only for discovery narrowly tailored to Plaintiffs' original Complaint (ECF 4), which did not seek relief related to electors who claimed that someone had impersonated them and/or cast either in-person, absentee, and/or mail-in ballots for them without their knowledge, consent, or authorization. Plaintiffs served their discovery pursuant to the Scheduling Order on July 24, 2020 and filed an Amended Complaint adding significant new allegations and seeking additional relief on July 27, 2020 (ECF 234), but Plaintiffs have not sought an amendment to the Scheduling Order to expand or otherwise alter the scope of discovery. Any discovery concerning allegations or relief that were not part of Plaintiffs' original Complaint is therefore not authorized by and outside the scope of the Scheduling Order, and Plaintiffs' attempt to circumvent the expedited timeline that Plaintiffs themselves requested, and thus unilaterally expand the scope of discovery, should not be permitted. For these reasons, the Board of Elections also objects to this Request as untimely, unduly burdensome, and disproportional. The burden and expense of the discovery concerning Plaintiffs' new allegations, especially on the expedited schedule requested by Plaintiffs, outweighs its likely benefit.

The Board of Elections further objects to this Request No. 10 to the extent it is duplicative of Request No. 1. The Board of Elections further objects to this Request No. 10 to the extent it requests documents and/or information contained in the Act 35 Report and thus is not required to be produced by the Boards of Elections under the Scheduling Order. The Board of Elections further objects to this Request No. 10 to the extent that the documents sought are publicly available from the Counties, the Secretary, the Department, and/or other entities, and thus equally accessible to Plaintiffs. The Board of Elections will not produce documents that are generally publicly available and accessible, such as the Election Code. The Board of Elections also objects to this Request No. 10 because it calls for documents that are in the possession, custody, or control of entities other than the Board of Elections, including but not limited to the Secretary or the Department.

The Board of Elections further objects to this Request as more properly directed to the Secretary because it requests documents concerning procedures, practices, rules, regulations and/or instructions that have been or will be promulgated or established by the Secretary or the Department. The Board of Elections will not produce documents that have been or will be promulgated by the Secretary or the Department, as the Secretary is a party to this Action and is able to produce those documents, and any production of such documents by the Boards of Elections would be duplicative. The Board of Elections further objects to this Request as more properly directed to law enforcement agencies, courts, or other public entities. The Board of Elections further objects to this Request No. 10 to the extent it calls for the production of documents protected by the attorney-client privilege, work product doctrine, deliberative process privilege, and/or other applicable privileges and protections from disclosure. The Board of Elections further objects to this Request No. 10 to the extent that it calls for the creation of documents not already in existence. The Board of Elections further objects to this Request No. 10 to the extent that it purports to seek production of absentee or mail-in ballots or ballot applications.

Subject to and without waiving these objections, the Board of Elections will produce the documents discussed in their Response to Request No. 1. Investigation remains ongoing, so the Board of Elections reserves the right to supplement this Response.

<sup>11.</sup> To the extent not produced by Secretary Boockvar and/or the Elections Department, please produce all data submitted by You to the Pennsylvania Department of State under 71 P.S. § 279.6(c).

**RESPONSE:** The Board of Elections objects to this Request No. 11 because the Scheduling Order provides that the Act 35 Report and data submissions under 71 P.S. § 279.6(c) "should be produced" by the Secretary" and any additional discovery must "not be duplicative of materials received in connection with the report." The Board of Elections further objects to this Request No. 11 as overly broad, not narrowly tailored, and disproportional because it calls for "all data" submitted by the Boards of Elections to the Department under 71 P.S. § 279.6(c), without limitation to the specific allegations and relief requested in Plaintiffs' Complaint and the scope of discovery provided in the Scheduling Order, and thus the burden and expense of this proposed discovery outweighs its likely benefit. The data submitted to the Department by the Board of Elections includes data that are not connected to any of the allegations made or relief sought in Plaintiffs' Complaint, including *inter alia* data on incidents encountered with electronic voting systems, the number of election officers appointed, and the consolidation and location of polling places. The Board of Elections further object to this Request No. 11 because the documents sought are publicly available from the Counties, the Secretary, the Department, and/or other entities, and thus equally accessible to Plaintiffs. The Board of Elections also objects to this Request No. 11 because it calls for documents that are in the possession, custody, or control of entities other than the Board of Elections, including but not limited to the Secretary or the Department.

The Board of Elections further objects to this Request No. 11 to the extent it is duplicative of Request No. 1. The Board of Elections further objects to this Request No. 11 to the extent it requests documents and/or information contained in the Act 35 Report and thus is not required to be produced by the Boards of Elections under the Scheduling Order. The Board of Elections further objects to this Request No. 11 to the extent that the documents sought are

publicly available from the Counties, the Secretary, the Department, and/or other entities, and thus equally accessible to Plaintiffs. The Board of Elections will not produce documents that are generally publicly available and accessible, such as the Election Code.

The Board of Elections further objects to this Request as more properly directed to the Secretary because it requests documents concerning procedures, practices, rules, regulations and/or instructions that have been or will be promulgated or established by the Secretary or the Department. The Board of Elections will not produce documents that have been or will be promulgated by the Secretary or the Department, as the Secretary is a party to this Action and is able to produce those documents, and any production of such documents by the Boards of Elections would be duplicative. The Board of Elections further objects to this Request No. 11 to the extent it calls for the production of documents protected by the attorney-client privilege, work product doctrine, deliberative process privilege, and/or other applicable privileges and protections from disclosure.

Subject to and without waiving these objections, the Board of Elections will produce the documents discussed in their Response to Request No. 1. Investigation remains ongoing, so the Board of Elections reserves the right to supplement this Response.

12. For all absentee and mail-in ballots identified in Answer to Interrogatory No. 14 that were not counted, please produce all documents which identify the reasons for why such ballots were not counted.

**RESPONSE:** The Board of Elections objects to this Request No. 12 to the extent it is duplicative of Request No. 1. The Board of Elections further objects to this Request No. 12 to the extent it requests documents and/or information contained in the Act 35 Report and thus is not required to be produced by the Boards of Elections under the Scheduling Order. The Board of Elections further objects to this Request No. 12 to the extent that the documents sought are publicly available from the Counties, the Secretary, the Department, and/or other entities, and thus equally accessible to Plaintiffs. The Board of Elections will not produce documents that are generally publicly available and accessible, such as the Election Code. The Board of Elections also objects to this Request No. 12 because it calls for documents that are in the possession, custody, or control of entities other than the Board of Elections, including but not limited to the Secretary or the Department.

