

STATE OF SOUTH CAROLINA)	IN THE COURT OF COMMON PLEAS
COUNTY OF RICHLAND)	
)	
SC SAFE ELECTIONS and)	C.A. NO. 2022-CP- 4004438
MICHAEL FUNDERBURK)	
)	
Plaintiff,)	
)	
vs.)	
)	
THE BOARDS OF ELECTIONS FOR)	
AIKEN COUNTY, BEAUFORT COUNTY,)	AFFIDAVIT OF EXPERT DAUGHERITY
COUNTY, DORCHESTER)	
COUNTY, GREENVILLE COUNTY,)	
LEXINGTON COUNTY, SPARTANBURG)	
COUNTY, YORK COUNTY, and THE)	
SOUTH CAROLINA STATE ELECTION)	
COMMISSION, HOWARD KNAPP IN)	
HIS OFFICIAL CAPACITY)	
)	
Defendants,)	
)	

TO: THE DEFENDANTS ABOVE-NAMED,

I, Walter C. Daugherty, make this statement after being duly sworn and attest to the following:

Qualifications

1. I am Walter C. Daugherty of College Station, Texas.
2. I am a Senior Lecturer Emeritus in the Department of Computer Science and Engineering at Texas A&M University and also a computer consultant to major national and international firms, as well as to government agencies, including classified work.
3. Prior to my retirement in 2019, I taught computer science and engineering at both the undergraduate and graduate levels for 37 years, the last 32 years being at Texas A&M University. Courses I developed and taught include courses in artificial intelligence, expert systems, programming and software design, quantum computing, and cyberethics.
4. I have published 26 research articles related to expert systems, fuzzy logic, noise-based logic,

and quantum computing from over \$2.8 million in funded research projects, plus conference papers and other publications.

5. As a computer expert I have consulted for major national and international firms, including IBM Federal Systems Division, *New York Times*, *Washington Post*, *Los Angeles Times*, Southwestern Bell Telephone, Fulbright & Jaworski (Houston), and Phonogram B.V. (Amsterdam), and also for government agencies such as Cheyenne and Arapaho Tribes of Oklahoma, Texas Department of Agriculture, U. S. Customs Service, and classified work.

6. Further details about my qualifications are included in my Curriculum Vitae attached to this affidavit as Exhibit 1.

7. I have qualified as an expert witness in other court cases related to elections, electronic voting machines, and election data.

Cast Vote Records

8. I have reviewed the pleadings in the above-referenced case and have been asked, based on my expertise, to provide information which is relevant to this case, particularly with regard to South Carolina Cast Vote Records.

9. "Cast Vote Record" (CVR) is defined in the federal voting system standards, to which South Carolina conforms, as "an electronic record of a voter's selections" (page iii of <https://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.1500-103.pdf>). For examples of the use of the term "Cast Vote Record" also see <https://www.lawinsider.com/dictionary/cast-vote-record>.

10. This <http://nist.gov/> document is one of the federal voting system standards developed by the National Institute of Standards and Technology (NIST) at the direction of the federal Election Assistance Commission (EAC).

11. The EAC was created by the federal Help America Vote Act (HAVA) of 2002, and, as

described at <https://scvotes.gov/resources/hava-help-america-vote-act-of-2002/>, South Carolina states that it complies with HAVA.

12. More specifically, South Carolina states on page 14 of

https://scvotes.gov/wp-content/uploads/2022/08/Final_State_Plan_2006.pdf

that:

- a. “The statewide voting system currently used in the State has the necessary audit capacity,” namely, that “The voting system shall produce a record with an audit capacity for such system.” The CVR report is such a record.
- b. “The voting system shall produce a permanent paper record with a manual audit capacity for such system” and “The statewide voting system currently used in the State produces an image of each vote cast; however, these votes can not be associated with any particular voter.” Thus, disclosure of these images cannot compromise voter privacy, and neither can the ballots from which these images were produced, nor can the CVR produced from the ballots and/or ballot images.

Personally-Identifiable Information

13. Interrogatory answer 15 claims not to know the meaning of the term “personally-identifiable information.” This is disingenuous, given that

<https://scvotes.gov/resources/vulnerability-disclosure-program/> uses the phrase and presumes anyone reading that web page will know what “personally-identifiable information” means.

Further, another statement at <https://scvotes.gov/> quoted in ¶ 12b above refers to the impossibility of votes’ being associated with a particular voter.

14. In the unlikely event the South Carolina Election Commission does not know what the terms it uses at <https://scvotes.gov/> mean, they can refer to the examples at

https://www.eac.gov/about_the_eac/help_america_vote_act.aspx, which says

“Please do not include any personally identifiable information (PII) such as Social Security numbers, driver's license numbers, dates of birth, and mailing addresses.”

