

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

Ohio A. Philip Randolph Institute, et al.,

Plaintiffs,

vs.

Larry Householder, Speaker of the Ohio
House of Representatives, *et al.*,

Defendants.

Case No.: 1:18-cv-00357-TSB

Judge Timothy S. Black
Judge Karen Nelson Moore
Judge Michael H. Watson

Magistrate Judge Karen L. Litkovitz

DEFENDANTS' AND INTERVENORS' JOINT PROPOSED FINDINGS OF FACT

In accordance with this Court's March 14, 2019 *Order Regarding Post-Trial Briefing* (ECF No. 250), Defendants, Larry Householder, Speaker of the Ohio House of Representatives, Larry Obhof, Jr., President of the Ohio Senate, and Frank LaRose, Ohio Secretary of State, all sued in their official capacities; and Intervenors, Rep. Steve Chabot (OH-01), Rep. Brad Wenstrup (OH-02), Rep. Jim Jordan (OH-04), Rep. Bob Latta (OH-05), Rep. Bill Johnson (OH-06), Rep. Bob Gibbs (OH-07), Rep. Warren Davidson (OH-08), Rep. Michael Turner (OH-10), Rep. Dave Joyce (OH-14), Rep. Steve Stivers (OH-15), the Republican Party of Cuyahoga County ("**RPCC**"), the Franklin County Republican Party ("**FCRP**"), Robert F. Bodi, Charles Drake, Roy Palmer III, and Nathan Aichele, respectfully submit their joint Proposed Findings of Fact pursuant to Fed. R. Civ. P. 52(a) from the trial held before this Court from March 4, 2019 to March 13, 2019.

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I. Redistricting in Ohio Following 2010 Census

A. The Legal and Procedural Landscape Applicable To Ohio's 2011 Redistricting Process

1. Under the United States Constitution and laws of the State of Ohio as they existed in 2011-2012, the Ohio General Assembly (the "General Assembly") is the body responsible for enacting legislation that defines the boundaries for Ohio's congressional districts. To become law, a congressional district plan must be approved by a majority of both the Ohio House of Representatives and the Ohio State Senate, and then signed into law by the Governor of Ohio.

2. To assist the General Assembly with its work in redistricting and reapportionment, the bipartisan Legislative Task Force on Redistricting, Reapportionment, and Demographic Research (the "Task Force") was created by statute in the early 1990s. (Trial Transcript, Vol. V, ECF No. 243 ("5 Tr." or "5Tr."), at 147:19-21).

3. The Task Force is the entity to which the General Assembly appropriates money to facilitate the redistricting process in Ohio. (Trial Tr., Vol. V 148:14-15). Mr. Troy Judy, who served as the Chief of Staff to Speaker Bill Batchelder of the Ohio House of Representatives in 2011, described the Task Force as "an administrative statutory vehicle by which appropriations are made in order to spend money on behalf of the official work that is done with respect to the census and drawing both the state lines and the congressional lines." (Trial Tr., Vol VI at 69:6-11).

4. As a statutory requirement, the Task Force has bipartisan co-chairs that are empowered to make allocations on behalf of the Ohio Apportionment Board. (Trial Tr., Vol. V at 147:22-148:1, 149:9-10; *see also* Trial Tr., Vol. V at 154:13).

5. The Task Force does not draw or adopt any Ohio congressional districts. (Trial Tr., Vol. V 148:9-12). Instead, the Task Force works "behind the scenes" to help "allocate money to

the various caucuses, put the proper contracts in place, and basically prepare the state for [the redistricting] process.” (Trial Tr., Vol. V at 148:2-8).

6. In the last two election cycles, the Task Force “made allocations *to the Republican caucuses and the Democratic caucuses in equal amounts* so that they could do everything that the joint caucuses felt they needed to: Hiring staff, buying computer equipment, travel, mileage reimbursement, and those types of things.” (Trial Tr., Vol. V at 149:10-16) (emphasis added). (See also Trial Transcript, Vol. VI, ECF No. 246 (“6 Tr.” or “6Tr.”), at 69:12-17) (“[b]oth the Republicans and Democrats *have an equal amount of money* by which they can hire consultants, buy computers, rent software, in order to assist them in the task of reconfiguring districts.”) (emphasis added).

7. Mr. Raymond DiRossi, who serves as the Finance Director to the majority caucus of the Ohio Senate, testified that in his experience, once the Democratic and Republican caucuses receive the allocated money from the Task Force, they work independently to create a proposed map. (Trial Tr., Vol. V at 149:17-150:1, see also Trial Tr., Vol. V at 150:6-13).

8. In order to draft proposed maps, each caucus buys its own equipment and hires its own experts. (Trial Tr., Vol. V at 149:22-24).

9. The caucuses bring their draft proposed maps “back in the legislative process” so that the maps can be “turned into a bill,” which then goes through the traditional legislative process. (Trial Tr., Vol. V at 150:2-5, 11-13).

B. Ohio’s Redistricting Process In 2011

a. The General Assembly Contracts with Cleveland State University in 2009 to Provide Census and “Political Data” to Both Parties to Aid in the 2011 Redistricting Process.

10. In August 2009, in advance of the 2011 redistricting cycle, the Ohio Legislative Service Commission entered into a database agreement with Cleveland State University (“CSU”).

Dr. Mark Salling was the professor at CSU who did part of the work on the contract. (Blessing Dep. 46:10-13; 94:18-95:3; 147:16-19; 153:23-154:18.)

11. CSU contracted to provide the Task Force members a database, termed the Ohio Common Unified Redistricting Database, that included geographic, demographic, and extensive election return data for the state. (*See* I-116, 2010 Ohio Common and Unified Redistricting Database Technical Documentation, pp. 7-10; Deposition of Christopher Glassburn, ECF No. 230-14 (the “Glassburn Dep.”), at 71:23-73:16). (*See also* Deposition of Mr. Lenzo, ECF 230-29 (“Lenzo Dep.”), at 68:2-5). The data were broken down by minute geographic levels to allow, for example, someone to determine how many voters in a given census block voted for Richard Cordray for Attorney General. (Glassburn Dep. at 78:6-14). The CSU database provided data using the split census block as its lowest unit of geography, which the state required because Ohio’s precinct boundaries, which are relevant for reapportionment, split census blocks. (Blessing Dep. 46:10-13, 94:18-95:3, 147:16-19, 153:24-154:18).

12. The Task Force provided this demographic and political data to both the Democratic and Republican caucuses of the General Assembly. (Glassburn Dep. 38:6-13,22-24).

13. Mr. Lenzo understood this CSU database would be used to determine from the raw census data provided by the Census Bureau where people actually were located so that both Federal and State maps could be drawn with respect to population requirements. He was later informed in January 2011, by Dr. Salling, about the nature of the election results information contained in the database. (Lenzo Dep. at 67:15-68:23.)

b. The 2010 Census Reveals Stagnation in Ohio's Population, but Significant Population Shifts, and the Loss of Two Congressional Seats.

14. In the 2010 Census, Ohio's total population was 11,536,504 persons, an increase of only 183,364 from the 2000 Census, which reported Ohio's total population as 11,353,140 persons. (P090, Report of Mr. William Cooper (the "Cooper Rep.") at 5, Fig. 1).

15. As a result, Ohio was apportioned 16 seats in the House of Representatives in 2011, a decrease of 2 seats from the 18 seats in the House the state had been apportioned after the 2000 Census. (6 Tr. 70:3-11).

16. While Ohio's total population was stagnant, the geographic distribution of Ohio's residents changed significantly from 2000 to 2010. Northern Ohio's urban counties *lost* population between 2000 and 2010, including Lucas County (-2.9%), Cuyahoga County (-8.2%), Summit County (-0.2%), Trumbull County (-6.6%), and Mahoning County (-8.3%). (PX090, Cooper Rep. at 9, Fig. 3). As Mr. Cooper explained, "population growth in Ohio between 2000 and 2017 is almost completely encapsulated by the Columbus MSA (+19.4%) and the Cincinnati MSA (+6.8%)." (P090, Cooper Rep. at ¶ 15).

17. In contrast to Northern Ohio's population loss, many counties neighboring Franklin County experienced large population growth from 2000-2010, such as Delaware County (58.4%), Union County (27.8%), and Fairfield County (19.1%). Franklin County itself saw 8.8% population growth. (P090, Cooper Rep. at 9, Fig. 3).

18. Ohio's 16th Congressional District includes all of Wayne County and portions of Cuyahoga, Medina, Portage, Stark, and Summit Counties. (*See* Ex. D1, 2011 Plan). Between 2000 and 2010, three of these counties—Cuyahoga, Stark, and Summit Counties—decreased in population. *See* U.S. Census Bureau, Population Division, Table 1. Intercensal Estimates of the Resident Population for Counties of Ohio: April 1, 2000 to July 1, 2010 (CO-EST00INT-01-39),

U.S. Census Bureau, Population Division (Sept. 2011), *available at*: <https://www.census.gov/data/tables/time-series/demo/pepest/intercensal-2000-2010-counties.html> (“U.S. Census Bureau County Data”).¹

19. Between 2000 and 2010, the resident population of Cuyahoga County decreased by about 113,749, amounting to about an 8.2% decrease in the resident population. *See id.*

20. Between 2000 and 2010, the resident population of Stark County decreased by about 2,558, amounting to about a 0.68% decrease in the resident population. *See id.*

21. Between 2000 and 2010, the resident population of Summit County decreased by about 1,068, amounting to about a 0.20% decrease in the resident population. *See id.*

22. Between 2000 and 2010, the resident population of Wayne County, which is entirely included within the boundaries of District 16, only increased by about a mere 2,958, amounting to about only a 2.65% increase in the resident population. *See id.*

23. Between 2000 and 2010, other counties in Northeast Ohio also decreased in resident population, including Ashtabula, Columbiana, Mahoning, and Trumbull Counties. *See id.*

24. Between 2000 and 2010, the resident population of Mahoning County decreased by about 18,765, amounting to about a 7.28% decrease in the resident population. *See id.*

25. Between 2000 and 2010, the resident population of Trumbull County decreased by about 14,793, amounting to about a 6.57% decrease in the resident population. *See id.*

¹ Defendants and Intervenors request that the Court take judicial notice of this Census data pursuant to Fed. R. Evid. 201(b)(2), as Census data is properly the subject of judicial notice because it “can be accurately and readily determined from sources whose accuracy cannot reasonably be questioned.” Fed. R. Evid. 201(b)(2); *see also Livingston Christian Sch. v. Genoa Charter Twp.*, 858 F.3d 996, 1011 (6th Cir. 2017), *cert. denied*, 138 S. Ct. 1696, 200 L. Ed. 2d 952 (2018) (taking judicial notice of “geographic maps” provided on the U.S. Census Bureau’s website); *United States v. Neal*, 577 F. App’x 434, 452 (6th Cir. 2014) (noting “courts may take judicial notice of government statistics such as United States census data”); *Jaimes v. Toledo Metro. Hous. Auth.*, 758 F.2d 1086, 1090 (6th Cir. 1985) (taking “judicial notice that the 1980 census did depict some change in [the] statistical data”). Further, courts can take judicial notice “at any stage of the proceeding.” Fed. R. Evid. 201(d); *see also Saccameno v. Ocwen Loan Servicing, LLC*, No. 15 CV 1164, 2019 WL 1098930, at *26 (N.D. Ill. Mar. 1, 2019) (“[T]here is nothing improper about taking judicial notice of a document after the close of evidence.”).

26. Between 2000 and 2010, the resident population of Columbiana County decreased by about 4,209, amounting to about a 3.76% decrease in the resident population. *See id.*

27. Between 2000 and 2010, the resident population of Ashtabula County decreased by about 1,184, amounting to about a 1.15% decrease in the resident population. *See id.*

28. Between 2000 and 2010, the population of many cities in Northeast Ohio also decreased. *See, generally*, 2010 Census of Population for Cities and Villages, Office of Policy, Research, and Strategic Planning, Ohio Department of Development (March 2011), *available at*: <https://development.ohio.gov/files/research/P1004.pdf> (“U.S. Census Bureau City Data”).

29. For example, from 2000 to 2010, the population in the city of Youngstown declined from 82,026 to 66,982, a decrease of 18.3%. *See id.*

30. From 2000 to 2010, the population in the city of Cleveland declined from 478,403 to 396,815, a decrease of 17.1%. *See id.*

31. From 2000 to 2010, the population in the city of Akron declined from 217,074 to 199,110, a decrease of 8.3%. *See id.*

32. Between 2000 and 2010, central Ohio was increasing significantly in resident population. *See id.* In fact, from 2000 to 2010, five central Ohio counties—Delaware, Fairfield, Licking, Union, and Warren Counties—had the largest increases in resident population. *See U.S. Census Bureau County Data.*

33. Between 2000 and 2010, the resident population of Delaware County increased by about 64,240, amounting to about a 58.41% increase in the resident population. *See id.*

34. Between 2000 and 2010, the resident population of Warren County increased by about 53,142, amounting to about a 33.31% increase in the resident population. *See id.*

35. Between 2000 and 2010, the resident population of Union County increased by about 11,325, amounting to about a 27.64% increase in the resident population. *See id.*

36. Between 2000 and 2010, the resident population of Fairfield County increased by about 23,213, amounting to about a 18.88% increase in the resident population. *See id.*

37. Between 2000 and 2010, the resident population of Licking County increased by about 20,796, amounting to about a 14.27% increase in the resident population. *See id.*

38. Between 2000 and 2010, of all Ohio counties, Franklin County had the largest resident population increase of about 94,678. *See id.*

39. Similarly, between 2000 and 2010, the population of largest city in central Ohio—the city of Columbus—increased substantially from 711,470 to 787,033, a 10.6% increase. *See*, U.S. Census Bureau City Data.

40. The northeast corner of Ohio is geographically limited in size in that it borders Lake Erie to the north and Pennsylvania to the east. (*See* Ex. D1, 2011 Plan).

41. During the 2011 redistricting process, Congressman Steve LaTourette was a senior member of the U.S. House of Representatives. *See* Authenticated U.S. Gov't Information, 112th Congressional Directory, Terms of Service at 327-29, available at: <https://www.govinfo.gov/content/pkg/CDIR-2011-12-01/pdf/CDIR-2011-12-01.pdf>.

c. The Republican Caucuses in the Ohio House and the Ohio Senate Assign Heather Blessing and Ray DiRossi to Lead Their Redistricting Efforts, Get Training For Personnel, and Set Up Maptitude and a Redistricting Office.

42. The Republican caucuses of the Ohio Senate and Ohio House of Representatives each designated one person to run point on redistricting and reapportionment² efforts. Mr. DiRossi was asked to spearhead the Ohio Senate Republican caucus's efforts on redistricting. (Trial Tr.,

² "Reapportionment" in this context refers to the drawing of state legislative plans, including plans for the 99 districts of the Ohio House of Representatives and the 33 districts of the Ohio Senate.

Vol. V at 153:22-154:5). Ms. Heather Blessing (née Mann), who served as an associate legal counsel in the office of Ohio House of Representatives Speaker Bill Batchelder in 2011, was asked to assist the Ohio House of Representatives' Republican caucus efforts on redistricting. (Deposition of Heather Blessing, ECF No. 230-5 ("Blessing Dep."), at 26:19-27:21).

43. Mr. DiRossi had prior experience with redistricting dating back to the 1990s. Specifically, in 1998, Mr. DiRossi was asked to begin getting ready for the 2001 redistricting process, worked with the Task Force and learned how the Census Bureau was interacting with Ohio's boards of elections. (Trial Tr., Vol. V at 146:18-147:6). Mr. DiRossi "was very involved in the creation" of Ohio's legislative and congressional districts in 2001. (Trial Tr., Vol. V at 147:7-11).

44. Ms. Blessing graduated from Ohio State University in 2000 with a degree in political science and from Capital University Law School in 2008 with a J.D. While she was in law school, Blessing worked for the House of the Ohio House of Representatives as a policy advisor. (Blessing Dep. 26:19-27:7.) After graduating from law school, Blessing began working for the Ohio House of Representatives as associate legal counsel. (Blessing Dep. 27:7-9.) Blessing first worked in office of the Speaker of the House for Speaker Jon Husted. Beginning in 2008, she worked for Minority Leader Bill Batchelder, who then became Speaker Batchelder. (Blessing Dep. 26:19 – 27:7, 27:10-21.)

45. To perform their reapportionment and redistricting work, both Ms. Blessing and Mr. DiRossi left their respective jobs and were retained by the Task Force as consultants from approximately August 4, 2011, through approximately November 2011. (See P102, 8/1/11 Contract; Trial Tr., Vol V at 210:16-19) (DiRossi); (Blessing Dep. 28:6-31:19). Subsequently, both returned to state employment. (Blessing Dep. 32:20-33:15).

46. In her work, Ms. Blessing reported to Mr. Troy Judy, who served as Speaker Batchelder's Chief of Staff for nearly six years. (Trial Tr., Vol V at 68:3-7). Mr. DiRossi reported to Thomas Niehaus, the then-President of the Ohio Senate, and also worked with Mr. Matt Schuler, President Niehaus's then-Chief of Staff. (Trial Tr., Vol. VI at 151:23-152:5; Deposition of Matthew Schuler, ECF No. 240-43 ("Schuler Dep."), at 26:4-8).

47. Ultimately, in their work on Ohio redistricting and apportionment, Mr. DiRossi and Ms. Blessing were directed by and were accountable to their principals, President Niehaus and Speaker Batchelder. (Trial Tr., Vol. V at 152:3-7; Blessing Dep. at 35:7-9).

48. The Republican caucuses had purchased Maptitude for Redistricting ("Maptitude"), a computer software package, to assist them with redistricting and reapportionment. (Blessing Dep. 41:17-42:5; Trial Tr., Vol. V, 199:18-19). Maptitude was a program that was featured at a National Conference of State Legislatures that Ms. Blessing, Mr. Judy, Mr. Lenzo, and Ohio Representative Matthew Huffman attended. The program was used in a lot of states and had high reviews. Ms. Blessing learned how to use the program by completing some tutorials that came with the program and also received some instruction from John Morgan. (Blessing Dep. 38:24-25; 41:20-21; 42:1-5; 155:17-156:15.)

49. The Maptitude software was loaded with geographic, demographic, and election returns data for the State of Ohio. (Trial Tr., Vol. V, 199:25-200:11; Blessing Dep. 43:6-16). Republicans utilized the CSU data in their redistricting work. (Trial Tr., Vol. V at 271:7-18). Mr. DiRossi used counties, political subdivisions, wards, precincts, and census blocks as units of geography when constructing maps in Maptitude; he did not use census tracts. (5 Tr. 202:2-16).

50. Significantly, there was no agreement amongst Republicans or anyone else about how to measure the partisanship of a district. Mr. DiRossi created a "unified partisan index"

consisting of five statewide elections, including, among other elections, the 2004 and 2008 presidential, and 2010 gubernatorial elections, to observe previous election results. (Trial Tr., Vol. V, 273:11-274:1).³ But, as Mr. DiRossi cautioned, that index “and other things had been very volatile. So, you know, those indexes are designed to look backwards and show how previous election results had happened. It is very imprecise going forward, and I can cite numerous examples of why that is.” (Trial Tr., Vol. V, at 233:2-10). And Mr. DiRossi acknowledged that “nobody really agreed with [him]” about the use of a unified index. (Trial Tr., Vol V., at 233:16-18).

51. The so-called “national” Republicans reportedly used the Cook Partisan Voting Index (“R+1, D+1 system”) which Mr. DiRossi did not know how to calculate. (Trial Tr., Vol V., at 229:7-18). And Mr. DiRossi was often asked by colleagues and others for an analysis of specific races. (Trial Tr., Vol. V, 200:15-201:11).

52. Plaintiffs point out that Mr. Clark Bensen, the owner of Polidata and a consultant retained by the General Assembly’s outside counsel, provided certain data services to the Republican caucuses. But Mr. Bensen’s work was limited to “refin[ing] that [CSU] data to make it – to make it more workable” and to providing certain additional election return information not included in the CSU database. (Trial Tr. Vol. V, 271:7-18, 271:19-272:2; *see also* Blessing Dep. 46:15-24).

53. In 2001, the Republican caucuses rented space at the DoubleTree hotel in Columbus—a building across the street from the Riffe Center and a stone’s throw to the State House—to use as a redistricting office. (Lenzo Dep. at 104:14-105:6).

³ Plaintiffs accuse Mr. DiRossi of cherry-picking data by not including 2002 election returns in his “unified index.” But as Mr. DiRossi testified, he excluded 2002 returns due to data quality problems because of how many local boards of elections had changed their voting precinct boundaries: “the farther you go back [in time], the more where your data doesn’t line up with the geography.” (Trial Tr., Vol. V, at 274:5-15).

54. Likewise, in 2011, the Republican caucuses again rented space at the DoubleTree for the same purpose. (Lenzo Dep. at 104:14-105:6). DiRossi was “very comfortable” with the space, having used it previously. (Trial Tr., Vol. V at 211:18-212:2).

55. There was a need for a dedicated and secure space for redistricting and reapportionment legislation to ensure the staff working on those matters would not be “interrogated” by individual members of the General Assembly, and to ensure there would be no opportunity for redistricting materials being stolen. (Lenzo Dep. at 102:18-105:6).⁴

d. The General Assembly’s Democratic Caucuses Assign Christopher Glassburn and Randall Routt to Lead Their Redistricting Efforts, Get Training For Personnel, and Set Up Maptitude.

56. Like their Republican counterparts, the Democratic caucuses of the General Assembly also assigned staff to work on redistricting, obtained the Maptitude software, and obtained training on redistricting matters.

57. In the Ohio Senate, the Chief of Staff to Senate Minority Leader Capri Cafaro, Ms. Amanda Hoyt, assigned the redistricting task to Randall Routt. (Deposition of Randall Routt, ECF No. 230-41 (the “Routt Dep.”), at 20:8-21:2). Mr. Routt first started working for the Ohio Senate in 1989, and in 2011 held a hybrid role performing policy and IT tasks. (Routt Dep. 18:6-20, 19:3-12). Mr. Routt’s specific role in the redistricting efforts for the Senate Democratic caucus included assisting in the production and analysis of draft maps. (Routt Dep. 19:13-23).

58. Mr. Routt reported to Ms. Hoyt and worked with any Democratic Senator who contacted him directly. (Routt Dep. at 20:8-21:2). He also regularly attended meetings of Democratic staff and Senate members on redistricting issues. (Routt Dep. at 21:3-9).

