

# REPORT ON ARAPAHOE COUNTY ELECTION LAW VIOLATIONS

Walter C. Daugherty, Editor

Updated May 25, 2025

## EXECUTIVE SUMMARY

Newly discovered evidence in Arapahoe County, Colorado, election data appears to show violations of federal and state criminal laws. Specifically, the Arapahoe County Clerk and Recorder's Office has this year (2025) publicly posted a new list of the ballots cast in November 2020, which is startlingly different from the list of those ballots which they publicly posted in 2022, as canvassed, audited, and certified in 2020.

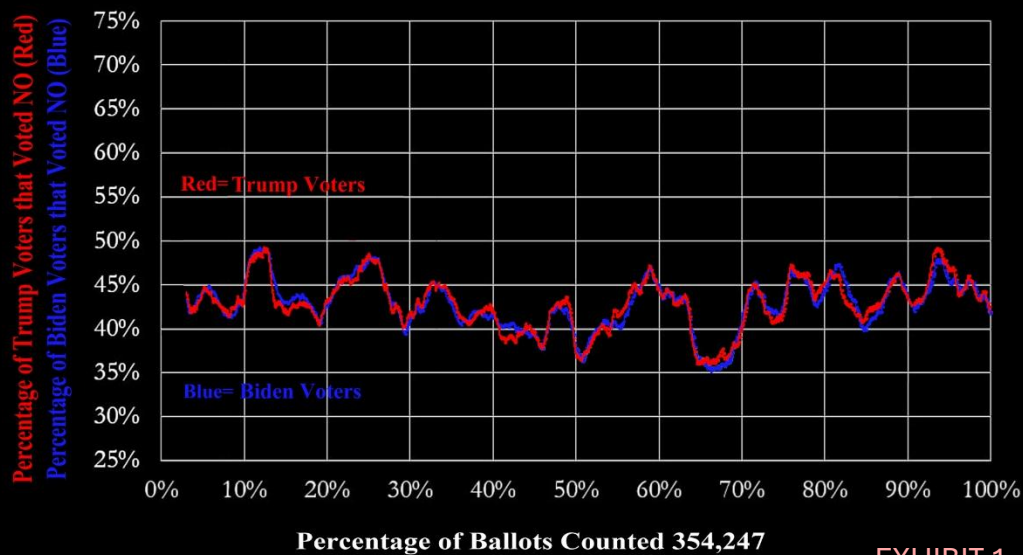
Needless to say, ballots should never be changed 5 years later; in fact, they should never be changed at all! Can you imagine the outrage if the 2020 Super Bowl score were to be changed 5 years later in 2025? The most egregious changes were to the down-ballot contests, notably the votes on Amendment B to repeal the Gallagher Amendment. It is generally considered that a "Yes" vote to repeal was expected to result in higher property taxes for homeowners, which conservative voters oppose and would therefore most likely vote "No," to not repeal. These same conservative voters are generally recognized as supporting Donald Trump over Joe Biden in the 2020 presidential race. Conversely, liberal voters are generally recognized as supporting Biden and most likely voting "Yes" to repeal.

Consequently, the percentage of Trump voters voting "No" on Amendment B should be high (well above 50%), and likewise the percentage of Biden voters voting "No" should be low (well below 50%). In other words, the percentages should be noticeably different; in fact, those percentages were indeed noticeably different in other Colorado counties' results for the 2020 election. However, in the November 2020 list of ballots for Arapahoe County, these two percentages were always below 50% and were almost identical, **FOR EVERY BLOCK OF CONSECUTIVE BALLOTS!**

For example, no matter what ballot number you start at, the next 10,000 or so ballots have almost identical "No" percentages for both Biden and Trump voters, which is statistically impossible and defies common sense. The chances of this happening in an honest election with over 350,000 ballots is infinitesimal, like flipping a coin 3,500 times in a row and getting heads every time.

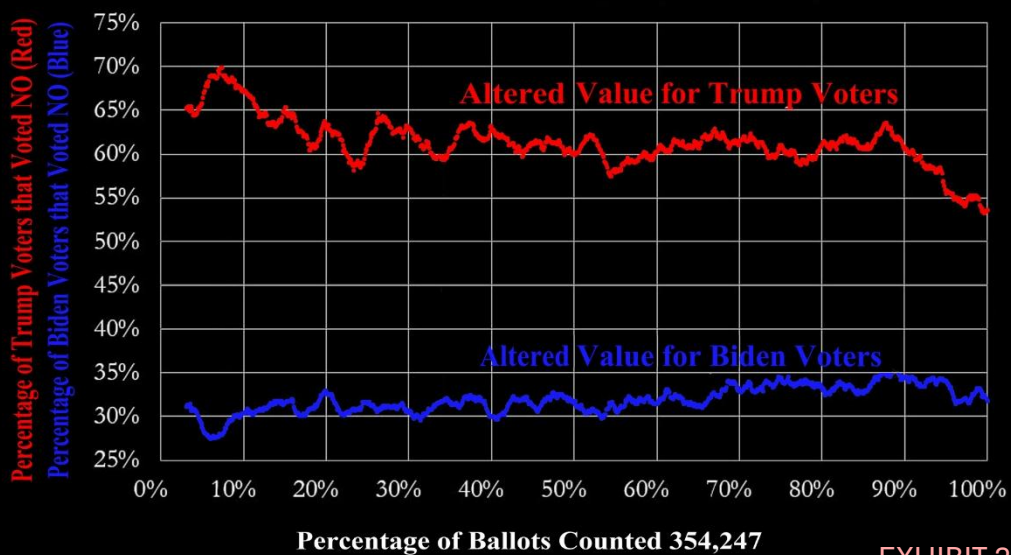
The original 2020 list of ballots (called a "Cast Vote Record") was publicly posted to the county website as an XLSX spreadsheet inside a ZIP file with the internal metadata indicating that the XLSX file was modified at 12:24 P.M. March 22, 2022. Exhibit 1 is a graph of the original CVR, which shows the impossible correlation between Biden and Trump voters voting against repeal of the Gallagher Amendment.