The Board of Elections further objects to this Request as more properly directed to the Secretary because it requests documents concerning procedures, practices, rules, regulations and/or instructions that have been or will be promulgated or established by the Secretary or the Department. The Board of Elections will not produce documents that have been or will be promulgated by the Secretary or the Department, as the Secretary is a party to this Action and is able to produce those documents, and any production of such documents by the Boards of Elections would be duplicative. The Board of Elections further objects to this Request No. 12 to the extent it calls for the production of documents protected by the attorney-client privilege, work product doctrine, deliberative process privilege, and/or other applicable privileges and protections from disclosure. The Board of Elections further objects to this Request No. 12 to the extent that it calls for the creation of documents not already in existence The Board of Elections further objects to this Request No. 12 to the extent that it purports to seek production of absentee or mail-in ballots or ballot applications.

Subject to and without waiving these objections, the Board of Elections will produce the documents discussed in their Response to Request No. 1. The Board of Elections also incorporates its response to Interrogatory No. 14 here by reference. Investigation remains ongoing, so the Board of Elections reserves the right to supplement this Response.

Respectfully submitted,

## HANGLEY ARONCHICK SEGAL PUDLIN & SCHILLER

Dated: August 5, 2020

By: <u>/s/ Mark A. Aronchick</u> Mark A. Aronchick Michele D. Hangley John B. Hill\* One Logan Square, 27th Floor Philadelphia, PA 19103 Telephone: 215-496-7050 Email: maronchick@hangley.com

Counsel for Defendants Bucks, Chester, Montgomery, and Philadelphia County Boards of Elections

#### **CERTIFICATE OF SERVICE**

I hereby certify that a copy of the foregoing Defendant Philadelphia County Board of Elections' Objections and Responses to Plaintiffs' First Set of Interrogatories and Requests for Production Directed to County Boards of Elections has been served upon the following counsel of record and all other parties via e-mail this 5th day of August, 2020, addressed as follows:

> Ronald L. Hicks, Jr., Esquire Jeremy A. Mercer, Esquire Porter Wright Morris & Arthur LLP 6 PPG Place, Third Floor Pittsburgh, PA 15222

> > /s/ Mark A. Aronchick Mark A. Aronchick

#### **VERIFICATION**

I, Chief Deputy Commissioner Seth Bluestein, state that I am authorized to make this verification on behalf of Defendant Philadelphia County Board of Elections, that I have read Defendant Philadelphia County Board of Elections' Objections and Responses to Plaintiffs' First Set of Interrogatories and Requests for Production Directed to County Boards of Elections, and that I believe, based on reasonable inquiry, that the facts set forth therein concerning the Philadelphia County Board of Elections are true and correct to the best of my knowledge, information, and belief. I verify under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

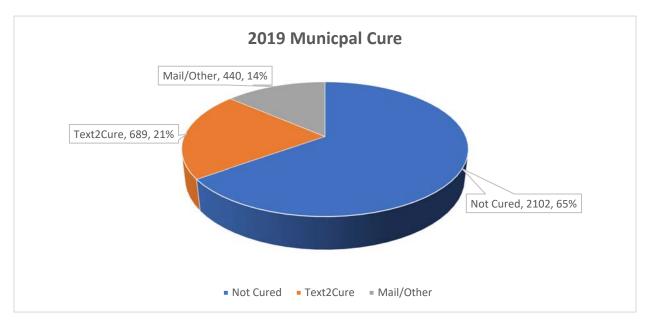
Set Bluge

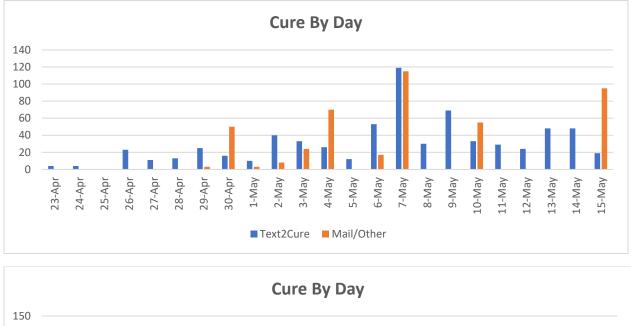
Dated: August 5, 2020

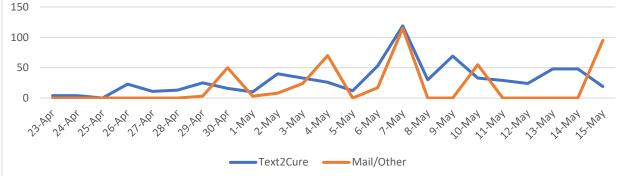
Seth Bluestein Chief Deputy Commissioner for Commissioner Al Schmidt

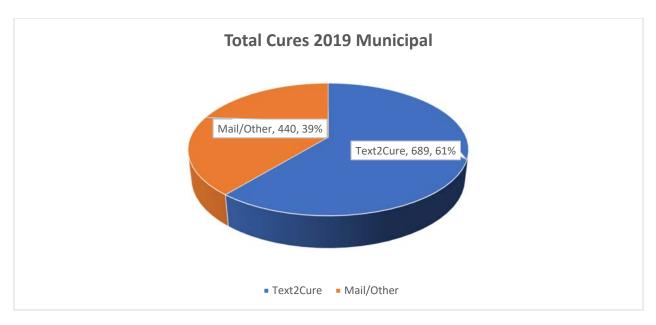
## **EXHIBIT 2** TO AFFIDAVIT OF AMBER M<sup>c</sup>REYNOLDS