⁴ Plaintiffs, both in this action and in the press, have cited a nickname the Republicans used for this redistricting space—“the bunker”—in an attempt to cast aspersions on the Republicans’ process. The nickname’s origins, however, are not nefarious: Mr. DiRossi coined the “bunker” nickname ten years earlier when he was working in the room at the DoubleTree on September 11, 2001 during the 9/11 terror attacks. (Trial Tr., Vol. V at 153:7-21).

59. Mr. Routt received training on redistricting and the Maptitude software from Caliper Corporation, the Ohio Secretary of State's office, NCEC (a Democratic Party-aligned outside group), and the National Council of State Legislatures. (Routt Dep. at 22:1-24:6, 51:5-20).

60. In the Ohio House of Representatives, Mr. Keary McCarthy, the Chief of Staff to House Minority Leader Armond Budish, appointed Mr. Glassburn to work on redistricting matters for the Ohio House. (Glassburn Dep. 23:5-18). (*See also* Deposition of Keary McCarthy, ECF No. 230-31 ("McCarthy Dep.") at 40:19-25).

61. Mr. Glassburn requisitioned a computer and a copy of Maptitude for his work. (Glassburn Dep. 54:14-19). Mr. Glassburn loaded the CSU data on his computer and leveraged that data in the scope of his work. (Glassburn Dep. 75:12-76:11).

62. Mr. Glassburn received training in redistricting at the 2010 Maryland conference of the National Conference of State Legislatures, and received training on the Maptitude software provided by Caliper in Columbus. (Glassburn Dep. 36:1-37:6).

63. Mr. Glassburn performed his redistricting work at the office, as well as his condominium and his then-girlfriend's apartment. (Glassburn Dep. 55:21-56:13). He acknowledged that, to this day, he has possession of the computer he was assigned for redistricting work for the Ohio House and he keeps the computer in his home in the Cleveland area. (Glassburn Dep. 16:20-18:6).

64. In the Fall of 2011, Mr. Glassburn left the employ of the State and went to work for Innovation Ohio, a think tank. (Glassburn Dep. at 24:9-25:4, 68:9-16). Innovation Ohio then assigned Mr. Glassburn to assist the Democratic members of the Ohio House with an interest in redistricting. (Glassburn Dep. 25:12-23).

65. The Democratic caucuses acquired the same Maptitude software the Republicans were using, and Mr. Rount testified one of the reasons they did so was to make it easier to share information with other entities. (Rount Dep. at 41:4-14).

66. Mr. Glassburn acknowledged that he utilized the elections return data in Maptitude in connection with his redistricting duties. (Glassburn Dep. 79:8-15). He also acknowledged that the House Democratic Caucus evaluated potential redistricting maps using, among other things, a partisan index called the “LWV Dem Partisan Index,” which Mr. Glassburn helped Plaintiff League of Women Voters of Ohio to develop. (Glassburn Dep. 79:16-22, 23-80:5, 80:15-81:14). (*See also* McCarthy Dep. at 100:5-101:8).

67. However, Mr. Glassburn was skeptical about the use of partisan indexes to evaluate the partisanship of a district and preferred to consider different races depending on the specific district being examined. (Glassburn Dep. 81:18-82:7, 84:9-21). Mr. Glassburn gave the example of Appalachia as a region where an index might not do well due to turnout concerns; he explained that “elections are not just about a single candidate, it’s about all the candidates running for that race, and sometimes candidates make strategic decisions to not focus on an area.” (Glassburn Dep. 82:8-11).

68. Mr. McCarthy relied on yet another partisan index, the DCCC Index, to evaluate maps. (I-110, 11/10/2011 Email, at SMC-KM-000171; McCarthy Dep. at 109:3-110:9).

69. The Democratic caucuses also had access to outside resources to assist them with redistricting. Messrs. Glassburn and Rount, for example, obtained statistical information and assistance from an outside group called the National Committee for an Effective Congress (“NCEC”) that works with Democrats. (Glassburn Dep. 47:3-48:2; Rount Dep. at 27:8-20). Mr. Rount and Mr. Glassburn also worked with Plaintiff League of Women Voters of Ohio on

redistricting matters. (Routt Dep. at 47:24-48:12; Glassburn Dep. 48:14-19, 86:8-87:7). Similarly, the Democratic caucuses were in contact with the Democratic Congressional Campaign Committee (the “DCCC”). (Routt Dep. at 48:13-19). And Mr. Glassburn worked with professors including Michael McDonald and Justin Levitt. (Glassburn Dep. 48:18-25, 50:21-51:5).

70. Unlike the Republicans, however, the Democratic House caucus did not spend the lion’s share of its Task Force allocation on map-making. Instead, Mr. McCarthy wrote a memo advocating that the caucus hire legal counsel to challenge Republican-passed maps in court, to hire a public relations firm to raise awareness of redistricting, and to spend most of the budget on those endeavors. (McCarthy Dep. at 48:5-49:9, 49:14-50:20, 52:11-23). Mr. McCarthy was also concerned that the Democratic caucuses should not produce any maps before the Republicans, although he could not remember why. (McCarthy Dep. at 64:5-17).

71. Mr. Glassburn acknowledges that “you could have drawn this state with a maximum of 13 out of 16 districts [R]epublican.” (Glassburn Dep. 174:5-8). In fact, Rep. Szollosi testified that Mr. Glassburn actually produced a map that he believed would elect 13 Republicans. Deposition of Rep. Szollosi, ECF No. 137-2 (“Szollosi Dep.”), at 96:24-97:9).

72. The only map the Democrats formally introduced in the General Assembly as legislation was introduced by Sen. Tom Sawyer, and consisted of one of the OCAR competition maps. (Routt Dep. 192:12-22).

73. Mr. Routt testified that there was no standard definition of a competitive district. (Routt Dep. 145:22-146:15). Further, Mr. Routt confirmed that, when it comes to political indexes, “I don’t know of any one specific index, because there isn’t one, ‘this is the index.’” (Routt Dep. 146:16-19).

74. Democratic members of Congress were also able to provide input in the process through discussions with then-Rep. Steve LaTourette (OH-14), a member of the Ohio congressional delegation in 2011.

75. In 2011, Mr. Adam Kincaid, the Redistricting Coordinator for the National Republican Congressional Committee (“NRCC”), met with Republican Congress members to discuss the redistricting process and help develop districting maps to propose to state legislatures. (Dkt. 230-28 (“Kincaid Dep. II”) at 273:24-274:10).

76. Mr. Kincaid did not meet with all members of the Ohio Congressional delegation. (Kincaid Dep. II 273:24-274:12; 274:14-20). He testified that he “met with the Republican members of Congress; some once, some not at all, and a couple of them multiple times to receive feedback from them and from others via them on what to include or not include in a proposal for the Ohio legislature.” (Kincaid Dep. II 274:15-20).

77. The Ohio member Mr. Kincaid met with far and away the most, between 15 and 30 times, was Congressman LaTourette and that was because Rep. LaTourette was negotiating on behalf of Democrat members. Congressman LaTourette was meeting with Democrat members and “get[ting] their input on the Ohio congressional map and would communication information back to them as well.” (Kincaid Dep. I 96:16-97:8; 97:11-14; 97:16-98:2; 98:8-12).

78. Mr. Kincaid testified that “Democrats would give Mr. LaTourette information on precincts or communities that they would like to be in their districts. Ms. Kaptur and Mr. Kucinich who had been drawn together in a district were interested in the makeup of their parts of those districts, specifically the DMA’s, which are the designated market areas of Toledo and Cleveland and how much of each was inside their districts -- their district. I know Congresswoman Fudge was interested in the precincts and communities that were included in her district, as was Mr. Ryan

[. . .] Ms. Fudge wanted a district that ran from Cleveland to Akron [. . .] My understanding is that that was communicated multiple ways through multiple avenues [. . .] My understanding is that what she wanted was communicated to the state legislature as well as to Mr. LaTourette.” (Kincaid Dep. I 99:8-100:10).

79. Mr. Kincaid recalled that Congresswoman Fudge “was thrilled by the district that was passed out of the Ohio legislature. She may not have used the word thrilled but that she was pleased with the district that she was drawn into.” (Kincaid Dep. I 100:20-101:3).

e. Speaker Batchelder and His Team Faced Clear Geographic Challenges in Constructing the 2011 Plan, and Had Many Priorities for That Plan. Many of Their Priorities Were Shared by the Democrats.

i. Ohio was facing the loss of two congressional seats and a significant shift of its population from the northern portion of the State to the Greater Columbus region.

80. As set forth above, Ohio faced a significant population dilemma going into the 2011 redistricting cycle: the state’s population had stagnated, causing a loss of two congressional seats and shifted to the Greater Columbus region from Cuyahoga County. (Trial Tr., Vol VI at 70:3-11).

81. Those population shifts, combined with the loss of seats, had to be accounted for in the new congressional district plan. (Trial Tr., Vol. V at 155:1-5). As Mr. DiRossi put it:

82. So anybody who knows kind of what was happening in northeast Ohio, you’ve got a number of communities that were experiencing significant population loss. You’ve got the loss of two congressional districts which required the districts to grow by 80,000 people, maybe even more. (Trial Tr., Vol. V, at 176:5-9).

83. Mr. DiRossi testified that because Ohio “was losing two congressional districts,” two incumbents would have to be eliminated. (Trial Tr., Vol. V at 154:22-25, 156:12-19).

- ii. The state made the common-sense decision to eliminate one Republican and one Democratic seat, while protecting other incumbents.*

84. Following the 2010 general election, Ohio's 18-person delegation consisted of 13 Republicans and 5 Democrats. Because Ohio was losing two congressional seats, Mr. DiRossi testified that "the decision was made to pair two Republicans together and two Democrats together," resulting in a 12 Republican and 4 Democrat split. (Trial Tr., Vol. V at 156:20-25).

85. Speaker Batchelder testified that the decision to eliminate one Republican and one Democratic seat was negotiated between the Republican and Democratic caucuses. (Trial Tr., Vol. VI at 47:12-13).

86. Former Senator Keith Faber testified that he recalled generic discussions about taking one seat away from the Democrats and one away from the Republicans being the fair thing to do. The question was which members would be affected, not about partisan issues. Deposition of Keith Faber, ECF No. 230-13 ("Faber Dep."), at 53:17-54:7.)

87. Sen. Faber recalls discussions about the ultimate need to get from 18 seats to 16. There were some Republicans who argued in favor of getting rid of two Democrats, and there were some Democrats who argued in favor of getting rid of two Republicans. Although Republicans had super majorities in the state legislature, they ultimately decided to get rid of one of each, with the ratio between Republicans and Democrats in the congressional delegation staying roughly the same as before. (Faber Dep. 214:5-217:21.)

88. If there was any goal, Sen. Faber testified, it was to try to avoid changing districts dramatically, so that people could be represented by people who shared their values and, to the extent possible, keep members representing the people they know. (Faber Dep. 193:11-194:15.)

89. Mr. DiRossi recalled participating in a number of discussions with Democrats about which Democratic incumbents to pair. (Trial Tr., Vol. V, at 282:7-11).

90. Mr. DiRossi testified that “in conjunction with population shifts that were happening” the location of District 11 and the location of District 3 made “necessary” another pairing of two incumbents whose residencies were “very close together” near District 11. (Trial Tr., Vol. V, at 176:22-177:9). (*See also* Deposition of Adam Kincaid, Jan. 31, 2019, at 576:18-25) (noting that, on the issue of incumbent pairing, “Ms. Sutton lived very close to three or four boundaries for different districts” and explaining that pairing is “just kind of how the physics of redistricting works when you drop the number of seats”). Those two Representatives included Rep. Jim Renacci and Rep. Betty Sutton.

91. In deciding which two Democrats to pair, Mr. DiRossi understood that in order to securely maintain District 11 as a majority-minority district, “nobody thought it was a good idea to pair anybody with [Representative Marcia Fudge].” (Trial Tr., Vol. V at 157:7-11).

92. Congresswoman Kaptur from Lucas County and Congressman Kucinich from western Cuyahoga County ultimately were paired. (Trial Tr., Vol. V at 158:23-159:2).

93. Mr. DiRossi testified that Bob Bennett, the former chairman of the Ohio Republican Party, who had “incredible relationships with former Democratic chairs and also some of the county chairs and individual members,” was an invaluable resource in fleshing out the logistics of pairing Representative Kaptur’s and Representative Kucinich’s districts. (Trial Tr., Vol. V at 160:5-19). Mr. Judy similarly confirmed that Mr. Bennett was instrumental in facilitating discussions with Democratic leaders. (Trial Tr., Vol VI at 74:4-11, 75:19-21).

94. Mr. DiRossi testified that he understood that Democratic leaders not only preferred the Kaptur-Kucinich pairing, but also preferred that the district to be drawn in a way that favored Representative Kaptur. (Trial Tr., Vol. V at 159:3-6, 159:10-13, 161:15-16, 162:19-163:13, 163:17-20).

95. Mr. Judy testified that Mr. Bennett facilitated communications with a Democratic leader from the Toledo area, Jim Ruvolo, regarding changes to District 9. (Trial Tr., Vol VI at 74:7-11, 76:16-19).

96. Mr. Judy testified that he understood based on communication with Mr. Ruvolo that the Democratic leadership wanted to pair Representatives Kaptur and Kucinich. (Trial Tr., Vol VI at 76:16-77:23).

97. Mr. Judy testified that Mr. Bennett's representations regarding the pairing of Representative Kaptur and Kucinich led to drawing of District 9. (Trial Tr., Vol VI at 77:24-78:3).

98. Mr. Bennett is now deceased. (Trial Tr., Vol VI at 75:19-25).

99. On the issue of incumbent pairing, Ohio Republicans did obtain the advice of the then-Speaker of the United States House of Representatives, Rep. John Boehner (OH-08), through one of his representatives, Mr. Thomas Whatman, who joined Speaker Boehner's political operation, known as "Team Boehner," in December 2011. (Deposition of Thomas Whatman, ECF No. 230-52 (the "Whatman Dep."), at 25:9-21).

100. Team Boehner was primarily a fundraising operation, but was also involved in anything related to political affairs concerning Speaker Boehner, including redistricting. (Whatman Dep. 25:25-26:12).

101. Mr. Whatman testified that Speaker Boehner assigned him to work on redistricting in either December 2010 or January 2011, and that his role was to serve as liaison with the Republican members of the delegation to formulate a proposed congressional map in Ohio based on their input. (Whatman Dep. 27:16-19, 29:19-30:3, 31:23-24).

102. Mr. Whatman testified that he created a proposed map, and that Speaker Boehner approved the proposed map before it was given to the General Assembly; Mr. Whatman does not recall anyone else having input on the proposal. (Whatman Dep. 38:7-17).

103. Mr. Whatman testified that in drawing its proposed map in 2011, Team Boehner's objective was not to build on Republican gains in Ohio; instead, it was concerned with incumbent retention. (Whatman Dep. 76:3-4, 76:18-23).

104. Mr. Whatman further testified that in 2011 Republicans had thirteen seats in Ohio, and Democrats had five, and that in redrawing the map it was Mr. Whatman's understanding that each side would lose one seat. (Whatman Dep. 76:25-77:10).

105. Specifically, Mr. Whatman testified:

Going back to the base premise of where we started from on the idea of a map would be that if you're going to ... start from the premise that you're going to lose one Republican and one Democrat from each, that would leave you with a twelve/four map. (Whatman Dep. 197:17-24).

106. Mr. Whatman testified that because Ohio was losing two members of Congress, the challenge in drawing a proposed map in 2011 was determining which two Republican incumbents were going to end up running against each other in a district, and which two Democrat incumbents were going to run against each other. (Whatman Dep. 33:7-13).

107. Mr. Whatman further testified that his desire was that whichever incumbents ended up running against each other, including both Republicans and Democrats, that each would have a fair shot at winning the district. (Whatman Dep. 33:18-23, 62:22-63:4).

108. Mr. Whatman's proposed map had Republican incumbents Congressman Turner and Congressman Austria running against each other, and Democrat incumbents Congressman Kucinich and Congresswoman Kaptur running against each other. (Whatman Dep. 35:2-9, 37:21-38:2, 72:7-8).

109. Mr. Whatman testified that he does not recall looking at election data when considering how to draw the map in connection with Representative Austria and Representative Turner. (Whatman Dep. 139:15-21).

110. Mr. Whatman testified that he had a conversation with Congressman Kucinich in which he told Mr. Kucinich that his proposed map intended to create a fair fight between Mr. Kucinich and democratic incumbent Ms. Kaptur. (Whatman Dep. 62:22-63:4).

111. Importantly, Mr. Kincaid, a redistricting consultant with the NRCC, believed that HB 369 was *not* a plan that “maximizes Republican seats.” (Deposition of Adam Kincaid, ECF No. 230-28 (the “Kincaid January Dep.”), at 573:22-574:15). To the contrary, Mr. Kincaid characterized HB 369 as “definitely an incumbent protection plan.” (Kincaid January Dep. at 576:9-13).

iii. Republicans and Democrats shared the objective of preserving an historic majority-minority district in Northeast Ohio and creating a new minority-opportunity district in Franklin County.

112. Compliance with the Voting Rights Act of 1965, as amended (the “VRA”) was a critical priority for the General Assembly as it set out about its work redistricting the state in 2011. (JX-23 at 1). District 11, Northeast Ohio’s historical majority-minority district, and District 3, a proposed new minority-opportunity district, were center-stage for those efforts.

113. District 11 is a district that historically has been a majority-minority district. (Trial Tr., Vol. V at 169:12-14). Congresswoman Marcia Fudge is the representative of District 11 and has represented the district since 2008. (Trial Transcript, Vol. I, ECF No. 239 (“1 Tr.” or “1Tr.”), at 80:6-10).

114. Mr. DiRossi testified that when he refers to a “majority-minority district,” he is referring to a district in which the voting age population is made up of a majority of non-Hispanic black voters. (Trial Tr., Vol. V at 173:19-23).

115. Mr. DiRossi testified that “great care” was given to District 11 because it was the only majority-minority district on the map. (Trial Tr., Vol. V at 170:17-25).

116. Mr. DiRossi testified that he considered input from Representative Fudge in drawing District 11 and drew a couple of alternative maps for her consideration. (Trial Tr., Vol. V at 170:17-171:8).

117. Mr. DiRossi understood that Representative Fudge favored the option in which District 11 continued south into Summit County. (Trial Tr., Vol. V at 171:19-172:17).

118. Mr. DiRossi understood that “there was considerable concern of pairing Congresswoman Fudge with Dennis Kucinich” and thus Representative Fudge and others in the African-American community preferred a map in which District 11 extended into Summit County. (Trial Tr., Vol. V at 173:2-10).

119. Mr. DiRossi testified that extending District 11 into Summit County created a “ripple effect” and caused other neighboring districts to “curl[] around the 11th District.” (Trial Tr., Vol. V at 176:2-14).

120. Given the population shifts in the state, preserving District 11 and creating a minority-opportunity district in District 3 were priorities for Speaker Batchelder. (Trial Tr., Vol VI at 70:3-11; *see also* Trial Tr., Vol VI at 71:24-72:1).

121. Mr. Judy testified that Speaker Batchelder has “a few long-standing relationships with the African American community,” including a relationship with George Forbes from Cleveland. (Trial Tr., Vol VI at 70:12-16).

122. Mr. Judy testified that throughout his career, Speaker Batchelder consulted with people in the African American community with whom he had long-standing relationships about issues that affected their community. (Trial Tr., Vol VI at 70:12-16).

123. By way of background, Speaker Batchelder began his political career as a member of the Ohio House of Representatives in 1968 and served in that role until 2000. (Trial Tr., Vol. VI at 17:16-18). After serving in the Ohio House from 1968 to 2000, Speaker Batchelder was a trial court judge in Medina County and subsequently an appellate judge in the Ninth District of Appeals in Ohio. (Trial Tr., Vol. VI at 17:19-22).

124. Speaker Batchelder later returned to the Ohio House of Representatives; he served one term in the minority caucus and three terms as the Speaker of the House. (Trial Tr., Vol. VI at 17:23-18:1).

125. Speaker Batchelder was serving as the Speaker of the House during the 2011 redistricting process. (Trial Tr., Vol. VI at 18:4-8).

126. Speaker Batchelder testified that he had a “very warm and friendly” relationship with George Forbes, a prominent African-American leader in Cleveland and member of the Cleveland City Council. (Trial Tr., Vol. VI at 18:18-25).

127. Speaker Batchelder testified Mr. Forbes’ opinion on the changes to District 11 carried great weight because Mr. Forbes had an extensive political background in Cuyahoga County and District 11. (Trial Tr., Vol. VI at 24:7-12).

128. Speaker Batchelder testified that he discussed with Mr. Forbes his concern that, given the results of the 2010 Census, District 11 would not continue as a majority-minority district. (Trial Tr., Vol. VI at 20:1-16).

129. Speaker Batchelder further testified that he discussed with Mr. Forbes the option of extending District 11 into Summit County in order to maintain the district as a majority-minority district. (Trial Tr., Vol. VI at 21:25-22:4).

130. Speaker Batchelder testified that Mr. Forbes was “amenable” to this idea. (Trial Tr., Vol. VI at 23:11-14, 23:16-24:6).

131. Speaker Batchelder’s approval of a District 11 that encompassed parts of Cuyahoga County and extended into Summit County was based on his understanding and belief that Mr. Forbes supported the changes to the district. (Trial Tr., Vol. VI at 24:13-21).

132. Districts 3 and 11 were priorities for Ohio Democrats, too. Rep. Szollosi, the second in charge of the House Democratic caucus, identified “strengthening minority representation” as being “absolutely” important to the House Democratic Caucus. (Szollosi Dep. 41:23-42:2). Rep. Szollosi also felt “very strongly about minority representation in the United States Congress, specifically for Cuyahoga and Summit counties, as well as Franklin County.” (Szollosi Dep. at 43:7-15).

133. Throughout the redistricting process, there was ample evidence from the Democrats’ private and public statements that they supported a majority-minority district for District 11 and, in fact, many Democrats agreed that such a district was legally required. Mr. Routt, on the advice of counsel, also tracked the African-American Voting Age Population for any districts he was drawing or analyzing “for VRA purposes.” (Routt Dep. at 84:14-19).

