

MAY 24 COMMISSIONER D2 ANALYSIS

PART 1: READING ELECTION SUMMARY REPORTS

This document will explain how to read the Election Summary Reports we post on our website and walk you through creating a spreadsheet that accounts for all the voters in the May 24 primary.

The Election Summary Report

Every election, we post an Election Summary Report on our website that looks like this:

County Commissioner D2 - Dem (Vote for 1)							
DEM							
Precincts Reported: 39 of 39 (100.00%)							
		Election Day	Advanced Vot	Absentee by	Provisional	Total	
Times Cast		9,766	5,763	1,311	0	16,840 / 98,425 17.11%	
Candidate	Party	Election Day	Advanced Voting	Absentee by Mail	Provisional	Total	
Lauren Alexander		2,671	1,428	283	0	4,382	34.67%
Marshall Orson		3,343	1,490	393	0	5,226	41.35%
Michelle Long Spears		589	2,019	423	0	3,031	23.98%
Total Votes		6,603	4,937	1,099	0	12,639	
		Election Day	Advanced Voting	Absentee by Mail	Provisional	Total	

It is important to distinguish between two terms that the report uses:

Times Cast: The number of ballots cast, even if this race was left blank.

Total Votes: The number of votes received by candidates. This does not include blank ballots.

For this election it is also important to keep in mind that five of the precincts appear in a second report called database 2. To get the complete numbers, we will need to add the two reports together.

County Commissioner D2 - Dem (Vote for 1)							
DEM							
Precincts Reported: 4 of 4 (100.00%)							
		Election Day	Advanced Vot	Absentee by	Provisional	Total	
Times Cast		1,235	513	82	0	1,830 / 7,606 24.06%	
Candidate	Party	Election Day	Advanced Voting	Absentee by Mail	Provisional	Total	
Lauren Alexander		322	141	21	0	484	33.99%
Marshall Orson		181	100	20	0	301	21.14%
Michelle Long Spears		440	175	24	0	639	44.87%
Total Votes		943	416	65	0	1,424	
		Election Day	Advanced Voting	Absentee by Mail	Provisional	Total	

Reports from the General Primary

This is where you can find the last reports from election night and what happens when you add together the votes in the Commission District 2 Democratic Primary section in a spreadsheet:

[Database 1 Election Summary Report – Unofficial and Incomplete \(May 25, 2:30 a.m.\)](#)

[Database 2 Election Summary Report – Unofficial and Incomplete \(May 25, 3:05 a.m.\)](#)

	Alexander	Broussard	Orson	Spears	Total
Election Day	2,993	0	3,524	1,029	7,546
Advance Voting	1,569	0	1,590	2,194	5,353
Absentee	304	0	413	447	1,164
Provisional	0	0	0	0	0
Total Votes	4,866	0	5,527	3,670	14,063
Blank Votes					4,607
Times Cast					18,670

This was the preliminary report of the hand count, released on June 1:

[Statement of Votes Cast, Commission District 2 Democratic Primary – Unofficial and Incomplete \(June 1\)](#)

	Alexander	Broussard	Orson	Spears	Total
Election Day	3,008	53	2,069	4,080	9,210
Advance Voting	1,457	41	1,492	2,152	5,142
Absentee	265	39	362	415	1,081
Provisional	7	0	5	4	16
Total Votes	4,737	133	3,928	6,651	15,449
Blank Votes					2,678
Times Cast					18,127

This is the hand count certified on June 3. Between June 1 and June 3 there were various corrections to the bookkeeping, including typos, numbers filed in the wrong place, and numbers that had not been entered.

[Statement of Votes Cast, Commission District 2 Democratic Primary – Official and Complete \(June 3\)](#)

	Alexander	Broussard	Orson	Spears	Total
Election Day	3,004	53	2,068	4,078	9,203
Advance Voting	1,561	39	1,541	2,291	5,432
Absentee	306	43	418	450	1,217
Provisional	7	0	5	4	16
Total Votes	4,878	135	4,032	6,823	15,868
Blank Votes					2,779
Times Cast					18,647

MAY 24 COMMISSIONER D2 ANALYSIS

PART 2: SOURCES OF ERROR

This document will go into detail on the counts of the County Commissioner District 2 Democratic Primary, list the errors in the initial machine count, and demonstrate that the initial results are explained by a ballot shift at 32 of the 40 District 2 precincts.

