

Data Driven Election Reform Advocacy to Increase Participation & Inclusion: The Case of Invalid Votes and Electoral Participation in Liberia.

Results from a study conducted by Liberia Election Network (LEON) in partnership with the Carter Center's Democracy Program Liberia, the Carter Center's Innovation Hub Program, and support from SIDA.

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Key terms and definition

1. **Apathy** – an emotional feeling or concern of interest a partism, or candidates show up to his or her party or member.
2. **Ballot paper**- Ballots are special kinds of papers designed through a very careful process carrying the names, photography, party symbol, emblem of the republic of Liberia and other information. They are designed with a very clear field, space, or box for voters to mark to express their intention for the party or candidate of their choice.
3. **Election**- In Liberia occur solely at national, the presidential and legislatures of Liberia is elected to a six-year term in a two- round system where Liberian citizens 18yrs. And above go to the poll to select the of their choice of candidate to represent them at national level (Presidential), and Legislative level (Representatives and Senates).
4. **Demographic**- Demographic is the statistical study of populations and its environments (male, female, tribes, and the type of languages the people speak), size of a country, size, and geo-location of county and other places.
5. **Democracy**- is system of government for the people, by the people, and by the people.
6. **Geo-coordinate**- measuring the distance, [positions](#), [latitude](#) and [longitude](#) of the precincts, pooling places, registration centers of election.
7. **Invalid Vote** is defined as when the voter's intention is not clear on the ballot paper; and below are some case when ballot paper will be considered as invalid ballot/vote below:
 - ✓ Two marks an "X" and "✓" equals to double marking for two different candidates, party, or alliance. The voter's intention is not clear.
 - ✓ A check mark "✓" resting partly in the marking space of one candidate, party or alliance with full extension into another area.
 - ✓ Illustration of number ex. 077/0886/.
 - ✓ A marking with signature and telephone number is in violation of voting secrecy and possible vote buying.
 - ✓ Use of double marks, profane writing, or insult to express a choice is against rules and decency.
 - ✓ Erasure of the photos of other candidates while using a check mark to express a choice for one candidate. Multiple marking.
 - ✓ A ballot absolutely no mark / thereby showing no expression of intent.
 - ✓ Using two informative markings- "YES" and non-affirmative markings- "NO". This Equals marking and expression of two choices where a single choice is required.
 - ✓ Multiple marking on a single ballot, thereby confusing the interpretation of the voter's intention.
 - ✓ Writing of one's name on the ballot is a clear violation of voting secrecy and possibly vote buying.
 - ✓ Marking with an "X" which interception rest squarely or nearly on the diving line between two candidates, parties, alliances, while the lines run in the areas of both candidates. Unclear expression of intend.
8. **Monitoring**- International and national observers have a very important role to play in observation of the election process. Election monitor must wear a badge issue by NEC at all the times while observing and they must also carry another document and monitor may enter a polling place from the time that the polling official arrives and move between polling places and voting precincts.
9. **Polling place**- is a designed place within the voting precinct where the voting will be conducted. At a polling place in a team of polling officials (the polling staff) work together to process voters.
10. **Referendum**- is a general vote by the electorate on a political question/preposition that has been place in the constitution of the country.
11. **Registration** – the process of registering or of being registered to vote in an election.
12. **Tabulation**- is the systematic counting of the ballot paper and total votes accumulated per candidates.
13. **Turnout**- is the total of voter's that turnout to vote from the various polling places.
14. **Valid Vote is defined as** when the voter's intention is clear on the ballot paper; and below are some case that indicate ballot paper/ will be considered valid ballot/vote below:
 - ✓ Mark on symbol, not interfering with any other candidates.

- ✓ All mark on the symbol, candidate photo, and marking space with no cross over to another candidate's party's or alliance.
 - ✓ Mark with "X" placed in the proper marking space.
 - ✓ Marking with a straight Line across the space's for only a single candidate, party, or alliance.
 - ✓ Thumbprint making in the space provided marking.
 - ✓ Marking with an "X" in the space provided for marking
 - ✓ A scrambled mark in space provided for marking with another mark on the same candidate and row.
 - a. Check mark with the base of "✓" portion fully in the area for one candidate with just a small tip entering the area of the other party candidate or alliance .
 - b. An "X" mark with full crossing in the space of one candidate, party alliance with a small tip into the area of another candidate, party, or alliance
 - c. A check mark properly placed in the marking space.
 - d. An "X" across the face or photo of the candidate.
15. **Vote-** marking of the ballot paper by selecting your choice of candidate and putting it in the ballot box.
16. **Voting** – is the right for a person 18 years and above must exercise their **fundamental right in a democratic process/system**. It is **a chance for the citizens of a country to have a say in the people who represent them or an issue that impacts them**.
17. **Voting Precincts** – is a former Voter Registration Center (VRC) and defined as a location where people cast ballots for the elections. Within any voting precinct, there will several polling places where voters will cast their ballots. A voting precinct can have one polling and up to eight polling places.

Acronyms

CBO	Community Based Organization
CI	Confidence Interval
CSV	Comma Separated Values
CVE	Civic Voter Education
LEON	Liberia Election Observation Network
MoE	Margin of Error
M&E	Monitoring and Evaluation
N	The Population
NA	Not Applicable
NEC	National Election Commission
UNDP	United Nations Development Programme

Executive Summary

Since the restoration of multiparty democracy in 2005, Liberia has held four general elections, two referenda, and several by-elections. Elections have generally witnessed high levels of voter turnout, signifying the desire of Liberian citizens to participate in the governance of their country. At the same time, large numbers of voters have not had their voices heard due to ballot marking errors that have resulted in high numbers of invalid votes over multiple election cycles. In the 2017 House of Representatives election, 5.2 percent of all votes were invalid. In the 2020 Senate elections, 5.5 percent of all votes were invalidated. In both elections, invalid votes comprised nearly 10 percent of all ballots cast in some electoral districts; and in some voting precincts, roughly 20 or 30 percent of all ballots cast were invalid. In the 2020 Constitutional Referenda, more than 50 percent of all ballots cast were invalid.

In every election worldwide, the percentage of votes cast is invalidated in accordance with the country's electoral framework. Per Liberian counting procedures, a ballot may be invalidated due to:

- No marking on ballot (i.e., blank)
- Double or multiple marks on ballot (e.g., voter puts check mark next for more than one candidate, voter writes 'yes' for who they are for and 'no' for who they are against, etc.)
- Unclear intention (e.g., voter writes 'no' or crosses out choices they are against, mark placed in location that is not definitive, etc.)
- Personal information on the ballot (name, phone number, signature, etc.)
- Profanity written on the ballot

A ballot with no marking or a ballot with profanity written on it may be a conscious decision by a voter to participate with intent to protest. However, mismarking, a lack of discernible intent, or the presence of personal information on the ballot are likely attributable to unintentional, and avoidable, voter error.

To ensure the voices of voters are heard at the ballot box and election results reflect the will of the people, all election stakeholders, the National Elections Commission (NEC), candidates, civil society, media, etc, must play a role in reducing *avoidable* mistakes that result in invalid ballots. It is in the interest of NEC to ensure the process they are administering is credible, candidates to ensure their supporters' votes are counted, and civil society to ensure voter education efforts are effective.

The Liberian Elections Observation Network (LEON), with assistance from The Carter Center (TCC), has analyzed previous election results data to discern trends in invalid ballots to substantiate where the problem is most acute and where efforts to reduce avoidable mistakes is most needed. In addition, to identify the prevalence of types of invalid votes cast in elections, LEON leveraged data on invalid votes cast by Liberian voters published in a report by the NEC Monitoring and Evaluation (M&E) Section published in September 2022. Finally, LEON conducted a nationwide voter survey to gain an understanding of why mistakes may be occurring and what misunderstandings may need correction ahead of the 2023 general elections.

Key Findings

Based on analysis of official election results data, NEC report data, and survey findings:

- Sixteen (16) electoral districts were identified as districts where invalid vote percentages were distinctly higher than average ('high risk' districts), and attention is needed:

Bong-2	Margibi-1
Bong-4	Maryland-1
Bong-7	Maryland-2
Grand Bassa-1	Maryland-3
Grand Bassa-2	Montserrado-1
Grand Bassa-4	Nimba-5
Grand Kru-1	Rivercess-1
Grand Kru-2	Sinoe-2

Figure 1

- Two hundred and nine (209) voting precincts, spread across fifty (50) electoral districts, were identified as specific precincts where invalid vote percentages were distinctly higher than average ('high risk' precincts).
- There appears to be a significant rural-urban divide, whereby invalid vote percentages are more often higher on average in voting precincts serving rural areas than urban areas.
- In the 2022 Lofa Senate By-Election, invalid vote percentages across all five electoral districts dropped sharply from the 2020 Senate elections. This may be attributable to the creation of local Civic and Voter Education (CVE) cells that conducted voter education prior to the election.
- The number of invalid votes was greater than the number of valid votes for seven (7) of eight (8) questions during the 2020 Constitutional Referendum; except for Montserrado-1, all the districts with an invalid vote percentage below 40% were in Montserrado county.
- According to NEC M&E section data, 89.51% of invalid votes in the 2020 Constitutional Referendum were intentionally invalidated (e.g., no marking or profanity). By contrast, in the 2020 Senate Election, invalid votes are categorized as below:
 - 52.8% of votes were intentionally invalidated.
 - 41.16% were invalidated due to marking errors.
 - 4.37% contained voter personal information that resulted in invalidation.
 - 1.18% were marked invalid in error by NEC officials and should have been valid.
- According to survey findings, 80.16% of voters said they received voter education prior to elections in which they participated. However roughly 30% of those voters either did not receive or could not recall receiving instruction on how to mark their ballots.
- Most voters, when prompted, responded incorrectly when asked about specific marking errors would result in an invalid vote, e.g., marks for multiple candidates, writing name or signature on ballot, marking face of candidate, etc, highlighting insufficient understanding of ballot marking.
- Among voters who claimed to have intentionally invalidated their ballots, the most common explanations for why were 1) lack of voter education and 2) anger with their representative.
- When voters were asked for the perceived cause of invalid votes, 88.38% believed it was attributable to a perceived lack of voter education.
- When voters were asked for solutions to reduce the number of invalid votes, improve voter education (73.4%), educate poll workers (56.45%), recruit the right civil society organizations to educate voters (43.59%) and improve ballot design (39.15%) were the common suggestions.

Conclusions & Recommendations

As evidenced by NEC M&E data and our survey findings, there is an inevitable share of invalid votes cast intentionally by voters who wish to participate, albeit in protest. However, efforts to reduce avoidable mistakes that result in invalid votes should be undertaken to ensure all voters who exercise their choice have their voices heard. As identified through analysis of election results data from previous elections, there are 16 districts and 209 voting precincts where invalid votes are high and particular attention is warranted to reduce the number of invalid votes in future elections. Per voter survey findings and insights from

experience drawn during the 2022 Lofa Senate By-Elections, efforts that may reduce ballot marking mistakes, notably increased and more intensive voter education, may be effective to that end. In the spirit of cooperation and in the interest of ensuring credible and inclusive elections, LEON offers the following recommendations to electoral stakeholders in advance of future elections:

To National Elections Commissions (NEC)

- Increase emphasis on ballot marking instruction as part of voter education efforts ahead of the 2023 elections, with deliberate effort on ensuring voters understand what constitutes an invalid ballot to reduce avoidable marking errors.
- Dedicate time and resources to ensure intensive voter education efforts with emphasis on ballot marking instruction are implemented in the 16 electoral districts identified as ‘high risk’ districts for invalid ballots, notably in rural areas of districts.
- Ensure poll workers who issue ballots provide ballot marking instruction to voters in voting precincts to reduce marking errors, with deliberate effort on ensuring such instruction is provided at the 209 voting precincts identified as ‘high risk’ precincts.
- Ensure poll workers are trained properly on what constitutes a valid or invalid ballot to reduce official errors that result in wrongful invalidation during the counting process
- Recruit and allocate resources to civil society organizations based in counties with high-risk districts to implement voter education activities in those areas the degree possible.
- Revise counting forms to disaggregate invalid votes by type to discern intention and error in ballot marking to facilitate further remediation efforts ahead of future elections

To Civil Society Organizations:

- Prioritize ballot marking instruction as part of voter education efforts, with particular emphasis on leveraging sample ballots provided by NEC.
- Ensure that rural areas, particularly in high-risk districts, are adequately covered as part of non-partisan voter education, outreach, and mobilization activities.

To Political Parties and Candidates:

- Include ballot marking instruction as part of partisan campaign voter engagement, outreach, and mobilization activities to ensure that ballots cast by supporters are valid votes.

Methodology

LEON analysis of invalid ballots used official election results data published on the NEC results portal. Specifically, the analysis is based on official Senate [County] (15), Electoral District (73), and Voting Precinct (2080) level results published on the NEC results portal for the 2017 House of Representatives¹, 2020 Senate², 2020 Referendum³, and 2022 Lofa County Senate By-Election.⁴ To facilitate data analysis, four LEON data clerks manually transcribed official Voting Precinct level results data published on the web portal into tabular file format (comma separated values, i.e., CSV).

To facilitate data mapping of invalid ballots at the county and electoral district levels, LEON leveraged: Liberia county shapefile published by The Database of Global Administrative Areas (GADM)⁵ and Liberia 2017 electoral district shapefile published by The Carter Center.⁶ To facilitate data mapping of invalid ballots at the Voting Precinct level, four LEON data clerks used [OpenStreetMap](#) to geolocate the *approximate* latitudes and longitudes of 2020 Voter Registration centers published by NEC.⁷ Where voter registration centers and voting precincts were the same, data clerks identified approximate latitude and longitude points and captured them in a CSV file.