## Arapahoe County 2020: Percentage of No Voters on Prop B - Original CVR

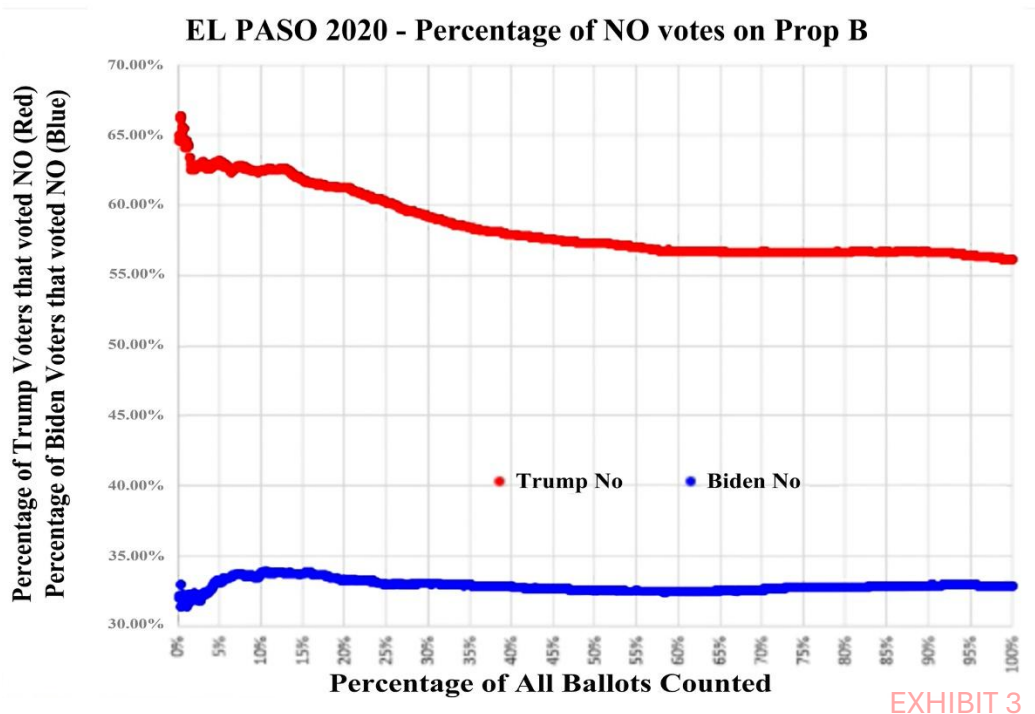


In contrast, the 2025 list of the “same” ballots, which was publicly posted to the county website as a CSV spreadsheet inside a ZIP file with the internal metadata indicating that the CSV file was modified at 9:26 A.M. February 20, 2025, ***CHANGES THE 2020 BALLOTS*** so that for every block of consecutive ballots the percentage of Trump voters voting “No” on Amendment B is always above 50%, and the percentage of Biden voters voting “No” on Amendment B is always below about 35%. Exhibit 2 is a graph of the new CVR.

## Arapahoe County 2020: Percentage of No Voters on Prop B -Altered CVR



This is consistent for both conservative and liberal voters, and is more consistent with results from other Colorado counties, such as El Paso. Exhibit 3 is a graph of Biden vs. Trump voters in El Paso County in 2020.



These three exhibits raise the question as to who changed the 2020 Arapahoe County votes in the cast vote record to make them look consistent, and why.

Through CORA (Colorado Open Records Act) our team was able to determine who initiated this change. An Assistant Professor, Shiro Kuriwaki of Yale who received his Ph.D. from Harvard after the 2020 election, contacted the Arapahoe Elections Office and stated that the 2020 results “appear to be jumbled across columns, incorrectly representing voters’ choices.” Assistant Professor Kuriwaki pointed out that in the original CVR “a staggering 77%” of voters who voted for Republican Congressman Ken Buck also voted for Joe Biden, which was an obviously impossible result. He asked Arapahoe County to post a revised CVR on its website. Assistant Professor Kuriwaki’s complete letter is attached to this report as Exhibit 4.