Background

On the evening of May 24, observers quickly began reporting that the result tapes for the County Commissioner District 2 Democratic Primary showed candidate Michelle Long Spears receiving zero votes in many precincts. DeKalb VRE reviewed the initial data generated from the Commission District 2 contest and coordinated efforts with the Georgia Secretary of State's office. An initial review indicated that it was an isolated issue that likely occurred after one candidate withdrew from the race. A comparison of the results demonstrated that the vote totals displayed incorrectly, making it appear as if candidate Michelle Long Spears received zero votes in most precincts. A hand count of the District 2 race was held on May 29-30 to obtain an accurate tabulation of ballots cast and the results of that count were certified instead of the machine count.

Errors in the Machine Count

Throughout the runup to the May 24 primary, DeKalb VRE worked with the Secretary of State's office and their Center for Election Systems (CES) to make several changes to the voting machine configuration. Some of those changes handled the withdrawal of candidate Donald Broussard correctly and others did not.

In the end, there were four different voting machine configurations used at District 2 precincts on election day:

1. At four precincts, the equipment was configured correctly.
2. At four precincts, the touchscreens allowed voters to vote for Broussard. However, when the memory cards were uploaded to the central server, those votes were counted as blank because Broussard was marked as withdrawn.
3. At twenty-nine precincts, the votes below Broussard were "shifted upward:" a vote for Spears was recorded as a vote for candidate Marshall Orson, and a vote for Orson was recorded as a vote for Broussard. Then, when the memory cards were uploaded, the Orson votes marked as Broussard were counted as blank.
4. At three precincts, some of the votes were shifted and some were not: the Scott and Shamrock precincts each had two scanners, one which was correctly configured and one which was not. At Lakeside, a technical problem required some of the ballots to be brought back and scanned at the office. The ballots scanned at the polling place were shifted and the ballots scanned at the office were not.

Open Questions

We will primarily be addressing two questions:

1. Was the hand count accurate?
2. Are the issues with the machine count explained by a ballot shift, or were there other factors at work?

Results of Each Count

May 24 Machine Count					
	Alexander	Broussard	Orson	Spears	Total
Election Day	2,993	0	3,524	1,029	7,546
Advance Voting	1,569	0	1,590	2,194	5,353
Absentee	304	0	413	447	1,164
Provisional	0	0	0	0	0
Total Votes	4,866	0	5,527	3,670	14,063
Blank Votes					4,607
Times Cast					18,670

May 29-30 Hand Count					
	Alexander	Broussard	Orson	Spears	Total
Election Day	3,004	53	2,068	4,078	9,203
Advance Voting	1,561	39	1,541	2,291	5,432
Absentee	306	43	418	450	1,217
Provisional	7	0	5	4	16
Total Votes	4,878	135	4,032	6,823	15,868
Blank Votes					2,779
Times Cast					18,647

Accuracy of the Hand Count

Because most election day votes for Spears were counted for Orson and most Orson votes were counted as blank, we expect the votes for Orson, votes for Spears, and blank votes to change between the two counts; and because the blank votes are changing, we expect the Total Votes—the number of votes received by candidates—to change.

We do not expect the Times Cast—the total number of ballots cast in the race—to change. Nor do we expect candidate Lauren Alexander's totals to change, because her name appeared above Broussard on the ballot and therefore her votes were not shifted. Advance Voting and Absentee should also not be affected.

If you compare the green cells in the two tables above, you can get a sense of the margin of error of the hand count. There will always be some error, but the totals are easily close enough to determine the outcome of the election.

Sources of Error

Next, we will investigate whether the ballot shift alone explains the errors in the machine count, or whether another explanation is needed. If applying what we know about the ballot shift to the correct count reproduces the May 24 machine count, that would indicate that the ballot shift was the only source of error; if it does not, then another explanation will be needed.