To identify the prevalence of types of invalid votes cast in elections, LEON leveraged a report published by The NEC Monitoring & Evaluation Section in September 2022.⁸ The report examined samples of invalid votes from 13 of 15 counties during the 2020 Senate Election (11,098 invalid ballots) and Referendum (834,002 invalid ballots). To facilitate analysis of invalid ballots attributable to voter “intent” as opposed to voter or tabulation “error”, LEON grouped the 10 types of invalid ballots identified by NEC M&E analysts in the report into the following five categories:

- Intentional: no marking (i.e., blank ballots), contained profanity
- Error (Marking): double marking, multiple markings, unclear intention
- Error (Personal): contained name, phone number, signature
- Error (Official): valid votes mistakenly invalidated during tabulation
- Unknown: others

Finally, to identify misunderstandings and challenges that result in voters casting invalid ballots, LEON conducted a nationwide survey (n=2399, CI=95, MoE=2%) of eligible voters stratified by county. The survey was conducted in November and December 2022. Voters were asked several questions to gauge their level of exposure to voter education and understanding of how to mark their ballots.

¹ 2017 House of Representatives Election Results

<https://necliberia.org/results/representative.php?&7d5f44532cbfc489b8db9e12e44eb820=MQ%3D%3D>

² 2020 Senate Election Results:

<https://necliberia.org/results/senate.php?&7d5f44532cbfc489b8db9e12e44eb820=MTAyOQ%3D%3D>

³ 2020 Referendum Results: <https://necliberia.org/results/referendum.php>

⁴ 2022 Lofa County Senate By-Election Results:

https://necliberia.org/results/county_senate.php?&7d5f44532cbfc489b8db9e12e44eb820=MjE%3D

⁵ https://geodata.ucdavis.edu/gadm/gadm4.1/shp/gadm41_LBR_shp.zip license: <https://gadm.org/license.html>

⁶ <https://tcc.maps.arcgis.com/home/item.html?id=2bf16a61878e453e846db6c59afae4a5>

⁷ 2020 Voter Registration Centers by Electoral District: https://www.necliberia.org/edistrict_20.php

⁸ “NEC Final Report on the Analysis of Invalid Ballots and the Sex Disaggregation of Voters in the 2020 Special Senatorial Elections and Referendum”, NEC Monitoring & Evaluation Section, September 2022

Findings

In the **2017 House of Representatives elections**, invalid votes comprised 5.2% (approximately 1-in-20) of all ballots cast across all 73 districts. The percentage of invalid votes in individual electoral districts ranged from 2.49% (1-in-40±) to 8.93% (1-in-11±). In 30 districts, the share of invalid votes was above the average; in 19 districts, above 6%; in eight districts, above 7%; and in two districts, above 8%.

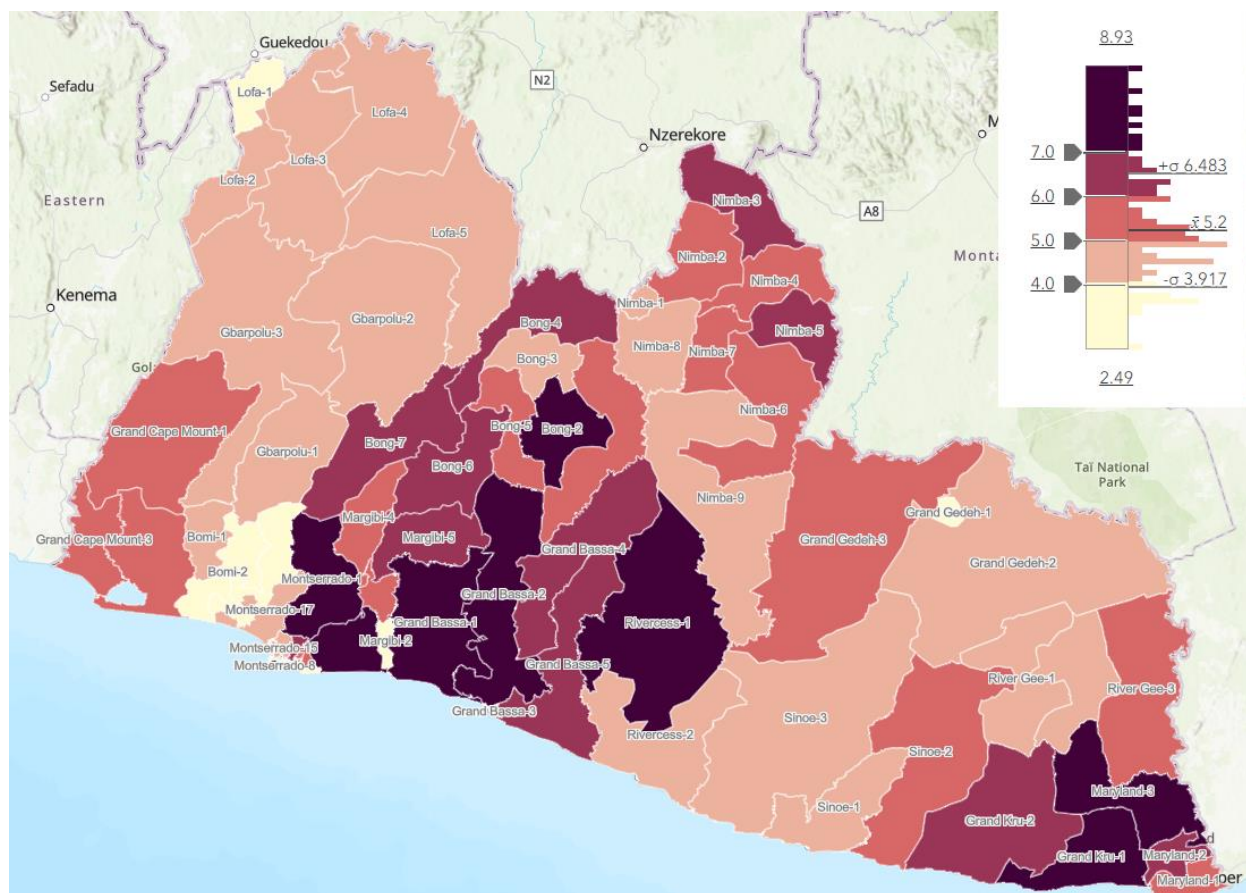


Figure 2: Map of invalid vote percentages across all 73 electoral districts in the 2017 Liberia House of Representatives elections. Nationwide average was 5.2%. The darker the electoral district, the higher the percentage of invalid votes.

- Four of five districts in Grand Bassa (1, 2, 4 & 5) were above 6%, including District 2 which had the highest percentage of invalid votes nationwide.
- Both districts in Grand Kru (1 & 2) were above 6%, including District 1 which had the second highest share of invalid votes across the country.
- Four of seven districts in Bong (2, 4, 6 & 7) were above 6%, including three districts among the top 10 nationwide in terms in invalid vote percentages.
- Two of three districts in Maryland (2 & 3) were above 6%, the other had an above average invalid percentage.

At the voting precinct level, there were 158 precincts where the percent of invalid votes was greater than 10%; 32 precincts where the invalid vote percentage was above 15%; and seven

Electoral District	Invalid Percent	Invalid Rank
Grand Bassa-2	8.93	1
Grand Kru-1	8.37	2
Montserrado-1	7.93	3
Margibi-1	7.85	4
Bong-2	7.53	5
Rivercess-1	7.32	6
Grand Bassa-1	7.23	7
Maryland-3	7.04	8
Bong-4	6.84	9
Bong-7	6.66	10

Figure 3

precincts above 20%. The map below includes all 2,080 voting precincts where ballots were cast in the 2017 elections:

- Where the arrow is red and pointing 'up', the percentage of invalid votes was higher than the national average.
- Where the arrow is green and pointing 'down', the percentage of invalid votes was lower than the national average.

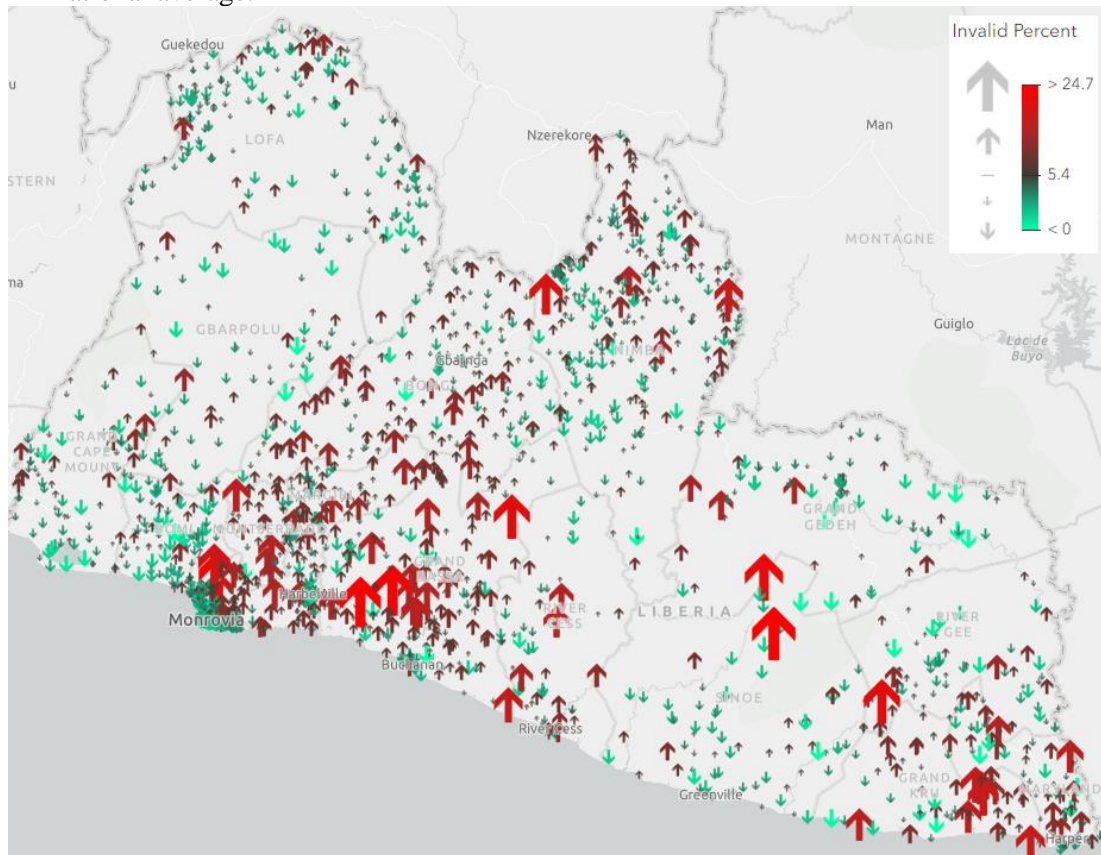


Figure 4: Map highlighting where the percentage of invalid votes was higher (red) or lower (green) in the 2017 House of Representatives elections. than the national average. The larger the arrow, the higher or lower the percentage.

There appears to be a significant rural-urban divide, whereby invalid vote percentages are more often higher on average in voting precincts serving rural areas than urban areas. This comes into sharp relief when examining the urban-rural divide in Montserrado: the further voting precincts are from Monrovia, the greater the percentage of invalid votes.

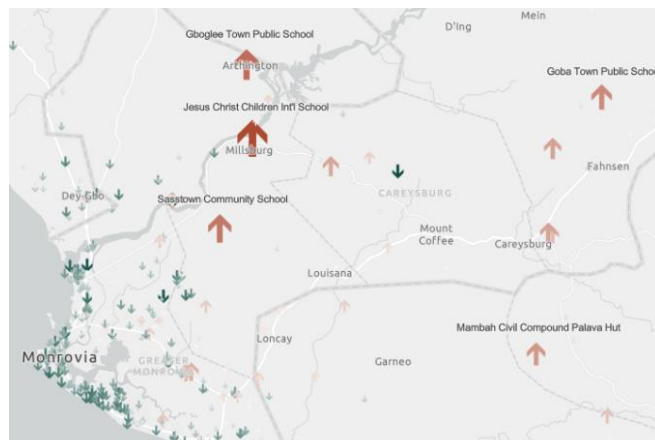


Figure 5

In the **2020 Senate elections**, invalid votes comprised 5.5% (approximately 1-in-20) of all ballots cast across all 73 districts. The percentage of invalid votes in individual electoral districts ranged from 2.28% (1-in-45±) to 9.62% (1-in-10±). In 41 districts, the share of invalid

votes was above the average; in 33 districts, above 6%; in 16 districts, above 7%; in six districts, above 8%; and in two districts, above 9%.