## **2019 Municipal Election Cure**

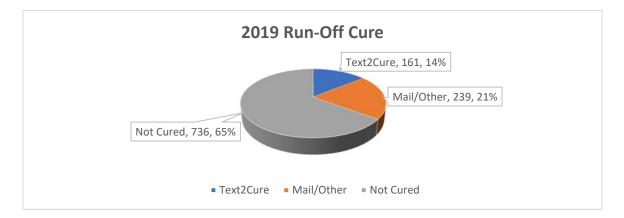


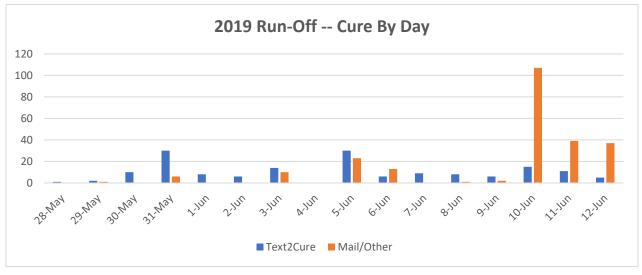


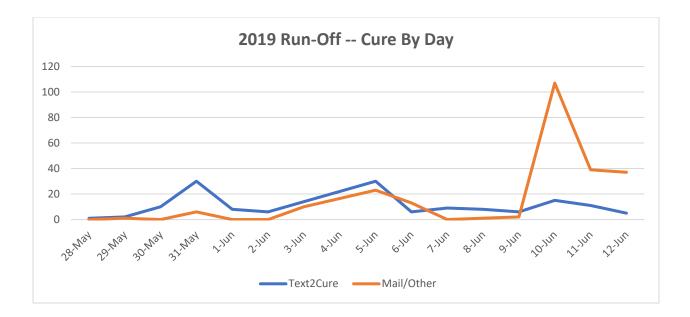


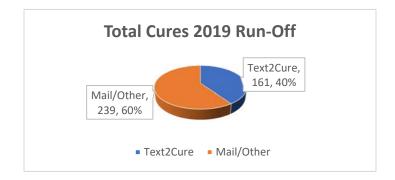


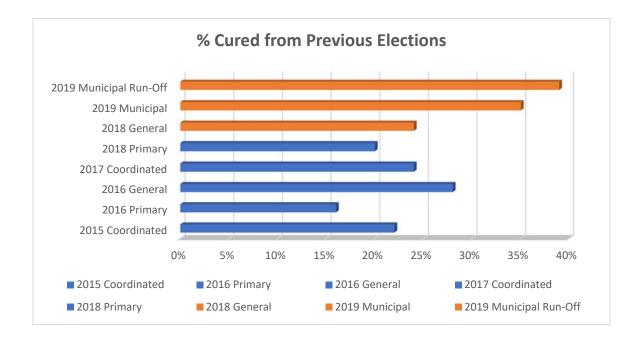
## 2019 Municipal Run-Off Cure











# **EXHIBIT 8**

### IN THE SUPREME COURT OF PENNSYLVANIA

PENNSYLVANIA DEMOCRATIC PARTY, et al.,

Petitioners,

NO. 133 MM 2020

v.

KATHY BOOCKVAR, et al.,

Respondents.

#### AFFIDAVIT OF LORI A. MARTIN

I, Lori A. Martin, am a partner with the law firm of Wilmer Cutler Pickering Hale and Dorr LLP, and counsel for amicus curiae Common Cause Pennsylvania; The League of Women Voters of Pennsylvania; The Black Political Empowerment Project ("B-PEP"); Make the Road Pennsylvania, a project of Make The Road States ("Make the Road PA"); Patricia M. DeMarco; Danielle Graham Robinson; and Kathleen Wise in the above-captioned litigation. I am familiar with the facts set forth herein, and, if called as a witness, would testify competently to those facts I affirm as follows:

- Attached as Exhibit 1 is a true and correct copy of e-mail correspondence from Jonathan Marks, Deputy Secretary for Elections and Commissions, to County Boards of Elections dated May 28, 2020. The document was produced by the Pennsylvania Secretary of State in *Donald J. Trump for President, Inc. v. Boockvar*, No. 20-cv-966 (W.D. Pa.) as PADOS000539.000001 - PADOS000539.000004.
- Attached as Exhibit 2 is a true and correct copy of the Preliminary Report of Ronald Stroman, Deputy Postmaster General of the United States Postal Service, entered in *Crossey v. Boockvar*, Case Nos. 108 MM 2020 and 266 MD 2020, Commonwealth Court of Pennsylvania, dated August 29, 2020.

I hereby certify that the foregoing statements are true and correct to the best of my knowledge, information, and belief. This verification is made subject to the penalties of 18 Pa.C.S. § 4904 relating to unsworn falsification to authorities.

Executed: September 8, 2020

Respectfully submitted.

/s/ Lori A. Martin

Lori A. Martin (PA No. 55786) WILMER CUTLER PICKERING HALE & DORR LLP 7 World Trade Center 250 Greenwich Street New York, NY 10007 Telephone: (212) 230-8800 Facsimile: (212) 230-8888 Lori.Martin@wilmerhale.com