Other common examples are voter ID, voter registration number, ballot number, name, mailing

address, and birthdate. *Not a single one of these fields appears in the CVR report.*

In-Person Paper Ballots

15. Interrogatory answer 14 claims not to know the meaning of the term “in-person paper ballot.” It is well established in law that the plain meaning of words applies, absent a specific definition such as S.C. Code Ann. §30-4-20(c), quoted below in ¶ 18. For example, <https://scvotes.gov/about-the-sec/public-notice/> says “Challenges of *ballots cast in person* in the absentee precinct and at the polling place on election day must be made prior to the voter casting the ballot,” and presumes that anyone reading this sentence will know what “*ballots cast in person*” are. The term “in-person paper ballot” is similarly perfectly clear. Regarding identifying individual voters, see ¶¶ 20-21 below.

Attorney General Opinion

16. Attorney General Wilson’s Opinion (AG Opinion) dated September 28, 2020, states that it is in response to South Carolina Election Commission Director Andino’s letter, which is quoted in part as saying:

We are likewise concerned that individual voters' cast ballots could be identified in violation of Article II, § 1, if cast ballots are subject to public inspection. Examples of problematic situations include: voters whose ballots have a unique set of offices or questions due to the location of their residence; voters who cast emergency or failsafe ballots in election with few or no other emergency or failsafe ballots; voters who cast provisional (challenge) as these ballots are either counted or rejected during a hearing open to the public; voters who cast write-in votes; and voters who mark a ballot with the intent of later identifying the ballot in violation of state law(see§7-25-100(A)(3)(making it unlawful for voter to "place a mark upon his ballot by which it may be identified")). Considering the number of ways or reasons information on published ballots could be used to identify voters, any attempt to manually redact problematic information from ballots that would inevitably fail to protect the secrecy of every vote cast.

17. Such concerns are readily mitigated in other states by, for example, redacting from the CVR

report any precinct with less than 10 votes cast, in order to protect voter privacy, which everyone agrees is a fundamental requirement.

18. This AG Opinion says:

Therefore, it is this Office's opinion that a court would hold voted ballots are not made open to the public under the S.C. FOIA.

This opinion belies the plain meaning of S.C. Code Ann. §30-4-20(c), which defines public records as follows:

“Public record” includes all books, papers, maps, photographs, cards, tapes, recordings, or other documentary materials regardless of physical form or characteristics prepared, owned, used, in the possession of, or retained by a public body.

19. The South Carolina Freedom of Information Act thereby expressly requires public disclosure of “papers” and “photographs,” “regardless of physical form or characteristics,” and, by the plain meaning of these terms, ballots are “papers” “regardless of physical form or characteristics” and ballot images are “photographs” “regardless of physical form or characteristics.”

20. The AG Opinion cites *Corn v. Bagwell*, which addresses a situation where numbered ticket stubs compromised voter privacy. This case is inapposite and irrelevant to the CVR report, since the CVR report contains no voter ID, voter registration number, ballot number, social security number, driver’s license number, name, address, birthdate, or any personally-identifiable information whatsoever.

21. The AG Opinion’s conclusion that these public records (see ¶¶ 18-19 above) are not required to be disclosed is conditioned by the phrase “To the extent that the disclosure of materials related to a cast ballot would lead to the identification of a voter.” Since neither ballots, nor ballot images (see ¶ 12b above), nor CVR reports contain any personally-identifiable information whatsoever, the conclusion that they are not required to be disclosed fails. (Also see ¶¶ 25-26 below.)

Attorney General Opinion 2

22. A second opinion, Assistant Attorney General Houck's Opinion (AG Opinion 2) dated September 7, 2022, states that "It is this Office's long standing policy, like that of our state courts, to defer to an administrative agency's reasonable interpretation of the statutes and regulations that it administers." Consequently, the AG is obliged to accept the South Carolina Election Commission's definition of CVR quoted in AG Opinion 2, namely, "the CVR includes the paper ballot itself, the scanned image of the ballot from the ballot scanner at the time the vote is cast, and the digital (electronic) record of the contents of the cast ballot." Indeed, AG Opinion 2 states "we will defer to the Commission's understanding of the term."

23. The Election Commission's definition thus confirms the equivalency of the information on ballots, ballot images, and the digital (electronic) record, so since the State asserts (see ¶ 12b above) that "The statewide voting system currently used in the State produces an image of each vote cast; however, these votes can not be associated with any particular voter," that means that voter privacy cannot be compromised by the public's viewing ballots, or ballot images, or the digital (electronic) record of the contents of the cast ballot, since the information in these three formats is equivalent.