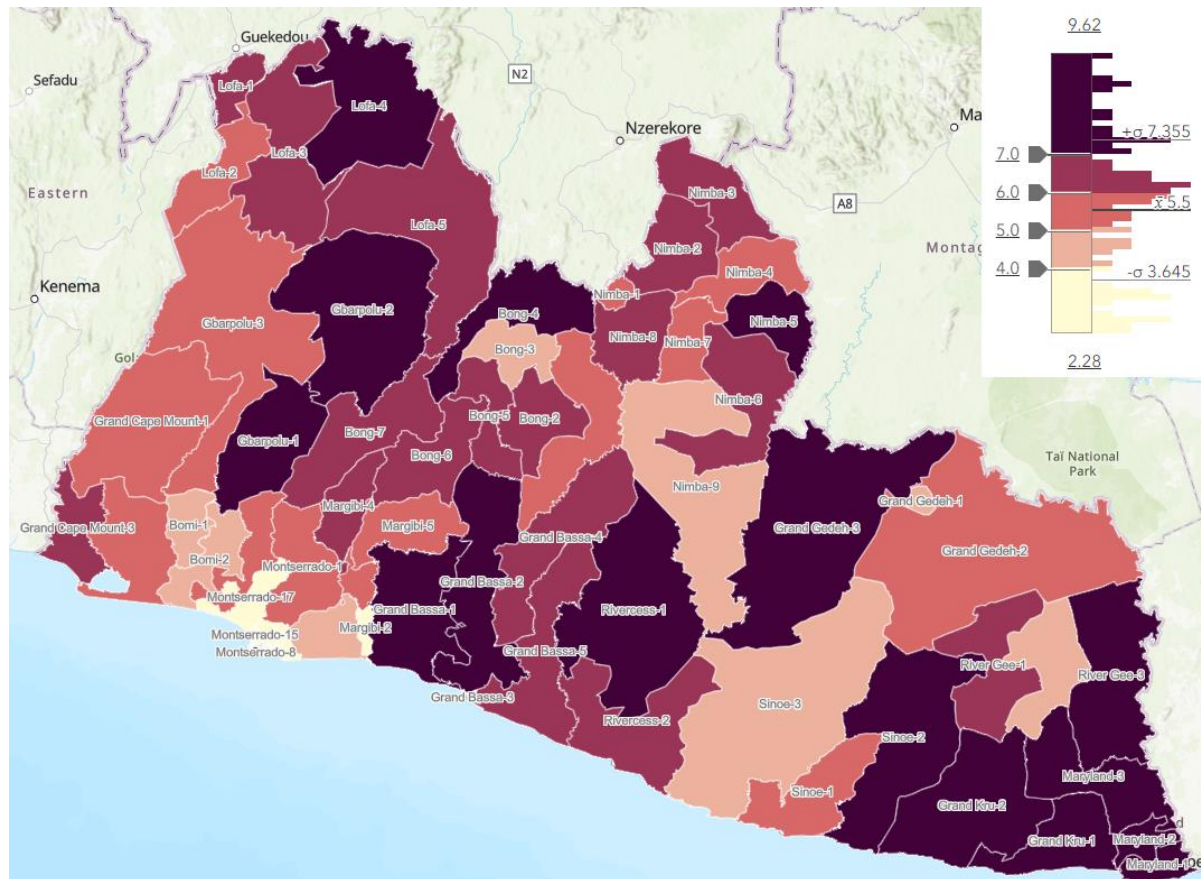


Figure 6: Map of invalid vote percentages across all 73 electoral districts in the 2020 Liberia Senate elections. Nationwide average was 5.5%. The darker the electoral district, the higher the percentage of invalid votes.

- Half of the districts with the highest percentage of invalid votes – Bong-4, Grand Bassa 1 & 2, Grand Kru-1, and Maryland-1 -- were the same as the 2017 House of Representatives Elections.
- All districts in Grand Kru (1 & 2) and Maryland (1, 2 & 3) were among districts with the highest invalid vote percentages (above 7%).
- In five of seven districts in Bong, and in four of five districts in both Grand Bassa and Lofa, the percentage of invalid votes was above 6%.
- 16 of 17 Montserrado districts were among districts with the lowest invalid vote percentages (below 4%).

At the voting precinct level, there were 241 precincts where the percent of invalid votes was greater than 10%; 65 precincts where the invalid vote percentage was above 15%; and 24 precincts above 20%. In four precincts, the number of invalid votes was greater than 30% -- and in one precinct, above 60%. The map below includes all 2,080 voting precincts where ballots were cast in the 2020 elections.

Figure 7

Electoral District	Invalid Percent	Invalid Rank
Sinoe-2	9.62	1
Maryland-2	9.01	2
Grand Kru-2	8.84	3
Grand Kru-1	8.83	4
Gbarpolu-2	8.73	5
Grand Bassa-1	8.09	6
Maryland-2	7.92	7
Gbarpolu-1	7.61	8
Grand Bassa-2	7.56	9
Bong-4	7.4	10

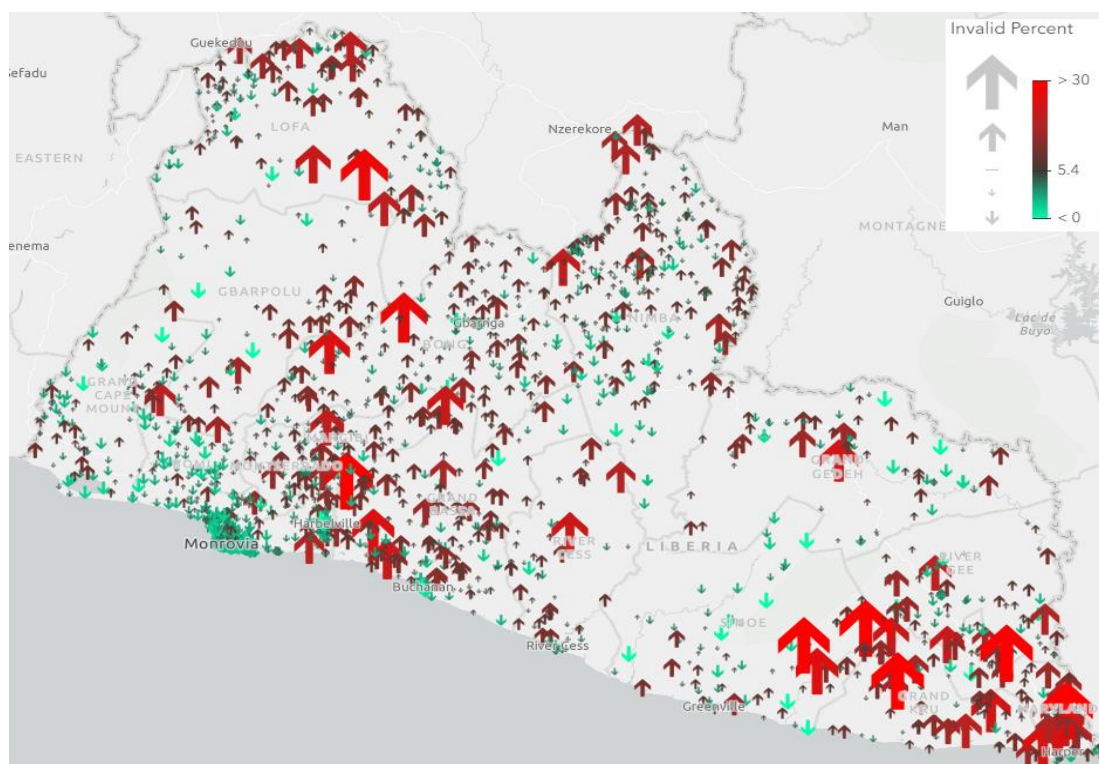


Figure 8: Map highlighting where the percentage of invalid votes in the 2020 Senate elections was higher (red) or lower (green) than the national average. The larger the arrow, the higher or lower the percentage.

Among the 158 voting precincts that witnessed an invalid vote percentage greater than 10% in 2017 House of Representatives Elections, 41 of those precincts also had invalid percentages above 10% in the 2020 Senate elections. Overall, more than 1-in-10 voters cast invalid votes in 359 (17.3% of all) voting precincts in the 2017 and 2020 elections.

A cluster analysis methodology was applied to identify trends across electoral districts in the **2017 House of Representatives** and **2020 Senate elections**. Based on analysis, 16 districts were identified as ‘high risk’ districts for invalid votes that merit dedicated attention in future elections.

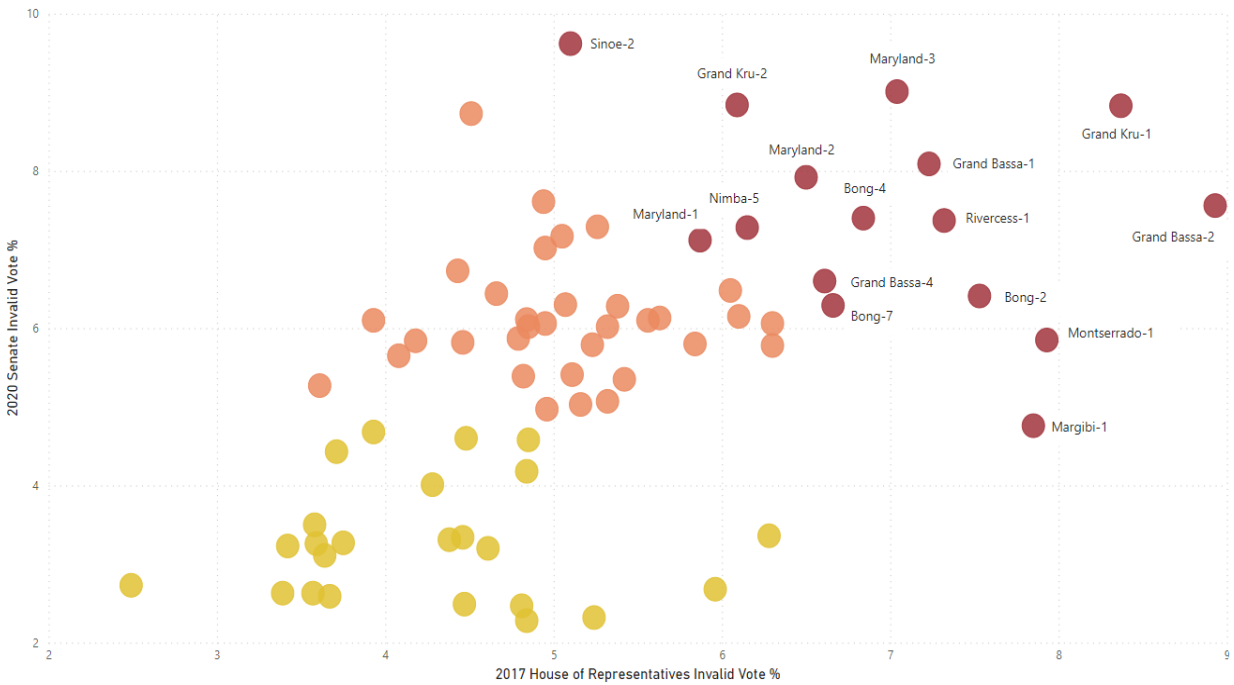


Figure 9: Scatterplot highlighting election districts clustered by patterns in invalid votes. The 16 red dots labeled with the names of election districts were identified as a 'high risk' cluster for invalid votes.

A simple analysis exploring invalid votes and rankings for invalid votes across all 73 electoral districts yielded similar results. The table below identifies the 17 districts with the highest aggregate percentage of invalid votes from the House of Representatives and Senate elections. This includes one district – Gbarpolu-2 -- identified via cluster analysis on the fringe of the 'medium' and 'high risk' clusters.

District	Invalid Pct Avg	Invalid Rank	2017 Invalid	2017 Rank	2020 Invalid	2020 Rank
Grand Kru-1	8.60	1	8.37	2	8.83	4
Grand Bassa-2	8.25	2	8.93	1	7.56	9
Maryland-3	8.03	3	7.04	8	9.01	2
Grand Bassa-1	7.66	4	7.23	7	8.09	6
Grand Kru-2	7.47	5	6.09	18	8.84	3
Sinoe-2	7.36	6	5.1	34	9.62	1
Rivercess-1	7.35	7	7.32	6	7.37	11
Maryland-2	7.21	8	6.5	12	7.92	7
Bong-4	7.12	9	6.84	9	7.4	10
Bong-2	6.97	10	7.53	5	6.41	21
Montserrado-1	6.89	11	7.93	3	5.85	35
Nimba-5	6.72	12	6.15	16	7.28	13
Gbarpolu-2	6.62	13	4.51	51	8.73	5
Grand Bassa-4	6.61	14	6.61	11	6.6	18
Maryland-1	6.50	15	5.87	21	7.12	15
Bong-7	6.48	16	6.66	10	6.29	23
Margibi-1	6.31	17	7.85	4	4.76	49

Figure 10

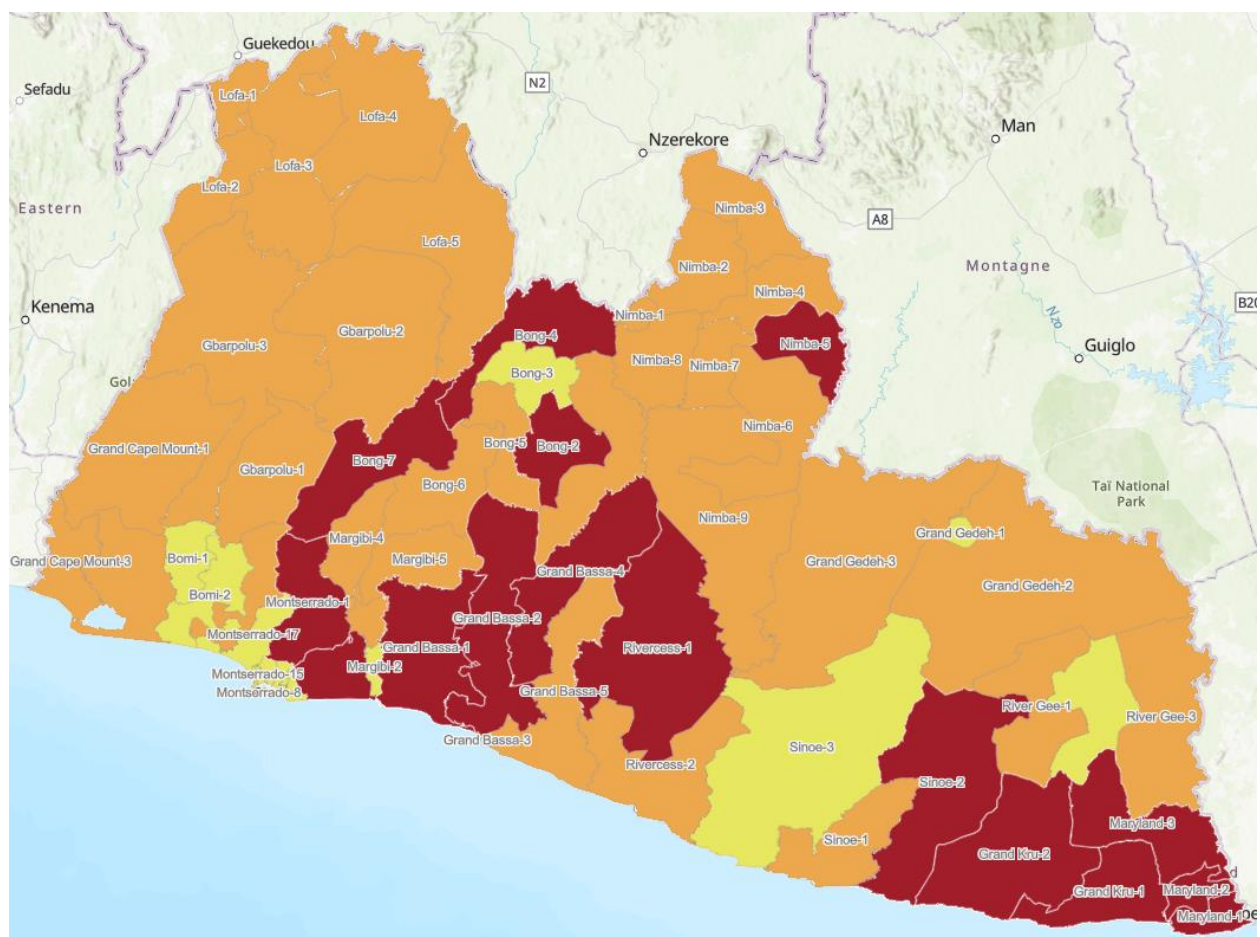


Figure 11: Map highlighting election districts clustered by patterns in invalid votes. The 16 election districts in red were identified as a 'high risk' cluster for invalid votes; orange as a 'medium risk' cluster; and yellow as a 'low risk' cluster.