134. In November 2011, Mr. McCarthy helped assemble a presentation titled “Compromise Proposal to Draw Fair Congressional Districts” that included a slide titled “Strengthening Minority Representation.” (McCarthy Dep. 89:10-25; I-108, Compromise Proposal, at SMC-KM-000367). The slide describes features of a Democratic map proposal and identifies both a “Cuyahoga/Summit” district with a BVAP of 50.04%, and a “Franklin County” district with a 30.15% BVAP. (I-108 at SMC-KM-000367). Mr. McCarthy testified that the goal

of “strengthening minority representation” was to “improv[e] the amount of opportunities there would be for African Americans to represent the district.” (McCarthy Dep. at 93:8-19).

135. Mr. Glassburn admitted that some members of his caucus wanted a majority-minority district in the Cleveland area. (Glassburn Dep. 109:16-110:12). So did Mr. McCarthy. (McCarthy Dep. 96:8-13). Indeed, on November 3, 2011, the House Democratic Caucus took a public position that a majority-minority district in Cleveland was “constitutionally required.” (McCarthy Dep. at 118:4-21).

136. Mr. Routt received an email from Ms. Hoyt in which “dem favorable” maps were described as including “a 50 plus 1 AA district.” (I-091, 11/17/11 Email; Routt Dep. at 82:7-12).

137. Mr. DiRossi testified that in drawing the 2011 map it was an “overarching goal ... to create a new district in Franklin County that might be able to elect a second member from the minority to Congress from Ohio for the first time ever.” (Trial Tr., Vol. V at 177:11-22).

138. Mr. DiRossi understood that Joyce Beatty was interested in running as a candidate for the newly created District 3 if certain criteria was satisfied. (Trial Tr., Vol. V at 177:23-178:6, 178:17-22).

139. Congresswoman Beatty specifically requested that the residence of Mary Jo Kilroy—a former Franklin County Commissioner—was “physically not in the district.” (Trial Tr., Vol. V at 178:25-179:4).

140. Congresswoman Beatty also requested that certain property of Ohio State University, her former employer, be included in the district. (Trial Tr., Vol. V at 179:4-9).

141. Mr. DiRossi testified that at the request of the Columbus Partnership to consistently have both Democratic and Republican congressional representatives from Franklin County in Congress, he split Franklin County into three districts. (Trial Tr., Vol. V at 288:3-289:1).

142. The creation of District 3 “creat[ed] outward pressure for the other districts”—for example, District 12 and District 15 went from “traditional central Ohio districts” to “more sprawling districts.” (Trial Tr., Vol. V at 179:3-180:2).

143. Speaker Batchelder testified that District 3 changed “quite markedly” according to the 2010 Census; Speaker Batchelder testified that he supported drawing District 3 in a way that supported the election of Joyce Beatty. (Trial Tr., Vol. VI at 26:3-10).

144. Mr. Judy testified that it was his understanding that it was important to Speaker Batchelder to have Congressional District 3 drawn in a way that favored Congresswoman Joyce Beatty. (Trial Tr., Vol VI at 72:4-8).

145. Mr. Judy testified that it was his understanding that Speaker Batchelder consulted with business leaders in Franklin County and members of the African-American community in Franklin County regarding the creation of central district in Franklin County. (Trial Tr., Vol VI at 71:5-11).

146. Mr. DiRossi testified that he never referred to District 3 as a “sinkhole” or referred to any group of voters, including those in District 3, as “dog meat.” (Trial Tr., Vol. V at 180:6-17). Speaker Batchelder never referred to District 3 as a “sinkhole.” (Trial Tr., Vol. VI at 26:11-21). Nor did he ever refer to voters as “dog meat.” (Trial Tr., Vol. VI at 26:22-25).

147. In contrast, District 3 was a positive, bipartisan achievement for Ohio. Indeed, Democratic support for a minority-opportunity district in District 3 dates back at least to July 18, 2011, when Mr. Routh authored an email expressing the view that “we believe that there could be a strong case for a Franklin County seat on the basis of having a self contained district plus, it also maximizes minority voting strength thereby increasing the opportunity of having an additional minority member of Congress outside of northeast Ohio.” (I-087, 7/18/11 Email Chain; Routh Dep.

at 43:3-15). This was a view not inconsistent with an “historical[] goal of the Senate Democratic Caucus, to have minority opportunities throughout the state...” (Routt Dep. at 44:13-19). (*See also* Routt Dep. 55:5-59:4).

148. Rep. Szollosi testified that it was a “priority of our caucus” to have a Franklin County district with a significant African-American population. (Szollosi Dep. at 44:20-45:6).

149. Also on July 18, 2011, the Senate Democratic Caucus contacted representatives of NCEC requesting their assistance:

to make a case for a Congressional district in Franklin County. If you guys have maps that would incorporate a Franklin County district which would maximize minority voting I would appreciate it. The point we would like to make in the hearings is it’s fine to maintain a minority district in Northeast Ohio but, why can’t we have a district in Franklin County where a minority could be competitive?

(I-089 at SMC-RR-029096; Routt Dep. at 58:2-14). Specifically, the ask was for an “opportunity district” in Franklin County. (Routt Dep. at 58:9-18).

f. Ohio Republicans Did Not Take Orders from “National” Republicans.

150. One theme Plaintiffs have woven into their brief is the allegation that so-called “national Republicans” like Speaker John Boehner or Adam Kincaid exerted undue influence or control over Ohio’s congressional redistricting process. This allegation is false.

151. While political leaders, even those in Washington D.C., had opinions about the proposed redistricting plan, ultimately, it was the leaders of the Ohio General Assembly that had the decision-making authority and the responsibility to get the bill passed through the traditional legislative process. (Trial Tr., Vol. V at 155:21-156:2, 185:2-11)).

152. Mr. DiRossi put it plainly:

Q. It was clear to you that [President Niehaus] was interested in Speaker Boehner’s input?

A. I mean, he was the Speaker of the United States House of Representatives, so I'm sure he was interested in his opinion. Ultimately, Speaker Batchelder and Tom Niehaus, the president of the Senate, they were responsible for getting the votes in the legislature to get the map through. And I am sure they had numerous conversations with all kinds of interested parties across the political spectrum, but at the end of the day, they had the responsibility to make sure that the map that was being voted on got the votes.

So I'm sure a lot of people's opinions were important. I'm sure they talked to a lot of people that were important, but the people of the caucuses that were voting on it, that was what was most important, and that was their responsibility. (Trial Vol. V, 234:2-16).

153. Plaintiffs seize on an email sent by Mr. DiRossi to Sen. Faber on September 10, 2011, shortly before HB 319 (described below) was introduced as legislation, in which Mr. DiRossi responded to a suggestion change by Sen. Faber by saying "DC is increasingly pushing to put the lid on this" to suggest that national Republicans controlled the process. But as Mr. DiRossi explained, the real issue was that "President Niehaus was getting frustrated that his own members of the leadership this late were making suggestions and running ideas and thinking of things. And so I was trying to gently nudge and say, 'we've got to stop. We've got to stop.'" (Trial Tr., Vol V at 239:7-21).

154. Similarly, Mr. Whatman testified that he did not have any approval authority over the maps that were drafted by the Ohio legislature. (Whatman Dep. 225:6-10).

155. In fact, Mr. DiRossi testified that "folks in D.C." suggested a map that split Franklin County "four ways," but that the General Assembly "rejected" that approach as contrary to the legislature's goal of the "creation of a new district in Franklin County." (Trial Tr., Vol. V at 232:7-21).

156. Ms. Blessing, for her part, confirms that apart from showing her how to use Maptitude, Mr. Morgan, a Republican redistricting consultant, did not have any input in terms of how the maps were being drawn. (Blessing Dep. 58:7-12, 18-21.)

157. Similarly, Ms. Blessing testified that Mr. Whatman did not need to approve any changes to any maps at any point in 2011, and Speaker Batchelder never instructed Blessing to get Mr. Whatman's approval. (Blessing Dep. 59:18-60:6.)

158. Senator Faber also testified that to his knowledge, Speaker Boehner's approval of the plan was not necessary. Faber did not have any direct communication with Boehner or any of his staff he can recall. Although Faber believes that Boehner was involved, he could not have had the lead role in the process because it was a legislative map and a bill that the Ohio General Assembly had to pass. (Faber Dep. 59:18-60:18; 125:18-126:13.)

159. In fact, when candidate maps to serve as HB 319 were presented to Speaker Batchelder and President Niehaus, no "national Republicans" were in the room. (*See* Lenzo Dep. at 36:13-37:6.)

160. Ms. Blessing showed these maps at a meeting in the redistricting office in the DoubleTree Hotel. The meeting attendees included Lenzo, President Niehaus, Speaker Batchelder, Troy Judy, Matt Schuler, and their outside legal counsel, Mark Braden. This was the only meeting when maps were presented to Lenzo outside of him seeing the original version of H.B. 319 and the final version of H.B. 369. (Lenzo Dep. at 37:16-38:24.)

161. This meeting involved various options that were available for each map. One map version created a majority-minority district linking Cuyahoga and portions of Summit County. Another version created both a majority-minority district and a Central Ohio Franklin County-based district. Lenzo does not recall how the third version differentiated from the other two. When these maps were presented, they were not accompanied with data or other information. (Lenzo Dep. at 39:2-40:3.)

162. Notably, while Mr. Kincaid recalled meeting with Congressman LaTourette between 15 and 30 times to discuss requests from Democratic Congress members, *infra* at ¶77, his interactions with Mr. DiRossi and Ms. Blessing paled by comparison.

163. Mr. Kincaid's work related to Ohio's Congressional map took place over the course of two months in 2011: late July through early September 2011. (Kincaid Dep. II 274:21-22; 274:24-276:13; 335:16-21).

164. Mr. Kincaid did not work on any draft maps after the passage of HB 319; he was not involved in any map drawing work for HB 369. (Dkt. 230-27 ("Kincaid Dep. I") at 20:8-21:7); (Dkt. 230-28 ("Kincaid Dep. II") at 546:4-20) (noting that he did not recall having any conversations about HB 369 with Mr. DiRossi, Ms. Mann or Mr. Whatman).

165. During the 2011 redistricting process, Mr. Kincaid never met Mr. DiRossi or Ms. Blessing in person, and does not recall having any telephone conversations with them. (Kincaid Dep. II 372:2-18; 381:10-12). "I don't recall having a conversation with Ray or Heather at all during the process." (Kincaid Dep. II 374:10-12).

166. Mr. Kincaid has no independent recollection of any conversations he had with Ray DiRossi in 2011. (Kincaid Dep. I 86:23-87:11). He only knows from a press account that he had an e-mail exchange toward the end of the process of drafting HB 319. (Kincaid Dep. I 86:23-87:11). "As you've seen before, I didn't share much directly with Heather and Ray[.]" (Kincaid Dep. II 463:2-3).

167. Mr. Kincaid did not discuss PVI with Mr. Dirossi. (Kincaid Dep. II 463:14-24). "I have no recollection of any conversation regarding PVI with Ray DiRossi." (Kincaid Dep. II 463:23-24).

168. When Mr. Kincaid referred to a “collaborative process” in the congressional map drawing in Ohio in 2011, as cited by Plaintiffs in para. 68 of their Proposed Findings of Fact, he was referring to a “collaborative process between [...] the [Ohio Congressional] members proposing a map and the state legislature putting their feet back and in and Ray and Heather making those edits there.” (Kincaid Dep. II 313:16-25). Mr. Kincaid was clear that his analyses did not cause changes to the map; they were simply facts and information provided to inform the process. (Kincaid Dep. II 313:16-314:8).

169. Mr. Kincaid does not recall receiving more than two block assignment files from Mr. DiRossi or Ms. Blessing, and did not receive them until toward the end of work on HB 319. (Kincaid Dep. II 271:4-14; 271:16-19; 271:21-25).

170. Mr. Kincaid was never part of any decision by the Ohio legislature about which map to adopt. Mr. Kincaid testified: “I didn’t pick one or the other.” (Kincaid Dep. II 393:25). “They asked for both maps. Both options. The Ohio legislature looked at the two of them and made a decision. I wasn’t part of that conversation. [...] Ray and Heather took those maps and I think showed them to – made changes in various things and did things on their end with the Ohio state legislature, and somewhere with the Ohio state legislature decided which way to go.” (Kincaid Dep. II 394:9-24).

171. Mr. Kincaid’s interactions with Tom Hofeller about Ohio in 2011 even paled in comparison to the number of meeting he conducted with Congressman LaTourette about Democratic Congress member interests. Mr. Kincaid’s communications with Tom Hofeller about the 2011 redistricting process was “more style than substance,” focused on how to communicate with members of Congress. (Kincaid Dep. I 78:19-25; 79:8-14; 79:20-80:4).

172. Dr. Hofeller never provided Mr. Kincaid instruction about how Ohio's congressional districts should be configured. (Kincaid Dep. II 278:24-279:5; 308:5-22).

173. Dr. Hofeller never provided Mr. Kincaid a block assignment file for the Ohio congressional map. (Kincaid Dep. II 305:10-15).

174. Mr. Kincaid never provided a block assignment file for the Ohio congressional map to Dr. Hofeller during the map drawing process. (Kincaid Dep. II 305:21-25).

175. Mr. Kincaid discussed Ohio's congressional map with Dr. Hofeller no more than two or three times and it was in the context of a broader discussion about redistricting nationwide. (Kincaid Dep. II 307:9-21).

176. Mr. Kincaid does not recall any meeting with Dr. Hofeller and Mr. Whatman. (Kincaid Dep. II 371:9-14). He does not think that Dr. Hofeller was in communication with Mr. Whatman about the Ohio congressional map. (Kincaid Dep. II 405:20-25).

g. Rep. Fudge, Rep. Kaptur, and Sen. Turner's Testimony Fails to Rebut This Extensive Factual Record

177. Plaintiffs offered the testimony of Rep. Marcia Fudge (OH-11), Rep. Marcy Kaptur (OH-9), and former State Sen. Nina Turner. None of these witnesses aided their case.

i. Rep. Marcia Fudge

1. The 11th District Is a Bona Fide Attempt to Comply with the Voting Rights Act.

178. Congresswoman Marcia Fudge has represented District 11 since 2008. (Trial Tr., Vol. I, at 79:19-21, 80:6-10). She resides in a suburb of Cleveland, Ohio called Warrensville Heights. (Trial Tr., Vol. I, at 89:21-23).

179. As Rep. Fudge testified, what is today known as District 11 has, in material respects, been in existence since 1969. (Trial Tr., Vol I at 79:21-25). Although it was not labeled the 11th district until after the 1990 Census, "the district itself has been around since 1969 when

Lou Stokes was first elected to represent what was then the 21st district.” (Trial Tr., Vol I at 79:21-25). Since 1969, District 11 has been majority-minority. (Trial Tr., Vol I at 89:1-4).

180. Rep. Fudge did not dispute that District 11’s configuration under the 2011 Plan was supported by prominent leaders of the Cleveland African American community:

- a. From about 1969 and for a period of 30 years, Congressman Louis Stokes represented the 21st district. (Trial Tr., Vol I at 88:9-16, 23-25).
- b. Congressman Stokes was and is a revered public servant. (Trial Tr., Vol I at 89:5-15).
- c. Congressman Stokes approved of the configuration of the 11th district in the 2011 Plan. (Trial Tr., Vol I at 89:16-18; 98:2-7).
- d. George Forbes was president of the Cleveland City Council for a number of years. (Trial Tr., Vol I at 90:21-25). Mr. Forbes was and is a prominent leader in Cleveland (including, but not limited, to the African American community) and served for a number of years as president of the Cleveland NAACP. (Trial Tr., Vol I at 91:1-12).
- e. Congresswoman Fudge respects George Forbes and would listen to him if he spoke on a matter of public importance. (Trial Tr., Vol I at 91:15-19).
- f. George Forbes supported the configuration of the 11th district in the 2011 plan. (Trial Tr., Vol I at 91:20-94:14). Mr. Forbes stated publicly in 2011 that “Everything the blacks asked for Republicans gave them.” (Trial Tr., Vol I at 93:14-17).
- g. Sen. Vernon Sykes is a Democratic Ohio state senator who represents a district that includes Akron, within the 11th District. (Trial Tr., Vol I at 94:20-95:4). Senator Sykes is a prominent member of the African American community in Northeast Ohio. (Trial Tr., Vol I at 95:11-13).
- h. Senator Sykes publicly supported drawing the 11th congressional district in Akron. (Trial Tr., Vol I at 95:16-97:25).

181. Three black representatives of the Ohio House of Representatives from Cleveland voted for the 2011 plan. (Trial Tr., Vol I at 98:8-11).

182. Under the 2011 Plan, the 11th district now includes portions of Summit County and the City of Akron. (Trial Tr., Vol I at 83:1-2). Congresswoman Fudge is “honored” to represent these new constituents. (Trial Tr., Vol I at 84:3-9).

183. It is true that, at trial in 2019, Rep. Fudge stated that she “would not have chosen” to represent portions of Summit County and Akron. (Trial Tr., Vol I at 83:5-7). But in 2011, Rep. Fudge stated that she was not upset with the map when she saw it. (Trial Tr., Vol I at 98:12-16). Although Rep. Fudge now claims to have been “misquoted” on this point in 2011, she made no effort until trial in 2019 to correct the record. (Trial Tr., Vol I at 99:2-12).

184. Her internally inconsistent testimony on this point is confusing.

185. Congresswoman Fudge conceded having an incentive not to speak in candor about her redistricting desires, stating that, in 2011, she would not “insult” people by saying she wanted a different districting configuration. (Trial Tr., Vol I at 98:13-21).

186. Congresswoman Fudge also admitted to a lack of complete candor with the Court, representing that she “need not share” information responsive to counsel’s questioning. (Trial Tr., Vol I at 100:22-23).

187. As of 2019, Congresswoman Fudge’s testimony about why she “would not have chosen” the configuration also was internally inconsistent.

- a. She testified at one point that “the *only* complaint I had was that I knew that taking Summit County or that portion of Akron away from Betty Sutton would make it seem...almost impossible for her to win her district.” (Trial Tr., Vol I at 85:20-23) (emphasis added).
- b. She testified that because she had no other complaint, the “only action I took was to sit with” congressmembers to discuss the district’s configuration. (Trial Tr., Vol I at 85:20-86:1).
- c. But elsewhere, she testified that her complaint was that she didn’t “know anything about Summit County.” (Trial Tr., Vol I at 84:15-16).
- d. She also complained that portions of the new district, such as Richfield and Bath, “never voted Democratic”; instead, most “are registered as independents.” (Trial Tr., Vol I at 84:15-23).

188. Moreover, placing Congresswoman Betty Sutton in a position where she would not win, however, was an unavoidable consequence of the reapportionment, since *some* members

would be paired and lose their districts when Ohio went from 18 to 16 seats. (Trial Tr., Vol I at 101:7-16).

189. That is particularly true given that, in deciding which two Democrats to pair, Mr. DiRossi understood that in order to securely maintain District 11 as a majority-minority district, “nobody thought it was a good idea to pair anybody with [Representative Marcia Fudge].” (Trial Tr., Vol. V at 157:7-11). Rep. Fudge was not, in fact, paired.

190. In all events, Rep. Fudge expressed no concern either in 2011 or in 2019 that the black voting age population in the 11th congressional district is too high.

- a. Rep. Fudge did not tell people with whom she spoke with about the redistricting that she did not want a majority-minority district. (Trial Tr., Vol I at 101:4-8).
- b. Rep. Fudge did not advocate that the 11th congressional district have less than 50% black voting age population. (Trial Tr., Vol I at 102:21-24).
- c. Rep. Fudge did not view the 11th district as a violation of the VRA. (Trial Tr., Vol I at 102:25-103:8).

191. Congresswoman Fudge also expressed no concern either in 2011 or in 2019 that the 11th congressional district is racially discriminatory.

2. Like Other Members of Congress, Representative Fudge Represents All People in Her District, Regardless of Partisanship.

192. Congresswoman Fudge represents everyone in her district regardless of political affiliation. (Trial Tr., Vol. I, at 103:14-19). Although many residents in Congresswoman Fudge’s district do not vote for her, she represents them. (Trial Tr., Vol. I, at 103:20-24).

193. Congresswoman Fudge does not only represent Democrats. (Trial Tr., Vol. I, at 103:25-104:1).

194. Congresswoman Fudge represents Republicans and Independents. (Trial Tr., Vol. I, at 104:2-4).

195. Congresswoman Fudge, a Democratic member, does not believe Congressman Stivers, a Republican member, represents only Republicans. (Trial Tr., Vol. I, at 105:4-12).

196. Congresswoman Fudge believes Congressman Stivers is a “very good congressman.” (Trial Tr., Vol. I, at 105:15-16).

197. Congresswoman Fudge has nothing negative to say about the Ohio congressional delegation’s ability to represent their constituents. (Trial Tr., Vol. I, at 105:17-23).

3. Members of Ohio’s Congressional Delegation Are Not Extreme Partisans.

198. Congresswoman Fudge, a Democratic member, is not opposed to free trade. (Trial Tr., Vol. I, at 104:10-11).

199. Congresswoman Fudge represents that she is pro-business. (Trial Tr., Vol. I at 104:12-13).

200. Congresswoman Fudge represents that she is not from a far liberal wing of her party. (Trial Tr., Vol. I at 104:14-17).

201. Congresswoman Fudge does not need court pressure to engage with moderate Democrats in her district. (Trial Tr., Vol. I at 104:18-20).

202. Congresswoman Fudge does not need a primary opponent in order to be forced to engage with constituents. (Trial Tr., Vol. I at 104:21-22).

4. Representative Fudge Confirms That Incumbency Protection was a Priority in the 2011 Plan.

203. Congresswoman Fudge believed John Boehner “would be sure that no one mistreated me.” (Trial Tr., Vol. I, at 100:3-4).

204. Nevertheless, the basis for Congresswoman Fudge’s criticism of the 11th district was that it gave her territory with which she was “unfamiliar” and because portions of it had independent rather than Democratic voters. (Trial Tr., Vol. I, at 84:15-22).

ii. Sen. Nina Turner

205. Sen. Nina Turner is a Democrat who first held elective office as a member of Cleveland City Council. (Trial Transcript, Vol. II, ECF No. 240 (“2 Tr.” or “2Tr.”), at 5:21-25).

206. Turner was appointed to state senate in 2008 and ran for state senate for the first time in 2010, (2 Tr. 6:1-2), serving for six years in the Ohio senate in total. (2 Tr. 6:20-21).

207. Turner represented the 25th State Senate District, which included parts of Cleveland, and the greater Cleveland suburban communities. (2 Tr. 6:11-13).