According to the CORA request, it does not appear that the county consulted with either the Secretary of State’s office or the election machine vendor, Dominion, for how the issues Assistant Professor Kuriwaki was claiming to exist could have happened, nor did they seek review by any expert that was not recommended by Assistant Professor Kuriwaki.

Instead, Arapahoe County published a new CVR which altered votes on 354,242 ballot records. Exhibit 5 compares votes on five ballots in the original CVR to votes on the same five ballots in the new tampered CVR. You can see that votes on three of the five ballot records were altered.

2020 Arapahoe County General Election							
Which CVR	CvrNumber	President (Vote for = 1) BIDEN	President (Vote for = 1) TRUMP	Amendment B (Repeal Gallagher) YES/FOR	Amendment B (Repeal Gallagher) NO/AGAINST	Amendment C (Charitable Gaming) YES/FOR	Amendment C (Charitable Gaming) NO/AGAINST
2020	1	1	0	0	1	0	1
2025		1	0	0	1	0	1
2020	2	1	0	0	1	0	1
2025		1	0	1	0	1	0
2020	3	1	0	0	1	0	1
2025		1	0	1	0	0	1
2020	4	0	1	0	1	0	1
2025		0	1	0	1	0	1
2020	5	1	0	1	0	0	1
2025		1	0	1	0	1	0

EXHIBIT 5

After Assistant Professor Kuriwaki received the tampered CVR from Arapahoe County, he confirmed in an email that the tampered CVR was now “in line with what I would expect.” The full email is attached as Exhibit 6.

There was no confirmation of recounting of ballots or any additional audit measures conducted to ensure the accuracy of the actual counts. There is also no information at this time to explain why the initial, un-tampered CVR was not correct after the certification of the 2020 Elections by Arapahoe County.

Assistant Professor Kuriwaki advised the Arapahoe Elections staff to update their website with this new file, which the County did on February 28, 2025, per their internal emails. There was no notice to the public that this file had been changed. When a member of the public downloaded this tampered CVR and discovered that the file had been tampered with, County Clerk Joan Lopez posted an announcement on her website that the file had been changed and uploaded April 2, 2025. It is not clear why she would have offered this date, as it raises further questions concerning the honesty and intentions of the Arapahoe County Elections office.

Honest, transparent, and accurate elections are our foundational civil right, upon which all other rights depend. This newly discovered evidence calls into question if the civil rights of Arapahoe County and Colorado citizens have been violated. An immediate investigation by federal authorities is called for, to ensure justice is served and the electoral rights of Americans are protected.

## STATEMENT OF FACTS

1. **CAST VOTE RECORD DEFINITION.** A “Cast Vote Record” or “CVR” records a single voter’s selections. In some voting systems there is a CVR for each page of a voter’s multipage ballot, while in other voting systems there is a single CVR for all pages of a voter’s entire ballot. The CVR Report then lists all of the CVRs in an election. Note that there is no personally-identifiable information in a CVR or CVR Report; it is simply a list of the choices made on the ballot(s). The CVR Report is often produced as a spreadsheet (XLSX or CSV), which is easy for the public to audit; other formats (such as JSON) include additional information and typically require more expertise to audit.

For reference, here are definitions of the term “Cast Vote Record” from the federal Election Assistance Commission (EAC), the National Institute of Standards and Technology (NIST), and Dominion Voting Systems (the vendor of the electronic voting equipment used in Colorado):

- a. EAC Glossary of Election Terminology: A permanent record of all votes produced by a single voter, whether in electronic, paper, or other form. They are also referred to as ballot images when used to refer to electronic ballots.
  - b. NIST SP 1500-103: A permanent record of all votes produced by a single voter, whether in electronic, paper, or other form. They are also referred to as ballot images when used to refer to electronic ballots.
  - c. CVR Export. The product and process, within Dominion Voting System Democracy Suite, of using the Election Management Server Results Tally & Reporting software to export a JSON, tabular, or comma/punctuation separated value data file containing tallied Cast Vote Records, with every row representing a single cast vote record, representing in aggregate the complete and accurate basis for reported election results.
2. **EVIDENCE.**
    - a. Tampered redacted CVR.

The “Elections and Voter Registration” menu item on Arapahoe County’s website (<https://www.arapahoeco.gov/>) links to <http://www.arapahoevotes.com/>, which in turn links to <https://www.arapahoevotes.gov/>. The “Transparency Info” button on that page links to <https://www.arapahoevotes.gov/transparency>. The “Certification and Recounts” tab on that page lists links to redacted CVRs, including the November 2020 election, whose link is to <https://www.arapahoevotes.gov/file/2020-general-election-redacted-cast-vote-record>.