Since we believe the hand count is broadly accurate, we will use those numbers as the “correct” count, although we will have to keep in mind that the hand count does still contain some errors.

These are the precinct breakdowns for the two counts.

PRECINCT	May 24 Machine Count							Hand Count						
	LAUR. ALEX.	DON. BROU.	MAR. ORS.	MICH. SPEA.	TOTAL VOTES	BLANK VOTE	TIMES CAST	LAUR. ALEX.	DON. BROU.	MAR. ORS.	MICH. SPEA.	TOTAL VOTES	BLANK VOTE	TIMES CAST
Ashford Dunwoody Rd	67	0	76	0	143	62	205	67	0	31	77	175	30	205
Ashford Park Elem	41	0	49	0	90	52	142	41	0	30	49	120	22	142
Ashford Parkside	59	0	96	0	155	47	202	59	0	12	96	167	35	202
Briar Vista Elem	82	0	112	0	194	104	298	83	0	48	112	243	56	299
Briarcliff	63	0	98	0	161	90	251	86	0	54	75	215	36	251
Briarwood	29	0	41	0	70	37	107	29	0	18	41	88	19	107
Brookhaven	86	0	65	0	151	48	199	86	0	22	65	173	27	200
Clairemont East	128	0	214	0	342	153	495	128	0	87	214	429	66	495
Clairemont West	160	0	271	0	431	205	636	160	0	94	271	525	112	637
Clairmont Road	79	0	121	0	200	87	287	79	0	48	121	248	40	288
Coralwood	66	0	131	0	197	140	337	61	0	100	117	278	70	348
Cross Keys High	35	0	17	37	89	23	112	35	0	17	37	89	24	113
Decatur	115	0	41	131	287	67	354	115	0	41	131	287	66	353
Druid Hills High	40	0	74	0	114	146	260	40	0	120	74	234	26	260
Emory Road	20	0	28	0	48	39	87	20	0	0	43	63	29	92
Emory South	75	0	89	0	164	130	294	69	0	73	88	230	58	288
Fernbank Elem	37	0	103	0	140	194	334	37	0	159	103	299	35	334
Glennwood	116	0	66	149	331	92	423	116	17	66	149	348	75	423
Harris-Margaret Harris	52	0	49	0	101	30	131	55	0	13	52	120	19	139
Johnson Estates	40	0	66	0	106	87	193	39	0	32	66	137	55	192
Kittredge Elem	22	0	94	0	116	25	141	22	0	8	94	124	17	141
Lakeside High	84	0	84	108	276	78	354	82	0	65	148	295	58	353
Lavista	72	0	68	0	140	75	215	72	0	43	68	183	32	215
Lavista Road	77	0	84	0	161	87	248	77	0	50	84	211	35	246
Lin-Mary Lin Elem	120	0	131	0	251	186	437	122	0	79	134	335	110	445
Medlock	86	0	176	0	262	167	429	86	0	101	176	363	67	430
Montclair Elem	44	0	50	0	94	19	113	44	0	10	50	104	9	113
Montgomery Elem	47	0	80	0	127	37	164	47	0	18	79	144	20	164
Northlake	49	0	25	60	134	64	198	49	13	28	61	151	50	201
Oak Grove Elem	49	0	100	0	149	65	214	47	0	33	95	175	33	208
Oakhurst	227	0	48	130	405	85	490	227	0	48	130	405	84	489
Ponce de Leon	119	0	156	0	275	126	401	119	0	68	156	343	58	401
Rehoboth	39	0	42	59	140	34	174	39	6	42	51	138	28	166
Sagamore Hills Elem	79	0	184	0	263	128	391	79	0	85	185	349	42	391
Scott	104	0	129	69	302	102	404	104	0	114	138	356	44	400
Shamrock	63	0	88	33	184	77	261	63	0	78	88	229	10	239
Silver Lake	60	0	59	0	119	64	183	60	0	28	59	147	36	183
Skyland	51	0	46	0	97	63	160	51	0	28	46	125	35	160
Winnona Park	118	0	48	172	338	102	440	116	17	52	174	359	80	439
Woodward	93	0	25	81	199	38	237	93	0	25	81	199	37	236
TOTAL	2,993	0	3,524	1,029	7,546	3,455	11,001	3,004	53	2,068	4,078	9,203	1,785	10,988