## **EXHIBIT 1** TO AFFIDAVIT OF LORI A. MARTIN

From:	"Marks, Jonathan" < EXCHANGELABS/EXCHANGE ADMINISTRATIVE GROUP
	(FYDIBOHF23SPDLT)/RECIPIENTS/4A8ED908653B41ED939420A5160F46C3 -JMARKS>
Sent:	5/28/2020 11:44:22 PM +0000
Го:	"Marks, Jonathan" <jmarks@pa.gov></jmarks@pa.gov>
BCC:	"Adams - Crouse, Angie" <acrouse@adamscounty.us>; "Allegheny - Voye, David" <david.voye@alleghenycounty.us>; "Armstrong - Bellas, Jennifer B." <jbbellas@co.armstrong.pa.us>; "Beaver - Mandity, Dorene" <dmandity@beavercountypa.gov>; "Bedford - Brown, Debra" <dbrown@bedfordcountypa.org>; "Bedford - Ferguson, Andrea"</dbrown@bedfordcountypa.org></dmandity@beavercountypa.gov></jbbellas@co.armstrong.pa.us></david.voye@alleghenycounty.us></acrouse@adamscounty.us>
	<aferguson@bedfordcountypa.org>; "Berks - Barsoum, Karen"</aferguson@bedfordcountypa.org>
	<kbarsoum@countyofberks.com>; "Berks - Olivieri, Deborah"</kbarsoum@countyofberks.com>
	<pre><dolivieri@countyofberks.com>; "Blair - Clapper, Virginia"</dolivieri@countyofberks.com></pre>
	<ul> <li><vclapper@blairco.org>; "Blair - Seymour, Sarah" <sseymour@blairco.org>;</sseymour@blairco.org></vclapper@blairco.org></li> </ul>
	"Bradford - Smithkors, Renee" <smithkorsr@bradfordco.org>; "Bucks - Freitag,</smithkorsr@bradfordco.org>
	Thomas" <tfreitag@buckscounty.org>; "Bucks - Gale, Kelly E. "</tfreitag@buckscounty.org>
	<pre><kegale@buckscounty.org>; "Bucks - Giorno, Deanna M."</kegale@buckscounty.org></pre>
	<pre><dmgiorno@buckscounty.org>; "Bucks - Miller, Jennifer"</dmgiorno@buckscounty.org></pre>
	<jlmiller@buckscounty.org>; "Butler - Herrit, Melissa"</jlmiller@buckscounty.org>
	<pre><mherrit@co.butler.pa.us>; "Butler - McCurdy, Chantell"</mherrit@co.butler.pa.us></pre>
	<cmccurdy@co.butler.pa.us>; "Cambria - Crowl, Shirley"</cmccurdy@co.butler.pa.us>
	<scrowl@co.cambria.pa.us>; "Cameron - Lupro, Misty"</scrowl@co.cambria.pa.us>
	<mlupro@cameroncountypa.com>; "Cameron - Munz, Brenda"</mlupro@cameroncountypa.com>
	<pre><bre>da@cameroncountypa.com&gt;; "Carbon - Dart, Lisa"</bre></pre>
	<lisadart@carboncounty.net>; Carbon - Elections Account</lisadart@carboncounty.net>
	<carbonelections@carboncounty.net>; "Centre - McKinley, Joyce"</carbonelections@carboncounty.net>
	<jemckinley@centrecountypa.gov>; "Centre - Neidig, Jodi"</jemckinley@centrecountypa.gov>
	<jineidig@centrecountypa.gov>; "Centre - Stefanko, Tisha"</jineidig@centrecountypa.gov>
	<imstefanko@centrecountypa.gov>; "Chester - Barsamian, Alexis"</imstefanko@centrecountypa.gov>
	<abarsamian@chesco.org>; "Chester - Burke, Sandy" <sburke@chesco.org>; "Clarion - Callihan, Cindy" <ccallihan@co.clarion.pa.us>; "Clearfield -</ccallihan@co.clarion.pa.us></sburke@chesco.org></abarsamian@chesco.org>
	Bumbarger, Donna" <voterreg@clearfieldco.org>; "Clearfield - Graham, Dawn</voterreg@clearfieldco.org>
	E." <elections@clearfieldco.org>; "Clinton - Boileau, Maria J. "</elections@clearfieldco.org>
	<mboileau@clintoncountypa.com>; "Columbia - Repasky, Matthew"</mboileau@clintoncountypa.com>
	<mrepasky@columbiapa.org>; "Crawford - Chatfield, Gina "</mrepasky@columbiapa.org>
	<gchatfield@co.crawford.pa.us>; "Crawford - Little, Rebecca"</gchatfield@co.crawford.pa.us>
	<rlittle@co.crawford.pa.us>; "Cumberland - Orris, Megan" <morris@ccpa.net>; "Cumberland - Salzarulo, Bethany" <bsalzarulo@ccpa.net>; "Dauphin - Feaser,</bsalzarulo@ccpa.net></morris@ccpa.net></rlittle@co.crawford.pa.us>
	Gerald" <jfeaser@dauphinc.org>; "Dauphin - Roach, Taryll"</jfeaser@dauphinc.org>
¥2	<troach@dauphinc.org>; "Delaware - Hagan, Laureen"</troach@dauphinc.org>
	<haganlt@co.delaware.pa.us>; "Delaware - Winterbottom, Crystal"</haganlt@co.delaware.pa.us>
	<winterbottomc@co.delaware.pa.us>; "Elk - Frey, Kim"</winterbottomc@co.delaware.pa.us>
	<kfrey@countyofelkpa.com>; "Erie - Fernandez, Tonia "</kfrey@countyofelkpa.com>
	<tfernandez@eriecountypa.gov>; "Erie - Smith, Doug"</tfernandez@eriecountypa.gov>
	<dsmith@eriecountypa.gov>; "Fayette - Blosser, Larry"</dsmith@eriecountypa.gov>
	<li><li>losser@fayettepa.org&gt;; "Fayette - Guthrie, Billie Jo"</li></li>
	 sputhrie@fayettepa.org>; "Forest - Hitchcock, Jean Ann" <pre></pre> <pre></pre> <pre>&lt;</pre>
	<pre><jaines@co.franklin.pa.us>; "Franklin - Aines, Jennie M."</jaines@co.franklin.pa.us></pre>
	<voter@co.franklin.pa.us>; "Franklin - Hart, John A." <commissioners@co.franklin.pa.us>; "Fulton - Beatty, Lisa"</commissioners@co.franklin.pa.us></voter@co.franklin.pa.us>
	<pre></pre>
	"Greene - Kiger, Tina" <tkiger@co.greene.pa.us>; "Huntingdon - Fellman,</tkiger@co.greene.pa.us>
	Heather" <hfellman@huntingdoncounty.net>; "Huntingdon - Thompson,</hfellman@huntingdoncounty.net>
	neutron shielman@nanangaoneoung.nets, nanangaon- mompaon,