That page in turn lists “[2020 General Election-Cast Vote Record - REDACTED.pdf](#)”

with a posting date of “Wed, 04/02/2025 - 12:00” which links to

[https://www.arapahoevotes.gov/sites/default/files/2025-04/2020 General Election-Cast Vote Record -REDACTED.pdf](https://www.arapahoevotes.gov/sites/default/files/2025-04/2020%20General%20Election-Cast%20Vote%20Record-REDACTED.pdf), which says “To access the Redacted

Cast Vote Record for the 2020 General Election, click here

([https://gis.arapahoegov.com/DL\\_Data/CR\\_VOTER\\_DATA/REDACTED\\_CVR/REDACTED\\_CVR\\_Export\\_20201130085221.zip](https://gis.arapahoegov.com/DL_Data/CR_VOTER_DATA/REDACTED_CVR/REDACTED_CVR_Export_20201130085221.zip)).” Clicking that link downloads the ZIP file (done May 16, 2025), which contains a zipped version of a file named REDACTED\_CVR\_Export\_20201130085221.csv which was created at 9:26 A.M. MST February 20, 2025. Unzipping the ZIP file extracts the CSV file, which is the CVR.

***THIS IS THE 2025 CVR WHICH CHANGED ALMOST ALL THE 2020 BALLOTS IN THE CVR.***

In all, 354,242 ballots out of 354,247 ballots were changed, with an average of about 45 changes per ballot, a grand total of 15,824,590 changes. This incomprehensible volume of changes in 2025 to the 2020 ballots demonstrates that there was something very wrong with the 2020 CVR, which will be discussed below in the section entitled “Discrepancies.”

Note that the extremely complex process just described to find the file

- i. makes it prohibitively difficult for the average voter to find this file on the county website, and
- ii. prevents the file from being backed up by <https://archive.org>, the “Wayback Machine” internet archive.

These consequences are the opposite of transparency, so it is ironic that the county calls this “Transparency Info.”

b. Original redacted CVR.

Using the same path as the previous ZIP file, the original CVR was found at [https://gis.arapahoegov.com/DL\\_Data/CR\\_Voter\\_Data/Redacted\\_CVR/Redacted\\_CVR\\_Export.zip](https://gis.arapahoegov.com/DL_Data/CR_Voter_Data/Redacted_CVR/Redacted_CVR_Export.zip) on May 16, 2025. That link downloads the ZIP file, which contains a zipped version of a file named REDACTED\_CVR\_Export\_20201130085221\_354247.xlsx which according to the internal XLSX metadata was originally created at 5:00 P.M. UTC December 10, 2020, by Arapahoe County Elections Manager Corene Henage, and modified (redacted) at 12:24 P.M. MDT March 22, 2022.

***THIS IS THE ORIGINAL 2020 CVR POSTED BY THE COUNTY, REDACTED IN 2022, WHICH WAS THEN REPLACED IN 2025 WITH AN ENTIRELY NEW FILE.***

A search was made on May 16, 2025, for this file at <http://archive.org/>, the “Wayback Machine” internet archive, which showed a backup of the zip file [https://gis.arapahoegov.com/DL\\_Data/CR\\_Voter\\_Data/Redacted\\_CVR/Redacted\\_CVR\\_Export.zip](https://gis.arapahoegov.com/DL_Data/CR_Voter_Data/Redacted_CVR/Redacted_CVR_Export.zip) had been archived May 31, 2022, and could be downloaded on May 16, 2025.

However, as of 7:55 P.M. CDT the next day, May 17, 2025, it is no longer downloadable from [https://archive.org](https://archive.org/). Such concealment is problematic, to block the public from downloading the publicly available backup. Arapahoe County should immediately restore public access to this internet backup file.

c. Discrepancies.

Since there are two different CVRs purporting to be the 2020 CVR, they obviously cannot both be correct. That indicates that **ONE OR BOTH OF THESE CVRS IS INCORRECT**. When the 2020 CVR was examined for cross-tabulation contingencies (commonly called “crosstabs”), it was discovered that the ballot choices reported there were impossibly inconsistent.

The most obvious changes were to the down-ballot contests, notably the votes on Amendment B to repeal the Gallagher Amendment. It is generally considered that a “Yes” vote to repeal was expected to result in higher property taxes for homeowners, which conservative voters oppose and would therefore most likely vote “No,” to not repeal. These same conservative voters are generally recognized as supporting Donald Trump over Joe Biden in the 2020 presidential race. Conversely, liberal voters are generally recognized as supporting Biden and most likely voting “Yes” to repeal.

Consequently, the percentage of Trump voters voting “No” on Amendment B should be high (well above 50%), and likewise the percentage of Biden voters voting “No” should be low (well below 50%). In other words, the percentages should be noticeably different; in fact, those percentages were indeed noticeably different in other Colorado counties’ results for the 2020 election. However, in the November 2020 list of ballots for Arapahoe County, these two percentages were always below 50% and were almost identical, **FOR EVERY BLOCK OF CONSECUTIVE BALLOTS!**

That is, no matter what ballot number you start at, the next 10,000 or so ballots have almost identical “No” percentages for both Biden and Trump voters, which is statistically impossible and defies common sense. The chance of this happening in an honest election with over 350,000 ballots is infinitesimal, like flipping a coin 3,500 times in a row and getting heads every time. (Note: This is the 2020 CVR which according to the XLSX metadata was modified at 12:24 P.M. MDT March 22, 2022, and publicly posted to the county website as an XLSX spreadsheet.)