1. “Our Revolution”

208. Turner “most recently” was the president of “Our Revolution,” (2 Tr. 6:7-8), but has taken a “leave of absence,” to serve as the co-chair for Senator Bernie Sanders’ presidential campaign. (2 Tr. 6:24-25).

209. Our Revolution “engages in social justice work primarily through the electoral process.” (2 Tr. 7:2-3). Our Revolution’s “major focus” is to get “progressives elected to all levels of government.” (2 Tr. 7:3-5). Our Revolution “push[es] for progressive issues,” (2 Tr. 7:5-7), and “push[es] to help the Democratic party be more accountable to the people.” (2 Tr. 7:8-9). Turner considers Our Revolution an “omni-partisan organization” and asserts it is “not partisan,” (2 Tr. 7:9-11), because it has “endorsed candidates from across the political spectrum.” (2 Tr. 7:10-11).

2. Ohio Democratic Caucus in 2011

210. “A lot” of Sen. Turner’s committee work dealt with the “work of the General Assembly” and involved discussing “positions on different pieces of legislation that [were] coming before the legislature, the Ohio Senate.” (2 Tr. 7:15-22).

211. The Democratic caucus in 2011 was a “deep minority.” (2 Tr. 7:15-16).

212. In 2011, Sen. Turner was one of ten members in the Senate Democratic caucus with 33 total senators in the state senate. (2 Tr. 7:23-8:3).

213. In 2011, five of the ten members in the Senate Democratic caucus were African-American to include Sen. Turner. (2 Tr. 7:23-8:6).

3. Sen. Turner Drops Out of the 11th District Congressional Race

214. In December 2011, Turner provided one of the reasons she decided to drop out of the 2012 congressional race against Congresswoman Fudge was because the “redistricting process was manipulated to allow incumbent politicians to guarantee their reelection.” (2 Tr. 25:2-26:14). Sen. Turner did not express “any reason to doubt” she made the statement. (2 Tr. 26:15-16). Sen. Turner believed the context of the statement was that an early primary date would make it harder to have a primary campaign against an incumbent, regardless of party affiliation. (2 Tr. 33:18-34:10).

215. Sen. Turner, upon reading a news article of a statement attributed to her in December 2011 for why she dropped out of the congressional race, and questioned if she made the statement, Sen. Turner testified, “It appears so.” (2 Tr. 26:13-14). The news article was titled, “Senator Nina Turner Drops Congressional Primary Bid.” (2 Tr. 33:14-17).

4. The Voting Rights Act

216. Sen. Turner testified the “irony” of the HB319 map was that it “hurt the voting prowess of the folks and the influence they would have through representative democracy by stripping or combining portions of the 11th Congressional District in ways that representatives could not focus purely on Cleveland and/or Cuyahoga County.” (2 Tr. 13:3-7). Sen. Turner thought part of the Republicans’ argument for the map was “that they were protecting us in some way, when that district has only had two congressmembers, one was Congressman Louis Stokes, currently it’s Congresswoman Marcia Fudge, and they’ve never had a problem winning elections in that district.” (2 Tr. 13:15-19).

217. Sen. Turner testified she believed the Republicans using the Voting Rights Act as a rationale for the map “was really just a mockery of what my Republican colleagues were doing.” (2 Tr. 13:8-12). Sen. Turner believed the use of the Voting Rights Act was an “irony” because “it had the reverse effect” as she believed it was being used “as a shield to do wrong,” which was “not the purpose of the Voting Rights Act.” (2 Tr. 13:20-25).

218. However, Sen. Turner did not criticize the Democrats who voted for HB 369.

219. Sen. Turner believes HB 319 and HB 369 were for “incumbency protection” regardless of “political affiliation.” 2Tr. 34:6-8.

220. In explaining what Democrats did in response to the passage of HB319, Sen. Turner testified, “Fortunately, in the great state of Ohio, the citizens have the right to overturn if they can get enough signatures. The will of the General Assembly and Democrats sought to do that.” 2Tr. 17:24-18:4. However, she testified the referendum effort “didn’t go well” because “Democrats did not collect enough signatures [from Ohio citizens] at the time to get the initiative on the ballot.” 2Tr. 18:5-7.

5. Participation in the 2011 Redistricting Process

221. Sen. Turner did not recall providing “any input on the map,” 2Tr. 34:23-25, although she recalled there “certainly . . . was robust debate . . . in [her] caucus about the maps.” 2Tr. 34:23-25. Sen. Turner confirmed her caucus “debated those issues.” 2Tr. 35:1-4.

222. Sen. Turner testified she “had no personal dealings with drawing the map.” 2Tr. 9:2-3.

223. Sen. Turner recalled the first map proposed was House Bill 319. 2Tr. 9:4-6.

224. Sen. Turner testified her ‘first actual knowledge’ of what HB 319 would look like was when leader Budish came to one of her Senate caucus sessions and explained the “broad contours” of the map. 2Tr. 9:7-12.

225. Sen. Turner testified leader Budish “simply explained” the “map was a 12-4 map, 12 being to the benefit of Republicans, and four Democratic seats.” 2Tr. 9:9-17.

226. Sen. Turner voted against HB319 in the Ohio Senate. 2Tr. 10:17-23.

227. Sen. Turner did not “recall” whether, between the first map passing (HB319) and the enacted map passing, she worked with Democratic map drawers on proposed alternatives to HB319. 2Tr. 27:11-16.

228. Sen. Turner thought it “might be possible” she “received proposals from Democratic map drawers which incorporated recommendations from the Ohio House and Senate Democrats, the Ohio Legislative Black Causes and congressional Democrats in Ohio.” 2Tr. 27:17-23.

229. The Democratic proposals in the fall of 2011 included a “50 plus one African-American district in northeast Ohio—the 11th Congressional District.” 2Tr. 27:24-28:8.

230. When confronted with an email dated November 3, 2011, with Sen. Turner’s email address, showing a Democratic proposal with a “50 plus one African-American district in northeast Ohio,” she denied that seeing that email would refresh her recollection because she “can’t guarantee whether or not [she] received that e-mail or not.” 2Tr. 28:15-30:13. Sen. Turner testified the email document was “certainly . . . sent to [her] email,” 2Tr. 30:10, however, upon hearing a line read aloud that said “It provides for a 50 plus one African-American district in northeast Ohio,” Sen. Turner “guess[ed]” she “just need[ed] some clarification.” 2Tr. 30:14-18.

231. On direct, Sen. Turner testified she, “as an individual senator,” never gave “Randall Rountt authority to issue map proposals on her behalf.” 2Tr. 34:17-20. Sen. Turner did not recall providing Randall Rountt input about the map. 2Tr. 34:21-22.

232. Sen. Turner admitted Randall Routt was an employee for the Ohio Senate caucus and “most likely on the team trying to help Senate Democrats . . . have some influence on those maps.” 2Tr. 36:22-25. Sen. Turner testified Randall Routt was “part of our caucus staff, and we did have debates about the . . . maps.” 2Tr. 37:7-8. However, she did not “know if [she] emailed him or not” privately to obtain details about voting data in Congressional District 11 in the fall of 2011, 2Tr. 36:19-37:2, and she did not recall if she was able to obtain political data from him regarding the districts in 2011. 2Tr. 37:9-11. Sen. Turner agreed an email presented to her showed she was privately emailing Randall Routt in the fall of 2011 about the racial composition of Congressional District 11, 2Tr. 37:24-38:6, with the caveat she sought to “get a better understanding of the impact that any map would have on the district” that she lived in and represented. 2Tr. 38:6-9.

iii. Rep. Marcy Kaptur

233. Rep. Marcia Kaptur was first elected to Congress as the Representative for the 9th Congressional District of Ohio since November of 1982 and has continuously held that seat to the present. Trial Transcript, Vol. VIII, ECF No. 249 (“8 Tr.” or “8Tr.”), at 68:23-69:7.

234. Rep. Kaptur is a member of the Democratic Party. 8 Tr. 73:12.

235. Rep. Kaptur is currently the most senior member of the Ohio Congressional delegation and believes she probably was the most senior member of the Ohio Congressional delegation in 2011. 8 Tr. 69:8-11.

1. Kaptur’s Reaction To HB 319

236. Rep. Kaptur stated that she did not “take any part in creating the map that was originally submitted as House Bill 319.” 8 Tr. 69:25-70:4.

237. Rep. Kaptur complained that HB 319 only kept in her district the “northeastern quadrant of the city” of Toledo, the “top” of Ottawa County and Erie County, and the portion of

Lorain County along the water, as well as connected the district into the city of Cleveland, which included a “mishmash of the west side.” 8 Tr. 71:14-72:9.

238. Rep. Kaptur noted that HB 319 placed her and Democratic Incumbent Congressman Dennis Kucinich in the same district. 8 Tr. 76:13-21. When asked if she wanted to be paired with Congressman Kucinich, Kaptur responded, “[a]bsolutely not.” 8 Tr. 76:22-23.

239. Kaptur stated that she remembered Ohio was losing two congressional seats following the census. 8 Tr. 77:15-17. She further testified that she would not “wish on anyone” to have to run against another incumbent, but that the apportionment process sometimes requires that to happen. 8 Tr. 78:5-9.

240. Kaptur testified that she had no reason to dispute that her district was “down by about a hundred and two thousand-plus people from the Constitution requirement of equal population, about 15 percent.” 8 Tr. 78:18-23. Kaptur also noted that Toledo had lost population and she agreed that “there was no question” her district would have to expand geographically. 8 Tr. 79:4-11.

241. Kaptur stated she “would guess that” Franklin County and Columbus would be the fastest growing areas in Ohio and agreed that if equal population districts had to be drawn one of them “might move” to the Franklin County area. 8 Tr. 79:22-80:6.

242. Kaptur testified the process for drawing legislative lines is a process performed by the state legislature. 8 Tr. 80:13-17.

243. Kaptur stated that she has never served in the state legislature and has never “personally” been involved in the creation of a legislative plan. 8 Tr. 92:16-20.

244. Kaptur stated that her only comments made at the series of hearings held around the state relating to the drawing of the legislative lines were about “the Friend of the Court opinion about the *Stewart-Blackwell* case” enforcing home rule. 8 Tr. 80:18-81:2.

245. Kaptur testified that she “vaguely” remembered receiving document requests on the 2011 redistricting for this case and that she did not “think [her office] had [produced] any documents,” 8 Tr. 81:9-15.

246. Kaptur stated that she had phone conversations with state Representative Michael Ashford regarding the redistricting process. 8 Tr. 81:22-82:10. However, Kaptur noted that these conversations took place after the release of the “original plan.” 8 Tr. 82:11-14.

247. Kaptur further testified that she did not have any contact with any legislators “prior to the release of [the original] plan.” 8 Tr. 82:15-18. Kaptur also stated that she did not talk with either Speaker Batchelder or the President of the Senate regarding the redistricting process prior to the passage of HB 319. 8 Tr. 82:19-22.

2. Kaptur Wins Some Changes to Her District in HB 369

248. Kaptur testified that she did work with members of the “northwest Ohio delegation,” but her communications did not begin until after HB 319 was passed. 8 Tr. 83:1-12.

249. After the passage of HB 319, Kaptur testified that she tried to “influence” the map to improve her district by engaging in “standard political negotiations.” 8 Tr. 83:13-23.

250. Kaptur testified that HB 369 incorporated some of her suggestions including the inclusion of her church and family cemetery. 8 Tr. 84:4-7.

251. Kaptur testified that during the period between the passage of H.B 319 and HB 369 in which she was providing input into the redistricting process, she was trying to secure “all the voters in Lucas County” because it was her “home county.” 8 Tr. 89:15-23.

3. Kaptur is Responsive to Her Constituents

252. Kaptur testified that she represents both Democrats and Republicans in her district. 8 Tr. 91:1-4.

253. Kaptur confirmed that if an individual who lives in her district had an issue, it wouldn't make a difference to her whether the individual was a Republican or Democrat. 8 Tr. 91:11-15.

254. Kaptur further testified that "case work is totally nonpartisan." 8 Tr. 91:21-22.

255. When asked if she would have any reason to believe that Congressman Chabot would not help a Democrat or Republican if they needed help, Kaptur testified that Congressman Chabot is her friend, that he is the "dean on the Republican side of the aisle," and that they "work together." 8 Tr. 92:5-13.

C. Legislative History of HB 319

256. On September 8, 2011, the House State Government and Elections Committee ("HSGEC") issued a notice that indicated that the committee would hear testimony on Ohio's congressional map. The congressional map was considered at hearings of the HSGEC on September 13 and 14. State Representative Matthew Huffman introduced HB 319 and gave sponsor testimony at the September 13 hearing. (*See* Joint Uncontroverted Facts, ECF No. 212-1 at ¶ 3).

257. In his testimony, Rep. Huffman stated that the United States Supreme Court has held that Congressional districts in the same state must be as equal in population as practicable, and that absolute population equality is the paramount objective. (J23 at p.1).

258. Rep. Huffman further testified that compliance with the Voting Rights Act (VRA) was of utmost importance in the redistricting process. (J23 at p.1).

259. Rep. Huffman testified that after receiving public input during five public hearings held across the state, he was confident HB 319 accomplished several goals, including creating fair districts; treating incumbent candidates equally by drawing three Republican and three Democrat incumbents into overlapping territories; creating an African American majority-minority district in Cuyahoga and Summit counties; and creating a minority opportunity district in Franklin County. (J23 at p.1).

260. Mr. Ray Miller testified at one such public hearing on July 20, 2011, as a consultant to the Ohio Legislative Black Caucus and as the Chairman of the Ohio conference on the NAACP's Ad Hoc Committee on Reapportionment and Redistricting. (P070 at p.4).

261. In his testimony, Mr. Miller requested that the new congressional districts maintain a majority-minority district in Cuyahoga in which an African American could be elected; create a minority opportunity district in Franklin County; and create a minority opportunity district in Hamilton County. (P070 at p.4).

262. Mr. Miller stated that Franklin and Hamilton counties had been gerrymandered so as to diminish the voting power of African Americans and other minorities, and requested that the legislation "right this wrong" in the new congressional districts. (P070 at p.4).

263. Mr. Aaron Ockerman, the executive Director of the Ohio Association of Election Officials, provided proponent testimony before the committee on September 13, 2011. Mr. Ockerman stated that because the board of elections work can begin only after the legislature completes its work on redistricting and reapportionment, the extra time purchased through a later primary date would be crucial to its ability to complete its work. (J25 at p. 005-006).

264. At the September 14 hearing, the committee voted HB 319 out of committee to the full House by a vote of 14 to 8. (*See* Joint Uncontroverted Facts, ECF No. 212-1 at ¶ 3).

265. HB 319 was debated on the floor of the House on September 15, 2011, and approved by a 56-36 vote. (Joint Uncont. Facts at ¶ 4).

266. Rep. Huffman spoke on the House floor on September 15, 2011, and noted that before congressional map drawing can take place, census data must be applied to the local political subdivisions down to the precinct and block level. This is a task that takes several months, and the census information was made available in late June, early July. (J01 at 14:12-21).

267. Rep. Huffman stated that HB 319 satisfied federal law's requirement that a majority-minority district be drawn where possible, and further satisfied federal law by having a deviation of only one person on either side. (J01 at 17:21-18:9).

268. Rep. Huffman listed other traditional redistricting principles considered by the map drawers, including compactness; contiguity; preservation of political subdivisions; preservation of communities of interest; preservation of cores of prior districts; and protection of incumbents. (J01 at 18:14-19).

269. Rep. Huffman stated that although the city of Fostoria lies in three separate counties, the legislature in HB 319 attempted to keep that political subdivision whole. (J01 at 19:21-20:3).

270. Rep. Huffman stated that HB 319 resulted in two Republicans running against each other, two Democrats running against each other, and a Republican and a Democrat running against each other. (J01 at 21:19-24).

271. Rep. Huffman stated his wholehearted belief that HB 319 complied with the Constitution, the laws of the United States, and redistricting principles. (J01 at 22:8-11, 23:8-12).

272. In response to a proposed amendment with a five-week time frame, Rep. Huffman stated that coming into the redistricting process, it was known that there was going to be a March

primary, which meant those running for Congress had to file their petitions by December 7th. Census information is not available until early July. Thus, the time frame contained in the amendment was unworkable under the existing time restraints. (J01 at 49:7-10, 49:18-21, 50:24-25).

273. Rep. Huffman further stated that the proposed amendment's biggest flaw was that it only required the majority party to prepare maps. Rep. Huffman stated that a map was not produced by the Democrats, and such a map presumably does not exist. (J01 at 52:10-12, 53:7-9).

274. Mr. Huffman then recalled Sen. Sawyer's statement that many of the redistricting principles conflict with each other: Equal population sometimes conflicts with compactness, and VRA considerations may conflict with keeping political subdivisions together. (J01 at 54:7-10).

275. Rep. Matt Szollosi spoke on the House floor on September 15, 2011, and stated that he expected the GOP to draw the district lines to their political advantage because "[t]hat's politics." (J01 at 27:3-5).

276. Representative Lynn Wachtmann spoke on the House floor on September 15, 2011, and, noting that the community of Delphos was split between herself and Rep. Huffman, stated there are good examples in the state where communities with multiple congressional office holders and state legislators have used that to their advantage by virtue of having more members working for their efforts. (J01 at 28:18-19, 29:7-12).

277. Rep. Gerberry spoke on the House floor on September 15, 2011, and stated the key point of the redistricting process is really the VRA, and that having a district (i.e., District 11) stretch from Cuyahoga County into Summit County "consolidates that issue" and is probably constitutional. (J01 at 39:23-40:4).

278. Rep. Yuko spoke on the House floor on September 15, 2011, and noted the East side of Cleveland's history of having a strong African American population and excellent representation for the area in Washington D.C., including representation by Congressman Louis Stokes; Congresswoman Stephanie Tubbs; and Congresswoman Marcia Fudge. (J01 at 58:24-60:1).

279. Rep. Blessing spoke on the House floor on September 15, 2011, and noted that the minority party did not produce a map, although they were allocated money to do so and proceeded to argue that the majority party had not considered what they put forward. (J01 at 64:23-65:6).

280. Rep. Blessing further noted, in response to statements that Democratic input or proposed maps would not have made a difference due to its status as the minority, that Mr. Ray Miller asked the committee for a minority-influenced district and he received it. (J01 at 65:7-13).

281. Rep. Barnes spoke on the House floor on September 15, 2011, and recalled the how Congressman Louis Stokes served for fifteen consecutive terms, representing his district with dignity and honor. (J01 at 71:12-21).

282. Rep. Barnes further stated that he was proud to stand and support HB 319 because it preserved the district that elected Mr. Carl Stokes to be the first African American mayor, and such preservation was very important to his community. (J01 at 72:19-73:2, 73:11-18).

283. During the House vote on September 15, 2011, three Democrats voted in favor of HB 319. (J07 at 1296-1297).

284. On September 19, 2011, HB 319 was introduced in the Ohio Senate. (Joint Uncont. Facts at ¶ 5).

285. On September 20, 2011, the Senate Committee on Government Oversight and Reform (“SCGOR”), chaired by Senator Keith Faber, held a hearing on HB 319. (Joint Uncont. Facts at ¶ 6).

286. Rep. Huffman testified before the Committee on September 20, 2011, and again testified that according to the Supreme Court of the United States, absolute population equality is the paramount objective in redistricting, and that compliance with the VRA had been of the utmost importance in the redistricting process. (J028 at p. 8).

287. Rep. Huffman testified that five public hearings were held around the state, where the House Subcommittee on Redistricting heard testimony from witnesses who gave input on changes they would prefer or oppose. (J028 at p. 8).

288. Rep. Huffman recalled that Mr. Ray Miller testified at one of those hearings, and that in keeping with Mr. Miller’s requests, HB 319 protects the civil rights of minority communities by complying with the VRA and the Court’s precedents in creating an African American majority-minority district in Cuyahoga and Summit counties, and by creating a minority opportunity district in Franklin County. (J028 at p.8-9).

289. On September 21, 2011, the SCGOR held a second hearing on HB 319 and added an amendment to include a \$2.75 million appropriation for local boards of elections. After adding the amendment, the Committee then voted to approve the map on a straight party line vote. (Joint Uncont. Facts at ¶ 7).

290. HB 319, as amended, was debated and passed the Senate later that same day—September 21, 2011—by a vote of 24-7. (Joint Uncont. Facts at ¶ 8).

291. Sen. Faber spoke on the Senate floor prior to the Senate’s vote on September 21, 2011, and noted that Senate President Niehaus formed a select committee on congressional

redistricting that traveled the state of Ohio, holding hearings in which the committee heard a number of requests from the public. (J03 at 8:24-9:5).

292. Sen. Faber further stated that at those hearings, the Committee was told that it was important to the Cuyahoga County community to redistrict a majority-minority district; Sen. Faber noted that this was actually a requirement for compliance with the VRA, and that HB 319 met that requirement. (J03 at 10:13-22).

293. Sen. Faber noted that although some believed the VRA could be complied with by drawing a minority preference district with less than 50% voting age African Americans, the United States Supreme Court in *Bartlett v. Strickland* held that a majority-minority district that is drawn to remedy a Section Two violation of the VRA claim must be made up of a numerical majority of the voting age population in the district; thus, the map fully complied with the intent of the VRA by creating a majority-minority district. (J03 at 11:1-12; 44:1-11).

294. Sen. Faber stated that Mr. Ray Miller informed the Committee that it was important to create a congressional district encompassing the city of Columbus and Franklin County; accordingly, the HB 319 included a Columbus-based Central Ohio, Franklin County district. (J03 at 11:16-22).

295. Sen. Faber stated that the Committee received input from the community that it was important to keep existing congress-people representing areas of continuity and interest. (J03 at 18:11-15).

296. Sen. Faber stated that the ratio under HB 319 would be roughly the same as the pre-HB 319 ratio, because HB 319 got rid of both a Republican seat and a Democrat seat. (J03 at 12:8-13).

297. Sen. Faber noted that other proposed maps failed either because they were not constitutionally equal in distribution of population, or did not satisfy the VRA; although competitiveness and compactness are “nice features to comply with,” Sen. Faber stated they do not supersede the Constitution’s or the VRA’s requirements. (J03 at 13:17-25, 14:7-12).

298. Sen. Faber stated that because the primary had been moved to March, the congressional redistricting bill had to be passed in September rather than in January. (Senate Sept. 21, 2011 Tr., at 15:14-16:6).