Other States Releasing CVRs

24. It is instructive to note that counties in many other states have released CVR reports, including Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Maryland, Michigan, Minnesota, Nevada, New Jersey, New Mexico, New York, Ohio, Oregon, Pennsylvania, Rhode Island, Tennessee, Texas, Vermont, Virginia, West Virginia, Wisconsin, as well as the District of Columbia. It is therefore abundantly clear that more than half of the states see no problem with releasing CVRs, a preponderance of evidence.

25. In particular, Travis County, Texas, (where the state capital city of Austin is located)

simply posts their CVR on their public website at

<https://countyclerk.traviscountvtx.gov/departments/elections/2020-cast-vote-record/> as a service to voters, without requiring public records requests, or any additional time or expense to satisfy public records requests. In addition, by looking at this CVR one may readily confirm that it contains no personally-identifiable information.

26. As AG Opinion 2 states, “There appears to be disagreement regarding how likely the disclosure of information would lead to voter identification, but the resolution of that dispute requires findings of fact. Again, this Office’s opinions cannot find facts.” Therefore, this Court may simply examine the Travis County, Texas, CVR posted on the website listed in ¶ 25, and determine which ballot was cast by Greg Abbott, Governor of Texas, or else find as a fact that Governor Abbott’s ballot cannot be identified in the CVR, contrary to the assertion by the Election Commission (quoted in AG Opinion 2) that “the release of voted ballots, scanned images of voted ballots, and CVR would likely lead to identification of voters.”

Value of Releasing CVRs

27. In order for the public to have trust and confidence in elections, elections must be *transparent, accurate, and accountable*. If they are, they will also be *auditable*, yet another fundamental (as well as legal) requirement; also see ¶ 12a above.

(a) By releasing CVRs, the state and counties are *transparent* with their voters, in keeping with the spirit and the letter of the South Carolina Freedom of Information Act (see ¶¶ 18-19 above and ¶ 29 below).

(b) By releasing CVRs, the public can compare precinct results to county results, and county results to statewide results, providing a double-check on *accuracy*.

(c) By releasing CVRs, the public is empowered to hold public servants *accountable*.

28. Our public servants must by definition serve the public, and not make the public their servants. This universally held American tenet is exquisitely expressed in the Texas Public Information Act at Government Code § 552.001 as follows:

Sec. 552.001. POLICY; CONSTRUCTION. (a) Under the fundamental philosophy of the American constitutional form of representative government that adheres to the principle that government is the servant and not the master of the people, it is the policy of this state that each person is entitled, unless otherwise expressly provided by law, at all times to complete information about the affairs of government and the official acts of public officials and employees. The people, in delegating authority, do not give their public servants the right to decide what is good for the people to know and what is not good for them to know. The people insist on remaining informed so that they may retain control over the instruments they have created. The provisions of this chapter shall be liberally construed to implement this policy.

(b) This chapter shall be liberally construed in favor of granting a request for information.

29. Similar most worthy goals are expressed in the South Carolina General Assembly's statement of purpose for the South Carolina Freedom of Information Act, quoted in AG Opinion 2 as follows:

The General Assembly finds that it is vital in a democratic society that public business be performed in an open and public manner so that citizens shall be advised of the performance of public officials and of the decisions that are reached in public activity and in the formulation of public policy. Toward this end, provisions of this chapter must be construed so as to make it possible for citizens, or their representatives, to learn and report fully the activities of their public officials at a minimum cost or delay to the persons seeking access to public documents or meetings.

30. South Carolina thus has this unique opportunity to put these noble ideals into practice by releasing CVRs to the public, in order to instill confidence that their elections are indeed transparent, accurate, accountable, and auditable by the public.

Conclusion

31. Based upon my experience and knowledge of elections, electronic voting machines, and

election data, it is my expert opinion that the South Carolina Cast Vote Records cannot contain any personally-identifiable information that would except them from being subject to the South Carolina Freedom of Information Act laws requiring their release as public records.

Executed this 18th day of January, 2023.

Walter C. Daugherty

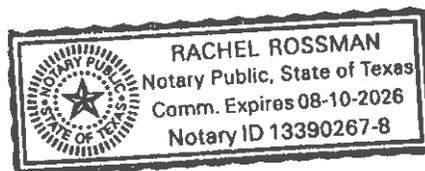
Signature

SWORN TO BEFORE ME THIS 18th DAY OF JANUARY, 2023.

Rachel Rossmann

Notary Public

State of Texas
County of Brazos



My Commission Expires 08-10-2026.