Once Arapahoe County was notified that the 2020 CVR was not believable, on May 13, 2025, the county posted the following peculiar notice at [https://www.arapahoevotes.gov/sites/default/files/2025-05/DOC Statement RE 2020 CVR 20250513.pdf](https://www.arapahoevotes.gov/sites/default/files/2025-05/DOC%20Statement%20RE%202020%20CVR%20250513.pdf):



ARAPAHOE COUNTY—On or about Oct. 29, 2024, Mr. Shiro Kuriwaki, an assistant professor at Yale University, notified the Clerk and Recorder's Office that he suspected there were errors in the published 2020 General Election cast vote record, suggesting the errors were likely due to mistakes made during the redaction process. Arapahoe County election staff conducted a review that confirmed Mr. Kuriwaki's hypothesis and performed a new redaction of the original (unredacted) cast vote record, then uploaded the corrected CVR to [www.ArapahoeVotes.gov](http://www.ArapahoeVotes.gov) on or about April 2, 2025.

First, “redaction” is the removal or obscuring of data, not changing data. For example, removing the “Counting Group” column (as the county did) is a redaction. Blacking out data would also be a redaction. The vote changes per ballot were not “redaction” as Assistant Professor Kuriwaki’s letter to Arapahoe County explicitly stated that his intention was to change the “ticket-splitting”, or the relationship of the votes on the Presidential Race to the votes in the down-ballot races. This was obviously achieved by the tampering.

However, changing a vote on Amendment B and other contests, as was done, is not a redaction; it is an alteration, which is prohibited by law. In total there were changes to votes on 354,242 ballot records in the CVR.

The statement that the 2025 CVR is a “corrected” one is manifestly false, since some ballots in the 2025 CVR have been changed to different congressional districts. If the congressional district for a precinct split was wrong in 2020, then changing it in 2025 is absurd, since the “wrong” district is what was voted on according to the original CVR.

The county admitted in the statement above that the original 2020 CVR was incorrect. But the “correction” published in 2025 altered votes on 354,242 ballot records in the original CVR, so the new CVR cannot possibly be legitimate.

Note that the “Risk-Limiting Audit” which Arapahoe County performed on the 2020 election as prescribed by the Colorado Secretary of State **DID NOT DETECT** multiple issues, one being the inconsistencies on Amendment B described above.



By the nature of their design, risk-limiting audits do not consider the sequence votes are tabulated, and thus they **CANNOT DETECT** sequence-dependent manipulations in general, including for example the different type of sequence-dependent manipulation observed in Maricopa County, Arizona, and elsewhere. Thus risk-limiting audits alone are insufficient to assure the CVR is accurate.

Following the above analysis, it was discovered that the first 40 columns had been selected and shuffled. This disjointed the votes on the races for President and U.S. Senate from the down-ballot races and removed the effect of the Trump and Biden voters' abnormal pattern on Amendment B, as discussed above. There is no legitimate reason for these changes.

### COUNTERARGUMENTS

1. One possible counterargument to mitigate the conclusion that both the 2020 CVR and the 2025 CVR are incorrect is that the extreme errors are due to clerical mistakes. This seems to be advanced in the county's statement above that "Arapahoe County election staff conducted a review that confirmed Assistant Professor Kirowaki's [sic] hypothesis that "the errors were likely due to mistakes made during the redaction process."

As noted above, redaction is the removal or obscuring of data, not changing data. If the county made errors redacting data, they could not correct it by altering votes on ballot records in the CVR. Their process should be fully explained and the creation of both the incorrect and correct CVR's should be witnessed by Law Enforcement personnel.

2. A second possible counterargument is that there was some (undescribed) technical issue (the infamous "glitch") at fault, for example, that the Election Management Server was backed up but restoring the 2020 files from the backup failed. This is not credible since the county explicitly said they (in 2025) still had access to "the original (unredacted) cast vote record."
3. A third possible counterargument is that the county's so-called redactions were necessary to preserve ballot secrecy. Again, genuine redaction does not change votes, which would violate federal law. Further, it is well established that auditability of elections trumps ballot secrecy. If an election cannot be audited (and auditability is required by Federal Law 52 U.S. Code § 21081) and shown to be accurate, then it is useless, because the results are unreliable. In certain rare circumstances auditability may impact ballot secrecy (which is also required by law), but in that case auditability of elections again trumps ballot secrecy. See <https://x.com/ZoomWalter/status/1895869759381451106> for a detailed analysis of this issue.

4. None of the foregoing possible counterarguments is sustainable, for the reasons stated here.

### RELEVANT CONSTITUTIONAL PROVISIONS

U.S. Constitution Article 4, Section 4. Guarantees every state a republican form of government, which necessarily includes free and fair elections which are transparent, auditable, and accurate.