Tammy" <tthompson@huntingdoncounty.net>; "Indiana - Maryai, Robin" <rmaryai@indianacountypa.gov>; "Indiana - Streams, Debra" <dstreams@indianacountypa.gov>; "Jefferson - Lupone, Karen" <klupone@jeffersoncountypa.com>; "Juniata - Weyrich, Eva" <eweyrich@juniataco.org>; "Lackawanna - Medalis, Marion" <medalism@lackawannacounty.org>; "Lancaster - Skilling, Diane" <dskilling@co.lancaster.pa.us>; "Lancaster - Wenger, Randall" <rwenger@co.lancaster.pa.us>; Lawrence - Ed Allison lcvote@co.lawrence.pa.us>; "Lebanon - Anderson, Michael L." <manderson@lebcnty.org>; "Lebanon - Sohn, Jo-Ellen" <jsohn@lebcnty.org>; "Lehigh - Benyo, Timothy A" <TimothyBenyo@lehighcounty.org>; "Lehigh Harkins, Terry" <TerriHarkins@lehighcounty.org>; "Luzerne - Parsnik, Dave" <David.Parsnik@luzernecounty.org>; "Luzerne - Steininger, Mary Beth" <Marybeth.steininger@luzernecounty.org>; "Luzerne - Watchilla, Shelby" <shelby.watchilla@luzernecounty.org>; "Lycoming - Lehman, Forrest" <flehman@lyco.org>; "Lycoming - Shuman, Jill" <ishuman@lyco.org>; "McKean - Frey, Linda" <lfrev@mckeancountypa.org>; "McKean - Pratt, Lisa M." </mpratt@mckeancountypa.org>; "Mercer - Greenburg, Jeff" <jgreenburg@mcc.co.mercer.pa.us>; "Mifflin - Powell, Pamela" <ppowell@mifflinco.org>; "Mlfflin - Swanger, Zane" <zswanger@mifflinco.org>; "Monroe - May-Silfee, Sara" <SMay-Silfee@monroecountypa.gov>; Montgomery - John Marlatt <imarlatt@montcopa.org>; "Montgomery -Macekura, Matt" <mmacekur@montcopa.org>; "Montgomery - Proietto, Sharon" <sproiett@montcopa.org>; "Montgomery - Sisler, Karley" <KSisler@montcopa.org>; "Montgomery - Soltysiak, Lee" <LSoltysi@montcopa.org>; "Montour - Brandon, Holly A." <hbrandon@montourco.org>; "Montour - Dyer, Darlis" <ddyer@montourco.org>; "Montour - Woodruff, Theresa" <twoodruff@montourco.org>; "Northampton - Cozze, Amy " <acozze@northamptoncounty.org>; "Northampton - Hess, Amy" <ahess@northamptoncounty.org>; "Northumberland - Harter, Jessica" <jessica.harter@norrycopa.net>; "Northumberland - McCarthy, MaryRose" <maryrose.mccarthy@norrycopa.net>; "Perry - Delancey, Bonnie L." <bdelancey@perryco.org>; "Perry - Shrawder, Deb ' <dshrawder@perryco.org>; "Philadelphia - Ayers, Jenne" <Jenne.Avers@phila.gov>; "Philadelphia - Bluestein, Seth" <Seth.Bluestein@phila.gov>; "Philadelphia - Custodio, Nick" <Nick.Custodio@Phila.gov>; "Philadelphia - Deeley, Lisa" <Lisa.deeley@phila.gov>; "Philadelphia - Dietz, Garrett" <Garrett.Dietz@phila.gov>; "Philadelphia - Dowling, Tim" <Tim.Dowling@phila.gov>; "Philadelphia - Irving, Greg" <Gregory.lrving@phila.gov>; "Philadelphia - Lynch, Joe" <Joseph.j.lynch@phila.gov>; "Philadelphia - Richardson, Kevin" <Kevin.Richardson@phila.gov>; "Philadelphia - Schmidt, Al" <Al.Schmidt@phila.gov>; "Philadelphia - Vito, Richard" <Richard.Vito@phila.gov>; "Pike - Manzoni, Nadeen" <nmanzoni@pikepa.org>; "Potter - Lewis, Sandra" <slewis@pottercountypa.net>; "Schuylkill - Brennan, Frannie" <fbrennan@co.schuylkill.pa.us>; "Schuylkill - Matz, Connor" <cmatz@co.schuylkill.pa.us>; "Snyder - Bilger, Debbie" <dbilger@snydercounty.org>; "Snyder - Guyer, Stacy" <sguyer@snydercounty.org>; "Snyder - Nace, Patricia" <pnace@snydercounty.org>; "Somerset - Pritts, Tina" <voter@co.somerset.pa.us>; "Sullivan - Doyle, Francine" <fdoyle@sullivancounty-pa.us>; "Sullivan - Verelst, Hope" <hverelst@sullivancounty-pa.us>; "Susquehanna - Rudock, Macy"

<mrudock@susqco.com>; "Tioga - Whipple, Penny" <pwhipple@tiogacountypa.us>; "Union - Katherman, Gregory A" <gkatherman@unionco.org>; "Union - Radel, Glenda" <gradel@unionco.org>; "Union - Zerbe, Kim" <kzerbe@unionco.org>; "Venango - Backer, Sabrina" <sbacker@co.venango.pa.us>; "Venango - Kirkwood, Jamie" <Jkirkwood@co.venango.pa.us>; "Warren - Rivett, Lisa" <lzuck@warrencounty.net>; "Washington - Ostrander, Melanie R.' <melanie.ostrander@co.washington.pa.us>; "Wayne - Furman, Cindy" <CFurman@waynecountypa.gov>; "Westmoreland - Lechman, Beth" <ble>chman@co.westmoreland.pa.us>; "Westmoreland - Wright, Shari" <swright@co.westmoreland.pa.us>; "Wyoming - Kellett, Florence" <fkellett@wycopa.org>; "York - Kohlbus, Sally" <swkohlbus@yorkcountypa.gov>; "York - Ulrich, Steve" <sfulrich@yorkcountypa.gov>; "Boockvar, Kathryn" <kboockvar@pa.gov>; "CCAP - Sage, Michael" <msage@pacounties.org>; "Datesman, Breanna" <bdatesman@pa.gov>; "Degraffenreid, Veronica" <vdegraffen@pa.gov>; "Farrell, Marc" <marcfarrel@pa.gov>; "Gates, Timothy" <tgates@pa.gov>; "Hartzell, John" <iohhartzel@pa.gov>; "Kotula, Kathleen" <kkotula@pa.gov>; "Latanishen, Steve" <slatanishe@pa.gov>; "Lawson, Tiffany" <tclawson@pa.gov>; Lisa - CCAP Schaefer (lschaefer@pacounties.org); "Moser, Michael" <micmoser@pa.gov>; "Murren, Wanda" <wmurren@pa.gov>; "Myers, Jessica" <jessimyers@pa.gov>; "Neely, Samantha - CCAP" <SNeely@pacounties.org>; "Robinson, Samuel" <sdrobinson@pa.gov>; ST-BCEL <ST-BCEL@pagov.onmicrosoft.com>; "Stevens, Sari" <sarstevens@pa.gov>; "Walls-Lavelle, Jessica" <jeslavelle@pa.gov>; "Weis, Laura" <lweis@pa.gov>; "Wills IV, Victor" <vicwills@pa.gov> Important DOS Email re: Absentee/Mail-in Ballot Canvass

Subject:

To all county election officials.

I hope you are all safe and well.

The department has received some questions from county officials in recent days regarding the proper disposition of absentee or mail-in ballots cast by voters who did not enclose their voted ballots in the official election ballot envelope ("secrecy" or "inner" envelope).

Though the Election Code requires county boards of elections to set aside absentee or mailin ballots enclosed in official election ballot envelopes that contain "any text, mark or symbol which reveals the identity of the elector," there is **no statutory requirement, nor is there any statutory authority,** for setting aside an absentee or mail-in ballot solely because the voter forgot to properly insert it into the official election ballot envelope. See 25 P.S. § 3146.8(g)(4)(ii).

To preserve the secrecy of such ballots, the board of elections in its discretion may develop a process by which the members of the pre-canvass or canvass boards insert these ballots into empty official election ballot envelopes or privacy sleeves until such time as they are ready to be tabulated.

Please consult with your solicitor about your plans to deal with such instances should they occur during the pre-canvass or canvass.

Thank you for everything you are doing to administer the 2020 Primary while coping with the unique challenges presented by COVID-19.