299. Sen. Faber stated that the appropriation was necessary in order to effectuate the congressional lines in the compressed time frame. (J03 at 16:9-12).

300. Sen. Coley spoke on the Senate Floor on September 21, 2011, and stated that he supported HB 319 because it complied with the constitutional requirement that each district have equal population, and complied with the VRA. (J03 Senate at 58:2-7).

301. Sen. Tavares spoke on the Senate floor on September 21, 2011, and stated her appreciation that HB 319 created a whole congressional district within the city of Columbus, which complied with the principle of maintaining jurisdictions in those congressional districts. (J03 at 19:25-20:8).

302. Sen. Tavares further noted that Ohio was automatically going to lose two legislators, and that it is fair to argue that it is fair and equitable to lose one seat from each party and to put several legislators in the same district. (J03 at 59:19-25).

303. Sen. Tavares declared her support for HB 319; she noted that the Ohio Legislative Black Caucus had worked with those who were developing the map, and applauded them for creating a minority-influenced district which would increase the number of potential African Americans being elected to the Congress of the United States. (J03 at 61:14-62:11).

304. Sen. Smith spoke on the Senate floor on September 21, 2011, and stated that her district wanted someone that “looks like us, someone that understands us, someone that we trust to have our own interest at heart”; Sen. Smith further stated that the 11th District in HB 319 was one that those in the District could live with. (J03 at 31:10-12, 31:15-18).

305. Two Democratic members of the Senate voted in favor of HB 319. (Joint Uncont. Facts at ¶ 8).

306. HB 319, as amended, returned to the House for a vote on September 21. (Joint Uncont. Facts at ¶ 9).

307. Before the House vote on September 21, Rep. Blessing noted that the districts had to be drawn within a single person or two, and that because there are 720,000 plus people in each district, the legislature had no choice but to draw the lines through streets and cul-de-sacs. The point of HB 319’s appropriation was to ensure that the legislature got that right. (J02 at 8:8-14, 9:8-9).

308. The House passed the amended bill by a 60-35 margin on September 21, 2011, with two Democrats voting in favor of the amended version of HB 319. (Joint Uncont. Facts at ¶ 9).

309. HB 319 was signed into law by Governor Kasich on September 26, 2011. (Joint Uncont. Facts at ¶ 10).

D. Referendum Threat And The Emergence Of HB 369 As A Bipartisan Compromise

310. HB 319, the initial map to make it through the legislative process, passed with sufficient majorities in the legislatures to become law. (Trial Tr., Vol. V at 174:3-4).

311. After HB 319 was passed, “an active petition drive and signature-gathering effort” ensued as an effort to overturn HB 319. (Trial Tr., Vol. V at 174:3-16).

312. Specifically, on September 28, 2011, an advocacy group called Ohioans for Fair Districts filed a mandamus action in state court seeking to compel the Ohio Secretary of State to

treat Sections 1 and 2 of HB 319 as subject to the constitutional right of referendum. (Joint Uncont. Facts at ¶ 11).

313. A referendum petition on HB 319 was filed with the Ohio Secretary of State's Office on October 12, 2011. (Joint Uncont. Facts at ¶ 12).

314. On October 14, 2011, the Ohio Supreme Court ruled that a referendum could proceed if there were signatures of 6% of state electors collected by December 25, 2011. (Joint Uncont. Facts at ¶ 13).

315. Mr. DiRossi testified that there was concern that if the referendum effort was successful, HB 319 would not go into effect and as a result, there would not be a new map in place in time for the next election cycle. (Trial Tr., Vol. V at 174:9-16).

316. Mr. Judy testified that after HB 319 passed, there was a referendum campaign that ensued and confusion regarding dual primaries. (Trial Tr., Vol VI at 72:15-73:7).

317. Accordingly, state legislative Democrats and Republicans began negotiating changes to HB 319. (Trial Tr., Vol. V at 174:17-175:1).

318. Speaker Batchelder testified that in redrawing the lines for HB 369, he was negotiating with Democratic members of the Ohio House:

Understand, at the same time, I was negotiating with my colleagues who were Democrats in our -- in our House of Representatives, who had different ideas from Representative Boehner. They had wanted to bring a referendum at one point. They were unsuccessful. And so I then met with them to see what might be done that would be amenable to both sides.

(Trial Tr., Vol. VI at 42:8-22; *see also* Trial Tr., Vol. VI at 42:25-43:2).

319. Speaker Batchelder testified to the complex political landscape he was operating in as follows:

Bottom line, I was working with Democrats on many bills. I had a brand-new governor downstairs. I had situations within our caucus

where four of my members ended up voting against the bill. We had a female member who was one of the bishops who was a Democrat. *I was, in my opinion, not in a position to just do any darn thing I wanted. I had to take account of the Democrat support that I had. I had been there through half a lifetime, and I worked with the Democrats, and this was not new.*

(Trial Tr., Vol. VI at 55:18-56:1) (emphasis added).

320. Consequently, at the direction of Speaker Batchelder, Mr. Judy began conversations and negotiations with members of the Democratic caucus regarding proposed changes to HB 319. (Trial Tr., Vol VI at 73:3-7, 73:23-74:3).

321. Mr. Judy testified that Speaker Batchelder asked him to begin “conversations with the Democrats to see what changes they would like to see in a map in order to garner bipartisan support of a bill, a new bill.” (Trial Tr., Vol VI at 73:23-74:3).

322. Mr. Judy communicated directly with several Democratic representatives regarding changes they wanted to see to HB 319, including Representatives Carl Weddington, Dale Mallory, and Clayton Luckie. (Trial Tr., Vol VI at 73:10-22).

323. Mr. Judy testified:

I communicated directly with a number of them. There was a member out of Columbus, Representative Carl Weddington, who visited with me in my office, as far as I can recall, at least once, whereupon, you know, we actually pulled up the map on my computer. He sat with me and talked about some of the changes he would like to see. He then pulled out his cellphone and dialed another representative – Dale Mallory – and put him on speakerphone. We discussed things that Representative Mallory would like to see in the Cincinnati area. And another gentleman that we – I had direct conversations with was Representative Clayton Luckie out of the Dayton area, and we talked about changes in the Montgomery County area and Clark County areas. (Trial Tr., Vol VI at 73:10-22).

324. Mr. Judy testified that requests from Representatives Weddington, Mallory, and Luckie were implemented into draft maps and exchanged with the Minority Chief of Staff, Keary McCarthy. (Trial Tr., Vol VI at 74:20-75:2-9).

325. In early November 2011, the Republicans and Democrats in the state legislature were reviewing multiple compromise proposals for a replacement to HB 319—one prepared by the House Republican caucus, one by the House Democratic caucus, and one by the Ohio Senate caucus. (I-094, 11/03/2011 Email; Routt Dep. 113:19-114:13) (House Republican); (I-095, 11/03/2011 Email; Routt Dep. 117:16-118:15) (House Democratic); (I-096, 11/03/2011 Email; Routt Dep. 123:22-124:24) (Senate Democratic).⁵

326. The Democrats were also carefully studying the population distribution within District 9 as between the western and eastern portions of the districts. According to an analysis prepared by Mr. Routt, the November 3, 2011 Republican proposed plan had 68% of the district's population contained within Cuyahoga and Lorain Counties. (Routt Dep. 117:6-16). By contrast, the House Democratic plan only had 54% of the district population contained within Cuyahoga and Lorain Counties. (Routt Dep. 123:14-21). Representative Kucinich resided in Cuyahoga County and Representative Kaptur resided in Lucas County.

327. Representative Fudge and Representative Kucinich's offices both "provided input" to the Senate Democratic Caucus proposal. (Routt Dep. 127:12-19).

⁵ While the proposals differed in various ways, it is noteworthy that *both* Democratic proposals drew District 11 as a majority-minority district, and *both* Democratic proposals contained a minority-opportunity district in Franklin County with a BVAP of approximately 30%. (I-095, 11/03/2011 Email, at SMC-AH-000264; Routt Dep. at 120:22-121:24; I-096, 11/03/2011 Email, at SMC-AH-000221; Routt Dep. 129:2-5, 131:9-13). (*See also* I-121, 11/2/11 Email and PowerPoint, at SMC-KM-000412; Glassburn Dep. 116:25-117:20). None of the maps provided by Mr. McCarthy during negotiations with Republicans proposed a configuration for District 11 that was materially different than the configuration proposed by Republicans. (Trial Tr., Vol VI at 75:10-13).

328. Mr. Judy testified that Bob Bennett—the outgoing chairman of the Ohio Republican Party—was instrumental in facilitating discussions with Democratic leaders. (Trial Tr., Vol VI at 74:4-11, 75:19-21).

329. Mr. Judy testified that Mr. Bennett served as a “back channel to Congresswoman Fudge” to communicate regarding the shape of Congressional District 11. (Trial Tr., Vol VI at 74:3-7, 76:1-4).

330. Mr. Judy testified that it was his understanding and belief that Congressional District 11 was drawn in a manner that satisfied Congresswoman Fudge. (Trial Tr., Vol VI at 76:5-15).

331. Mr. Judy testified: “[W]e wanted to make changes and incorporate things that Democrats wanted to see, and since Bob Bennett had communicated to us that she would like to see that, it absolutely influenced how we did that.” (Trial Tr., Vol VI at 76:12-25).

332. Mr. Judy testified that Mr. Bennett also facilitated communications with a Democratic leader from the Toledo area, Jim Ruvolo, regarding changes to District 9. (Trial Tr., Vol VI at 74:7-11, 76:16-19).

333. Mr. McCarthy acknowledged that the impasse over replacing HB 319 was resolved by modifying the map and by addressing the dual-primary issue. (McCarthy Dep. 125:24-126:7). It fell to the Assistant Minority Leader, Rep. Szollosi, to close the deal.

334. From 2011-2013, Rep. Matthew Szollosi served as the Assistant Minority Leader of the Ohio House of Representatives under then-Minority Leader Armond Budish. (Deposition of Matthew Szollosi, Dec. 10, 2018 (the “Szollosi Dep.”) at 14:2-8). Rep. Szollosi represented HD-47, a district in the Toledo area. (Szollosi Dep. 11:20-22).

335. Rep. Szollosi voted against HB 319 and disliked it for two reasons. First, he objected to the fact it created two primary dates. (Szollosi Dep. at 20:18-21:11). Second, he objected to how HB 319 split Lucas County into three congressional districts. (Szollosi Dep. at 21:12-20). Rep. Szollosi believed it was critical to have “a strong voice in Congress” for the City of Toledo, particularly “a congresswoman with significant tenure in the Congress which, of course, had benefits for northwest Ohio.” (Szollosi Dep. at 21:21-22:3).

336. Rep. Szollosi became directly involved in negotiations to resolve the impasse over HB 319 in December 2011. (Szollosi Dep. 36:21-37:5).

337. The compromise began when Rep. Szollosi recalled seeing Rep. Matthew Huffman “in the hallway” and was aware that “we were up against a time limit to effectuate a compromise, meaning a date certain was coming up where we were either going to reach a compromise or 319 was going to stand.” (Szollosi Dep. 57:3-11). The discussion led to an invitation for a meeting with Speaker Batchelder. (Szollosi Dep. 57:22-58:4).

338. Rep. Szollosi met with Speaker Batchelder soon after. The meeting began with Speaker Batchelder “telling stories for about the first 35 to 40 minutes of the meeting,” then turning to a discussion of the Democratic Caucus’s concerns. (Szollosi Dep. 58:5-10). Rep. Szollosi raised the dual-primary issue and his concerns with District 9, and to alleviate those concerns, Rep. Szollosi testified that “Jim Jordan was removed from representing part of Lucas County and pushed to the east. I think Bob Latta and the overall percentage of Lucas County that he was going to represent was reduced. And a significant portion of that was then put into the 9th congressional district, at the time was represented by Congresswoman Kaptur.” (Szollosi Dep. 59:18-60:4).

339. Rep. Szollosi testified that he believed Speaker Batchelder was “sincere and motivated” to obtain Democratic support for the proposed replacement for HB 319. (Szollosi Dep. 63:18-25).

340. Following the meeting, Rep. Szollosi spoke to Rep. Sandra Williams, the head of the Ohio Legislative Black Caucus, and to Congresswoman Marcia Fudge to give her reassurance that her district would not be changing. (Szollosi Dep. at 60:10-61:11).

341. Rep. Szollosi testified that under HB 369, Districts 1, 6, 10, 14, 15, and 16 were more competitive than under HB 319. (Szollosi Dep. 91:10-15).

342. Mr. Judy testified that there were also changes to the map based on requests that Representative Matt Szollosi communicated to him. (Trial Tr., Vol VI at 79:2-14).

343. Mr. Judy testified:

There was a desire on both of our sides to have a map that would have overwhelming bipartisan support, and, thereby, you know, not allow a judicial body of some sort to draw the congressional map, and to maintain the control of the drawing of the congressional map inside the legislative body. And so, really, what precipitated the vote was the outside pressure and leverage, I believe, from both sides to come up with a – with a deal that reflected changes that the Democrats wanted to see. And I think it resulted, actually, in an overwhelmingly bipartisan bill that we passed. (Trial Tr., Vol VI at 78:14-23).

344. The new, revised map became HB 369. (Trial Tr., Vol. V at 174:21-23).

345. Lenzo attended the final compromise meeting on or about December 14, 2011, with respect HB 369. Present were Speaker Batchelder, Representative Matt Huffman, Troy Judy, Representative Matt Szollosi, and Keary McCarthy. The group had already been meeting when Lenzo received a text message from Judy asking him to join the meeting. They were in a conference room close to the Speaker’s office on the 14th floor of the Riffe Center. When Lenzo arrived, he was informed that Representative Szollosi said that the House Democratic Caucus

wanted to achieve a deal to provide enough votes to pass HB 369 and to pass it as an emergency measure so there would not be subject to referendum. One of the conditions he requested was that the federal primary date for congressional candidates be rescheduled to March 2012. Representative Szollosi also discussed a former Democratic Congresswoman, Mary Joe Kilroy. Kilroy was rumored to want to run for the new central Ohio congressional district that had existed in HB 319 and would continue to exist in HB 369. Szollosi requested that Kilroy be drawn out of the new central Ohio House district and that then-Representative Ted Celeste be drawn into the central Ohio congressional district. He also requested that any changes in geography that had to be made to accomplish this not change the black voting age population. (Lenzo Dep. at 171:23-173:19.)

346. At the end of Lenzo's participation in this meeting, he was instructed by Troy Judy to task Heather Blessing with seeing if the requested changes to the map were feasible. Lenzo communicated these requests to Blessing, and she began working on that. Lenzo then spoke with Linda Jacobsen, who at that time was the Legislative Service Commission drafter working on redistricting bills. He let her know that they would probably be providing her a new data set for her to turn into a piece of legislation preferably the same day. (Lenzo Dep. at 173:25-174:19; (Blessing Dep. 170:8-173:3.)

a. Several Changes Were Made To The Map As Part Of The Bipartisan Compromise

i. Montgomery County and District 10.

347. To garner support for HB 369 from Democrats in the state legislature, DiRossi testified that he included the entirety of Montgomery County in District 10. (Trial Tr., Vol. V at 166:25-167:17, 168:18-169:5).

348. Including the entirety of Montgomery County in one district significantly increased in the population of District 10 and required Mr. DiRossi to re-work the configuration of that district. (Trial Tr., Vol. V at 167:13-17).

349. Mr. DiRossi reduced the population of District 10 by moving several counties into District 15—an adjustment that created “ripple effects” throughout the map. (Trial Tr., Vol. V at 167:18-25, 168:1-4).

350. For example, Mr. DiRossi testified that the effect of the including the entirety of Montgomery County into District 10, tipped the Turner-Austria district in Representative Turner’s favor. (Trial Tr., Vol. V at 168:5-17).

ii. Maintaining The Majority-Minority District 11.

351. District 11 is a district that historically has been a majority-minority district. (Trial Tr., Vol. V at 169:12-14).

352. Mr. DiRossi testified that “great care” was given to District 11 because it was the only majority-minority district on the map. (Trial Tr., Vol. V at 170:17-25).

353. Mr. DiRossi testified that he considered input from Representative Fudge in drawing District 11 and drew a couple of alternative maps for her consideration. (Trial Tr., Vol. V at 170:17-171:8).

354. Mr. DiRossi understood that Representative Fudge favored the option in which District 11 continued south into Summit County. (Trial Tr., Vol. V at 171:19-172:17).

355. Mr. DiRossi understood that “there was considerable concern of pairing Congresswoman Fudge with Dennis Kucinich” and thus Representative Fudge and others in the African-American community preferred a map in which District 11 extended into Summit County. (Trial Tr., Vol. V at 173:2-10).

356. Mr. DiRossi testified that extending District 11 into Summit County created a “ripple effect” and caused other neighboring districts to “curl[] around the 11th District.” (Trial Tr., Vol. V at 176:2-14).

iii. Creation of District 3.

357. Mr. DiRossi testified that in drawing the 2011 map it was an “overarching goal ... to create a new district in Franklin County that might be able to elect a second member from the minority to Congress from Ohio for the first time ever.” (Trial Tr., Vol. V at 177:11-22).

358. Mr. DiRossi understood that Joyce Beatty was interested in running as a candidate for the newly created District 3 if certain criteria was satisfied. (Trial Tr., Vol. V at 177:23-178:6, 178:17-22).

359. Congresswoman Beatty specifically requested that the residence of Mary Jo Kilroy—a former Franklin County Commissioner—was “physically not in the district.” (Trial Tr., Vol. V at 178:25-179:4).

360. Congresswoman Beatty also requested that certain property of Ohio State University, her former employer, be included in the district. (Trial Tr., Vol. V at 179:4-9).

361. Mr. DiRossi testified that at the request of the Columbus Partnership to consistently have both Democratic and Republican congressional representatives from Franklin County in Congress, he split Franklin County into three districts. (Trial Tr., Vol. V at 288:3-289:1).

362. The creation of District 3 “creat[ed] outward pressure for the other districts”—for example, District 12 and District 15 went from “traditional central Ohio districts” to “more sprawling districts.” (Trial Tr., Vol. V at 179:3-180:2).

iv. Other Political Considerations In Negotiating HB 369 Based On Democratic Requests.

363. Mr. DiRossi testified that there was a member of the state legislature who resided in Mercer County and “was very passionate about where the district boundaries should be and what territory should be in [each of the] three congressional districts [in Mercer County.]” (Trial Tr., Vol. V at 182:11-19). Mr. DiRossi testified that he “spent a decent amount of time looking at [this] issue.” (Trial Tr., Vol. V at 182:18-19; *see also* Trial Tr., Vol. V 237:12-22).

364. Mr. DiRossi considered a request made late to have the Timken Steel headquarters included in District 16. (Trial Tr., Vol. V at 182:20-25).

365. Mr. DiRossi considered a request to include NASA Glenn Research Center into District 9 based on Representative Kaptur’s involvement with the Armed Services Committee. (Trial Tr., Vol. V at 183:6-13, 183:17-24).

366. Mr. DiRossi considered a request to include the entire city of Loveland, Ohio within District 2 because Congresswoman Schmidt—the District 2 incumbent—lived in Loveland. (Trial Tr., Vol. V at 184:6-185:1).

b. District-Specific Changes From HB 319 to HB 369.

367. Mr. Routt acknowledged there were dozens of changes from HB 319 to HB 369, including changes to Districts 1, 2, 3, 4, 5, 7, 9, 10, 12, 15, and 16. (I-101, 12/22/2011 Email; Routt Dep. 170:10-20).

368. In regard to Intervenors’ Exhibit 72, Mr. DiRossi testified that in comparing the districts as drawn for HB 319 to the districts as drawn for HB 369, the red portions of the map represented territory dropped from the district, the green portions of the map represented the territory added to the district, and the yellow portions represented the territory that was common to both HB 319 and HB 369. (I-072; Trial Tr., Vol. V at 187:7-13).

i. District 1

369. Mr. DiRossi testified that in drawing District 1, he set out with the intention to include the territory of one entire county within the district. (Trial Tr., Vol. V at 186:3-16).

370. Mr. DiRossi testified that including the entirety of Hamilton County within District 1 was not an option because the population of Hamilton County was too large for just one district. (Trial Tr., Vol. V at 186:16-19).

371. Accordingly, Mr. DiRossi instead included the entirety of Warren County within District 1 and then used as much as Hamilton County as was necessary to satisfy the zero deviation in population requirement. (Trial Tr., Vol. V at 186:19-22).

372. The decision to include the entirety of Warren County and the west side of Cincinnati within the same district impacted the shape of District 1. (Trial Tr., Vol. V at 186:23-187:6).

ii. District 2

373. Mr. DiRossi testified that requests from the Democratic members of the legislature to include the entirety of Montgomery County within District 10 caused a “ripple effect” that impacted Congressional District 2. (Trial Tr., Vol. V at 187:2-188:9).

374. Namely, the inclusion of the entirety of Montgomery County into District 10 caused a large number of people to be included in the western part of District 10. (Trial Tr., Vol. V at 188:3-7). As a result, Mr. DiRossi had to assign counties previously included in District 10 to other districts, including District 2, to satisfy the zero deviation in population requirement. (Trial Tr., Vol. V at 188:7-8).

iii. District 3

375. Mr. DiRossi testified that the changes from HB 319 to HB 369 in Congressional District 3 were the result of ongoing conversations with Congresswoman Beatty regarding her preferences of which territories to include within the district. (Trial Tr., Vol. V at 188:17-23).

376. Mr. DiRossi testified that the geography of Franklin County, namely that many townships are not contiguous, made the map-drawing process for District 3 challenging. (Trial Tr., Vol. V at 188:24-190:4).

iv. District 4

377. In regard to District 4, Mr. DiRossi testified his goal was to extend District 4 toward Lake Erie in order to “tilt [District 9] more to Toledo.” (Trial Tr., Vol. V at 190:10-22).

v. District 5

378. Mr. DiRossi testified that he had to shift portions of the Toledo area that were included in District 5 under HB 319 to District 9 to obtain more Democratic support of HB 369. (Trial Tr., Vol. V at 190:24-191:11).

vi. District 6

379. Mr. DiRossi testified that from HB 319 to HB 369, there were little to no changes to District 6. (Trial Tr., Vol. V at 191:12-20).

vii. District 7

380. Mr. DiRossi testified that from HB 319 to HB 369, he dropped portions of Lorain County from District 7 so that District 9 could “tilt” more toward Toledo and favor Representative Kaptur. (Trial Tr., Vol. V at 166:7-19, 191:24-192:13).

viii. District 8

381. Mr. DiRossi testified that requests from the Democratic legislature to include the entirety of Montgomery County resulted in changes to District 8. (Trial Tr., Vol. V at 192:16-23).