U.S. Constitution 14<sup>th</sup> Amendment. Equal Protection and Due Process – All voters are entitled to have their votes accurately counted, reported, and preserved. “The right to vote is protected as a fundamental right under the Equal Protection Clause. A state may not value one person's vote over another. Any election process that lacks uniform standards or permits arbitrary vote dilution violates due process.” ***Bush v. Gore, 531 U.S. 98, 104-105 (2000).***

### POTENTIAL CRIMINAL VIOLATIONS

#### Federal Criminal Statutes:

18 USC § 1512

c) Whoever corruptly—

(1) alters, destroys, mutilates, or conceals a record, document, or other object, or attempts to do so, with the intent to impair the object's integrity or availability for use in an official proceeding;

shall be fined under this title or imprisoned not more than 20 years, or both.

18 USC § 2071

(b) Whoever, having the custody of any record, proceeding, map, book, document, paper, or other thing, willfully and unlawfully conceals, removes, mutilates, obliterates, falsifies, or destroys such thing, shall be fined under this title or imprisoned not more than three years, or both.

#### Colorado Criminal Statutes

CRS § 1-13-716. (1) No person shall willfully destroy, deface, or alter any ballot or any election records.

CRS § 18-8-114. Abuse of public records

(1) A person commits a class 2 misdemeanor if:

(a) The person knowingly makes a false entry in or falsely alters any public record.

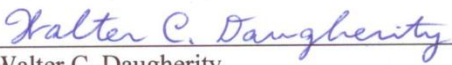
## **RECOMMENDED INVESTIGATIVE ACTIONS**

1. Preservation of all election records, including but not limited to all digital artifacts from voting systems and the original hard drives, by all Colorado counties, Colorado Secretary of State, Dominion Voting Systems, Clarity Elections, SOE Software, Scytl, Comitia and any other vendor of software products used within the election process.
2. Preservation of all communications regarding preservation of election records, records administration of county and state websites and records storage services/functions by all Colorado counties, Colorado Secretary of State, Dominion Voting Systems, Clarity Elections, SOE Software, Scytl, and Comitia and any data and communications concerning that data between Assistant Professor Kuriwaki, Professor Lewis, and Arapahoe County (in any combination of paths).
3. Identify individuals with access to and responsible for creation/modification of Arapahoe County URLs identified above, posted URLs, and county-owned or county-controlled or county-contracted websites.
4. Obtain from Arapahoe County the original CVR export(s) with time stamps and complete chain of custody including hash validation which were used for:
  - a. 2020 election Risk-Limiting Audit.
  - b. 2020 election certification.
  - c. 2020 election project backup.
  - d. Original public transparency posting.
  - e. Latest public transparency posting.
5. Obtain from Arapahoe County all original batch and manifest files from all Dominion tabulators, in JSON format, with time stamps and complete chain of custody including hash validation.
6. Obtain from Arapahoe County all ballot images, with time stamps and complete chain of custody including hash validation.
7. Obtain from Arapahoe County the “permanent paper record with a manual audit capacity” required by federal law 52 U.S. Code § 21081.
8. Compare the above records with one another.

## **CONCLUSIONS**

1. The Arapahoe County official CVR for the 2020 election, redacted in 2022, is not plausible.
2. Arapahoe County’s new 2025 version of the 2020 CVR altered votes on 354,242 ballot records in the official CVR by means of directed shuffling of the Federal Election votes.
3. Altering votes in election records is a crime.
4. An immediate investigation by Federal authorities is called for.

To the best of my knowledge and belief, this report is true and accurate.


  
Walter C. Daugherty

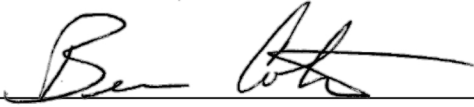
Senior Lecturer Emeritus, Dept. of Computer Science & Engineering, Texas A&M University

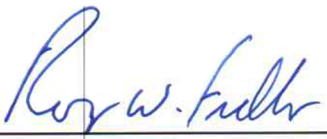
Date: May 26, 2025

## CONCURRING EXPERTS


We, the undersigned experts, concur with this report and agree with its conclusions.

Signature:  Date: 2025-05-26  
Mark Cook  
IT and Cybersecurity Expert Specializing in Election System Forensics

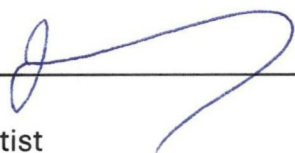
Signature:  Date: 26 May 2025  
Ben Cotton, CISSP  
Cybersecurity Expert

Signature:  Date: MAY 26, 2025  
Roger W. Fuller, MSEE Microchip and Computer Aided Design  
Software Engineer

Signature:  Date: 26 May 2025  
Clay Parikh  
Cybersecurity and Electronic Voting Systems Expert

Signature:  Date: 5/26/2025  
Lisa (Draza) Batsch-Smith, P.E., MsEE, MSCpE  
Control Systems Engineer

Signature:  Date: 26 May 25  
Col. (Ret.) Shawn Smith  
National Security/Threat/Election Systems Analyst

Signature:  Date: 5-26-25  
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Data Scientist

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October 29, 2024

Arapahoe County Clerk and Recorder's Office

Dear Ms. Lopez,

I am a researcher with expertise in studying cast vote records and ticket-splitting. I write concerning the 2020 cast vote record (CVR) posted on your website. I am aware that this is an extremely busy time for your office, given the upcoming election, but I write with the hope that identifying this issue may help your office improve your CVR redaction method moving forward.