Kind regards,

Jonathan M. Marks

Deputy Secretary for Elections & Commissions

Pennsylvania Department of State

302 North Office Building | Harrisburg, PA 17120 2717.783.2035 &717.787.1734

☑ jmarks@pa.gov





Filed 8/30/2020 5:37:00 PM Commonwealth Court of Pennsylvania 266 MD 2020

#### IN THE COMMONWEALTH COURT OF PENNSYLVANIA

Michael Crossey, Dwayne Thomas, Irvin Weinreich, Brenda Weinreich, and the Pennsylvania Alliance for Retired Americans.

Petitioners,

v.

Kathy Boockvar, Secretary of the Commonwealth, Jessica Mathis, Director of the Bureau of Election Services and Notaries,

Respondents.

No. 108 MM 2020

AND

No. 266 MD 2020

#### PRELIMINARY REPORT OF RONALD STROMAN

I, Ronald Stroman, having been duly sworn according to law, declare as follows:

1. My name is Ronald Stroman. I am over the age of 18 and I prepared this preliminary report based upon my personal knowledge of the facts below and my experience.

2. I am a resident of Washington, D.C. I served for nine years as the Deputy Postmaster General of the USPS, the second highest-ranking official in USPS, from 2011 until June 1, 2020. The USPS has more than 600,000 employees and approximately \$70 billion in annual operating revenue. Some of my responsibilities and priorities as Deputy Postmaster General related to voting by mail and included: (1) improving the quality of the information that USPS provided to state and local election officials on voting by mail; (2) improving the communications between the USPS, election officials, and the election mail community; (3) improving the internal training for USPS employees on election mail; and (4) developing a system for the rapid resolution of election mail issues. I worked closely with state and local election officials across the country

for approximately five years to implement these improvements in the voting by mail system.

3. With the COVID-19 pandemic and the resulting dramatic shift to voting by mail across most of the country, election officials in most states, including in Pennsylvania, are facing unprecedented challenges in conducting this year's elections. The surge in voting by mail imposes unprecedented strains on state election systems, most of which are not designed for the expected volume of mail ballots, and on the United States Postal Service ("USPS"), which has never before been required to provide mail service to support elections in which large numbers of voters will vote by mail.

#### I. BACKGROUND

4. As Deputy Postmaster General, my work in coordinating with the election mail community included coordinating with the National Association of State Election Directors ("NASED") and the National Association of Election Officials, also known as The Election Center, to develop best practices for administering vote by mail in federal, state, and local elections. NASED and the Election Center's members are election officials from across the country, many of whom have worked in election administration at the state and local levels for decades. In the process of working with these officials, I became very familiar with state laws governing voting by mail. In addition to having expertise in issues involving mail and the USPS, I am a lawyer, having been admitted to the Bar of Pennsylvania in 1978. My training and experience as a lawyer, including working as Assistant Counsel on the Judiciary Committee of the U.S. House of Representatives, has provided me with unique insights into the relationship between states' voting laws involving voting by mail and the operations and service standards of the USPS.

5. My work on voting by mail as the Deputy Postmaster General has also provided me with a detailed understanding of the resources and procedures that election officials and the

USPS must have to support voting by mail. Specifically, election officials and the USPS must devote the resources and establish the procedures necessary to ensure that: (1) voters receive absentee ballots in a timely manner; (2) voters are able to return their completed ballots in time for them to be counted; (3) ballots are not lost in the mail; and (4) ballots are properly verified by election officials and included in final vote tabulations.

6. A copy of my curriculum vitae is attached as Exhibit 1. I am being compensated at a rate of \$400 per hour. My compensation in this matter is not in any way contingent on the content of my opinion or the outcome of this matter.

7. I have been asked to describe, based on my experience, the impact of the coronavirus pandemic and the resulting surge in voting by mail on USPS's operational capacity, as well as its ability to meet delivery service standards to ensure the timely delivery of mail ballots in Pennsylvania. Based on my observations from elections conducted in Pennsylvania and other states during the coronavirus pandemic, it is highly probable that the shift toward voters casting ballots by mail will be even more pronounced in the November 3rd general election. This surge in vote by mail will continue to impose significant challenges for USPS, which has never before been required to provide mail service to support elections in which the majority of voters will vote by mail.

8. In preparing this preliminary report, I reviewed publicly available materials which I understand have been disclosed to all parties.

#### II. THE USPS, THE PANDEMIC, AND ELECTION MAIL

9. In my role as Deputy Postmaster General, I also became familiar with the problems the USPS experienced in connection with several elections held during the COVID-19 pandemic. Some of those problems are described in a July 7, 2020 report issued by the USPS' Office of the

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Inspector General ("OIG") in connection with Wisconsin's Spring Election, held on April 7, 2020. The audit reflected in the OIG Report was conducted between April and July, encompassing a period during which I was still Deputy Postmaster General. It focuses not just on the Wisconsin election, but also on national issues involving the incompatibility of many state election deadlines concerning: (1) when completed ballots must be received to be counted, and (2) the time it takes for the USPS to deliver absentee ballots to voters and then to deliver voters' completed ballots back to election offices. I was aware of the issues that were being addressed in the audit while I was still with the USPS, including the incompatibility of state election deadlines and USPS delivery time, and I have reviewed the final OIG report and am familiar with its findings.

10. The report documents and summarizes evidence that election officials were overwhelmed by the volume of mailed ballots in the Wisconsin primary. The evidence includes: three tubs of absentee ballots to be mailed to voters that were found in the USPS's Milwaukee Processing & Distribution Center after the polls had closed on election day because a third-party mailer presented them to USPS around 6:00 p.m. on election day, as well as 2,693 absentee ballots that Milwaukee voters had requested and that, according to election records, had been sent on March 22 and 23, but were not actually sent because of a system failure. In addition, problems occurred when USPS returned absentee ballots to the Fox Point Clerk's Office three different times, without explanation, instead of delivering them to voters, and hundreds of completed ballots returned by voters were not postmarked by the USPS, leaving election officials uncertain about whether to count them as lawfully cast votes.

11. Pennsylvania's June 2, 2020 primary was similarly affected by the pandemic. Over 1.8 million voters requested an absentee ballot in the June Primary. Election officials struggled to keep up with the demand and process times lagged. One county mailed 6,000 absentee ballots to

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voters the day before the June Primary. Tens of thousands of voters did not receive their absentee ballots until the week after the primary. According to an analysis of election data published by Pennsylvania's Department of State, the average wait time for voters to receive their absentee ballot after requesting it was 7 days, with Blair, Bucks, Centre, Cumberland, Franklin, Fulton, Juniata, Mifflin, Montgomery, Philadelphia, and Somerset counties exceeding 10 days, and Delaware topping the list with an average wait of over 20 days.