382. For example, from HB 319 to HB 369, the portions of District 8 that included Montgomery County were dropped in order to allow for the entirety of Montgomery County to be included in District 10. As a result, portions of Clark County were added to District 8 to increase the population of the district and satisfy the zero deviation in population requirement. (Trial Tr., Vol. V at 192:24-193:2).

383. Consequently, District 8 included the entirety of Clark County in the HB 369 version of the map. (Trial Tr., Vol. V at 192:24-193:2; *see also* Trial Tr., Vol. V at 246:1-23).

ix. District 9

384. Mr. DiRossi testified that he understood that Democratic leaders not only preferred the Kaptur-Kucinich pairing, but also preferred that the district to be drawn in a way that favored Representative Kaptur. (Trial Tr., Vol. V at 159:3-6, 159:10-13, 161:15-16, 162:19-163:13, 163:17-20).

385. Mr. DiRossi testified that in drawing District 9, additional territory from Lucas County was added to the district, wards from the Cleveland area were removed, and the “neutral” area between Representative Kaptur’s and Representative Kucinich’s districts was reduced in population. (Trial Tr., Vol. V at 161:3-18, 166:7-13). The “practical effect” was a “more elongated” district. (Trial Tr., Vol. V at 166:20-23).

386. Mr. DiRossi described the combination of Representative Kaptur’s and Representative Kucinich’s districts as a teeter-totter:

387. And so, basically, where we had originally designed this to be kind of teeter-totter that was evenly balanced between Congresswoman Kaptur and Congressman Kucinich, the effect of the final map was really kind of tilting the teeter-totter to Toledo, so that there was much more Toledo in it and less – less Cleveland. (Trial Tr., Vol. V at 166:14-19).

388. Mr. DiRossi testified that from HB 319 to HB 369, portions of Lucas County were added to and other portions closer to Cleveland were dropped from District 9. This change allowed District 9 to “teeter-totter” toward Lucas County and favor Representative Kaptur. (Trial Tr., Vol. V at 193:3-19).

389. Mr. DiRossi testified that in drawing District 9 he did not split, or did not intentionally split, Florence Township. (Trial Tr., Vol. V at 194:2-16).

x. District 10

390. Mr. DiRossi testified that requests from the Democratic legislature to include the entirety of Montgomery County within District 10 resulted in substantial changes to District 10. (Trial Tr., Vol. V at 194:17-195:5).

391. Mr. DiRossi testified that this change caused a “significant spike in population in the district.” (Trial Tr., Vol. V at 194:25-195:1). To satisfy the satisfy the zero deviation in population requirement, Mr. DiRossi testified that he had to drop entire counties and parts of other counties from the east side District 10. (Trial Tr., Vol. V at 195:1-5).

xi. District 11

392. Mr. DiRossi testified that unlike for the other districts, there were not any requests from the Democratic members of the legislature to make any alterations to District 11. (Trial Tr., Vol. V at 195:6-14).

393. As a result, from HB 319 to HB 369, there were no changes to District 11. (Trial Tr., Vol. V at 195:6-14).

xii. District 12

394. Mr. DiRossi testified that the changes to District 12 from between HB 319 to HB 369 were the result of the requests related to District 3. (Trial Tr., Vol. V at 195:23-196:8).

395. Additionally, Mr. DiRossi testified that the “ripple effect” of extending District 4 toward Lake Erie impacted District 12. (Trial Tr., Vol. V at 196:8-18).

xiii. District 13

396. Mr. DiRossi testified that there were no changes to District 13 between HB 319 and HB 369. (Trial Tr., Vol. V at 196:19-197:1).

xiv. District 14

397. Mr. DiRossi testified that there were no changes to District 14 between HB 319 and HB 369. (Trial Tr., Vol. V at 197:2-10).

xv. District 15

398. Mr. DiRossi testified that the changes to District 15 between HB 319 and 369 were largely the result of the request to include the entirety of Montgomery County into District 10. (Trial Tr., Vol. V at 197:11-22).

xvi. District 16

399. Mr. DiRossi testified that the changes to District 16 between HB 319 and HB 369 “were to effectuate the change in the 9th [District]” needed to ensure District 9 favored Representative Kaptur. (Trial Tr., Vol. V at 197:23-198:10).

c. HB 369 Passes The General Assembly On A Bipartisan Basis.

400. HB 369 passed in the Ohio House of Representatives, with a vote of 77 to 17, including 21 of the 40 Democratic members of the House voting in favor of the bill. (Trial Tr., Vol. V at 181:2-14). The following Democratic members voted in favor of the bill: Sandra Williams, Nancy Garland, Theodore Celeste, Tracy Heard, Carlton Weddington, Connie Pillich, Denise Driehaus, Dale Mallory, Alicia Reece, Clayton Luckie, Roland Winburn, Vernon Sykes, Teresa Fedor, Michael Ashford, Matthew Szollosi, Stephen Slesnick, Mark Okey, Lorraine Fende, Dennis Murray, Debbie Phillips, and Jack Cera. (J09 at 1475). The vote on the emergency clause

for HB 369 in the Ohio House of Representatives was 78 to 16, with 22 of 40 Democratic members of the House voting in favor. (Trial Tr., Vol. V at 181:2-11). The following Democratic members voted in favor of the emergency clause: Michael Ashford, Teresa Fedor, Clayton Luckie, Mark Okey, Alicia Reece, Matthew Szollosi, Lorraine Fende, Theodore Celeste, Denise Driehaus, Dale Mallory, Dennis Murray, Debbie Phillips, Stephen Slesnick, Michael Stinziano, Jack Cera, Nancy Garland, Tracy Heard, Connie Pillich, Vernon Sykes, Carlton Weddington, Sandra Williams, and Roland Winburn. (J09 at 1474-1475).

401. HB 369 passed in the Ohio Senate by a vote of 27 to 6, with 4 of the 10 Democratic members of the Senate voting in favor of the bill. (Trial Tr., Vol. V at 181:21-182:4). The following Democratic members voted in favor of the bill: Edna Brown, Lou Gentile, Capri Cafaro, and Joseph Schiavoni. (J11 at 1829). The emergency clause vote in the Ohio Senate was 29 to 4 in favor, with 6 of the 10 Democratic members of the Senate voting in favor. (Trial Tr., Vol. V at 181:22-182:1). The following Democratic members voted in favor of the emergency clause: Capri Cafaro, Thomas Sawyer, Shirley Smith, Lou Gentile, Edna Brown, and Joseph Schiavoni. (J11 at p.1829).

402. Speaker Batchelder testified that he had a long-standing relationship with the Ohio Legislative Black Caucus, and the members of that Caucus voted in favor of HB 369. (Trial Tr., Vol. VI at 56:15-22; 57:20-25).

403. Governor John Kasich signed HB 369 into law the following day, December 15, 2011. (Second Amended Complaint (“SAC”) ¶ 84; Answer ¶ 84).

404. At the time HB 369 was passed, it was far from the “entrenched” Republican plan Plaintiffs’ allege. In fact, P499 shows PVI scores for the enacted HB 369 and indicates that 11 out

of the 12 Republican seats have PVI scores under R+10, and 5 of the 12 have PVI scores at or under R+5. P499. P499.

405. Mr. Kincaid believed that “anything below R+10 is not moved out of play.” (Kincaid Dep. II 506:4-6). “[A] lot of these [districts identified in P310] are less than R+10, and we’ve either lost or almost lost most of these over the course of the decade.” (Kincaid Dep. II 506:14-16).

406. Mr. Kincaid testified regarding P499 that the percentage in the left-hand column for each election indicates the votes garnered by the Republican candidates in those elections. (Kincaid Dep. II 565:14-567:10). He testified that Republicans would have failed to garner a majority of the vote in 8 of the 16 HB 369 districts in the 2006 Attorney General race, and 7 of the 16 districts in the 2010 Attorney General race. (Kincaid Dep. II 565:14-567:10). In fact, the spreadsheet shows that even though all 12 purportedly Republican districts had R+ PVI values, Republican candidates won the majority vote in all 12 HB 369 districts in only one of the six elections analyzed (“Bush”). P499.

407. In other words, HB 369 as drawn does not portend 12 secure districts. As an example, Mr. Kincaid testified that in Congressional District 6, a Republican would fail to garner the majority vote in 4 out of the 6 elections analyzed even though that district was scored as R+5. (Kincaid Dep. II 567:15-568:13).

408. Mr. Kincaid could have drawn plans for Ohio’s Republican congressional delegation that maximized the number of Republican seats, that could have more than 12 seats won by Republican candidates. (Kincaid Dep. II 573:22-574:9).

409. Mr. Kincaid testified that HB 369 is not a map that maximizes Republican seats but one that protects incumbents. (Kincaid Dep. II 574:10-15; 576:3-577:20). He testified that the

shrinking population in Ohio and the location of incumbents led to the pairing of three sets of incumbents: two Democrats, two Republicans, and one Democrat with a Republican. (Kincaid Dep. II 576:3-577:20). P499 shows that Congressional District 16, where the Republican and Democratic incumbents were paired was competitive with the Republican candidate failing to garner a majority vote in one of the elections and barely eking out a majority of the vote in the remaining elections. P499 (showing no majority vote greater than 54.99%).

II. Ohio's 2011 Plan And Election Returns Thereunder

410. Ohio's current congressional plan was first used in the 2012 election cycle, (SAC ¶ 86; Answer ¶ 86), and is hereinafter referred to as the "2011 Plan."

411. The 2011 Plan contains 16 districts. (SAC ¶ 86; Answer ¶ 86).

412. The 2011 Plan splits 23 of Ohio's 88 counties. Hamilton, Lucas, Mahoning, Trumbull, Medina, Richland, Tuscarawas, Muskingum, Ross, Scioto, Erie, Athens, Marion, Huron, Ottawa, and Fayette counties are split into two different congressional districts. Franklin, Stark, Lorain, Portage, and Mercer counties are split into three different congressional districts. Cuyahoga and Summit counties are split into four congressional districts. The remaining 65 counties are maintained entirely in one congressional district. (D04, Report of M.V. Hood, III, Ph.D. ("Hood Rep.") at 6, Tbl. 5; *see also* D01).

413. The 2011 Plan preserved 95.5% of all political subdivisions in the State of Ohio. (Hood Rep. at 7, Tbl. 6).

414. The 2011 Plan paired three sets of incumbents – Rep. Kaptur and Rep. Kucinich, Rep. Sutton and Rep. Renacci, and Rep. Turner and Rep. Austria. (Hood Rep. at 5, Tbl. 3). No other incumbents were paired in the 2011 Plan. The mean core retention (i.e., the percentage of

the old district that is within the boundaries of the new district) for the 2011 Plan was 55.7%. (Hood Rep. at 6, Tbl. 4).

415. The 2011 Plan created a Voting Rights Act “majority minority” district in northeast Ohio—Congressional District 11—with a Black Voting Age Population of 52.3%. (P254, Report of Lisa Handley, Ph.D. (“Handley Rep.”) at 6).

416. The 2011 Plan created a “minority influence” district in Franklin County—Congressional District 3—with a Black Voting Age Population of 30%. (I-099, 12/14/11 Email, at SMC-RR-016675).

417. Ohio’s 3rd Congressional District has been represented by an African-American woman—Joyce Beatty—since 2013.

418. Since 2012, Ohio has been trending more Republican in its voting behavior.

419. In 2012, incumbent President Barack Obama carried the state of Ohio over Mitt Romney in the 2012 presidential election, while incumbent U.S. Senator Sherrod Brown won reelection over Josh Mandel. (J17 at Tabs 3–4).

420. In 2014, Republican John Kasich defeated Democrat Ed FitzGerald in Ohio’s gubernatorial race. (J18).

421. In 2016, Republican Donald Trump defeated Democrat Hillary Clinton statewide in Ohio by nearly 450,000 votes, and Republican U.S. Senator Rob Portman won re-election with over 58 percent of the vote. (J19 at Tabs 3–4).

422. In 2018, Republican Mike DeWine defeated Democrat Richard Cordray in Ohio’s gubernatorial race. (J21 at Tab 3).

423. In 2018, Republicans also repeated their 2014 sweep of statewide partisan races, with the exception of the U.S. Senate race, where incumbent Sherrod Brown once again won re-election. (J18; J21 at Tabs 3–4).

424. Finally, from 2012 to 2018, no incumbent Congressional Representative seeking re-election was defeated of *either* political party; both Republican and Democratic incumbents have been successfully re-elected during those cycles. (J17, J18, J19, J21).

III. Ohio’s Congressional Delegation Provides Effective Representation To All Ohioans

A. Ohio’s Congressional Delegation Provides Effective Representation To All Ohio Citizens.

a. Republican members represent all residents in their districts, not just Republicans.

i. Rep. Steven Chabot represents both Democratic and Republican residents in his district.

425. Representative Chabot’s office spends the same resources on constituents whether those constituents support him or not. (Deposition of Rep. Steve Chabot, ECF No. 230-9 (“Chabot Dep.”), at 43:24-44:6).

426. Representative Chabot works to develop coalitions of supporters with all constituents, including Democrats. (Chabot Dep. at 44:7-15).

427. When asked if he works with constituents who are Democrats, Representative Chabot stated:

We do with all constituents. We don’t ask them whether they’re Democrats or Republicans. They’re in my district and they have some interest, whether they’re farmers or teachers or whatever they may be. You know, it’s something we wouldn’t know necessarily what they are, what their political background is.

(Chabot Dep. at 44:10-15).

428. Representative Chabot testified that when Democratic officials within his district reach out to him or his staff regarding the needs of his constituents, Representative Chabot or his staff meet those requests. (Chabot Dep. at 47:14-19).

429. Representative Chabot has ongoing and working relationships with his constituents and constituent groups, including Democrats. (Chabot Dep. at 55:16-56:18).

430. Representative Chabot meets with all constituent groups, regardless of whether its members are Democrats or Republicans. (Chabot Dep. at 56:19-57:10).

431. Representative Chabot has routinely participated in events organized and election material prepared by the League of Women Voters. (Chabot Dep. at 123:15-124:23).

432. Representative Chabot testified that his campaign office completes the League of Women Voter's questionnaire. (Chabot Dep. at 138:22-139:3).

433. Representative Chabot responds to communications from his constituents irrespective of whether the constituent is a Republican or a Democrat. (Chabot Dep. at 136:12-137:15).

434. When asked if the help he gives to his constituents is contingent on the constituents' political affiliations, Representative Chabot stated: "Not at all, no. We would do the same thing no matter – I would not – 99 in 99/100ths percent of the time I would have no idea whether they were Republican or Democrat and I would care less." (Chabot Dep. at 141:6-12).

435. Representative Chabot testified that he listens to the views of all his constituents and that it is "[his] job to represent all members of [his] district regardless of party affiliation." (Chabot Dep. at 141:13-142:5).

ii. *Rep. Bill Johnson represents both Democratic and Republican residents in his district.*

436. Representative Johnson testified that he has spent a considerable amount of time and money building a coalition of supporters in his district, and these coalition-building activities include Democrats. (Deposition of Rep. Bill Johnson, ECF No. 230-24 (“Johnson Dep.”), at 21:14-22:5).

437. Representative Johnson testified that in engaging in coalition-building activities, “[t]here’s never a question in my district about a person’s party affiliation. We never query a business about whether they are Republican or Democrat” (Johnson Dep. at 25:6-13).

438. Representative Johnson testified that he meets “with Democrats, Republican, and Independents.” (Johnson Dep. at 25:11-13).

439. Representative Johnson testified:

[T]here’s never a differentiation in my office or in the conduct of my office what party affiliation a person is part of.

...

[W]hen you ask me if I’m reaching out to Republicans, the answer has to be yes because I reach out to 721,000 people, and so there are Republicans in that group, Democrats in that group, and Independents in that group. But I don’t – I don’t target a Republican group or a Democrat group.

(Johnson Dep. 26:9-11, 25:19-25).

440. As such, Representative Johnson testified that he meets with groups that typically align with Democratic voters. (Johnson Dep. at 25:14-22).

441. Representative Johnson testified that has working relationships with constituents—including Democrats—on substantive lobbying issues, including multi-employer pension funds for coal miners, EPA regulations affecting oil and gas business owners, and erosion along the banks of the Ohio and Muskingum Rivers. (Johnson Dep. at 35:5-36:16).

442. Representative Johnson testified that whether a district is “favorable” is not dependent on the partisan composition of the district. (Johnson Dep. at 37:22-24, 38:3-19).

Representative Johnson explained:

443. If you look at my election process, in 2010 I ran in a predominantly Democratic district and I didn’t consider the partisan makeup of that district when I ran. I ran to serve. Excuse me. I ran to serve, and so it didn’t matter to me what party the people came from.

444. I would visit – at that time in my first election I represented Athens County, all of Athens County, which included the City of Athens. I spent a lot of time in Athens talking to college students and professors that I learned afterwards probably would never support me. But that didn’t matter to me. It was my job to represent them. And so having an open line of communication with them would help me gain the resources that I need to run a campaign.

(Johnson Dep. at 38:3-19).

iii. Rep. James Jordan represents both Democratic and Republican residents in his district.

445. Representative Jordan represents all members of all political parties. (Deposition of Rep. Jim Jordan, ECF No. 230-25 (the “Jordan Dep.”) at 123:16-20).

446. Representative Jordan testified that he attends bipartisan and non-partisan events. (Jordan Dep. at 35:22-24). For example, Representative Jordan testified that he has attended debates hosted by the League of Women Voters. (Jordan Dep. at 36:3-4). He has also attended “Chamber of Commerce events” and “other types of community development events,” in which both Democrat and Republican elected officials attend. (Jordan Dep. at 36:14-23, 37:3-13).

447. Regarding these events, Representative Jordan testified: “I see myself there as the state rep, the state senator, or the United States congressman representing that community.”

(Jordan Dep. at 37:19-21).

448. Representative Jordan testified that he does not decide to attend an event based on whether it is a Republican, Democratic, bipartisan, or non-partisan event; instead, the decision to attend is based on his schedule and availability. (Jordan Dep. at 38:5-15).

449. Representative Jordan testified that in communicating with his constituents, he does not inquire into whether an individual is a Democrat or a Republican. (Jordan Dep. at 120:11-15). Further, it does not matter to Representative Jordan or his staff whether a constituent is a Democrat or Republican because they respond to all constituents in the same manner. (Jordan Dep. at 120:24-121:13).

450. Representative Jordan participates in several forums throughout the year, including the candidate forum sponsored by the League of Women voters. (Jordan Dep. at 121:22-10).

451. In 2012, Representative Jordan participated in a candidate forum sponsored by the League of Women Voters. (Jordan Dep. at 122:7-20). This past year, however, Representative Jordan was unable to participate in the candidate forum sponsored by the League of Women Voters due to a scheduling conflict. (Jordan Dep. at 121:21-123:12).

iv. Rep. Steven Stivers represents both Democratic and Republican residents in his district.

452. Representative Stivers attends elected official lunches—that includes both Democratic and Republican elected officials—in every county that he represents on a regular basis to talk about issues that matter to them. (Deposition of Rep. Steve Stivers, ECF No. 230-46 (the “Stivers Dep.”) at 113:12-20).

453. Representative Stivers has held bipartisan roundtables to discuss the opioid crisis and pursued legislative action addressing the opioid issue. (Stivers Dep. at 113:21-25).

454. Representative Stivers attended two bipartisan debates in the last election, one in Athens County and the other in Columbus hosted by the Columbus Metropolitan Club. (Stivers Dep. at 114:23-115:12).

455. Representative Stivers testified that he has attended forums sponsored by the League of Women Voters. (Stivers Dep. at 114:15-17).

456. Representative Stivers has passed five bills in the past two years, all of which have been bipartisan. (Stivers Dep. at 113:25-114:3).

457. Representative Stivers testified that bipartisan support is important to him and his constituents; and specifically stated: “So almost every issue I’ve worked on, if it wasn’t bipartisan, I worked to make it bipartisan so it can be, because that’s important to me, and I think it’s important to my constituents.” (Stivers Dep. at 114:4-7).

458. Representative Stivers testified that the Lugar Institute ranked him the 37th most bipartisan member of Congress. (Stivers Dep. at 114:8-10).

B. Republican members engage with their communities.

a. Rep. Steven Chabot engages with his community.

459. Representative Chabot has invested time into learning his district. (Chabot Dep. at 44:16-19).

460. Representative Chabot engages with his district by responding to email, letter, and telephone requests for help or otherwise relating to constituent services. (Chabot Dep. at 46:4-47:13; 136:12-137:4).

461. Representative Chabot engages with is community by speaking at events and participating in forums and debates. (Chabot Dep. at 123:18-124:17; 137:16-21).

462. Representative Chabot is present in his district on a frequent and regular basis “keeping in touch with the people that [he] represent[s].” (Chabot Dep. at 139:4-18).

463. Representative Chabot maintains three official offices and one campaign office. Two official offices, along with the campaign office, are located in his district. (Chabot Dep. at 139:19-140:7).

464. Constituents regularly visit Representative Chabot's offices to receive help from Representative Chabot or his staff. (Chabot Dep. at 140:8-141:5).

b. Rep. Johnson engages with his community.

465. Representative Johnson testified that he has invested considerable time and money building a coalition of supporters in his district. (Johnson Dep. at 24:14-17).

466. Representative Johnson meets with "seniors, veteran, students, business owners, school officials, and elected officials." (Johnson Dep. at 24:20-22).

467. Representative Johnson testified: "Anyone that is a constituent of mine I spend a lot of time and effort and money to meet with them and understand what their issues and challenges are as it relates to federal policy." (Johnson Dep. at 24:22:25:2).

c. Rep. Jordan engages with his community.

468. Representative Jordan testified that he has invested a lot of time building coalitions of supporters in his district and spends a lot of time visiting and communicating with the constituents throughout his district. (Johnson Dep. at 34:10-15, 108:12-20, 110:13-17, 119:15-120:10).

469. Representative Jordan testified that he travels home to his district from Washington D.C. "most weekends" and all breaks to visit with his constituents. (Johnson Dep. at 104:2-8).

470. Representative Jordan testified that when he is home in his district, he spends time "touring businesses, visiting schools, talking with constituents, having townhalls, [and] giving speeches." (Johnson Dep. at 34:16-23; *see also* Johnson Dep. at 41:2-8).