My collaborators and I have examined the November 2020 General Election "Redacted CVR" available on your website at <https://www.arapahoevotes.gov/transparency> (the tab called "CERTIFICATION AND RECOUNTS"), which is named REDACTED\_CVR\_Export\_20201130085221\_354247.xlsx (139 MB).

Even though these records indicate the *correct* number of *total* votes for each candidate, the rows appear to be jumbled across columns, incorrectly representing voters' choices.

For example, the spreadsheet indicates that Donald Trump won 127315 votes and Ken Buck (US Representative of Colorado's 4th District) won 3885 votes. This is all consistent with your official certified election results. However, the spreadsheet also indicates that among the 3885 of those voting for Ken Buck (R), a staggering 77% of them – 2986 voters – voted for the Democrat, Joe Biden (D). This degree of ticket-splitting is inconsistent with the rest of the cast vote records in Colorado (See Exhibit 1 for the first few rows).

**Is it possible that rows of the spreadsheet were mixed up in preparing the redacted spreadsheet?** If so, would it be possible to post a corrected version?

I consulted with Neal McBurnett, who is much more familiar with the details of Colorado elections than I am. He suspects that the error was likely produced in the redaction process. I checked the pre-redaction audit center [sample](#) of the same election, and verified that the audit samples show reasonably low levels of ticket-splitting, for example in CO-06 (see Exhibit 2).

These 2020 relationships are inconsistent with your county's records from other elections. In the November 2022 CVR I obtained from the same website, only 6% of

# Exhibit 4

those who voted for Ken Buck voted for the Democratic Senator, Michael Bennet. This is a much more plausible number.

My research aims to contribute to the election administrator community, and I am a regular attendee at the Election Science, Reform and Administration Conference (<https://www.shirokuriwaki.com/>). As I mentioned, I do not wish to disrupt your work but only write to be helpful. I would love to work with you so as not to interfere with the integral work that you do for Arapahoe County.

Best,  
Shiro

Shiro Kuriwaki



**Exhibit 1:** Sample of Spreadsheet. I have colored the cells and hidden some columns to highlight the irregular discrepancy between the President and the US House race.

	A	B	C	D	E	F	G	H	I	J	AV	AW	
1	2020 Arapahoe Cou 5.11.3.1												
											Represent	Represent	
											ative to	ative to	
											the 117th	the 117th	
											United	United	
2									President	President	States	States	
									al Electors	al Electors	Congress-	Congress-	
									(Vote	(Vote	District 4	District 4	
									For=1)	For=1)	(Vote	(Vote	
3									Joseph R.	Donald J.			
									Biden /	Trump /			
									Kamala D.	Michael	Ike		
									Harris	R. Pence	McCorkle	Ken Buck	
4	CvrNumber	Tabulat	Batch	Recon	Imprin	Count	Precinct	Portion	BallotType	DEM	REP	DEM	REP
5	1	4	1	50	4-1-50	Mail	1260303140	(1260303140 - 44)	44	1	0	1	0
6	2	4	1	33	4-1-33	Mail	6260303128	(6260303128)	62	1	0	1	0
7	3	4	1	32	4-1-32	Mail	1260303136	(1260303136)	33	1	0	0	1
8	4	4	1	23	4-1-23	Mail	1260303113	(1260303113 - 41)	41	0	1	1	0
9	5	4	1	17	4-1-17	Mail	1260303133	(1260303133)	33	1	0	0	1
10	6	4	1	8	4-1-8	Mail	1260303131	(1260303131)	33	0	1	0	1
11	7	4	1	2	4-1-2	Mail	6263803176	(6263803176)	43	1	0	0	1
12	8	4	1	73	4-1-73	Mail	1260303109	(1260303109)	39	1	0	1	0
13	9	4	1	72	4-1-72	Mail	6260303162	(6260303162)	61	1	0	0	1
14	10	4	1	45	4-1-45	Mail	6294203512	(6294203512)	29	1	0	0	1
15	11	4	1	44	4-1-44	Mail	6263803159	(6263803159)	43	1	0	1	0
16	12	4	1	35	4-1-35	Mail	1260303134	(1260303134)	33	1	0	0	1
17	13	4	1	34	4-1-34	Mail	1260303133	(1260303133)	33	1	0	1	0
18	14	4	1	18	4-1-18	Mail	1260303113	(1260303113 - 41)	41	1	0	0	1
19	15	4	1	9	4-1-9	Mail	1260303131	(1260303131)	33	1	0	0	1
20	16	4	1	6	4-1-6	Mail	1260303133	(1260303133)	33	1	0	0	0
21	17	4	1	95	4-1-95	Mail	1260303122	(1260303122)	39	0	1	0	1
22	18	4	1	94	4-1-94	Mail	6293603381	(6293603381)	17	0	1	0	1
23	19	4	1	93	4-1-93	Mail	6293603381	(6293603381)	17	0	1	0	0
24	20	4	1	92	4-1-92	Mail	6263803150	(6263803150 - 43)	43	1	0	0	1
25	21	4	1	79	4-1-79	Mail	6263803176	(6263803176)	43	1	0	0	1
26	22	4	1	78	4-1-78	Mail	6273803190	(6273803190)	65	1	0	0	1
27	23	4	1	63	4-1-63	Mail	6263803155	(6263803155)	43	1	0	0	0
28	24	4	1	62	4-1-62	Mail	6263803150	(6263803150 - 43)	43	1	0	0	1
29	25	4	1	49	4-1-49	Mail	6263803165	(6263803165)	43	1	0	0	1
30	26	4	1	24	4-1-24	Mail	1310903137	(1310903137)	31	1	0	0	0
31	27	4	1	12	4-1-12	Mail	1260303132	(1260303132 - 33)	33	1	0	0	1
32	28	4	1	5	4-1-5	Mail	1260303133	(1260303133)	33	1	0	0	1
33	29	4	1	87	4-1-87	Mail	6263803168	(6263803168)	43	0	1	0	0
34	30	4	1	86	4-1-86	Mail	6263803163	(6263803163)	43	1	0	0	1
35	31	4	1	85	4-1-85	Mail	6263803158	(6263803158)	43	1	0	0	1
36	32	4	1	84	4-1-84	Mail	6263803171	(6263803171)	43	0	1	0	1
37	33	4	1	57	4-1-57	Mail	6263803145	(6263803145)	60	1	0	0	1