High Risk		Medium Risk		Low Risk	
Bong-2	Margibi-1	Bomi-3	Lofa-5	Bomi-1	Montserrado-8
Bong-4	Maryland-1	Bong-1	Margibi-3	Bomi-2	Montserrado-9
Bong-7	Maryland-2	Bong-5	Margibi-4	Bong-3	Montserrado-10
Grand Bassa-1	Maryland-3	Bong-6	Margibi-5	Grand Bassa-3	Montserrado-11
Grand Bassa-2	Montserrado-1	Gbarpolu-1	Nimba-1	Grand Gedeh-1	Montserrado-12
Grand Bassa-4	Nimba-5	Gbarpolu-2	Nimba-2	Margibi-2	Montserrado-13
Grand Kru-1	Rivercess-1	Gbarpolu-3	Nimba-3	Montserrado-2	Montserrado-14
Grand Kru-2	Sinoe-2	Grand Bassa-5	Nimba-4	Montserrado-3	Montserrado-15
		Grand Cape Mount-1	Nimba-6	Montserrado-4	Montserrado-16
		Grand Cape Mount-2	Nimba-7	Montserrado-5	Montserrado-17
		Grand Cape Mount-3	Nimba-8	Montserrado-6	River Gee-2
		Grand Gedeh-2	Nimba-9	Montserrado-7	Sinoe-3
		Grand Gedeh-3	River Gee-1		
		Lofa-1	River Gee-3		
		Lofa-2	Rivercess-2		
		Lofa-3	Sinoe-1		
		Lofa-4			

Figure 12

A cluster analysis methodology was applied to identify trends across voting precincts in the 2017 House of Representatives and 2020 Senate elections. Based on this analysis, 209 precincts were identified as ‘high risk’ precincts for invalid votes that merit dedicated attention in future elections.

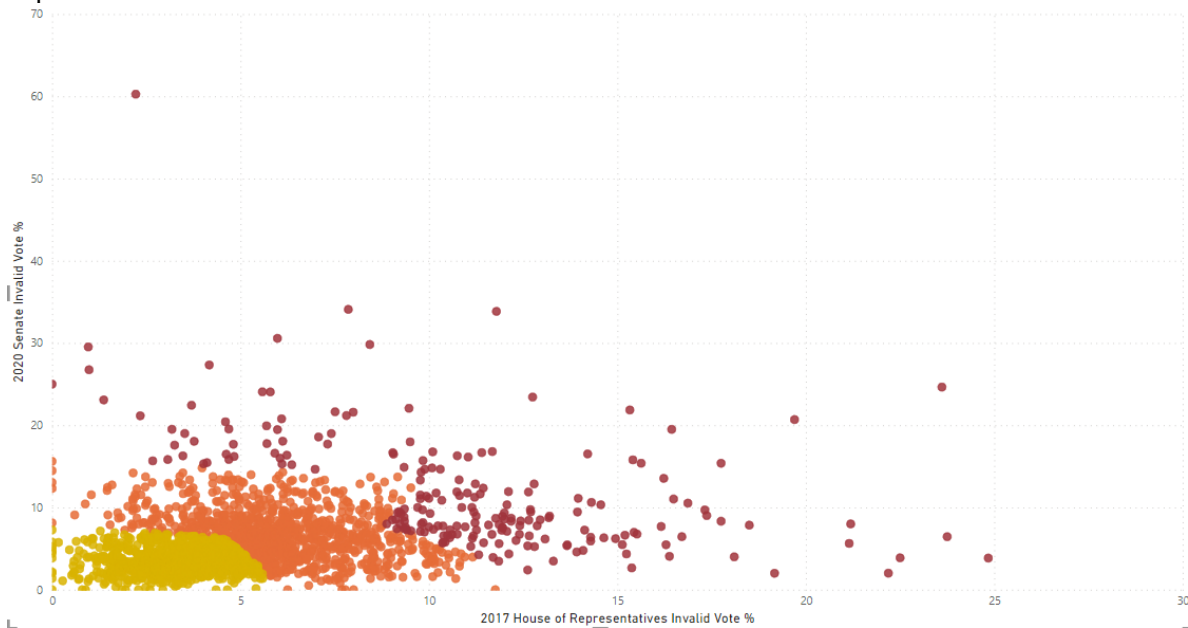


Figure 13: Scatterplot highlighting in red the distribution of voting precincts identified as a ‘high risk’ cluster for invalid votes.

High risk voting precincts that are at risk for high numbers of invalid ballots are found in 50 of 73 electoral districts. The map below highlights the spread of these precincts across the country.



Figure 14: Map highlighting the locations of the 209 voting precincts identified as ‘high risk’ precincts for invalid votes

Below is a breakdown of ‘high risk’ voting precincts per electoral district (high risk electoral districts are highlighted in bold). A full table of the 209 voting precincts identified as ‘high risk’ precincts is included as Annex A to this report.

District	Count		District	Count
Bomi-2	1		Lofa-5	3
Bomi-3	1		Margibi-1	6
Bong-1	1		Margibi-2	1
Bong-2	7		Margibi-3	2
Bong-4	2		Margibi-4	4
Bong-5	2		Margibi-5	5
Bong-6	3		Maryland-1	7
Bong-7	8		Maryland-2	6
Gbarpolu-1	1		Maryland-3	10
Gbarpolu-2	2		Montserrado-1	13
Gbarpolu-3	3		Montserrado-17	1
Grand Bassa-1	9		Montserrado-2	2
Grand Bassa-2	19		Nimba-2	5
Grand Bassa-4	8		Nimba-3	5
Grand Bassa-5	1		Nimba-4	3
Grand Cape Mount-1	3		Nimba-5	2
Grand Cape Mount-3	1		Nimba-6	4
Grand Gedeh-2	1		Nimba-7	2
Grand Gedeh-3	4		Nimba-9	2
Grand Kru-1	9		River Gee-1	2
Grand Kru-2	8		River Gee-3	5
Lofa-1	1		Rivercess-1	5
Lofa-2	1		Rivercess-2	2
Lofa-3	1		Sinoe-2	5
Lofa-4	7		Sinoe-3	3

Figure 15

In the **2022 Lofa Senate by-election**, invalid votes comprised 3.3% of ballots cast across five districts compared to 6.3% in the 2020 Senate election. In each district, the percentage of invalid votes decreased significantly in the 2022 by-election while voter turnout remained close to 2020 levels.

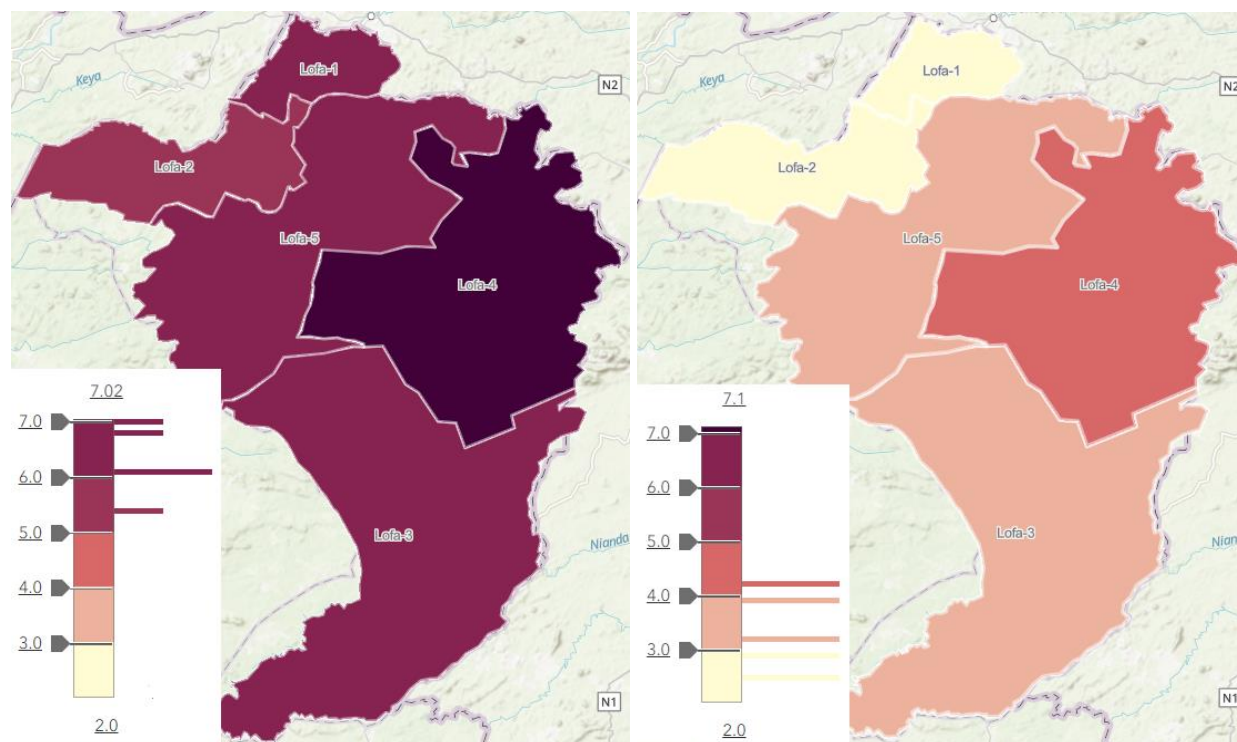


Figure 16: Map of invalid vote percentages across all five electoral districts in Lofa the 2020 Liberia Senate elections and 2022 Lofa Senate by-elections. In 2022, the percentage of invalid votes was 3.3% across districts compared to 6.3% in the 2020 elections.

According to the NEC, before the 2022 Lofa Senate by-election, it deployed CVE cells in each electoral district.. The difference was that the cells originated from each district (local knowledge), composed of different demographics (women groups, CBO, persons with disabilities, youth). NEC implemented the cells with training and some logistic support from UNDP.

While it is not possible to establish a direct causal relationship between these activities and the reduction in invalid votes, it is possible that these activities may have had a positive effect.

Electoral District	2020 Turnout Pct	2022 Turnout Pct	2020 Invalid Pct	2022 Invalid Pct
Lofa-1	40.22	36.67	6.10	2.87
Lofa-2	30.85	26.96	5.39	2.47
Lofa-3	45.55	41.36	6.11	3.22
Lofa-4	33.75	29.96	7.02	4.19
Lofa-5	35.41	34.46	6.73	3.89

Figure 17

In the **2020 Constitutional Referendum**, invalid votes comprised more than half (52.2%) of all ballots cast across all 73 districts. The percentage of invalid votes in individual electoral districts ranged from 30.14% (1-in-3±) to 78.2% (4-in-5±). In 43 districts, the share of invalid votes outnumbered valid votes; in 26 districts, above 60%; and in two districts, above 70%.



Figure 18: Map of invalid vote percentages across all 73 electoral districts in the 2020 Liberia Referendum. Nationwide average was 52.2%. The darker the electoral district, the higher the percentage of invalid votes.

- Half of the districts with the highest percentage of invalid votes – Bong-4, Gbarpolu 1 & 2, Maryland-3, and Rivercess-1 – were among the same as the 2017 House of Representatives or 2020 Senate Elections.
- In six of seven districts in Bong, and three of five districts in Grand Bassa, the percentage of invalid votes was above 60%.
- 16 of 17 Montserrado districts were among districts with the lowest invalid vote percentages (below 40%); Montserrado-1 was an outlier (50%+).
- In Gbarpolu & Rivercess there was at least twice as many invalid votes than the valid votes
- In only three counties – Grand Gedeh, Lofa & Montserrado -- was the percentage of valid votes greater than the percentage of invalid votes.

Electoral District	Invalid Percent	Invalid Rank
Bong-4	78.20	1
Gbarpolu-3	70.97	2
Gbarpolu-1	69.56	3
Bong-6	68.96	4
Bong-5	68.86	5
Rivercess-1	68.37	6
Maryland-3	66.12	7
Nimba-4	65.92	8
Rivercess-2	65.37	9
Gbarpolu-2	65.15	10

Figure 19

Voting precinct-level results data is not available for the 2020 Referendum. Results data disaggregated by referendum proposition question shows that the number of invalid votes was greater than the number of valid votes (both yes and no combined) for seven of eight questions. For only one question (4), the percentage of valid votes outnumbered invalid votes. For question 3, invalid votes outnumbered valid votes by more than 100,000 ballots.

