

# **EXHIBIT A**

**IN THE UNITED STATES DISTRICT COURT  
FOR THE SOUTHERN DISTRICT OF OHIO  
EASTERN DIVISION**

MICHAEL GONIDAKIS et al.,

Plaintiffs,

THE OHIO ORGANIZING  
COLLABORATIVE, COUNCIL ON  
AMERICAN-ISLAMIC RELATIONS, OHIO,  
OHIO ENVIRONMENTAL COUNCIL,  
SAMUEL GRESHAM JR., AHMAD  
ABOUKAR, MIKAYLA LEE, PRENTISS  
HANEY, PIERRETTE TALLEY, and  
CRYSTAL BRYANT,

Intervenor-Plaintiffs,

v.

FRANK LAROSE, in his official capacity,

Defendant.

Case No. 2:22-cv-00773

Circuit Judge Amul R. Thapar

Chief Judge Algenon L. Marbley

Judge Benjamin J. Beaton

Magistrate Judge Elizabeth Preston Deavers

**DECLARATION OF MEGAN A. GALL, PhD**

### **BACKGROUND & QUALIFICATIONS**

1. I am a Principal at Blockwell Consulting, LLC (“Blockwell”). My business address is 833 Edgewood Drive, Charleston, WV 25302.
2. I have previously submitted a declaration to this Court that details my experience, background, qualification, and experience. *See* ECF No. 165-3.

### **ASSIGNMENT & SUMMARY OF OPINIONS**

3. In my previous declaration, I concluded that a plan submitted to the Ohio Redistricting Commission (“Commission”) on March 28, 2022 by two independent map drawers hired by the Commission, Douglas Johnson and Michael McDonald (“Johnson/McDonald Plan”) is materially compliant with Sections 3 and 4 and is not malapportioned under the Fourteenth Amendment. As my revised version of that Plan submitted to this Court in my previous declaration (“Revised Johnson/McDonald Plan”) only made minor tweaks to the Johnson/McDonald Plan, it too materially complies with Sections 3 and 4 and is not malapportioned.

4. I now submit a subsequent declaration to assess a separate revised version of the Johnson/McDonald Plan submitted to this Court on April 8, 2022 by Ms. Bria Bennett, one of the named intervenor-plaintiffs in the above-captioned matter, which is the second plan prepared by Dr. Jonathan Rodden in this litigation (“Second Rodden Revised Johnson/McDonald Plan”). *See* ECF No. 177.

5. I have now been asked by the Ohio Organizing Collaborative Intervenor-Plaintiffs to determine whether the Second Rodden Revised Johnson/McDonald Plan complies with Sections

3–4. To conduct the Section 3 and 4 analyses, I rely on publicly available data and GIS software including Maptitude for Redistricting<sup>1</sup> and QGIS.

6. I have also been asked to analyze the Second Rodden Revised Johnson/McDonald Plan to determine whether that plan reflects equipopulous districts when applied to Ohio’s current demographic configuration, i.e., whether the Plan is malapportioned. To conduct this malapportionment analysis, I rely on 2020 U.S. Census Bureau data from the PL 94-171 redistricting files as procured by the Ohio University Common and Unified Redistricting Database.<sup>2</sup> Demographic data reflect the total population from table P1 and voting age populations from P4 of the PL 94-171 files.

7. The Second Rodden Revised Johnson/McDonald Plan is substantively similar as to what I submitted to the Court in my initial declaration. As such and given that my Revised Johnson/McDonald Plan materially complies with Sections 3 and 4, so too does the Second Rodden Revised Johnson/McDonald Plan. And because my Revised Johnson/McDonald Plan is not malapportioned under the Fourteenth Amendment, neither is the Second Rodden Revised Johnson/McDonald Plan. Simply put, I could not identify any areas where the Second Rodden Revised Johnson/McDonald Plan fails to comply with the Ohio and federal constitutions. The result is a legally sound plan with no identifiable infractions.