# Exhibit 4

## Exhibit 2: Audit sample compared to Full Data

Each table here is a cross-tabulation. Each cell represents the number of voters who voted for both of the two candidates identified in rows and columns. For example, the “152” number in the left table indicates that in the audit sample, 152 ballots voted for both Biden and Crow, the Democratic House candidate for CO-06. I have limited my analysis to the 6<sup>th</sup> district.

Audit Sample (appears correct)

Audit Sample				
President Choice	US House Choice			
	Crow (D)	House (R)	Olsen (Lbt)	NA
Joseph R. Biden	152	6	2	7
Donald J. Trump	5	103	1	5
Other	0	3	2	0

Note: Only a small fraction of voters appears to have split their ticket, in line with past Colorado elections and national evidence.

Posted online (appears incorrect)

Redacted CVR Posted Online				
President Choice	US House Choice			
	Crow (D)	House (R)	Olsen (Lbt)	Other
Biden (D)	111,430	68,150	3,800	7,342
Trump (R)	66,123	41,434	2,272	4,275
Other	7,036	4,407	240	433

Note: This table implies that more Trump voters voted for the Democratic candidate (Jason Crow, 66,123) than the Republican candidate (Steven House, 41,434), suggesting the data was missorted.

O: 303-734-5465

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**From:** Kuriwaki, Shiro <[shiro.kuriwaki@yale.edu](mailto:shiro.kuriwaki@yale.edu)>

**Sent:** Tuesday, March 11, 2025 4:26 PM

**To:** Tom Skelley <[TSkelley@arapahoegov.com](mailto:TSkelley@arapahoegov.com)>

**Cc:** William Mast <[WMast@arapahoegov.com](mailto:WMast@arapahoegov.com)>; Karl Herrmann <[KHerrmann@arapahoegov.com](mailto:KHerrmann@arapahoegov.com)>;  
Joan M. Lopez <[JLopez@arapahoegov.com](mailto:JLopez@arapahoegov.com)>

**Subject:** Re: Letter about the 2020 redacted cast vote record

Hi Tom,

I had taken a look at the redacted version you sent me, and the ticket splitting in the few contests I looked at were in line with what I would expect. Thank you again for looking in to my initial inquiry.

I was wondering if you plan to update your website with this revised dataset, and if you have any news on getting the use agreement for me to sign?

Thank you,

Shiro

--

Shiro Kuriwaki  
Assistant Professor, Yale University  
Department of Political Science  
[www.shirokuriwaki.com](http://www.shirokuriwaki.com)

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**From:** Tom Skelley <[TSkelley@arapahoegov.com](mailto:TSkelley@arapahoegov.com)>

**Date:** Tuesday, February 25, 2025 at 4:20 PM

**To:** Kuriwaki, Shiro <[shiro.kuriwaki@yale.edu](mailto:shiro.kuriwaki@yale.edu)>

**Cc:** William Mast <[WMast@arapahoegov.com](mailto:WMast@arapahoegov.com)>, Karl Herrmann  
<[KHerrmann@arapahoegov.com](mailto:KHerrmann@arapahoegov.com)>, Joan M. Lopez <[JLopez@arapahoegov.com](mailto:JLopez@arapahoegov.com)>