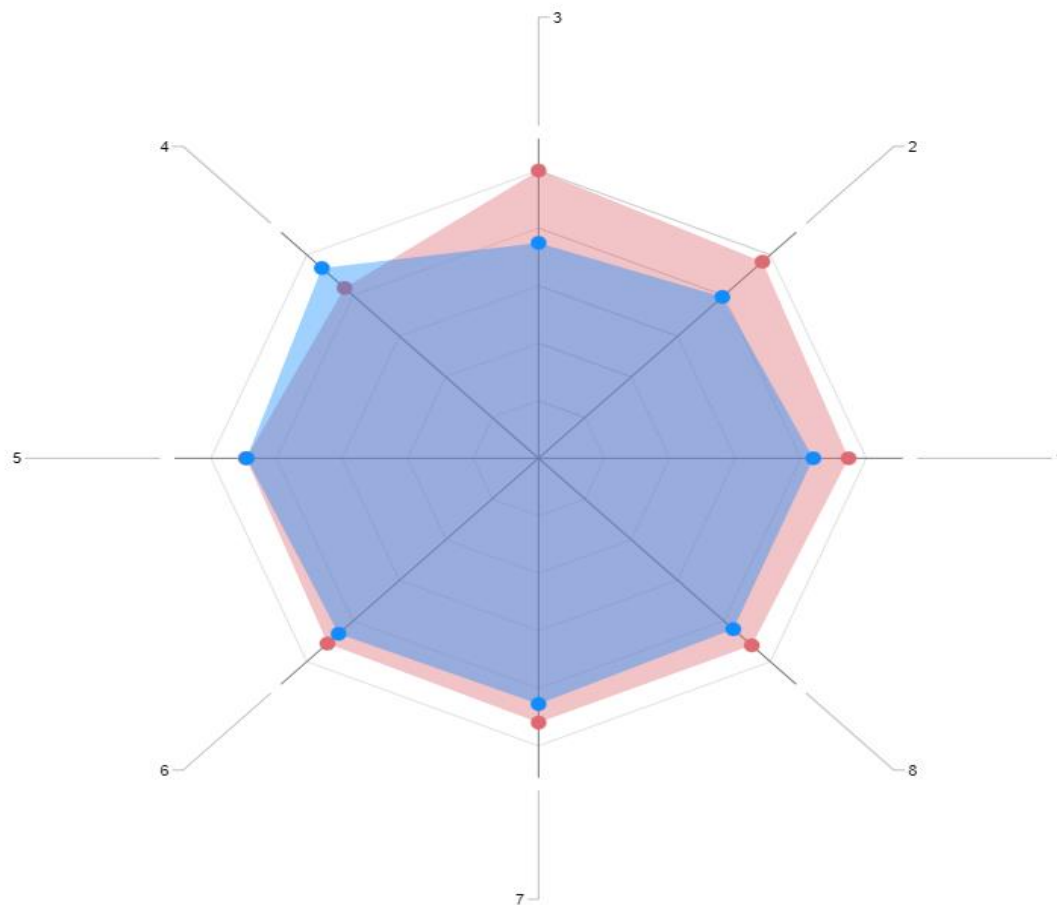


Figure 20: Radar chart highlighting valid and invalid votes by proposition question in the 2020 Referendum. Valid votes are highlighted in blue while invalid votes are highlighted in red.

#	Question	Valid Votes	Invalid Votes	Total Votes	Invalid Pct
1	Inalienability of citizenship of natural born Liberians, dual citizenship	392831	437170	830001	52.67%
2	Change in date of election	373606	456785	830391	55.01%
3	Shortened time for NEC to hear complaints	352136	478265	830401	57.59%
4	Reduction of term of Office of President & Vice President	437860	391951	829811	47.23%
5	Reduction of term of Senators	414441	415694	830135	50.08%
6	Reduction of term of Office of President Pro Tempore	403751	426399	830150	51.36%
7	Reduction of term of Office of Representative	400046	430188	830234	51.82%
8	Reduction of term of Office of Speaker & Depute Speaker	399570	430683	830253	51.87%

Figure 21

NEC Invalid Vote Analysis

In September 2022, The NEC Monitoring & Evaluation (M&E) Section produced a report analyzing invalid votes in the 2020 Senate Elections and Referendum from 13 of 15 counties (Lofa & Grand Cape Mount were excluded due ongoing legal disputes). Four teams of M&E analysts selected 11,098 invalid ballots from the 2020 Senate elections and 834,002 invalid ballots from the 2020 referendum.

According to NEC M&E Analysis, 52.80% of invalid votes in the 2020 Senate Election may be considered ‘intentionally’ invalid votes, i.e., ballots with either no marking or profanity. The remaining 47.20% may be considered votes that were invalidated due to voter or official ‘error’, i.e., double marking, multiple marking, unclear intention, personal information on the ballot, or other error; interestingly, the analysis found that 1.18% of ballots were ‘valid’ votes deemed invalid by election officials in error.

Category	Percent	Type
Intentional	52.80%	No Marking, Profanity
Error – Marking	41.16%	Double Marking, Multiple Marking, Unclear Intention
Error – Personal	4.37%	Contains Name, Signature or Phone Number
Error - Official	1.18%	Valid Votes Deemed Invalid
Other	0.49%	NA

Figure 22

Consequently, nearly half of invalid votes in the 2020 Senate Election were attributable to ‘avoidable’ voter or official errors that could be reduced with better voter education and election official training.

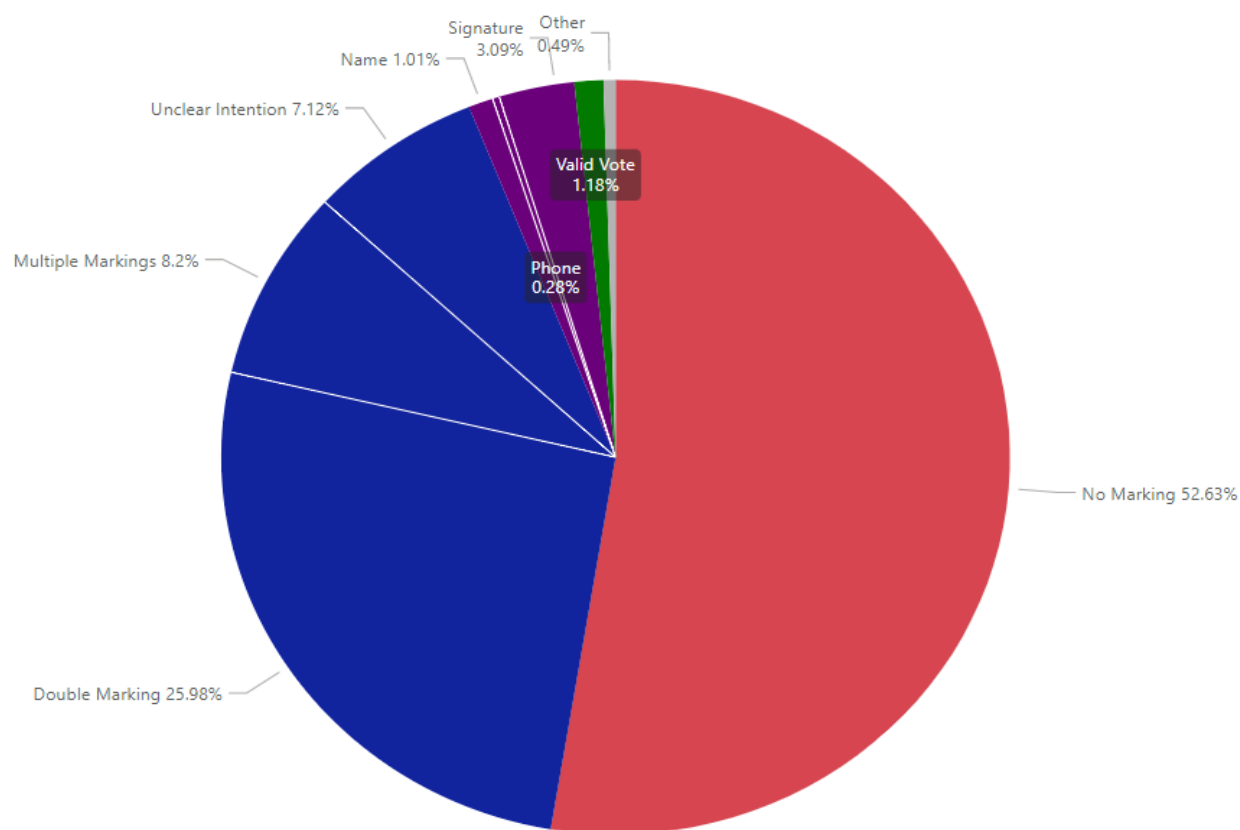


Figure 23: Pie chart of invalid votes in 2020 Senate Election by ‘Intentional’, ‘Error - Marking’, ‘Error – Personal’, ‘Error – Official’ and ‘Other’ categorizations. Roughly half of votes were invalidated due to ‘avoidable’ voter or election official errors.

In contrast with the 2020 Senate Election, 89.51% of invalid votes in the 2020 Referendum may be considered ‘intentionally’ invalid votes. The overwhelming majority of invalid votes were ballots cast with no marking, indicating voter willingness to participate, but without expressing a clear choice. The second largest share of invalid votes (8.95%) were ballots that contained double marking, signifying that a voter ticked boxes for both ‘yes’ and ‘no’ options. Interestingly, the third largest share of invalid votes (0.23%) were valid votes deemed invalid in error by election officials during the counting process.

The disproportionately high percentage of votes invalidated due to no marking suggests that a lack of adequate knowledge of referendum questions, and in turn, a lack of preference, may be a significant factor. It may also suggest apathy or lack of interest in the referendum ballot questions as a factor.

Category	Percent	Type
Intentional	89.51%	No Marking, Profanity
Error - Marking	10.05%	Double Marking, Multiple Marking, Unclear Intention
Error - Personal	0.12%	Contains Name, Signature or Phone Number
Error - Official	0.23%	Valid Votes Deemed Invalid
Other	0.09%	NA

While the proportion of invalid votes in the 2020 Referendum was skewed by ballots with no marking, the actual invalid vote percentage was 52% in the Referendum (and 5.2% in the 2020 Senate Election). If the sample analyzed by the NEC M&E Section was representative, then roughly 5% of all votes cast in the Referendum - and 2.5% in the 2020 Senate Election – were invalid due to voter or official error.

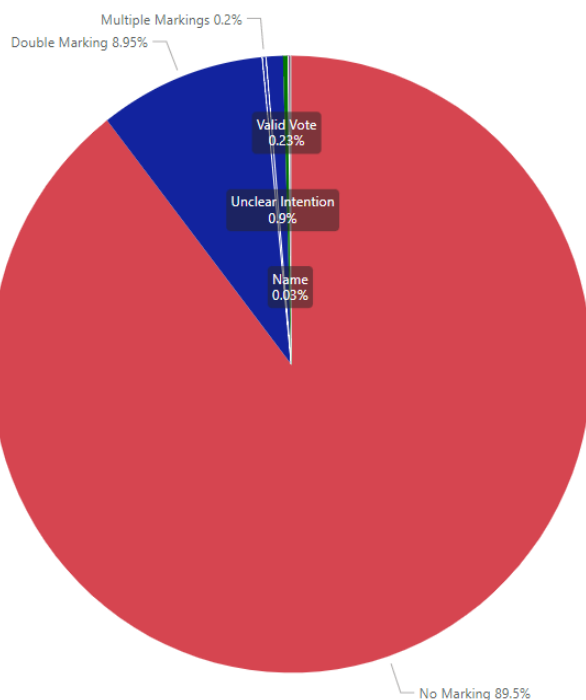


Figure 24: Pie chart of invalid votes in 2020 Referendum by ‘Intentional’, ‘Error - Marking’, ‘Error – Personal’, ‘Error – Official’ and ‘Other’ categorizations. Nearly 9-in-10 votes were invalidated due to voters intentionally casting blank ballots.

LEON Voter Survey Findings

2271 of 2399 survey respondents voted in one or more elections since 2017. Among voters, 80.16% (4-in-5) said they received information on how to vote. There was no significant discrepancy among male and female respondents in terms of receiving voter information.

Among respondents who received voter information, radio (76.92%) was by far cited as the most common medium. Flyers (40.93%), which presumably includes posters, was cited as the second most common medium followed by social media (28.13%), newspaper (27.53%), loudspeaker (21.81%), community drama (21.70%) and television (16.04%).

Across all media formats, the NEC (66.81%) was the most common voter information source cited by respondents. Parties or candidates (48.63%), civil society organizations (40.99%) and friends or family (34.89%) were also common sources of information. Less common sources included churches (14.89%), traditional leaders (11.21%), and town criers (9.18%).