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<sup>1</sup> Maptitude for Redistricting is created by the Caliper Corporation and is a full-featured mapping and GIS software that has been an industry leader in redistricting. From my professional experience, it is the go-to technical tool that combines demographic population data, geographic shapefiles, political data, among other desired inputs. From my understanding and observation, official map-drawing by Ohio Redistricting Commission staff and by Dr. Johnson and Dr. McDonald were done using Maptitude.

<sup>2</sup> The database is publicly available and accessible here: <https://redistricting.ohio.gov/resources>

8. The remainder of this report discusses my general understanding of the background in this matter, the research I conducted, and provides a detailed discussion of the results of my analyses.

### **BACKGROUND**

9. The Ohio Constitution requires that map drawers use entire counties, municipal corporations, and townships as the foundation for district lines, to the extent possible. Counties with populations greater than the ideal district population must spill over into a single additional district. The map drawer must also strive to not split counties more than once, and to not split more than one municipality per district. *See generally* Ohio Constitution, Article XI, Section 3. Similarly, splits of counties with populations at or above the ideal population value for a state Senate district are to be minimized. *See generally* Ohio Constitution, Article XI, Section 4. Given map drawers must comply with all of these rules, the maximum deviation among districts permitted under Ohio law is 10 percent. *See* Ohio Constitution, Article XI, Section 3(B)(1) (noting that “[i]n no event shall any district contain a population of less than ninety-five percent nor more than one hundred five per cent of the applicable ratio of representation.”).

10. Similarly, the Fourteenth Amendment prevents map drawers from producing malapportioned maps. More specifically, it prohibits a state from “deny[ing] to any person within its jurisdiction the equal protection of the laws.” U.S. CONST. amend. XIV, § 1. This provision therefore “requires that the seats in both houses of a bicameral state legislature [] be apportioned on a population basis.” *Reynolds v. Sims*, 377 U.S. 533, 568 (1964).

11. Where the maximum population deviation in a map is greater than 10 percent, the deviation is presumptively impermissible. *See Evenwel v. Abbott*, 578 U.S. 54, 60 (2016).

## ANALYSIS AND OPINIONS

### **I. Line-Drawing Analysis: Whether the Second Rodden Revised Johnson/McDonald Plan Complies with Sections 3 and 4 of Article XI**

12. In order to evaluate compliance, I employed the same methodology that I used in my initial declaration. I first produced population statistics by district. Maptitude software allows for this procedure as a basic function. I then examined the district deviations to assess compliance with the +/- 5 percent deviation requirement. I calculated the maximum plan deviation (the absolute value of the district with the lowest deviation plus the value of the district with the highest deviation) to check compliance with the requirement for a maximum plan deviation of no more than 10 percent. I used a built-in function in Maptitude to check for non-contiguous areas and I did a visual inspection to assess the plans for boundaries with a nonintersecting continuous line. It is not possible to fully assess Section 3(C)(1) detailing the order in which the map drawers must construct and name districts. For the Second Rodden Revised Johnson/McDonald Plan, I isolated the counties with the highest population and assessed whether they were districted and labeled sequentially and before counties with smaller populations. Assessing compliance with Section 3(C)(3) and 3(D) was also a multi-step process. In order, I ran an algorithm to isolate counties, cities, villages, and then townships that overlap with district boundaries. I then visually inspected those overlapping jurisdictions to assess whether the split counted as an official split under specifications outlined in Section 3(D). After individually inspecting splits for those four geographies, I returned to the official splits for the four geographies and counted the number of splits per district.