We are going to apply all the errors we know of to the hand count and see if it produces the same outcome as the machine count. We will need to separate the precincts into two groups: green precincts are not shifted, but if there are any votes for Broussard, we will need to change them to blank. Purple precincts are shifted, so we will change any Orson votes to blank and Spears votes to Orson. This is the result:

PRECINCT	May 24 Machine Count							Hand Count with Ballot Shift Applied						
	LAUR. ALEX.	DON. BROU.	MAR. ORS.	MICH. SPEA.	TOTAL VOTES	BLANK VOTE	TIMES CAST	LAUR. ALEX.	DON. BROU.	MAR. ORS.	MICH. SPEA.	TOTAL VOTES	BLANK VOTE	TIMES CAST
Ashford Dunwoody Rd	67	0	76	0	143	62	205	67	0	77	0	144	61	205
Ashford Park Elem	41	0	49	0	90	52	142	41	0	49	0	90	52	142
Ashford Parkside	59	0	96	0	155	47	202	59	0	96	0	155	47	202
Briar Vista Elem	82	0	112	0	194	104	298	83	0	112	0	195	104	299
Briarcliff	63	0	98	0	161	90	251	86	0	75	0	161	90	251
Briarwood	29	0	41	0	70	37	107	29	0	41	0	70	37	107
Brookhaven	86	0	65	0	151	48	199	86	0	65	0	151	49	200
Clairemont East	128	0	214	0	342	153	495	128	0	214	0	342	153	495
Clairemont West	160	0	271	0	431	205	636	160	0	271	0	431	206	637
Clairmont Road	79	0	121	0	200	87	287	79	0	121	0	200	88	288
Coralwood	66	0	131	0	197	140	337	61	0	117	0	178	170	348
Druid Hills High	40	0	74	0	114	146	260	40	0	74	0	114	146	260
Emory Road	20	0	28	0	48	39	87	20	0	43	0	63	29	92
Emory South	75	0	89	0	164	130	294	69	0	88	0	157	131	288
Fernbank Elem	37	0	103	0	140	194	334	37	0	103	0	140	194	334
Harris-Margaret Harris	52	0	49	0	101	30	131	55	0	52	0	107	32	139
Johnson Estates	40	0	66	0	106	87	193	39	0	66	0	105	87	192
Kittredge Elem	22	0	94	0	116	25	141	22	0	94	0	116	25	141
Lakeside High (at poll)	26	0	41	0	67	40	107	26	0	41	0	67	40	107
Lavista	72	0	68	0	140	75	215	72	0	68	0	140	75	215
Lavista Road	77	0	84	0	161	87	248	77	0	84	0	161	85	246
Lin-Mary Lin Elem	120	0	131	0	251	186	437	122	0	134	0	256	189	445
Medlock	86	0	176	0	262	167	429	86	0	176	0	262	168	430
Montclair Elem	44	0	50	0	94	19	113	44	0	50	0	94	19	113
Montgomery Elem	47	0	80	0	127	37	164	47	0	79	0	126	38	164
Oak Grove Elem	49	0	100	0	149	65	214	47	0	95	0	142	66	208
Ponce de Leon	119	0	156	0	275	126	401	119	0	156	0	275	126	401
Sagamore Hills Elem	79	0	184	0	263	128	391	79	0	185	0	264	127	391
Scott (Scanner 2)	54	0	70	0	124	79	203	54	0	69	0	123	76	199
Shamrock (Scanner 1)	32	0	55	0	87	61	148	32	0	55	0	87	50	137
Silver Lake	60	0	59	0	119	64	183	60	0	59	0	119	64	183
Skyland	51	0	46	0	97	63	160	51	0	46	0	97	63	160
Cross Keys High	35	0	17	37	89	23	112	35	0	17	37	89	24	113
Decatur	115	0	41	131	287	67	354	115	0	41	131	287	66	353
Glennwood	116	0	66	149	331	92	423	116	0	66	149	331	92	423
Lakeside (in office)	58	0	43	108	209	38	247	56	0	43	107	206	40	246
Northlake	49	0	25	60	134	64	198	49	0	28	61	138	63	201
Oakhurst	227	0	48	130	405	85	490	227	0	48	130	405	84	489
Rehoboth	39	0	42	59	140	34	174	39	0	42	51	132	34	166
Scott (Scanner 1)	50	0	59	69	178	23	201	50	0	59	69	178	23	201
Shamrock (Scanner 2)	31	0	33	33	97	16	113	31	0	33	33	97	5	102
Winnona Park	118	0	48	172	338	102	440	116	0	52	174	342	97	439
Woodward	93	0	25	81	199	38	237	93	0	25	81	199	37	236
TOTAL	2,993	0	3,524	1,029	7,546	3,455	11,001	3,004	0	3,509	1,023	7,536	3,452	10,988