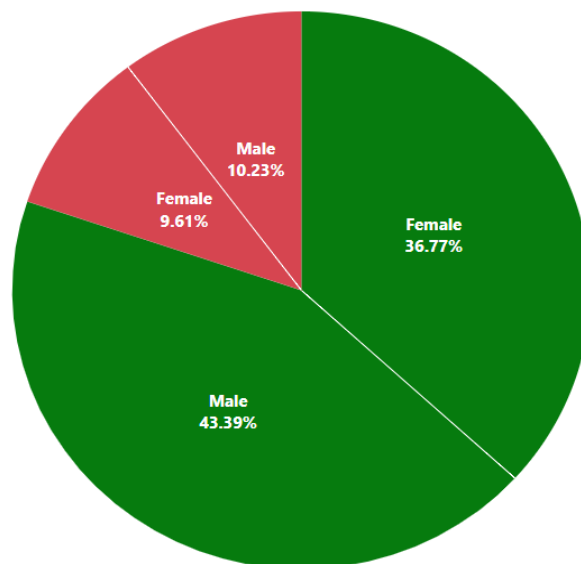


Figure 25: Pie chart highlighting in green the percentage of voters who said they received voter information, disaggregated by gender

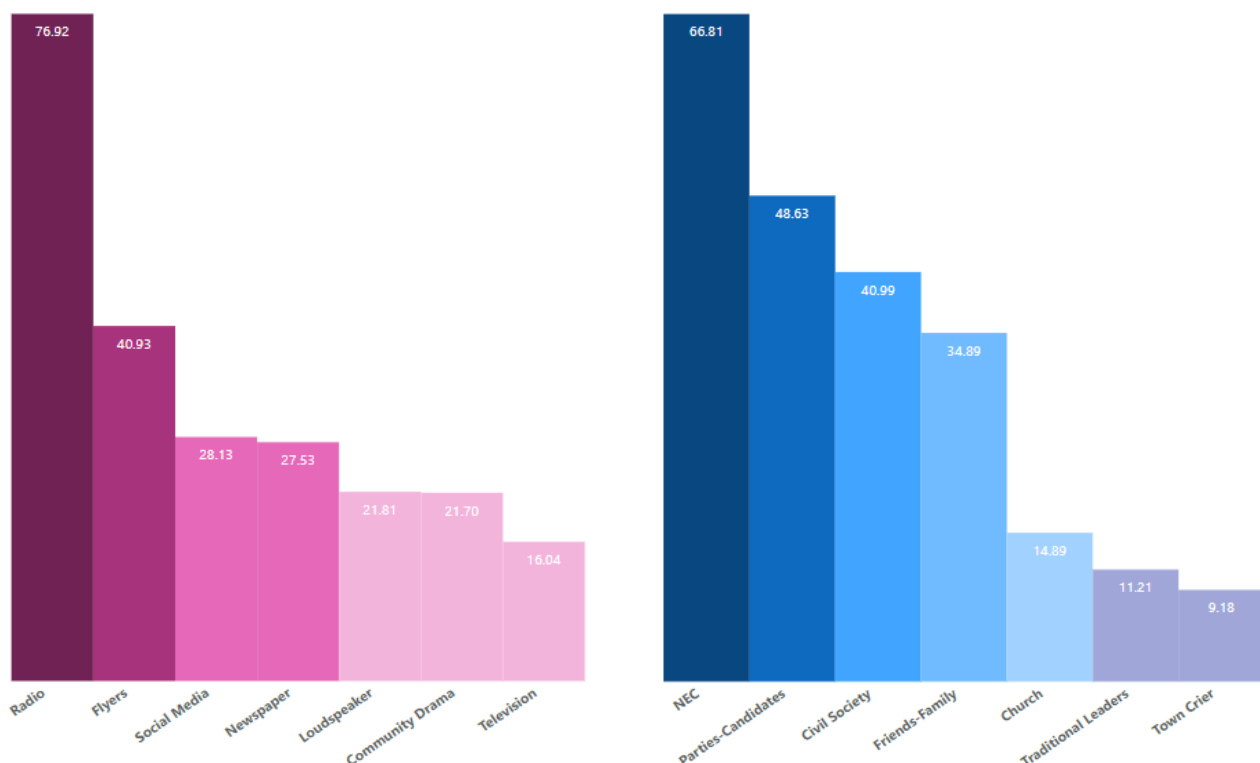


Figure 26: Bar Charts highlighting the common media (left) and sources (right) from which voters said they received voter information

Among respondents that said they had received voter information, the majority (70.63%) recalled that information on how to mark ballots was included. However, a significant number of respondents (29.37%) said that their ballot marking information was either not provided (6.12%) or they could not recall if it was

provided (23.25%). A similar percentage of respondents (71.07%) recalled that ballot marking information was also provided at the voting precinct by the ballot issuer; 28.93% said that such information was not provided by the ballot issuer (23.56%) or that they could not recall (5.37%).



Figure 27: Stacked column chart highlighting voter recollection of whether ballot marking information was provided in voter information received prior to the election (top) or at the voting precinct (bottom).

While most respondents recalled receiving information on ballot marking, when prompted to confirm whether specific actions would invalidate a vote, most voters responded incorrectly in all cases:

- Marks for multiple candidates: 43.68%
- Unclear intent: 41.00%
- Torn ballot: 25.23%
- No marks on ballot: 19.24%
- Voter name or signature: 16.86%
- Mark face of candidate choice: 9.29%

This suggests that past efforts to provide education on how to mark ballots, and conversely, what constitutes a ballot marking mistake, may be insufficient.

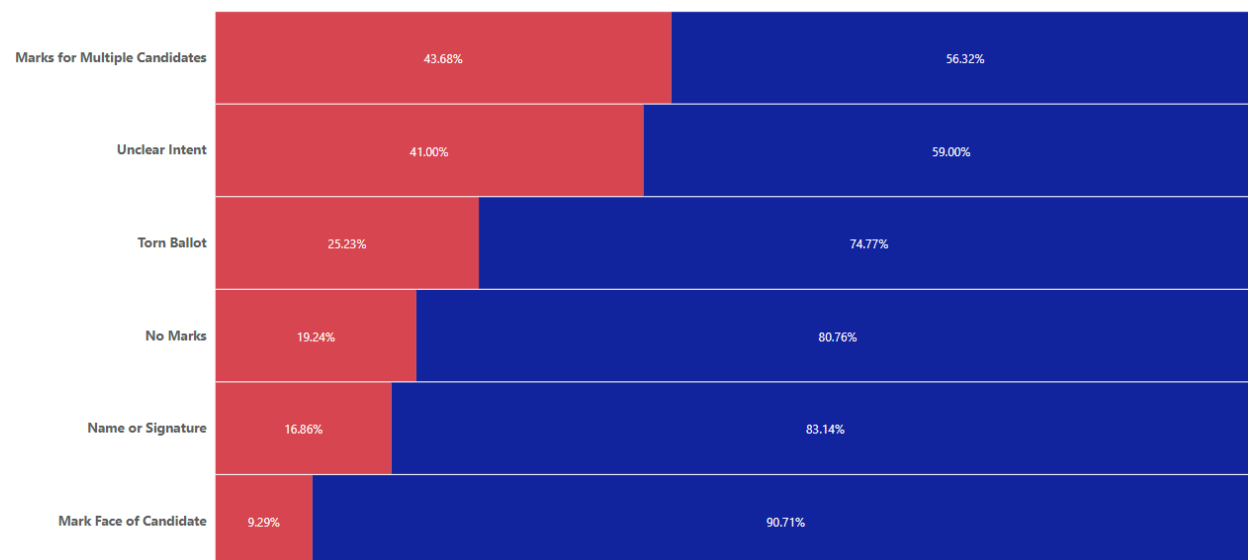


Figure 28: Stacked column chart highlighting voter responses to prompts of whether ballot marking actions or mistakes would result in an invalid vote. The proportion of responses correctly confirming “an action or mistake = invalid vote” are highlighted in red.

Corroborating the findings and analysis of the NEC M&E Section, a notable proportion of voters (12.37%) claimed that they had either knowingly or intentionally invalidated their vote in a prior election. Voters who had knowingly or intentionally invalidated their vote provided one or multiple explanations:

- Lack of Voter Education: 61.57%
- Angry with my Senator or Representative: 52.31%
- Couldn't Choose Between Two Candidates: 37.72%
- Couldn't Identify My Candidate: 26.33%

- Tore Ballot: 9.25%

The large proportion of voters who claimed that they invalidated their votes because they were angry with their Senator or Representative, indicates that there will always be some proportion of “intentionally” invalid votes; the percentage of voters that knowingly invalidated their votes due anger accounts for 7.62% of all voter respondents. The proportions of voters who invalidated votes because couldn’t choose between, or identify chosen, candidates may also result in inevitable invalid votes.

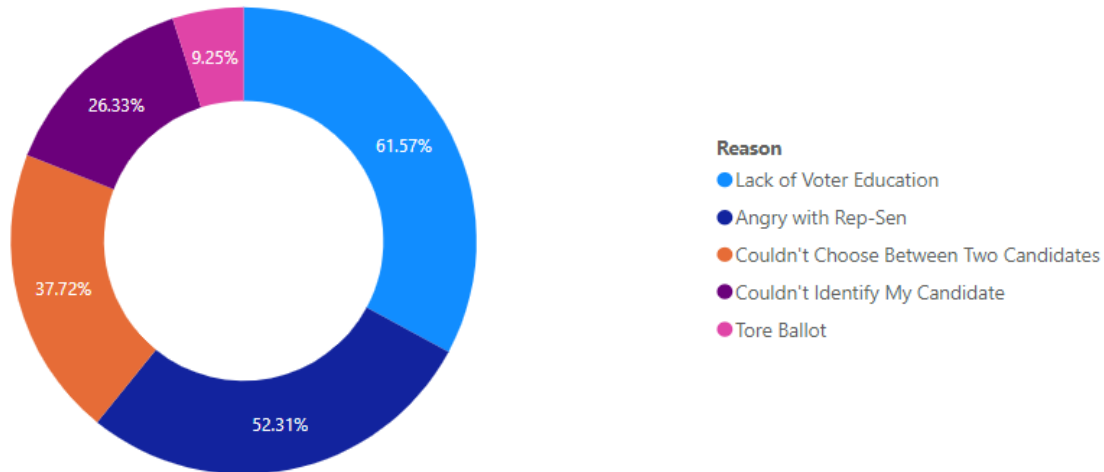


Figure 29: Donut chart highlighting reasons voters said they either knowingly or intentionally invalidated votes in previous election(s).

Even though some voters intentionally invalidate their votes due to anger - or confusion - regarding their choices, the desire among citizens to participate in elections remains extremely high. In total, 89.52% of voters in prior elections said they plan to vote in the next election for one of or multiple reasons:

- Vote for the president: 66.49%
- It's my right to vote: 58.39%
- Vote for representative / senator: 29.50%
- Vote for my country: 21.53%

This suggests that despite voter frustration with their elected officials or confusion regarding their choices, voter enthusiasm remains high, and voter apathy is not presently a major concern.

When voters were asked why they believed there were high numbers of invalid votes, they offered several reasons, chief among them a perceived lack of voter education (88.38%). They also felt that many invalid votes were attributable to voters marking more than one candidate (39.76%), not being able to identify candidates due to lack of picture clarity (29.11%), voters protesting or casting blank ballots (26.10%), or tearing their ballots when folding (11.54%).

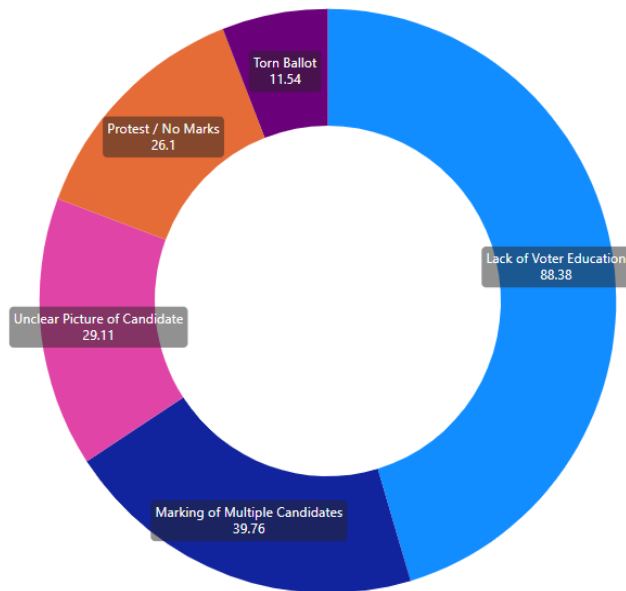


Figure 30: Donut highlighting respondent attribution of problems that result in high numbers of invalid votes.

To reduce the number of invalid votes in future elections, respondents recommended that voter education be improved (73.40%), poll workers be educated on ballot marking who in turn can educate voters (56.45%), that NEC ensure the right civil society organizations are recruited to conduct voter education (43.59%), and that ballot design is improved to improve clarity and understanding (39.15%).

In terms of specific aspects of voter education to be provided, respondents suggested where to mark ballots to ensure a vote is valid (56.14%), how to hold the ballot to avoid a stray mark from an inked finger from invalidating a ballot (52.49%), and how to fold the ballot to prevent tearing (43.24%).

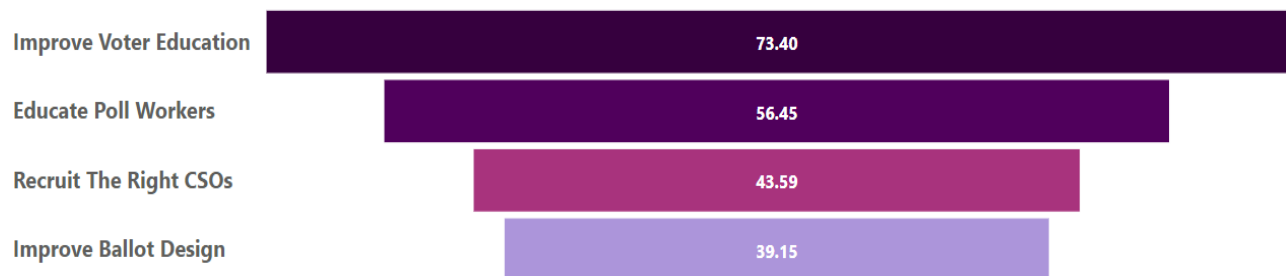


Figure 31: Funnel chart highlighting voter recommendations for actions to reduce high numbers of invalid votes in future elections.

Conclusions & Recommendations

As evidenced by NEC M&E data and survey findings, there is an inevitable share of invalid votes cast intentionally by voters who wish to participate, albeit in protest. However, efforts to reduce avoidable mistakes that result in invalid votes should be undertaken to ensure all voters who exercise their choice have their voices heard. As identified through analysis of election results data from previous elections, there are 16 districts and 209 voting precincts where invalid votes are high and particular attention is warranted to reduce the number of invalid votes in future elections. Per voter survey findings and insights from experience drawn during the 2022 Lofa Senate By-Elections, efforts that may reduce ballot marking mistakes, notably increased and more intensive voter education, may be effective to that end.