13. I studied the Second Rodden Revised Johnson/McDonald Plan for points of non-compliance. I could not identify any areas where the Plan fails to comply with Sections 3 and 4. My assessment also reveals that the Second Rodden Revised Johnson/McDonald Plan is

substantively the same as what I submitted to the Court in my initial declaration. Like my Revised Johnson/McDonald Plan, the Second Rodden Revised Johnson/McDonald Plan corrects for very small violations of Article XI, Sections 3 in the Johnson/McDonald Plan, homing in on the same geographical areas for revision as I did in my initial declaration. The analysis below demonstrates the substantive similarity between my Revised Johnson/McDonald Plan and the Second Rodden Revised Johnson/McDonald Plan.

14. The Second Rodden Revised Johnson/McDonald Plan identify the same three geographic areas for revision as I identified in my Revised Johnson/McDonald Plan. The revisions within each of these areas differ slightly from my alterations to the Johnson/McDonald Plan and therefore result in similar final maps.

15. The first revised area is in a district that has portions in Sandusky, Wood, and Hancock counties. The district is labeled as District 77 in the Second Rodden Revised Johnson/McDonald Plan and is labeled as District 60 in my Revised Johnson/McDonald Plan. The Revised Johnson/McDonald Plan revisions placed small portions of Weston and Jerry City villages into the adjacent district. The Second Rodden Revised Johnson/McDonald Plan includes those portions of Weston and Jerry City and portions of Green Springs village into District 77. The Green Springs village was split at the Sandusky and Seneca county line. As such, the split is allowable under Article XI, Section 3(D)(1)(b) holding that if a municipality has contiguous area and is split by a county line, the areas of the municipality in each county may be considered separate municipalities for the purposes of redistricting.

16. The second revised area is in a district that has portions in Delaware and Morrow counties. The districts are labeled as Districts 61, 62, and 91 in the Second Rodden Revised Johnson/McDonald Plan and as Districts 67, 68, and 91 in my Revised Johnson/McDonald Plan. In

the Revised Johnson/McDonald Plan, I chose to include all of Delaware city into District 68 (District 62 in the Second Rodden Revised Johnson/McDonald Plan) and leave Sunbury city as the single municipality split in the district, in compliance with Section 3(D)(3). The Second Rodden Revised Johnson/McDonald Plan alternatively leaves Delaware city split but places all of Sunbury city in District 62 (District 68 in the Revised Johnson/McDonald Plan) and compensates by excluding additional area in Morrow County. This choice is allowable under Section 3(D)(3) because which holds that districts may have a single split municipality.

17. The third revised area is in Franklin County. The Johnson/McDonald Plan split Franklin and Jackson townships, which violated Section 3(D)(3) by including more than one split township or municipality in the district. To correct this issue, my Revised Johnson/McDonald Plan altered boundaries around Franklin township. The Second Rodden Revised Johnson/McDonald Plan changed the same district configuration but focused on Prairie township on the border between Districts 10 and 11 instead of Franklin township on the border between Districts 9 and 10. In total, 17,235 people were impacted by these revisions which represents 0.15 percent of the total state population.

18. Given the above-mentioned similarities between Revised Johnson/McDonald Plan and the Second Rodden Revised Johnson/McDonald Plan and that my Revised Johnson/McDonald Plan materially complies with Sections 3 and 4, so too does the Second Rodden Revised Johnson/McDonald Plan. The Second Rodden Revised Johnson/McDonald Plan demonstrates upmost regard for the guidelines in Article XI and the result is a fully compliant map that is also immediately ready for full implementation.



## II. Malapportionment Analysis: Whether the Second Rodden Revised Johnson/McDonald Plan Complies with the Fourteenth Amendment of the U.S. Constitution

19. In order to assess malapportionment, I apply the same statistical analysis as I used in my initial declaration. First, I calculate the ideal district population. To do that calculation, I take the total population in the state and divide by the number of districts. That number then becomes the ideal population for each district in the state and the benchmark from which district deviation and overall plan deviation are calculated.

20. Table 1 below, which was generated from Census data, reveals how the Second Rodden Revised Johnson/McDonald House Plan is compliant with equal-population principles.