12. In the days before the June Primary, some county election officials began encouraging voters not to return their completed ballots by mail, expressing concern that ballots mailed would not be received in time. For this reason, several counties petitioned their Courts of Common Pleas to extend the deadline for the receipt of completed ballots. County officials in Montgomery County, for instance, stated that the USPS was delivering mail at slower rates than it had anticipated, that numerous voters reported not receiving their absentee ballots despite that the ballots had been mailed to them, and that they had received confirmation from USPS that absentee ballots could take up to ten days to be delivered to voters. Based on my experience, the interest in vote by mail, and the corresponding strain on election officials, is only likely to become more acute in the November General Election.

13. These problems reveal a system that was overwhelmed by both the impact of the coronavirus and the volume of absentee ballots requested and returned by mail. The pressing question now for Pennsylvania election officials, Pennsylvania voters, and the nation is whether the problems the State has experienced will resolve themselves before the November election, which is less than 65 days away, or whether the recent elections are a sign of what is to come in November, with an unprecedented volume of absentee ballots and the extraordinary challenge of delivering that mail during a once-in-a-century pandemic. My experience with voting by mail and

my extensive work with election officials leads me to conclude that the recent primaries are a predictor of what may occur in the November general election, absent significant changes.

#### III. PENNSYLVANIA'S VOTING LAWS MAKE RETURNING A BALLOT BY MAIL A RISKY BET

14. Pennsylvania's voting laws are such that many voters will not receive their absentee ballot in time to return it by mail with confidence that it will be received in time to be counted. The problem lies at the confluence of two deadlines: First, under Pennsylvania law a voter may request a ballot up until 7 days before an election. Second, under Pennsylvania law a ballot is only counted if it is received by election officials on election day. This is the so-called ballot receipt deadline.

15. The USPS recently notified Pennsylvania that its laws left many voters at serious risk of disenfranchisement. The letter laid out the risk: "[I]t appears that a completed ballot must be received by Election Day to be counted. If that understanding is correct, we accordingly recommend, as noted above, that voters who choose to mail their ballots do so no later than Tuesday, October 27. However, it further appears that state law generally permits voters to request a ballot as late as 7 days before the November general election. If a voter submits a request at or near that deadline, and the ballot is transmitted to the voter by mail, there is a significant risk that the voter will not have sufficient time to complete and mail the completed ballot back to election officials in time for it to arrive by the state's return deadline. This risk is exacerbated by the fact that the law does not appear to require election officials to transmit a ballot until 48 hours after receiving a ballot application."

16. Several factors lead me to conclude that the ballot receipt deadline for the November General Election will lead to disenfranchisement.

17. First, I understand that mail voting has increased exponentially in Pennsylvania—

with 1.8 million voters requesting an absentee ballot for the June 2 primary compared to 84,000 in the 2016 primary—because of the ongoing COVID-19 pandemic and the State's recent adoption of no-excuse mail-in voting for all eligible voters, 25 P.S. § 3150.11(a). Pennsylvania officials, including the Governor, have also encouraged vote by mail.

18. Second, the USPS has service standards for the two types of mail used for electionrelated materials: First Class Mail and Marketing Mail. The service standard for First Class Mail is two to five days, while the service standard for Marketing Mail is three to ten days. There is an irreconcilable conflict between these USPS service standards and Pennsylvania's voting laws that will almost certainly lead to the disenfranchisement of large numbers of Pennsylvanians, an effect that will only be exacerbated if voters are required to rely exclusively on the postal service to return their mail ballots.

19. To illustrate, consider a very optimistic scenario of a voter submitting a request for an absentee ballot on Tuesday, October 27, 2020, which is one week before election day. If an election official responds promptly and mails the ballot within a day, the ballot could be accepted by the USPS as early as Wednesday, October 28. Let's assume the Board of Elections is using First Class Mail and the ballot is delivered to the voter's residence on Friday, October 30. The voter promptly reviews the candidates and any ballot initiatives, fills out the ballot and mails it Saturday afternoon, after the Saturday USPS critical entry time. The mail carrier won't pick up that ballot until Monday, November 2. Even if the voter takes the ballot to a Post Office and has it postmarked on Saturday, the ballot would not be processed until Monday. With the USPS service standard of two to five days, the earliest that ballot would be delivered to the Board of Elections is Wednesday, November 4, the day after election day. This scenario assumes everything goes perfectly, and a voter is within two days reach of USPS. Now, let's say it takes five days to get a ballot to a voter, a day for the voter to fill out a ballot, and five days for that ballot to be delivered back to the Board of Elections, all within the USPS service standards. These realistic changes add six more days without even attempting to account for expected delays. In each of these scenarios, mailing ballots back to election officials is a futile, or, at best, risky proposal for a voter.

20. Third, the already high risk of late delivery is increased by the significant challenges the USPS is facing. The COVID-19 pandemic has caused mail delays across the state. For example, in various cities, the USPS has had significant challenges with employee availability. Postmaster General DeJoy recently testified before the Senate Homeland Security and Governmental Affairs Committee that COVID-19 has impacted employee availability by at least 20 percent in Philadelphia. This March, in Bethlehem, PA, at least one employee in the mail facility contracted COVID-19. In response, the USPS gave workers the option to go home, with half taking them up on the offer. As more employees have been forced to take leave, either as a precaution after potential exposure to the virus or to care for family members, resulting in limited staffing, the Postal Service has begun prioritizing the delivery of packages to ensure the timely delivery of life-saving pharmaceuticals and personal protective equipment. With health-care experts predicting a second wave of COVID-19 in the fall, along with the seasonal flu, staffing shortages could be a significant issue at a critical time for the acceptance, processing, and delivery of absentee ballots.

21. In response to a decline in mail volume over the last decade and the last year, the USPS cut costs by ending some employee overtime, and requiring all trucks to leave plants on time, regardless of whether all mail is loaded onto the trucks, which delayed delivery of mail left behind at the plant. The USPS has a 96.5 percent target for on-time delivery for First-Class Mail. In quarter three, covering the period of April 1, 2020 through June 30, 2020, the USPS' Central

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Pennsylvania District achieved a 94.1 percent score, Philadelphia Metro District achieved 92.7 percent, and Western Pennsylvania District achieved a 96 percent score. After the implementation of these new policies, during the week of July 19, the Central Pennsylvania District reported a 72.1 percent score, Philadelphia Metro District achieved a 85.7 percent score, and Western Pennsylvania District reported a 90 percent score, all significantly below their previous scores and below the target. After significant public and congressional pressure, particularly on the potential impact to timely delivery of mail-in ballots, the Postmaster General announced that he was suspending the operational changes until after the election. However, the Postmaster General has indicated that he will not reverse any of the operational changes already implemented.