In the spirit of cooperation and in the interest of ensuring credible and inclusive elections, LEON offers the following recommendations to electoral stakeholders in advance of future elections:

To National Election Commission

- Increase emphasis on ballot marking instruction as part of voter education efforts ahead of the 2023 elections, with deliberate effort on ensuring voters understand what constitutes an invalid ballot to reduce avoidable marking errors
- Dedicate time and resources to ensure intensive voter education efforts with emphasis on ballot marking instruction are implemented in the 16 electoral districts identified as ‘high risk’ districts for invalid ballots, notably in rural areas of districts
- Ensure poll workers who issue ballots provide ballot marking instruction to voters in voting precincts to reduce marking errors, with deliberate effort on ensuring such instruction is provided at the 209 voting precincts identified as ‘high risk’ precincts.
- Ensure poll workers are trained properly on what constitutes a valid or invalid ballots to reduce official errors that result in wrongful invalidation during the counting process
- Recruit and allocate resources to civil society organizations based in counties with high-risk districts to implement voter education activities in those areas the degree possible
- Revise counting forms to disaggregate invalid votes by type to discern intention and error in ballot marking to facilitate further remediation efforts ahead of future elections
- NEC, political parties, CSOs, and CBOs embedded in all voter education a clear explanation of accurate ballot marking in local languages.
- Continual explanation of proper/valid ballot marking through local languages on the radio in these high-risk areas.
- Before the 2023 general elections, NEC must deploy CVE cells in each electoral district. The cells, as was the case in the Lofa Senatorial by-election, must originate from each district (local knowledge), compose of different demographics (women groups, CBOs, person with disability, youths). NEC must leverage on the support from UNDP election project, as was the case in the Lofa Senatorial by-election.

To Civil Society Organizations

- Prioritize ballot marking instruction as part of voter education efforts, with particular emphasis on leveraging sample ballots provided by NEC
- Ensure that rural areas, particularly in high-risk districts, are adequately covered as part of non-partisan voter education, outreach, and mobilization activities
- In addition to the recruitment of qualified CSOs, qualified SBOs, and tribal or traditional leaders in towns or communities of “high risks” precincts also be recruited and trained to carry out voter education on valid/proper making through local languages.
- Voter education on rightful/accurate ballot making as indicated by the report be done more using tribal/local languages in these areas by CBOs, CSOs, parties, and NEC.

To Political Parties & Candidates

- Include ballot marking instruction as part of partisan campaign voter engagement, outreach, and mobilization activities to ensure that ballots cast by supporters are valid votes.

Annexures

Annexure A: High Risk Voting Precincts for Invalid Votes

Precinct	District	Name	Town	
3039	Bomi-2	Gbakendu Palava Hut	Gbakendu	
3053	Bomi-3	Gongweh Palava Hut	Gongweh	
6174	Bong-1	Fohr Palava Hut	Fohr	
6007	Bong-2	Tolomanai Palava Hut	Tolomanai	
6021	Bong-2	Garmoquellah Palava Hut	Garmoquellah	
6062	Bong-2	Jankpalah Palava Hut	Jankpalah	
6082	Bong-2	Leleh Public School	Leleh	
6110	Bong-2	Foloblah palava Hut	Foloblah	
6128	Bong-2	Nyeawon Palava Hut	Nyeawon Town	
6173	Bong-2	Dorwuta Palava Hut	Dorwuta	
6034	Bong-4	Feetuah Palava Hut	Feetuah	
6077	Bong-4	Laryea Public School	Laryea	
6040	Bong-5	Tamatee-ta Palava Hut	Tamatee-Ta	
6164	Bong-5	Jorkai Palava Hut	Jorkai Town	
6027	Bong-6	Teaslay Mission	Teaslay Mission	
6099	Bong-6	SawyeaPolu palava Hut	SawyeaPolu Town	
6165	Bong-6	Joe Wow Palava Hut	Gbayila Ta	
6030	Bong-7	Wumai Palava Hut	Wumai Town	
6070	Bong-7	Kelebei Public School	Kelebei	
6076	Bong-7	Winnie Ta Public School	Winnie Ta	
6095	Bong-7	Popota Public School	Popota	
6120	Bong-7	Volomeni Palava Hut	Volomeni Town	
6126	Bong-7	Yarbayeh Public School	Yarbayeh Town	
6134	Bong-7	Gbalala Clinic	Gbalala Town	
6168	Bong-7	Mark Gbassay Public School	Mark Gbassay Town	
45068	Gbarpolu-1	Under Wear Palava Hut	Under Wear Town	
45021	Gbarpolu-2	Gelekpala School	Gelekpasu	
45057	Gbarpolu-2	Nyailowai Town Hall	Nyailowai	
45001	Gbarpolu-3	Ballah Town Public School	Ballah Bassa Town	
45007	Gbarpolu-3	Beatoe Town	Beatoe	
45026	Gbarpolu-3	Galahun Town Hall	Galahun	
12014	Grand Cape Mount-1	Begondo Public School	Begondo	
12015	Grand Cape Mount-1	Gold Camp Public School	Gold Camp (A)	
12071	Grand Cape Mount-1	Lofa Congo Town Public School	Lofa Congo Town	
12034	Grand Cape Mount-3	Gondama Town Hall	Gondama	
15068	Grand Gedeh-2	Jaibo Town Elementary School,	Â Jaibo Town	

Precinct	District	Name	Town	
15006	Grand Gedeh-3	Bodee Public School,	Â Bodee	
15010	Grand Gedeh-3	Chayee Public School,	Chayee	
15011	Grand Gedeh-3	Dayblay Elem. School,	Dayblay	
15044	Grand Gedeh-3	Tojallah Elem. School	Tojallah	
18008	Grand Kru-1	Newaken Public School	Newaken	
18018	Grand Kru-1	Juduken Public School	Juduken (Weteken)	
18019	Grand Kru-1	St. Banabas Catholic Elem. & Jr. High	Gbarken(Wedabo)	
18020	Grand Kru-1	Wedabo Beach Public School	Wedabo Beach	
18021	Grand Kru-1	Degblahken Public School	Degblahken	
18026	Grand Kru-1	Gbatao Jr. High School	Klofueh	
18027	Grand Kru-1	Blebo Public School	Blebo	
18052	Grand Kru-1	Pennuken Jr. High School	Dougbo	
18057	Grand Kru-1	Gblabloken Public School	Gblabloken	
18003	Grand Kru-2	Doeswen Public School	Doeswen	
18006	Grand Kru-2	Betu Public School	Betu City	
18022	Grand Kru-2	Parluken Public School	Parluken	
18029	Grand Kru-2	Boluwin Town Hall	Boluwin	
18032	Grand Kru-2	Wropluken Public School	Wropluken	
18043	Grand Kru-2	John S. Wokreh Elementary School	Woloken#2	
18045	Grand Kru-2	Sartiken Town Hall	Sartiken	
18047	Grand Kru-2	Weayan Town Hall	Weayan Town	
9010	Grand Bassa-1	Bokay Town Palava Hut	Boka	
9011	Grand Bassa-1	Jeko Town Palava Hut	Â Jeko	
9055	Grand Bassa-1	Neegeewein Elem. School	Neegeewein	
9062	Grand Bassa-1	Chuah Viankon Town Palava Hut	Chuah Viankon	
9083	Grand Bassa-1	Gurlee Town Palava Hut	Gurlee	
9101	Grand Bassa-1	Norr Town Palava Hut	Â Norr Town	
9122	Grand Bassa-1	Zuzohn Palava Hut	Zuzohn	
9181	Grand Bassa-1	Gowin Palava Hut	Gowin	
9192	Grand Bassa-1	Saine Town Palava Hut	Saine	
9005	Grand Bassa-2	Albert Town Palava Hut	Â Albert	
9006	Grand Bassa-2	Charley Gio Town Palava Hut	Charley Gio	
9025	Grand Bassa-2	Garneo Town Palava Hut	Garneo	
9031	Grand Bassa-2	Gbanah Town Palava Hut	Gbanah	
9035	Grand Bassa-2	Gborgar Town Palava Hut	Gborgar	
9036	Grand Bassa-2	Bohn Town Palava Hut	Bohn	
9058	Grand Bassa-2	Johnny Diggs Town Palava Hut	Johnny Diggs	
9063	Grand Bassa-2	Womia Town Palava Hut	Womia	
9066	Grand Bassa-2	Ballahwein Town Palava Hut	Â Ballahwein	
9068	Grand Bassa-2	Civil Compound # 2 Admin Building	Civil Compound	
9070	Grand Bassa-2	S.D.A Mission School Building	S.D.A Mission	
9073	Grand Bassa-2	Zahn Town Palava Hut	Zahn	
9074	Grand Bassa-2	Palapolu Town Palava Hut	Palapolu	

Precinct	District	Name	Town	
9075	Grand Bassa-2	Daniel Town Palava Hut	Daniel	
9164	Grand Bassa-2	Gaye Gbokone Town Palava Hut	Gonnigar	
9167	Grand Bassa-2	Tutu Town School Building	Tutu	
9171	Grand Bassa-2	Bowine Town School Building	Bowine	
9172	Grand Bassa-2	Juah Town School Building	Juah	
9190	Grand Bassa-2	Kamatoe Palava Hut	Kamatoe	
9017	Grand Bassa-4	Isaac Anjuah Town Palava Hut	Isaac Anjuah	
9018	Grand Bassa-4	Timbo Town Palava Hu	Timbo Giah	
9020	Grand Bassa-4	Borbor Town Palava Hut	Borbor	
9026	Grand Bassa-4	Sam Town Palava Hut	Sam	
9049	Grand Bassa-4	Charles Johnson Town Palava Hut	Charles Johnson	
9050	Grand Bassa-4	Sawthrow Town Palava Hut	Sawthrow	
9096	Grand Bassa-4	Saynwrane Town Palava Hut	Saynwrane	
9177	Grand Bassa-4	Â Nain Camp Elementarty School	Â Nain Camp	
9034	Grand Bassa-5	Boe-Wee Palava Hut	Boe-Wee	
21004	Lofa-1	Bandenin Melimu Town Hall	Bandenin Melimu	
21052	Lofa-2	Kpagamai Town Hall	Kpagamai	
21093	Lofa-3	Tawalahun Town Hall	Tawalahun	
21006	Lofa-4	Barkedu Public School	Barkedu	
21017	Lofa-4	Dayzabah Public School	Dayzabah	
21041	Lofa-4	Betjama Public School	Betjama	
21107	Lofa-4	Marverkonnedu Public School	Marverkonnedu	
21108	Lofa-4	Gbegbedu Public School	Gbegbedu	
21146	Lofa-4	Mamiekonnede Public School	MAMIEKONNEDU	
21150	Lofa-4	Barwen Town Hall	Barwen	
21001	Lofa-5	Balagwalazu Public School	Balagwalazu	
21105	Lofa-5	Lobobah Town Hall	Lobobah	
21143	Lofa-5	Vasala Lutheran Hall	VASALA LUTHERIA HALL	
24031	Margibi-1	Browne Town Palava Hut	Browne Town	
24036	Margibi-1	Mambah Civil Compound Palava Hut	Â Mambah Civil Compound	
24050	Margibi-1	Zeor Palava Hut,	Â Zeor	
24059	Margibi-1	Joezohn Palava Hut	Joezohn - Loongaye	
24102	Margibi-1	Lloydsville Public School	Lloydsville / Zeechugb	
24104	Margibi-1	J.P. Mitchell School	Scheiffelin	
24077	Margibi-2	Bethel World Outreach Church	Bethel World Outreach	
24024	Margibi-3	Division 31 Camp 3 Office	Division 31 Camp 3	
24129	Margibi-3	Gborfela Public School	Gborfela	
24009	Margibi-4	Brown Farm Palava Hut	Brown Farm	
24037	Margibi-4	J.D. Lassana Farm Palava Hut	J.D. Lassana Farm	
24041	Margibi-4	Gwepolosue Palava Hut	Gwepolosue	
24057	Margibi-4	Sakey Town Palava Hut	KPINKPAH FOLO	
24004	Margibi-5	Nuah Town Palava Hut	Nuah Town	
24005	Margibi-5	Behn Gbowron Town Palava Hut	Behn Gbowron	