21. Table 1 also shows that the population deviation for each Second Rodden Revised Johnson/McDonald House district is within 5 percentage points of the ideal district population and, like the Revised Johnson/McDonald plan, the maximum plan deviation is 9.98% percent.

<b>District</b>	<b>Total Population</b>	<b>Deviation</b>	<b>% Deviation</b>
1	113,804	-5,382	-4.52%
2	115,690	-3,496	-2.93%
3	114,825	-4,361	-3.66%
4	115,779	-3,407	-2.86%
5	115,549	-3,637	-3.05%
6	114,055	-5,131	-4.31%
7	116,576	-2,610	-2.19%
8	115,486	-3,700	-3.10%
9	113,671	-5,515	-4.63%
10	122,684	3,498	2.93%
11	113,662	-5,524	-4.64%
12	114,810	-4,376	-3.67%
13	125,091	5,905	4.95%
14	124,926	5,740	4.82%
15	125,074	5,888	4.94%

16	125,129	5,943	4.99%
17	125,139	5,953	4.99%
18	125,092	5,906	4.96%
19	125,124	5,938	4.98%
20	125,102	5,916	4.96%
21	124,875	5,689	4.77%
22	125,108	5,922	4.97%
23	122,306	3,120	2.62%
24	124,580	5,394	4.53%
25	115,863	-3,323	-2.79%
26	115,993	-3,193	-2.68%
27	114,191	-4,995	-4.19%
28	122,081	2,895	2.43%
29	117,150	-2,036	-1.71%
30	120,781	1,595	1.34%
31	125,081	5,895	4.95%
32	122,703	3,517	2.95%
33	117,907	-1,279	-1.07%
34	117,650	-1,536	-1.29%
35	124,970	5,784	4.85%
36	113,249	-5,937	-4.98%
37	113,852	-5,334	-4.48%
38	124,372	5,186	4.35%
39	113,814	-5,372	-4.51%
40	117,451	-1,735	-1.46%
41	121,721	2,535	2.13%
42	123,297	4,111	3.45%
43	113,336	-5,850	-4.91%
44	113,289	-5,897	-4.95%
45	121,556	2,370	1.99%
46	124,300	5,114	4.29%
47	116,372	-2,814	-2.36%
48	113,903	-5,283	-4.43%
49	125,055	5,869	4.92%
50	119,566	380	0.32%
51	114,682	-4,504	-3.78%
52	117,427	-1,759	-1.48%
53	120,396	1,210	1.02%
54	122,877	3,691	3.10%
55	121,180	1,994	1.67%

56	121,704	2,518	2.11%
57	120,633	1,447	1.21%
58	124,454	5,268	4.42%
59	115,369	-3,817	-3.20%
60	113,245	-5,941	-4.98%
61	114,519	-4,667	-3.92%
62	114,314	-4,872	-4.09%
63	118,762	-424	-0.36%
64	113,556	-5,630	-4.72%
65	124,312	5,126	4.30%
66	124,078	4,892	4.10%
67	119,415	229	0.19%
68	115,502	-3,684	-3.09%
69	121,691	2,505	2.10%
70	114,552	-4,634	-3.89%
71	122,537	3,351	2.81%
72	117,347	-1,839	-1.54%
73	124,170	4,984	4.18%
74	114,218	-4,968	-4.17%
75	115,806	-3,380	-2.84%
76	113,563	-5,623	-4.72%
77	122,349	3,163	2.65%
78	124,936	5,750	4.82%
79	116,894	-2,292	-1.92%
80	119,984	798	0.67%
81	121,578	2,392	2.01%
82	121,444	2,258	1.89%
83	115,655	-3,531	-2.96%
84	120,113	927	0.78%
85	121,599	2,413	2.02%
86	124,192	5,006	4.20%
87	122,473	3,287	2.76%
88	122,888	3,702	3.11%
89	114,201	-4,985	-4.18%
90	117,881	-1,305	-1.10%
91	115,739	-3,447	-2.89%
92	113,551	-5,635	-4.73%
93	113,990	-5,196	-4.36%
94	116,408	-2,778	-2.33%
95	113,497	-5,689	-4.77%

96	116,108	-3,078	-2.58%
97	123,119	3,933	3.30%
98	123,450	4,264	3.58%
99	123,450	4,264	3.58%

22. Table 2 below, which was generated from Census data, reveals how the Second Rodden Revised Johnson/McDonald Senate Plan is also compliant with equal-population principles.