If you compare the numbers, you can see that the tables are virtually identical, although there are a few errors that are probably mistakes in the hand count. This is the difference between the machine count and the ballot-shifted hand count:

PRECINCT	Difference						
	LAUR. ALEX.	DON. BROU.	MAR. ORS.	MICH. SPEA.	TOTAL VOTES	BLANK VOTE	TIMES CAST
Ashford Dunwoody Rd	0	0	1	0	1	-1	0
Ashford Park Elem	0	0	0	0	0	0	0
Ashford Parkside	0	0	0	0	0	0	0
Briar Vista Elem	1	0	0	0	1	0	1
Briarcliff	23	0	-23	0	0	0	0
Briarwood	0	0	0	0	0	0	0
Brookhaven	0	0	0	0	0	1	1
Clairemont East	0	0	0	0	0	0	0
Clairemont West	0	0	0	0	0	1	1
Clairmont Road	0	0	0	0	0	1	1
Coralwood	-5	0	-14	0	-19	30	11
Druid Hills High	0	0	0	0	0	0	0
Emory Road	0	0	15	0	15	-10	5
Emory South	-6	0	-1	0	-7	1	-6
Fernbank Elem	0	0	0	0	0	0	0
Harris-Margaret Harris	3	0	3	0	6	2	8
Johnson Estates	-1	0	0	0	-1	0	-1
Kittredge Elem	0	0	0	0	0	0	0
Lakeside High (at poll)	0	0	0	0	0	0	0
Lavista	0	0	0	0	0	0	0
Lavista Road	0	0	0	0	0	-2	-2
Lin-Mary Lin Elem	2	0	3	0	5	3	8
Medlock	0	0	0	0	0	1	1
Montclair Elem	0	0	0	0	0	0	0
Montgomery Elem	0	0	-1	0	-1	1	0
Oak Grove Elem	-2	0	-5	0	-7	1	-6
Ponce de Leon	0	0	0	0	0	0	0
Sagamore Hills Elem	0	0	1	0	1	-1	0
Scott (Scanner 2)	0	0	-1	0	-1	-3	-4
Shamrock (Scanner 1)	0	0	0	0	0	-11	-11
Silver Lake	0	0	0	0	0	0	0
Skyland	0	0	0	0	0	0	0
Cross Keys High	0	0	0	0	0	1	1
Decatur	0	0	0	0	0	-1	-1
Glennwood	0	0	0	0	0	0	0
Lakeside (in office)	-2	0	0	-1	-3	2	-1
Northlake	0	0	3	1	4	-1	3
Oakhurst	0	0	0	0	0	-1	-1
Rehoboth	0	0	0	-8	-8	0	-8
Scott (Scanner 1)	0	0	0	0	0	0	0
Shamrock (Scanner 2)	0	0	0	0	0	-11	-11
Winnona Park	-2	0	4	2	4	-5	-1
Woodward	0	0	0	0	0	-1	-1
TOTAL	3,004	0	3,509	1,023	7,536	3,452	10,988

Conclusion

Although no hand count is perfect, after comparing the two counts, the certified hand count appears to be more than accurate enough to determine the outcome of the Commission District 2 race. There was a large error introduced into the machine count by the ballot shift; but we do not see any evidence of other sources of error.