471. Representative Jordan testified that he engages in these activities “all over [his] district.” (Johnson Dep. at 34:24-35:3).

472. Representative Jordan testified that he regularly attends Lincoln Day dinners throughout his district, as well as community days and municipal ground breaking ceremonies in towns throughout his district. (Johnson Dep. at 35:16-20, 37:7-13).

473. Representative Jordan also attended at least a couple of candidate forums sponsored by the League of Women Voters; he, however, missed the League of Women Voters’ event this past election year due to a scheduling conflict. (Johnson Dep. at 122:7-123:12; *see also* Johnson Dep. at 35:25-36:4)

474. Representative Jordan participated in three candidate forums; he missed a couple of other candidate forums due to scheduling conflicts. (Johnson Dep. at 121:14-122:8).

475. Representative Jordan testified that he has offices in Lima (Allen County) and Norwalk (Huron County) that are staffed five days a week, and an office in Bucyrus (Crawford County) that is staffed several days a week. (Johnson Dep. at 105:7-15, 105:19-106:4).

d. Rep. Steven Stivers engages with his community.

476. Representative Stivers testified that he comes home to his district “every weekend” to meet with his constituents. (Stivers Dep. at 94:4-11).

477. Representative Stivers testified that he travels to each county about once a month and has a representative from his staff in every county each week. (Stivers Dep. at 96:23-97:11).

478. Representative Stivers has offices in Wilmington (Clinton County), Hilliard (Franklin County), and Lancaster (Fairfield County) that are staffed five days a week. About once a year, he also has a mobile office the counties in which he does have a permanent office. (Stivers Dep. at 96:17-22, 97:12-98:3; *see also* Stivers Dep. at 98:12-19).

479. Representative Stivers testified that he holds meetings in his offices when he is home, but otherwise is out “doing tours, doing meetings [and] lunches with constituents and officials, and doing events in all of the counties, too.” (Stivers Dep. at 99:20-100:10).

480. Representative Stivers testified that he has a personal interest in this case because he has invested personally in the people he represents:

I am personally vested in the people I represent. I work hard everyday to provide constituent service, to correspond and communicate with my constituents. I've done 24 telephone town hall meetings over these last two years, about one a month. And I go to my district every week and meet with people. And they are my constituents, and I consider myself a servant leader, and I want to continue to serve them.

(Stivers Dep. at 110:2-13).

481. Representative Stivers responds to a large volume of correspondence from constituents:

Over the last few years, we've responded to 300,000 letters and emails that have come to our office. We've had serviced about 4,200 constituent claims, like a passport or a veteran's administration case or Social Security or Medicare or health care or anything involving the greater government umbrella that people might have issues with.

(Stivers Dep. at 133:24-134:17).

482. Representative Stivers reached out to his community during the election cycle by holding rallies and going door to door. He also does newspaper, online, radio and television advertisements. (Stivers Dep. at 115:23-116:17).

C. Republican members can share the same policy priorities as Democratic members.

a. Rep. Steven Chabot shares policy objectives with Democrats.

483. Representative Chabot testified that he introduced legislation, which became law, that addressed gun violence in schools. (Chabot Dep. at 125:20-126:8; *see also* Chabot Dep. at 126:9-127:2, 127:15-129:14).

484. Representative Chabot testified that the legislation was aimed to “reduce gun violence and vulnerability in schools.” (Chabot Dep. at 126:10-13).

485. Representative Chabot testified that he believes that a Democrat co-sponsored the bill. (Chabot Dep. at 127:15-22).

486. Representative Chabot testified that the bill gave additional federal funding to schools to train teachers, guidance counselors, and school personnel regarding the warning signs of a potentially violent student. (Chabot Dep. at 127:23-128:16).

487. The bill also provided funding for additional equipment, like metal detectors; training for responding to active shooter situations; and school resource officers. (Chabot Dep. at 128:17-129:9).

b. Rep. Johnson shares policy objectives with Democrats.

488. Representative Johnson has advocated for policy solutions to help coal miners whose multi-employer pension funds are in default and as a result, could lose their health benefits. (Johnson Dep. at 35:5-18).

489. Representative Johnson has worked for a policy solution to help coal companies or oil and gas companies that are impeded by federal policies or regulations. (Johnson Dep. at 35:19-36:25).

490. Representative Johnson has supported policies to address erosion issues along the riverbanks of the Ohio and Muskingum Rivers. (Johnson Dep. at 36:2-9).

A. There is more to representing constituents than agreeing with them on policy objectives.

a. Rep. Chabot provides many kinds of constituent services.

491. Representative Chabot testified that he responds to various requests from his constituents:

Try to assist them in whatever it is they're contacting us about. Oftentimes it's you know, could be a matter has to do with the IRS or Social Security or Medicare, a whole range of federal issues. Or they may be wanting to bring their family to Washington and have a tour of the Capital building or school groups come up here. So they contact us and we try to assist them.

(Chabot Dep. at 136:17-24).

492. Representative Chabot testified that of he will make phone calls to the IRS, or the Social Security Administration, or immigration agencies on behalf of his constituents if he thinks it will help resolve an issue they are having. (Chabot Dep. at 140:18-141:5).

c. Rep. Johnson has working relationships with his constituents on substantive policy issues.

493. Representative Johnson testified that he has worked to help find federal policy solutions for coal miners whose pension funds are in default, energy companies impeded by federal regulations, and riverbanks suffering from erosion. (Johnson Dep. at 35:8-36:9).

d. Rep. Jordan responds to ministerial and substantive lobbying requests from his constituents.

494. When asked what electioneering activities the he has engaged in, Representative Jordan testified

I don't -- I guess I don't view it as electioneering. I view I as doing my job which is going out and visiting the folks I get the privilege of representing, whether that's in a meeting, touring their business, stopping by a school, giving a speech to 8th graders or juniors and seniors in their economics and government class. So I don't view that as electioneering. I just view that as doing our job. (Jordan Dep. at 40:22-41: 8).

495. Representative Jordan testified that constituents turn to him and his staff for ministerial and substantive lobbying requests. (Jordan Dep. at 62: 22-25, 63:4).

496. For example, Representative Jordan receives requests from Veterans groups:

We'll have veterans groups talk to us about things they are working on, talk to us about legislation. Sometimes it could be as simple a

request as I want a flag for some presentation they're doing for a veteran or their family. I mean, that's the first example that popped into mind is dealing with veterans organizations. I'm sure there are others. (Jordan Dep. at 63:6-13).

497. Representative Jordan testified that he welcomes criticism "for standing up and doing what [he] told the voters [he was] going to do." (Jordan Dep. at 81:3-22).

e. Rep. Stivers testified that he works on issues that are important to the people.

498. Representative Stivers testified that during his time in office, he has built many coalitions:

499. I've worked to – you know, worked on coalitions of faith-based folks. I've worked on coalitions of folks that are veterans and military. I've worked on and with coalitions of folks that care about bipartisanship and getting things done. I've worked on civility with Joyce Beatty, but built a coalition of people that care deeply about that in my district. (Stivers Dep. at 112:3-10).

500. Representative Stivers testified that he has worked on many issues that are important to his constituents:

501. I've worked with folks on various issues that are important to this district, like, Buckeye Lake; like getting a grocery store in Vinton County that for four years had no grocery store in the whole county; like getting the water situation at Caesar's Lake in Clinton County worked out; like getting the Wayne National Forest down in Hocking and Athens County and Perry County to be more friendly to recreation.

502. All those issues are important to me. I've worked on them, and they are important to the people. And if this district gets broken up, we'll lose momentum on making things happen for those folks. (Stivers Dep. 112:11-24).

D. The Congressional Intervenors Had No Control Over The Shapes Of Their Districts.

a. Rep. Johnson was not involved in the redistricting process.

503. When asked about a remedial plan that paired two or more Member Intervenor Applicants, Representative Johnson testified that he would not want to spend resources on a primary, but he “is not in charge of drawing the lines.” (Johnson Dep. at 28:3-20).

504. Representative Johnson testified that, during the 2011 congressional redistricting process, he did not have an understanding of the redistricting process, did not know who was organizing it or who had final approval of the map before it went to the floor of the General Assembly, and was not aware that two versions of the redistricting maps were passed. (Johnson Dep. at 49:5-18).

505. Representative Johnson testified that he never talked to Speaker Boehner in a one-on-one conversation about redistricting and never told Speaker Boehner what he wanted his district to look like. (Johnson Dep. at 64:16-21, 77:8-11).

506. Representative Johnson was not of the understanding that Speaker Boehner or his staff would have any control or decision-making authority in the redistricting process; this is still his understanding today. (Johnson Dep. at 65:4-18, 66:10-24).

507. Representative Johnson testified that although he had general discussions with both Democratic and Republican members about redistricting, he does not remember any particular discussion. (Johnson Dep. at 66:25-68:13).

508. Representative Johnson testified that he did not know what Tom Niehaus’s involvement in Ohio’s Congressional redistricting process was and had only high-level, general discussions about the redistricting process with President Niehaus. (Johnson Dep. at 70:17-71:6).

509. Representative Johnson testified that he did not know what Speaker Batchelder's involvement in Ohio's Congressional redistricting process was and had only high-level, general discussions about the redistricting process with Speaker Batchelder. (Johnson Dep. at 71:12-23).

510. Representative Johnson testified that he did not know whether Kevin DeWine had a role in Ohio's Congressional redistricting process and had only high-level, general discussions about the redistricting process with Representative DeWine. (Johnson Dep. at 73:12-74:3).

511. Representative Johnson testified that he did not have conversations with anyone at the time of redistricting about his district becoming more favorable in terms of the PVI. (Johnson Dep. 116:2-5).

b. Rep. Jordan had very limited conversations regarding the changes to his district.

512. Representative Jordan testified that he had brief conversations when Congressman Latta regarding "swapping some counties" between their respective districts. (Jordan Dep. at 48:6-13, 48:18-49:11).

513. Representative Jordan testified that contrary to his desire, the swap of counties between his and Representative Latta's district occurred. (Jordan Dep. at 49:5-11).

E. In The Experience Of Ohio's Congressional Delegation, "Political Indexes" Are Not The Sole Factor in Determining Whether A District Is Competitive.

514. Representative Stivers testified that there are many factors that make a district competitive:

515. [A] lot of things make districts competitive or not competitive, whether somebody is an incumbent, how well they serve their people, how hard they work on campaigns, how much they fundraise, what their index is. And all those things go into this, even though I only reference the index in this, but it's all those things that matter.

(Stivers Dep. at 81:15-22; *see also* Stivers Dep. at 82:13-18).

516. Representative Stivers testified that “the index is not the sole determinant of an outcome at all.” (Stivers Dep. at 82:2-3).

517. Representative Stivers testified that District 12 had a political index of R+8 and “it ended up being a less than one point race in the special election in August [2018], because the index isn’t the sole determinant.” (Stivers Dep. at 82:4-8).

F. Each Congressional Member Has An Interest In Their District And The Redistricting Process.

a. Rep. Johnson has a personal interest in representing the voters that elected him.

518. When asked about his interest in his district, Representative Johnson testified: “[I have an interest to] represent the voters that have elected me. I have a responsibility to them.” (Johnson Dep. at 22:15-18).

519. Representative Johnson testified that incumbents have a personal interest in their districts. (Johnson Dep. at 22:12-14).

520. Representative Johnson testified that he has a personal interest in his continued incumbency because he “want[s] to continue representing the people that [he] serve[s].” (Johnson Dep. at 22:24-23:7)

521. Representative Johnson testified that if his district had a different configuration, he “would have to go back and start from square one ... in building fundraising alliances and coalitions” to get his “message out to [voters] to help them understand what kind of representative [he] would be on their behalf ...” (Johnson Dep. at 37:12-21).

522. Representative Johnson agreed that fundraising efforts would be wasted if district lines were redrawn and a member was paired with another incumbent or moved from a favorable to an unfavorable district. (Johnson Dep. at 44:6-14).

523. When asked why fundraising efforts would be wasted if the districts lines changed, Representative Johnson testified: “Well, many people, many people contribute to seeing their particular member of Congress elected or reelected, not someone else’s. So if they were outside of my district, they might be less inclined to support financially.” (Johnson Dep. at 45:9-17).

b. Rep. Stivers is personally vested in the people he represents.

524. Representative Stivers testified that maps imposed by the judiciary would “disenfranchise” voters who have vested interests in having him as their congressional representative. (Stivers Dep. 104:13-22).

525. Representative Stivers testified that his voters would be harmed by the remedial maps Democrats propose. (Stivers Dep. 104:23-105:7).

526. When asked if he has a personal interest in his district, Representative Stivers testified:

527. I am personally vested in the people I represent. I work hard everyday to provide constituent service, to correspond and communicate with my constituents. I’ve done 24 telephone town hall meetings over these last two years, about one a month. And I go to my district every week and meet with people. And they are my constituents, and I consider myself a servant leader, and I want to continue to serve them.

528. And if somebody is going to break the social contract that we all live under that says these are ten-year districts, I feel like I have a personal interest in that, because I want to represent the people that I’ve been representing. And, you know, obviously, they get a chance every two years to vote me in or vote me out, but I enjoy representing them, and I believe I have a personal interest in this case because I want to continue to represent them.
(Stivers Dep. 110:2-23).

529. Representative Stivers testified that he has a personal interest in his continued incumbency. (Stivers Dep. 110:24-111:2).

530. Representative Stivers testified that he has invested considerable time and money building coalitions of supporters in his district. (Stivers Dep. 111:20-23).

531. Representative Stivers testified if his district is broken up, he will “lose momentum on making things happen for his voters.” (Stivers Dep. 112:20-24).

532. Representative Stivers testified: “[P]eople are counting on me to help solve those problems large and small for them. And I take it very seriously and have a vested interest in doing that and continuing to do that.” (Stivers Dep. 113:2-6).

IV. Expert Witnesses

A. Plaintiff’s Expert – Dr. Wendy Tam Cho

a. Dr. Cho’s Simulation Methodology.

533. The court in this case deemed Dr. Cho as an expert in political science, including political geography and the analysis of redistricting through the use of simulations in statistics including applied statistics, statistical modeling and sampling from unknown distributions in operations research including the design of algorithms and in high-performance computing. Trial Transcript, Vol. IV, ECF No. 242 (“4 Tr.” or “4Tr.”), at 140:17-141:4.

534. Dr. Cho is employed at the University of Illinois at Urbana-Champaign as a full professor with appointments in the Department of Political Science, the Department of Statistics, the Department of Mathematics, the Department of Asian American Studies, the College of Law, and she is a senior research scientist at the National Center for Supercomputing Applications. 4Tr. 131:14-23.

535. Dr. Cho has developed an algorithm that simulated theoretical maps redistricting the state of Ohio. (4Tr. 143:9-144:12).

536. The purpose of Dr. Cho's computer simulation is to draw a set of simulated maps with so-called nonpartisan redistricting criteria to use as a baseline to compare against the enacted map. 5Tr. 6:15-19.

537. Dr. Cho testified that the total possible ways the state of Ohio can be divided into 16 congressional districts is a "very large number" but she did not calculate it. 5Tr. 7:10-14.

538. Dr. Cho's algorithm is an evolutionary Markov Chain Monte Carlo ("EMCMC") algorithm. 5Tr. 46:24-47:10.

539. Dr. Cho is able to simulate billions of theoretical maps by running her algorithm on the Blue Waters supercomputer that is housed at her university. 5Tr. 6:1-6. The Blue Waters supercomputer is three million times faster than an average laptop. Ex. P087 at 5

540. Dr. Cho's algorithm is a set of steps, 5Tr. 48:5-6, but you need the code to implement the algorithm, 5Tr. 48:7-9, and Dr. Cho wrote her code in C++, 5Tr. 48:10-11. The code Dr. Cho provided in this case was not in a single C file. 5Tr. 48:12-14. Dr. Cho's code comes in different files, 5Tr. 48:19-20, or "pieces," 5Tr. 48:23-25, and these "different multiple files . . . different parts of the code . . . have to work together." 5Tr. 48:21-23.

541. To run the code in this case, Dr. Cho executed and changed certain functions, "called parameters," at the command line. 5Tr. 49:1-6. Dr. Cho set the parameters at the command line when she ran the code. 5Tr. 48:7-10. Dr. Cho did not know how many parameters she set "offhand" when running her code in this case. 5Tr. 49:10-13.

542. Dr. Cho disclosed some, but not all, parameters used in this case in her report. 5Tr. 49:24-50:1. For example, Dr. Cho disclosed that each of her maps had to (a) split no more than 23 counties; (b) preserve at least 96.78% of cities; (c) have districts with at most 1% population deviation; (d) have districts that are contiguous; and (e) have one district in the "Cleveland area"

with a Black Voting Age Population of at least 45%. Ex. P087 at 8-10; 5Tr. 50:2-5; 4Tr. 162:9-16; 5Tr. 50:6-9; 4Tr. 162:19-21.

543. However, Dr. Cho did not disclose numerous other parameters that impacted her algorithm in her report. For example, Dr. Cho's report did not disclose that she included weights for each parameter, that these weights were used to calculate "fitness" scores, and the fitness scores guided the movement of her Markov chain. 5Tr. 51:3-52:6; 5Tr. 54:12-18; 55:7-9; 56:18-20.

544. Moreover, Dr. Cho's code includes default values for various parameters and she changes these defaults at the command line when running her code for a specific state. Thus, nobody reviewing her code could understand what she input at the command line at the time she ran it. 5Tr. 62:10-15; 62:16-23.

545. In addition, the code Dr. Cho used and produced in this case contains parts from other algorithms that she did not use in this case, but she does not disclose those specific parts in her report. 5Tr. 58:16-21; 63:17-20; 64:7-18.

546. Dr. Cho restricted the runtime of her algorithm on the supercomputer to four hours. 5Tr. 69:2-4. She could have let it run longer. 5Tr. 69:5-6.

547. Dr. Cho's algorithm generated billions of potential maps in those four hours. 5Tr. 69:8-10. These billions of maps were potential or feasible maps defined as meeting Dr. Cho's criteria. 5Tr. 69:11-13. However, Dr. Cho only reported a sample of about 3 million maps. 5Tr. 69:14-17. Consequently, Dr. Cho provided a "sample of a sample." 5Tr. 69:18-20.

548. Dr. Cho does not know how many feasible maps, with feasibility defined as meeting Dr. Cho's criteria, her algorithm could create for the State of Ohio. 5Tr. 69:24-70-2.

549. Dr. Cho does not know how many potential maps there are for the state of Ohio that the legislature could legally adopt. 5Tr. 70:4-7.

550. Dr. Cho does not provide any analysis for how accurately her 3 million maps uniformly sample the possible districtings of the state of Ohio in her report. 5Tr. 70:8-12.

551. Dr. Cho agrees that the purpose of a simulation is ultimately to generate maps that a human might draw “in the sense that they’re legally viable and in the sense that [she] described already.” 5Tr. 70:14-18.

552. Dr. Cho did not generate any pictorial maps from her simulation; so, nobody knows what these maps actually look like, nor did she produce any shapefiles that anyone could load into software to view these maps. 5Tr. 70:19-71:2.

553. Dr. Cho did not generate a representative sample of all possible redistricting maps for the state of Ohio. 5Tr. 8:4-9.

554. Dr. Cho did not generate a representative sample of all possible redistricting maps for the state of Ohio that meet the basis legal constraints of contiguity and equal population. 5Tr. 8:10-18.

555. Rather, Dr. Cho simply produced an alleged representative sample of the billions of maps that met the criteria she employed. Had she employed different criteria, she would have produced a different sample of maps. 5Tr. 8:19-9:2.

b. Dr. Cho Admits that the Proper Comparison Set is One that Employs the Same Redistricting Criteria for the Enacted Map.

556. Dr. Cho admits that in order to use a set of simulated maps to compare against the enacted map you have to follow the same traditional districting principles as the enacted map for an apples-to-apples comparison. 5Tr. 11:18-21.

557. Dr. Cho believes if one does not use or follow the same criteria, then a map comparison would “not necessarily” be an apples-to-oranges comparison, rather “[i]t would be a larger set.” 5Tr. 11:22-25.

558. Dr. Cho agreed she “tr[ie]d to use the same traditional districting principles that the enacted map followed so that [her] simulation set was an apples-to-apples comparison.” 5Tr. 11:18-20.

c. Dr. Cho Admits that She Did Not Factor Incumbency Protection into Simulation.

559. Dr. Cho recognized the courts have used the term incumbency protection and consider it a traditional districting principle. 4Tr. 170: 17-18.

560. Dr. Cho agrees “absolutely” that it is “clear in political science literature” that “incumbent protection is not simply not having another incumbent in the same district; it is the drawing of lines that the incumbent retains his core constituency.” 5Tr. 34:20-35:2.

561. Dr. Cho agreed the enacted map protected all but three sets of incumbents, but her map simulation makes no effort to protect incumbents. 5Tr. 33:24-34:1; 5Tr. 46:13-16; 4Tr. 171:22-24.

562. Dr. Cho has no idea how many incumbents are paired in any of her 3 million simulated maps. 5Tr. 34:2-4.

563. Dr. Cho did not factor in incumbency protection because she did not believe that it was a priority of the Ohio Legislature when enacting the 2011 plan. 5Tr. 35:3-12. Dr. Cho did not believe incumbency protection was a priority because she “looked at the legislative record, [and] thought they made that pretty clear.” 5Tr. 35:3-8.

564. In particular, Dr. Cho relied upon the statements by Representative Huffman at the September 15, 2011 hearing on HB 319. 5Tr. 38:8-12; 5Tr. 45:9-16; 4Tr. 160:18-161:5; 4Tr. 172:16-17.

565. But, Dr. Cho was not aware of Rep. Huffman’s role in the map-drawing process. 5Tr. 38:17-19. She admitted she did not have “any knowledge of what was actually inside

Representative Huffman's mind or what his intent was based on [his legislative record] statements," 4Tr. 176:17-20, and was only "inferring," 4Tr. 176:20. Dr. Cho admitted she "didn't talk to him [i.e. Rep. Huffman] or do further research into this." 4Tr. 176:20-21.

566. Dr. Cho's "feeling" was that "there was no intent to protect incumbents, because the plan [did] not maximize protection of incumbents." 5Tr. 13-24.

567. But Dr. Cho agreed a plan does not necessarily have to protect every incumbent possible for incumbency protection to still have been one of the priorities of the legislature. 5Tr. 35:25-36:4.