23. Table 2 also demonstrates that the population deviation for each Second Rodden Revised Johnson/McDonald Senate district is within 5 percentage points of the ideal district population. For state senate districts, the maximum plan deviation increased from 8.94% in the Revised Johnson/McDonald Plan to 9.11% in the Second Rodden Revised Johnson/McDonald plan.

<b>Table 2: Second Rodden Revised Johnson/McDonald Senate Plan Deviations</b>			
<b>District</b>	<b>Population</b>	<b>Deviation</b>	<b>% Deviation</b>
1	363,242	5,683	1.59%
2	349,231	-8,328	-2.33%
3	351,838	-5,721	-1.60%
4	362,228	4,669	1.31%
5	343,927	-13,632	-3.81%
6	351,473	-6,086	-1.70%
7	365,787	8,228	2.30%
8	352,265	-5,294	-1.48%
9	362,511	4,952	1.38%
10	353,802	-3,757	-1.05%
11	358,354	795	0.22%
12	351,202	-6,357	-1.78%
13	364,453	6,894	1.93%
14	348,181	-9,378	-2.62%
15	343,408	-14,151	-3.96%
16	344,165	-13,394	-3.75%
17	365,749	8,190	2.29%
18	371,686	14,127	3.95%

19	342,823	-14,736	-4.12%
20	360,413	2,854	0.80%
21	347,180	-10,379	-2.90%
22	351,811	-5,748	-1.61%
23	375,075	17,516	4.90%
24	375,382	17,823	4.98%
25	375,277	17,718	4.96%
26	362,223	4,664	1.30%
27	358,470	911	0.25%
28	367,188	9,629	2.69%
29	359,303	1,744	0.49%
30	353,362	-4,197	-1.17%
31	349,883	-7,676	-2.15%
32	371,509	13,950	3.90%
33	346,047	-11,512	-3.22%

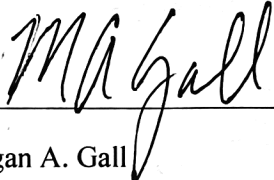
24. As demonstrated by the analysis above, the Second Rodden Revised Johnson/McDonald Plan is not malapportioned.

#### CONCLUSIONS

25. After fully scrutinizing the Second Rodden Revised Johnson/McDonald Plan, I could not identify a single feature of the Plan that was not compliant with Article XI, Sections 3 and 4 of the Ohio Constitution and the Fourteenth Amendment. The Second Rodden Revised Johnson/McDonald Plan made some minor adjustments to further refine the Johnson/McDonald Plan, which track the alterations that I made in my Revised Johnson/McDonald Plan. Given the substantive similarities between my Revised Johnson/McDonald Plan and the Second Rodden Revised Johnson/McDonald Plan, both Plans materially comply with the Ohio and federal constitutions. As such, the Second Rodden Revised Johnson/McDonald Plan is ready for immediate implementation.

26. My opinions and conclusions as expressed in this report are to a reasonable degree of professional and scientific certainty. My conclusions have been reached through the proper application of data analysis, and using methodologies relied upon by experts in the field of demography and geographic information science. My opinions will continue to be informed by any additional material that becomes available to me. I reserve the right to update and/or supplement my opinions if Intervenor-Plaintiffs provide additional information.

27. I declare under penalty of perjury that the foregoing is true and correct.



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Megan A. Gall

Charleston, WV

April 11, 2022