Precinct	District	Name	Town	
24014	Margibi-5	Vayema Palava Hut	Vayema	
24066	Margibi-5	Zeo Town Palava Hut	Zeo	
24073	Margibi-5	Lonfay Palava Hut	Lonfay	
27001	Maryland-1	Barraken Elem. School	Barraken	
27004	Maryland-1	Cavalla Big Town Public School	Cavalla Big Town	
27005	Maryland-1	Fish Town Public School	Fish Town	
27006	Maryland-1	Fodoken Town Hall	Fodoken	
27018	Maryland-1	Little Wlebo Elem. School	Little Wlebo # 1	
27021	Maryland-1	Pedebo Elem. School	Pedebo	
27029	Maryland-1	Mission Town Hall	Mission Town	
27008	Maryland-2	Gbeken Town Hall	Gbeken Main Town	
27013	Maryland-2	CRC High School	Gedetarbo	
27014	Maryland-2	Division 5 Camp 5 Palava Hut	Division 5 Camp 5	
27020	Maryland-2	Old Sodoken Town Hall	Old Sodoken	
27031	Maryland-2	Libsuko Community School	Libsuko Factory	
27034	Maryland-2	Witchoken Elem. School	Witchoken Mission	
27048	Maryland-3	Gbiabosuken Town Hall	Gbiabosuken	
27057	Maryland-3	Kliliken Town Hall	Kliliken	
27058	Maryland-3	Yobloken Town Hall	Yobloken Town	
27059	Maryland-3	Martuken Town Hall	Martuken	
27060	Maryland-3	Sampson Goe Elem. School	Gbawiliken Cavalla	
27062	Maryland-3	Yederobo Elem. School	Yederobo	
27067	Maryland-3	Tarworken Town Hall	Tarworken	
27072	Maryland-3	Wlowien Town Hall	Wlowien	
27079	Maryland-3	Rock Town Kunorkudi Public School	Rock Town Kunorkudi	
27080	Maryland-3	Yedegboken Public School	Yedegboken Town	
30002	Montserrado-1	Goba Town Public School	Goba	
30178	Montserrado-1	Kingsville Public School	Central Kingsville	
30179	Montserrado-1	15th Gate Community School	15th Gate community	
30195	Montserrado-1	Tarquoi Town Palava Hut	Tarquoi	
30196	Montserrado-1	Koon Town Public School	Koon	
30197	Montserrado-1	Manamu Town Palava Hut	Manamu	
30270	Montserrado-1	Sasstown Community School	Sasstown	
30329	Montserrado-1	New Land IDP Camp Community Hall	Upper Careysburg	
30333	Montserrado-1	Yeakpai Town Public School	Yeakpai Town/Todee	
30334	Montserrado-1	Yeagbah Town Public School	Yeagbah Town/Todee	
30335	Montserrado-1	Nyehn Town Public School	Nyehn Town/Todee	
30433	Montserrado-1	Jesus Christ Children Int'l School	Central White Plains	
30435	Montserrado-1	Yarkpazuah Palava Hut	Yarkpazuah Town	
30230	Montserrado-2	Ma Bendu I. Sheriff School	Zinc Factory	
30231	Montserrado-2	Muslim Solidarity Arabic & English School	Zinc Factory	
30456	Montserrado-17	Gboglee Town Public School	Gboglee - Upper Arthington	
33041	Nimba-2	Gbedin Public School	Gbedin Camp #3	

Precinct	District	Name	Town	
33124	Nimba-2	Mao Public School	Mao	
33155	Nimba-2	Suakarzue Public School	Suakarzue	
33203	Nimba-2	Zolowee Public School	Zolowee	
33244	Nimba-2	Boapea Public School	Boapea Town	
33012	Nimba-3	Beintonwin Public School	Beintonwin	
33021	Nimba-3	Bonla Public School	Bonla	
33035	Nimba-3	Duoplay Public School	Duoplay	
33136	Nimba-3	New Yekepa Public School	New Yekepa	
33242	Nimba-3	KinNon Public School	KinNon Town	
33059	Nimba-4	Gblanlay Public School	Gblanlay	
33105	Nimba-4	Kpaglay Public School	Kpaglay	
33213	Nimba-4	Zuoplay Public School	Zuoplay	
33015	Nimba-5	Blemieplay Public School	Blemieplay	
33259	Nimba-5	Bluntuo Palava Hut	Bluntuo	
33044	Nimba-6	Behwalay Public School	Behwalay	
33171	Nimba-6	Toweh Public School	Toweh	
33191	Nimba-6	Old Yourpea Public School	Old Yourpea	
33215	Nimba-6	Gbeletuo Public School	Gbeletuo	
33127	Nimba-7	Miaplay Bonnah Public School	Miaplay Bonnah	
33202	Nimba-7	Duowin Palava Hut	Duowin	
33129	Nimba-9	Nebornwen Palava Hut	Yillay	
33184	Nimba-9	Wontoe Public School	Wontoe	
36009	Rivercess-1	Neezoin School Building	Neezoin Town	
36010	Rivercess-1	Garpue Palava Hut	Garpue Town	
36020	Rivercess-1	Gleozohn Palava Hut	Gleozohn	
36022	Rivercess-1	Gorgor Church	Gorgor Town	
36046	Rivercess-1	Sand Beach Town	Sand Beach, Rivercess	
36016	Rivercess-2	ITI Town Hall	ITI	
36052	Rivercess-2	Gorzohn Public School	GORZOHN	
42001	River Gee-1	Cherboken Public School	Cheboken	
42038	River Gee-1	Gedeken Town Hall	Gedeken Town	
42006	River Gee-3	Yargbeken Public School	Yargbeken	
42025	River Gee-3	Tarwarken Public School	Tarwarken	
42045	River Gee-3	Woffiken Town Hall	Woffiken Town	
42047	River Gee-3	Wissetoken Town Hall	Wissetoken Town	
42055	River Gee-3	Karbuken Public School	Karbuken	
39014	Sinoe-2	Joplokpo Palava Hut	Joplokpo	
39031	Sinoe-2	Titien Public School	TITIYEN VILLAGE	
39054	Sinoe-2	Jarpuken Public School	Jarpuken	
39066	Sinoe-2	Bala Camp Club Hall	Bala Camp	
39067	Sinoe-2	Dodoiken Public School	Dordroken	
39020	Sinoe-3	Voogbadee Public School	Voogbadee	
39027	Sinoe-3	Baffu Camp Palava Hut	Baffu Camp	

Precinct	District	Name	Town
39078	Sinoe-3	New VRC House	Saydee Town

Annexure B: 2017 House of Representatives Elections Voting Precincts with 15%+ Invalid Votes

Among the 158 voting precincts where the invalid vote percentage was greater than 10%, 16 are in Grand Bassa-2; 9 are in Grand Kru-1; and 8 each are in Maryland-3 and Montserrado-1. The 32 voting precincts where the invalid vote percentage was greater than 15% cut across 19 electoral districts in 10 counties (see table below). Among the seven precincts where the percentage of invalid votes was greater than 20%, two are in Sinoe-3, three are in Grand Bassa -- in three different electoral districts.

District	Precinct	Name	Town	Invalid %
Sinoe-3	39078	New VRC House	Saydee Town	24.84
Grand Bassa-2	9006	Charley Gio Town Palava Hut	Charley Gio	23.75
Grand Bassa-1	9122	Zuzohn Palava Hut	Zuzohn	23.61
Montserrado-1	30433	Jesus Christ Children Int'l School	Central White Plains	22.5
Sinoe-3	39020	Voogbadee Public School	Voogbadee	22.19
Grand Bassa-5	9034	Boe-Wee Palava Hut	Boe-Wee	21.19
Grand Kru-2	18029	Boluwin Town Hall	Boluwin	21.15
Bong-1	6174	Fohr Palava Hut	Fohr	19.7
Montserrado-17	30456	Gboglee Town Public School	Gboglee Town - Upper Arthington	19.17
Grand Kru-1	18021	Degblahken Public School	Degblahken	18.5
Montserrado-1	30270	Sasstown Community School	Sasstown	18.1
Grand Kru-1	18057	Gblaboken Public School	Gblaboken	17.75
Maryland-1	27005	Fish Town Public School	Fish Town	17.75
Rivercess-2	36052	Gorzohn Public School	Gorzohn	17.37
Nimba-5	33015	Blemieplay Public School	Blemieplay	17.32
Grand Bassa-2	9171	Bowine Town School Building	Bowine	16.87
Montserrado-1	30195	Tarquoi Town Palava Hut	Tarquoi	16.71
Maryland-3	27058	Yobloken Town Hall	Yobloken Town	16.49
Grand Kru-1	18018	Juduken Public School	Juduken (Weteken)	16.44
Montserrado-1	30002	Goba Town Public School	Goba	16.38
Grand Kru-2	18006	Betu Public School	Betu City	16.29
Grand Bassa-1	9181	Gowin Palava Hut	Gowein	16.23
Rivercess-1	36010	Garpue Palava Hut	Garpue Town	16.16
Maryland-3	27080	Yedegboken Public School	Yedegboken Town	15.63
Grand Bassa-1	9011	Jeko Town Palava Hut	Jeko	15.52
Grand Bassa-2	9058	Johnny Diggs Town Palava Hut	Johnny Diggs	15.44
Grand Bassa-2	9005	Albert Town Palava Hut	Albert	15.41
Grand Bassa-2	9074	Palapolu Town Palava Hut	Palapolu	15.38
Rivercess-1	36022	Gorgor Church	Gorgor Town	15.33
Grand Gedeh-3	15011	Dayblay Elem. School,	Dayblay	15.24
Nimba-4	33213	Zuoplay Public School	Zuoplay	15.2
Margibi-1	24036	Mambah Civil Compound Palava Hut	Mambah Civil Compound	15.13

Annex C: 2020 Senate Elections Voting Precincts with 15%+ Invalid Votes

The 65 voting precincts where the invalid vote percentage in the 2020 Senate elections was greater than 15% are listed below. Among these 65 precincts, 15 (in bold) witnessed invalid vote percentage greater than 10% in the 2017 House of Representatives Elections.

District	Precinct	Name	Town	Invalid %
Grand Bassa-1	9083	Gurlee Town Palava Hut	Gurlee	60.26
River Gee-3	42055	Karbuken Public School	Karbuken	34.09
Maryland-2	27014	Division 5 Camp 5 Palava Hut	Division 5 Camp 5	33.85
Grand Kru-2	18043	John S. Wokreh Elementary School	Woloken#2	30.57
Sinoe-2	39054	Jarpuken Public School	Jarpuken	29.82
Sinoe-2	39067	Dodoiken Public School	Dordroken	29.52
Lofa-5	21001	Balagwalazu Public School	Balagwalazu	27.33
Bong-4	6077	Laryea Public School	Laryea	26.75
Sinoe-2	39014	Joplokpo Palava Hut	Joplokpo	25
Grand Bassa-1	9122	Zuzohn Palava Hut	Zuzohn	24.64
Maryland-1	27018	Little Wlebo Elem. School	Little Wlebo # 1	24.07
Gbarpolu-2	45057	Nyailowai Town Hall	Nyailowai	24.05
Grand Kru-1	18052	Pennuken Jr. High School	Dougbo	23.43
Grand Gedeh-2	15068	Jaibo Town Elementary School,	Jaibo Town	23.08
Maryland-2	27034	Witchoken Elem. School	Witchoken Mission	22.43
Grand Bassa-2	9164	Gaye Gbokone Town Palava Hut	Gonnigar	22.06
Rivercess-1	36022	Gorgor Church	Gorgor Town	21.86
Grand Bassa-2	9031	Gbanah Town Palava Hut	Gbanah	21.64
Grand Kru-2	18022	Parluken Public School	Parluken	21.59
Maryland-2	27008	Gbeken Town Hall	Gbeken Main Town	21.18
Lofa-5	21105	Lobobah Town Hall	Lobobah	21.15
Maryland-3	27059	Martuken Town Hall	Martuken	20.78
Bong-1	6174	Fohr Palava Hut	Fohr	20.69
Margibi-4	24041	Gwepolosue Palava Hut	Gwepolosue	20.42
River Gee-1	42001	Cherboken Public School	Cheboken	19.93
Lofa-5	21143	Vasala Lutheran Hall	VASALA	19.54
Maryland-1	27006	Fodoken Town Hall	Fodoken	19.51
Grand Kru-1	18018	Juduken Public School	Juduken (Weteken)	19.5
Lofa-4	21146	Mamiekonnedu Public School	MAMIEKONNEDU	19.47
Gbarpolu-3	45007	Beatoe Town	Beatoe	19
Maryland-2	27031	Libsuko Community School	Libsuko Factory	18.99
Margibi-1	24102	Lloydsville Public School	Lloydsville / Zeechugb	18.57
Nimba-9	33184	Wontoe Public School	Wontoe	18.06
Nimba-3	33242	KinNon Public School	KinNon Town	18.05
River Gee-3	42006	Yargbeken Public School	Yargbeken	17.98
Nimba-4	33105	Kpaglay Public School	Kpaglay	17.77
Nimba-3	33021	Bonla Public School	Bonla	17.71

District	Precinct	Name	Town	Invalid %
Maryland-3	27079	Rock Town Kunorkudi Public School	Rock Town Kunorkudi	17.69
Lofa-4	21041	Betejama Public School	Betejama	17.58
Maryland-2	27020	Old Sodoken Town Hall	Old Sodoken	16.8
Grand Kru-2	18032	Wropluken Public School	Wropluken	16.77
Grand Kru-2	18045	Sartiken Town Hall	Sartiken	16.67
Grand Bassa-4	9020	Borbor Town Palava Hut	Borbor	16.67
Maryland-3	27062	Yederobo Elem. School	Yederobo	16.6
Grand Gedeh-3	15044	Tojallah Elem. School	Tojallah	16.51
Maryland-1	27001	Barraken Elem. School	Barraken	16.49
Maryland-3	27060	Sampson Goe Elem. School	Gbawiliken Cavalla	16.48
Nimba-6	33191	Old Yourpea Public School	Old Yourpea	16.36
Nimba-3	33012	Beintonwin Public School	Beintonwin	16.29
Lofa-4	21006	Barkedu Public School	Barkedu	16.28
Grand Gedeh-3	15010	Chayee Public School,	Chayee	16.2
Margibi-3	24024	Division 31 Camp 3 Office	Division 31 Camp 3	16.13
Gbarpolu-1	45068	Under Wear Palava Hut	Under Wear Town	16
Gbarpolu-2	45021	Gelekpala School	Gelekpasu	15.84
Bomi -3	3053	Gongweh Palava Hut	Gongweh	15.83
Grand Bassa-2	9005	Albert Town Palava Hut	Albert	15.79
Maryland-3	27067	Tarworken Town Hall	Tarworken	15.71
Lofa-1	21004	Bandenin Melimu Town Hall	Bandenin Melimu	15.67
Sinoe-2	39075	Jokoken Elementary School	Jokoken	15.61
Grand Kru-1	18019	St. Banabas Catholic Elem. & Jr. High	Gbarken(Wedabo)	15.45
Maryland-1	27005	Fish Town Public School	Fish Town	15.38
Maryland-3	27080	Yedegboken Public School	Yedegboken Town	15.38
Lofa-3	21093	Tawalahun Town Hall	Tawalahun	15.31
Bong-5	6164	Jorkai Palava Hut	Jorkai Town	15.29
River Gee-1	42038	Gedeken Town Hall	Gedeken Town	15.2