22. The factors I describe above give me great concern that a significant number of Pennsylvania voters who submit their ballots by mail in the November election will be disenfranchised because of mail delivery delays. Providing additional leeway for the delivery of ballots postmarked by election day would, in my opinion, significantly reduce the risk that USPS delays could prevent voters from casting a ballot in the November general election.

23. I declare that the foregoing is true and correct to the best of my knowledge.

Executed on August 29, 2020

Respectfully submitted,

DocuSigned by: Ronald Stroman

Ronald Stroman

## **Exhibit 1**

Affidavit of Lori A. Martin - Exhibit 2

## Affidavit of Lori A. Martin - Exhibit 2

### **RONALD A STROMAN**

Phone: (202) 641-0031 | Email: stromanra@gmail.com Address: 1360 Kalmia Road NW, Washington, DC 20012

#### **EXECUTIVE SUMMARY**

Detail-oriented, passionate, and highly motivated Government Affairs Executive with 30+ years of exemplary service in the United States House of Representatives and experience as Deputy Postmaster General for the U.S. Postal Service and Director of the U.S. Department of Transportation. Expertise in overseeing government programs, managing legislative strategies, developing bipartisan legislation, and supervising financial activities. Committed to maintaining a reputation based on exemplary service and uncompromising ethics and recognized for successfully developing and managing public policy advocacy initiatives while overseeing a large number of staff and budgets up to \$6MM. Possesses solid analytical, communication, public speaking, and several other key strengths as follows:

- ♦ Committee Oversight
- Public Policy Advocacy
- Equal Opportunity
- ♦ Staff Supervision
- Diversity Improvement
- Financial/Budget Analysis
- ◆ Stakeholder Relations

- Government Procurement
- Program Management
- Waste/Fraud Investigation
- ◆ Grassroots Communication
- ◆ Agency Collaboration
- Contract Administration
- ◆ Strategic Negotiation

#### CAREER OVERVIEW

#### United States Postal Service · Washington, D.C.

Deputy Postmaster General

- Named the 20<sup>th</sup> Deputy Postmaster General out of 219 years of Postal Service existence, as the 2<sup>nd</sup> highest ranking postal executive serving on the Postal Service Board of Governors and Postmaster General's Executive Leadership Team.
- Reports include the functions of Consumer and Industry Affairs, Government Relations and Public Policy, Sustainability, and the Judicial Officer Department.
- Collaborates with the mailing industry to help improve interactions with postal customers and facilitates relationships with federal, state, and local agencies on core business strategy implementation.
- Assists in overseeing agency operations with total annual revenues of \$65 billion and a workforce of over 500K employees for a government agency second in size to Wal-Mart if compared as a business.

#### United States House of Representatives · Washington, D.C.

Staff Director, Committee on Oversight & Government Reform

- Responsible for overseeing a staff of more than 70 attorneys, professionals, and administrative personnel with a \$6MM operating budget.
- Directed committee investigations in the areas of Financial Crisis, Waste, Fraud, Abuse in Federal Spending, and various other issues.
- Oversaw drafting and negotiations of laws related to funding for Federal Procurement, United States Postal Services, Federal Workforces, and Limiting Peer-to-Peer Computer Downloading.
- Supervised 85 professional staff members and played an integral role in 20 bills that were signed into law by President Obama.

- ◆ Multi-Office Management
- ◆ Federal Spending Insight
- ◆ Legislative Analysis
- Continuous Improvement
- ◆ Government Reform
- Business Strategy Implementation

2011 - June 2020

2009 - 2011

#### United States General Accounting Office · Washington, D.C.

Managing Director, Office of Opportunity & Inclusiveness

- Held accountable for monitoring, analyzing, and recommending changes to the GAO's human capital systems while serving as Principal Advisor to the Comptroller General on diversity matters.
- Directed interpretive services for the deaf/hard-of-hearing staff, as well as oversaw agency's formal complaint process and reviewed all products responding to Congressional requests which involved civil rights and diversity.

#### CAREER OVERVIEW (CONTINUED)

#### United States Department of Transportation · Washington, D.C.

Director, Office of Civil Rights

- Supervised office operations for 6 locations throughout the nation and a staff of 70 employees.
- Served as Principal Advisor to the Secretary of Transportation on all civil rights and equal opportunity matters while implementing Titles VI and VII of the Civil Rights act of 1964, the Americans with Disabilities Act of 1990, and the Disadvantaged Business Enterprise provisions of the Transportation Equity Act for the 21<sup>st</sup> Century.
- Successfully eliminated 400-case backlog of EEO cases during stewardship of the Office of Civil Rights.
- Implemented efforts to establish Disability Resources Center, which now handles all requests for reasonable accommodation by the Department's employees with disabilities.
- Established department-wide Alternative Dispute Resolution program and Diversity Task Force.

#### United States Department of Transportation · Washington, D.C.

Acting Director, Office of Small & Disadvantaged Business Utilization

- Led a staff of 13 in the mission of ensuring that small, minority, and women-owned businesses participated fully in the Department's direct and federally assisted procurement opportunities which incorporated the Disadvantaged Business Enterprise Program.
- Managed the Bonding Assistance Program in an effort to increase the number of surety bonds written, as well as the Short Term Lending Program to provide capital loans and guarantees for small disadvantaged businesses working on transportation-related contracts.

# United States House of Representatives • Washington, D.C.1984 - 1997Deputy Minority Staff Director/Procurement Counsel, Committee on Government Reform & Oversight (1995 - 1997)Staff Director/Chief Counsel, Subcommittee on HR & Intergovernmental Relations/Comm. on Govt. Ops. (1993 - 1994)General Counsel, Committee on Government Operations (1988 - 1994)Assistant Counsel, Subcommittee on Criminal Justice/Committee on the Judiciary (1984 - 1988)

#### United States Department of Housing & Urban Development · Washington, D.C. 1978 - 1984

Attorney Advisor, Office of the General Counsel

2001 - 2009

1997 - 2001

2000 - 2001

Education, Affiliations & Publications	
<b>Rutgers University Law Center</b> · Newark Campus Doctor of Jurisprudence	1977
Manhattan College · New York Bachelor of Arts in Government	1974

#### Pennsylvania State Bar Association

Member

Publication: Charles Tiefer & Ronald Stroman – Uncovering Congress' Intent in the Federal Acquisition Streamlining Act on Commercial Product Acquisition, The Procurement Lawyer (Summer 1997).

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