568. Dr. Cho agreed Ohio losing two congressional seats will require Ohio's districting map to include at least two incumbent pairings, and she observed the Ohio Legislature "did three." 5Tr. 36:7-14.

569. In a Pennsylvania redistricting case, Dr. Cho testified as an expert for the state (5Tr. 28:8-10) and inferred that incumbency protection was a goal of the legislature because there was only one pairing, 5Tr. 36:18-22, explaining "it's more . . . a totality of circumstances." 5Tr. 36:18-22. Dr. Cho confirmed she inferred incumbency protection was a goal of the legislature in the Pennsylvania case because there was only one pairing. 5Tr. 37:8-11. Dr. Cho refused to make the same inference in this case because the state paired three sets of incumbents when only two were required based on the "whole picture" and the "whole discussion." 5Tr. 37:20-24.

570. Dr. Cho believes if incumbency protection is a legislature's goal, then that could have a partisan impact on the map because "incumbency protection can be a very partisan goal," 5Tr. 40:12-16, but "[i]t can also be a nonpartisan goal." 5Tr. 40:16.

571. Dr. Cho agreed that if she left out incumbency protection, and it was demonstrated incumbency protection was one of the priorities of the legislature, then she does not know if the

partisan bias in the enacted plan results from incumbency protection or some other improper purpose. 5Tr 41:2-10.

572. In the Pennsylvania redistricting case, Dr. Cho concluded that neither of the plaintiffs' expert's map sets were properly comparable against the enacted state map. 5Tr. 42:1-6. Dr. Cho testified she "had a lot of issues with [the expert's] simulations," 5Tr. 42:6, and one of those issues was that the expert's [i.e. Dr. Chen's] first set of maps did not include incumbency protection. 5Tr. 42:7-16. Specifically, Dr. Cho did not believe that the expert's [Dr. Chen's] simulated set of maps were comparable to the enacted map because "it left out incumbency protection which is constraining, obviously, on what kind of maps are drawn. So -- so if they don't use it, they're leaving out a constraint that the map drawers who used [the controlling statute] used. And so, then they aren't comparable because, then, you're comparing apples to oranges. Right? You have to use the same -- the same constraints." 5Tr. 42:15-22; *see also* 4Tr. 178:2-12.

573. Dr. Cho agreed her previous testimony in the Pennsylvania state court case concerning incumbency protection included:

574. [I]n political science, our understanding of incumbency protection is not just that the incumbents have to be in different districts. One of the reasons we have one of the reasons incumbency protection is used a lot is, for instance, if you want to get a map passed, a lot of times, you have to satisfy certain people. And sometimes that is -- translates to protecting incumbents, meaning they -- they will feel happy with their district. And they wouldn't feel happy with their district, for instance, if you -- just -- just because you haven't paired them with another incumbent. They want a certain kind of district composition. And so that affects, for instance, the partisan metrics of the plans that are drawn. So if a plan is drawn with incumbency protection, that affects

the partisan -- the partisan metrics. And so if you leave it out, then you might say, Oh, this was obviously partisanship when it was, at least partly, incumbency protection.

5Tr. 43:17-44:13.

575. Dr. Cho would not know until she tried if she would end up with 3 million different maps if she factored incumbency protection into her simulation. 5Tr. 44:14-17.

576. Dr. Cho admitted she did not know how much more likely 12 Republican seats would be if she factored in an incumbency protection—in her words, “If I -- if I made the maps separate the incumbents, then I don’t know [how much more likely 12 Republican seats would be if incumbency protection was factored in], yes.” 5Tr. 113:10-14.

d. None of Dr. Cho’s Simulated Maps Comply with Equal Population Requirements.

577. Dr. Cho agreed equal population is a criterion required by law and originates from the one-person one-vote requirement. 5Tr. 23:22-24:1. Dr. Cho tried to comply with the equal population criterion in her simulation. 5Tr. 24:2-5.

578. Dr. Cho described the level of population equality in the current Ohio congressional map as “almost perfect. The deviation is one person.” 4Tr. 165:12-14.

579. Dr. Cho agreed that while the enacted map has exactly equal population, her maps, at best, have .3 percent population, 5 Tr. 46:1-4, with .3 percent equating to approximately 2,000 people, 5Tr. 25:3-8.

580. She admits that some of her maps are “pretty close” to one percent (as “technically, they all have to be below one percent”), 5Tr. 46:5-9.

581. Dr. Cho is not aware of any state in the country whose congressional districting map has a population deviation of between 2,000 and 7,000 people because she “[hasn’t] done that analysis.” 5Tr. 25:16-19.

582. Dr. Cho's position is that any of her maps can be brought to population equality at the census block level without compromising any other traditional districting principles. 5Tr. 26:4-9.

583. Dr. Cho further testified that zeroing out population will have "[l]ittle effect on the outcome of my analysis," 5Tr. 27:21-24; 4Tr. 167:5-168:12, but Dr. Cho did not perform any such analysis. 5 Tr. 33:6-20.

584. Dr. Cho recognized that in the Pennsylvania case she criticized one of the Plaintiffs' experts, Dr. Wesley Pegden—who used 2% and 1% population deviation numbers in his simulation—when at the Pennsylvania trial she testified:

So one of the limitations is the way he [i.e. Dr. Wesley Pegden] defined what's a valid map is not, in my opinion, the right way to do it because he leaves out -- for instance, kind of like Dr. Chen, he leaves out incumbency protection. But Dr. Pegden leaves out even more. He left out preserving cities. He didn't preserve "equal population" at the same level that the current map preserves it at. He uses two percent. Current map is at zero. He tried one percent. The current map is at zero.

So we're comparing something else, because if you're constrained to have population equality and then you say, "Okay. The maps I'm going to compare to constrain...at a different level," it's like, Well, do you -- do you get some partisan effect from that . . . relaxing of that constraint; do you get some partisan effect from not preserving cities?

5Tr. 30:4-19 (ellipsis in original).

585. Dr. Cho agreed her statements in her expert report from the Pennsylvania case were accurate. 5Tr. 31:12-16. Dr. Cho stated in that report: "'However, he [Dr. Pegden] does not require his bag of alternatives to meet all of the same criteria (preserving cities and incumbent protection), and on other criteria, such as population equality, he allows his candidate maps to systematically be worse than the candidate map. This decision biases what appears in the candidate set of comparison maps" 5Tr. 31:22-32:8. Dr. Cho further stated in her report in that case: "His third

point is that the threshold does not affect the outcome . . . This statement is a broad and sweeping claim that is not backed up with empirical evidence. He simply asserts the fact, which is non-obvious. Partisan bias is not a proxy for population deviation. The two do not move in lock step with one another.” 5Tr. 32:10-33:1.

e. None of Dr. Cho’s Simulated Maps Created a Majority-Minority District Despite the Existence of One in Northeast Ohio Since 1968.

586. Dr. Cho agreed the enacted map has a majority-minority district with a BVAP of over 50 percent, but none of her maps do. 5Tr. 46:10-12. None of Dr. Cho’s “3 million maps have a district that is over 50 percent BVAP.” 5Tr. 19:9-12. In fact, Dr. Cho “know[s] none of [her maps] got up to 48 percent.” 5Tr. 19:17-18.

587. Dr. Cho defined “minority districts” to mean that in all her supercomputer-generated 3 million maps, each has a district “that has at least 45 percent black voting age population, or BVAP, in the Cleveland area.” 4Tr. 158:20-159:2.

588. Dr. Cho testified that the legal requirement for applying any minority district’s criterion came from Section 2 of the Voting Rights Act. 4Tr.159:7-11.

589. But Dr. Cho admitted the basis for her 45% BVAP number came “from the plaintiffs’ expert, Dr. Lisa Handley.” 4Tr. 159:3-6.

590. Dr. Cho “just accepted and employed the 45 percent BVAP number in [her] simulation per the direction of plaintiffs’ counsel” because “that’s what [she] was informed to do.” 5Tr. 21:4-7.

591. Dr. Cho testified that she purportedly checked to confirm that the “VRA District” in each of her maps was drawn within the Cleveland area. 5Tr. 72:9-11. But Dr. Cho did not produce any of those maps for the Defendants to be able to confirm that the VRA district was

always in the Cleveland area. 5Tr. 72:13-16. Dr. Cho did not print out any maps to see if the “VRA District” was in Cuyahoga County. 5Tr. 72:23-25.

592. When Dr. Cho ran the code in her simulations for this case, she did not include the code that checked whether the “VRA District” was in the Cleveland area, 5Tr. 74:4-8, because she had ‘taken it out’ as part of “code cleaning.” 5Tr. 73:16. As a result, Dr. Cho was not able to check for the purposes of this case whether the “VRA District” was in the Cleveland area in each of her 3 million maps. 5Tr. 74:9-11. Nobody reading her code could be sure that the “VRA District” was in the Cleveland area, 5Tr. 75:1-5, but Dr. Cho is “sure that district is in that area, the Cleveland area,” 5Tr. 75:1-2, despite nobody being able to confirm that, 5Tr. 75:3-6.

593. Dr. Cho agreed the “legislative record reflects a desire by the Ohio Legislature to create a majority-minority district in northeast Ohio.” 5Tr. 17:12-15.

594. Dr. Cho “didn’t perform any independent analysis to determine if, in fact, a 45 percent BVAP district in northeast Ohio would comply with the Voting Rights Act” because “that’s not within [her] expertise.” 5Tr. 21:8-11.

595. Dr. Cho agreed “had [she] required each one of [her] maps to have a district that had a 50 percent or greater BVAP, [she] would have ended up with entirely different maps.” 5Tr. 21:22-22:1.

596. Dr. Cho does not know if requiring her maps to have a 50 percent or greater BVAP would affect the partisan composition for each of her simulated maps because she “did not do it in this case” and “wouldn’t know until after [she] did it.” 5Tr. 22:2-6.

597. Dr. Cho did not conduct any district-specific functional analysis in this case for any of her VRA districts in any of her simulated maps. 5Tr. 78:23-79:1.

598. Dr. Cho did not conduct any district-specific functional analysis on Cuyahoga County generally. 5Tr. 81:8-10; 5Tr. 82:3-6.

599. Dr. Cho did not send any of her 3 million maps to plaintiffs' counsel or to Dr. Handley to conduct a district-specific functional analysis. 5Tr. 82:7-10.

600. Dr. Cho "just used a single 45 percent BVAP target number for all of [her] VRA districts and all of [her] 3 million simulated maps." 5Tr. 79:15-17.

601. It would have been impossible to conduct a district-specific functional analysis on any of the VRA districts in Dr. Cho's 3 million maps because what Dr. Cho's VRA districts look like in any of her 3 million maps is unknown. 5Tr. 79:1-7. Neither Dr. Cho, nor anybody else, knows what particular towns or cities are contained within each of her VRA districts in each of her 3 million simulated maps. 5Tr. 79:8-11.

602. Dr. Cho was not aware that the City of Euclid was under a court-mandated level of 60 percent BVAP for certain electoral districts. 5Tr. 81:4-7.

603. Dr. Cho does not know if any of the VRA districts in any of her 3 million simulated maps went down into Summit County, but she "would highly doubt it." 5Tr. 81:25-82:2.

f. Dr. Cho's Simulation Does Not Attempt to Create a Minority Influence District in Franklin County.

604. Dr. Cho understands the term "minority influence district" to mean "the population of the district has a minority population that will allow the [the minority group] to have at least an influence on the elections in that district." 5Tr. 22:7-13.

605. Dr. Cho agreed it could be a "valid redistricting goal for the legislature to create minority influence districts." 5Tr. 22:14-17.

606. Dr. Cho's algorithm made no specific effort to create a minority influence district in the Franklin County area. 5Tr. 23:18-21. Dr. Cho did not factor in an intent by the Ohio

legislature to create a new district in Franklin County that would be considered a minority influence district. 5Tr. 23:9-16.

g. Dr. Cho's Algorithm Has Not Undergone Sufficient Peer Review or Been Properly Vetted or Tested.

607. Dr. Cho has only written one two-page abstract about the algorithm she used in this case. PX428; 5Tr. 86:22-87:2. The article has not been published in a peer-reviewed journal but has been presented at a single peer-reviewed conference in November 2018. 5Tr. 87:3-10. Dr. Cho only disclosed the "idea" of her algorithm in this paper presented at this peer-review conference. 5Tr. 87:11-21. Dr. Cho did not disclose her code at the peer-review conference or with her paper. 5Tr. 87:13-14; 87:22-24.

608. Dr. Cho is not aware of anyone who's attempted to run her code because she has not produced it to anybody else. 5Tr. 95:23-96:1.

609. Dr. Cho provided pseudocode with her paper on her PEAR algorithm but did not provide pseudocode with her paper discussing the algorithm she employed in this case. 5Tr. 88:1-4.

610. Dr. Cho's sole paper on her algorithm employed in this case does not provide any detail on how the algorithm generates her simulated maps. 5 Tr. 90:18-24; 91:12-17.

611. While Dr. Cho purportedly tested her algorithm using a smaller data set from 25 geographical units she does not report the results of that analysis anywhere in her report and did not produce the smaller dataset in this case. 5Tr. 92:7-94:4; 101:24-102:1; 102:2-8.

h. Dr. Cho Cherry Picked Her Use of Political Data to Make the State of Ohio Look More Democratic.

612. After running her algorithm, Dr. Cho then compared each of her simulated maps to the enacted map under various partisan metrics. 5Tr. 102:12-15.

613. To calculate the various partisan scores for each of her simulated maps, Dr. Cho used election data from eight statewide races in 2008 and 2010, 5Tr. 103:17-22.

614. Dr. Cho agreed she could have used 2012 to 2016 congressional elections to determine the partisanship of each district. 105:6-9. Dr. Cho agreed if she had used congressional elections for 2012, 2014, 2016, instead of the eight statewide races in 2008 and 2010, she would have had an index that would have had a lower Democratic vote share. 5Tr. 106:9-12. Which in turn, would have caused Dr. Cho's simulation to likely create more Republican seats. 5Tr. 106:15-17.

615. Dr. Cho agreed there is no perfect measure of which election data to use. 5Tr. 103:8-10.

i. Dr. Cho Agrees that Many Plaintiffs' Won't Elect a Democrat under Any of Her 3 Million Simulated Maps.

616. Dr. Cho calculated the two-party Democratic vote shares for each plaintiff in each of her simulated maps. 5Tr. 114:14-115:2.

617. There are several plaintiffs that are not going to be in a district that has a 50 percent or greater two-party Democratic vote share in any of Dr. Cho's 3 million simulated maps, 5Tr. 115:9-13, including Plaintiffs Deitsch, Nadler, Megnin, and Thobaben, 5Tr. 115:14-116:1.

618. Dr. Cho agreed that when her simulation is drawing maps and it is making changes to districts, those changes might benefit one of the plaintiffs by placing the plaintiff in a higher Democratic district and it might make one of the plaintiffs worse off by placing the plaintiff in a lower Democratic district. 5Tr. 118:5-10.

619. Plaintiff Myer in District 13, no matter which election returns data one looks at, Plaintiff Myer is in an enacted district with higher Democratic vote share than any of Dr. Cho's simulated maps, 5Tr. 117:2-6, which Dr. Cho admitted is also true for "several of the plaintiffs."

5Tr. 117:6. Even though Plaintiff Myer is currently in an enacted district that is going to elect a Democrat, in some of Dr. Cho's simulated maps, she would be in a district that may elect a Republican. 5Tr. 117:7-11.

620. Dr. Cho agreed "redistricting is a zero-sum game." 5Tr. 118:11-12.

621. Dr. Cho is not opining that any particular plaintiff lacks the ability to have an influence on their member of Congress, meaning, as Dr. Cho explained, any "plaintiff . . . [can] call up his congressman, make a plea and influence his congressman, yeah, anyone can do that." 5Tr. 118:13-18.

622. Dr. Cho is not testifying that "any particular plaintiffs have been shut out of the political process." 5Tr. 118:19-119:12.

623. Dr. Cho is not providing any opinions on how much partisanship is too much. 5Tr. 113:15-17.

B. Plaintiff's Expert – Dr. Christopher Warshaw

624. Dr. Warshaw offers opinion predicated entirely on statewide metrics that are new, unreliable, continually changing, and incapable of identifying manageable standards for drawing districts or adjudicating so-called partisan gerrymandering claims. Accordingly, the opinion is unhelpful to the Court in resolving the issues presented.

a. Dr. Warshaw's Definition of Partisan Gerrymandering Is Unreliable And Inconsistent With Supreme Court Precedent.

625. Dr. Warshaw defines partisan gerrymandering as: "when the party that controls the redistricting process attempts to convert the votes that they receive into seats in the legislature as efficiently as possible." 2 Tr. 191:10-12.

626. Dr. Warshaw evaluates four factors in assessing whether a redistricting plan is a partisan gerrymander: (1) whether a single party controlled the redistricting process, (2) whether

the partisan bias metrics that he look at indicate the same party that controlled the redistricting process was actually advantaged in the translation of votes to seats, (3) whether the map is an outlier “looking at the complete corpus of historical elections over the last 45 years,” and (4) whether all the partisan bias metrics point in the same direction. 2 Tr. 191:23-912:12.

627. According to Dr. Warshaw, “in order for it to be a partisan gerrymander, we have to be able to say that one party intended to maximize their seat share,” so partisan gerrymandering is “about the intent of the party that controlled the redistricting process.” 2 Tr. 192:18-19.

628. But Dr. Warshaw believes the votes of the minority party for a redistricting bill do not “matter in [his] definition of gerrymandering.” 2 Tr. 194:10-18. This is because there are “idiosyncratic reasons” why a minority member “might” support a redistricting plan, including that “there could be reasons to protect their personal district to make it safe for them personally.” 2 Tr. 194:19-24.

629. But the Supreme Court—unlike Dr. Warshaw—has defined any cognizable gerrymandering claim to be (at a minimum) “a district specific” inquiry. *Gill v. Whitford*, 138 S. Ct. 1916, 1929 (2018). “[I]diosyncratic” matters related to one’s “personal district,” of course, are relevant to a district specific inquiry. Dr. Warshaw ignored these factors in his non-district-specific analysis that focuses entirely on statewide vote totals.

630. But Dr. Warshaw ultimately conceded that it *would* matter if the “vast” majority of members of the minority party supported an alleged gerrymander, but a “majority” would not satisfy him. Trial Transcript, Vol. III, ECF No. 241 (“3 Tr.” or “3Tr.”), at 112:12-25. Illogical distinctions tailored conveniently for the facts of a given case are not the hallmark of witness

credibility. There is, in fact, no “empirical research” that informs Dr. Warshaw’s opinion on this issue. 3 Tr. 113:6-8.

631. The reason one-party control matters to Dr. Warshaw is it allows one party to pass a plan without help from minority party voters. 3 Tr. 111:2-25. If this does not occur, there is no gerrymander. 3 Tr. 111:20-25. But Dr. Warshaw did not study the process by which Ohio’s 2011 congressional plan was enacted into law. 3 Tr. 113:12-5.

632. Dr. Warshaw views gerrymandering as being accomplished through the use of packing and cracking voters. 3 Tr. 27:17-23.

633. Dr. Warshaw cannot identify a line on what constitutes a cracked district. 3 Tr. 28:16-19.

634. Dr. Warshaw cannot identify a line at which a majority would become narrow. 3 Tr. 28:19-22.

635. Dr. Warshaw can identify no line on what constitutes a packed district, but he used an 80% figure as “an illustrative” figure of an overwhelming majority. 3 Tr. 28:23-29:8.

636. Even using five metrics of partisan symmetry, Dr. Warshaw cannot—relying on all together—identify a line defining an unacceptable partisan gerrymander. 3 Tr.57:8-10.

637. Of the 16 districts in Ohio, from 2012 through 2018, Democratic candidates won only the 11th congressional district by 80% or more—which only occurred in one contested election. 2 Tr. 29:23-30:6.

638. Dr. Warshaw analyzed congressional election results from 1972 to 2018 to provide a baseline comparison to the Ohio 2011 plan. 2 Tr. 197:18-198:15. Not a single one of those plans has been conclusively held to be an unconstitutional partisan gerrymander, so Dr.

Warshaw is comparing a plan presumed to be lawful against other lawful plans—a factually irrelevant comparison.

639. Dr. Warshaw looked only at congressional elections, not presidential elections, but concluded that “it would have made little difference empirically if I had used some other statewide election result” because “voters typically vote similarly in congressional elections and presidential elections.” 2 Tr. 198:9-15. That, by definition, is false: different candidates run in congressional, presidential, and state races. Dr. Warshaw assumes that a “similar” vote is a vote defined by partisanship—a national and statewide concept. This has nothing to do with a “district specific” analysis. And Dr. Warshaw concedes that there is no “uniformly accepted way to measure the partisanship of a district.” (3 Tr. 39:25-40:3).

640. Dr. Warshaw did not look at election results pre-dating 1972 because prior elections were not conducted in districts of substantially equal population. 2 Tr. 198:16-199:4. Dr. Warshaw therefore did not consider whether the emergence of the one-person, one-vote principle limits partisan favoritism in districting, and he measures the baseline against districts that may (for all he knows) be far more *fair* than any set of electoral schemes since the dawn of democracy—which has, for most of its existence, included such schemes as “rotten boroughs.”

641. Dr. Warshaw looked at five metrics and recommended that all be used together to address whether a plan is a gerrymander, but he conceded that they are all highly correlated. 3 Tr. 108:11-12. So they all test only minor variations on the same thing: statewide vote totals using a vote-to-seat comparison. Moreover, even using five metrics of partisan symmetry, Dr. Warshaw cannot—relying on all together—identify a line defining an unacceptable partisan gerrymander. 3 Tr.57:8-10.

642. Dr. Warshaw opines that all measures together must be an outlier—albeit at some undefined level. 3 Tr. 114:7-16.

643. Dr. Warshaw opined that the 2001 plan is not an outlier under several metrics and was in fact not a partisan gerrymander. 3 Tr. 115:9-14.

b. The Efficiency Gap Is Not A Reliable Measurement Of Gerrymandering.

644. Dr. Warshaw’s first metric is the efficiency gap, which is “a way to mathematically capture the packing and cracking that is the heart of gerrymandering.” 2 Tr. 207:17-23. “Partisan-asymmetry metrics such as the efficiency gap measure something else entirely” different from individual rights: “the effect that a gerrymander has on the fortunes of political parties.” *Gill v. Whitford*, 138 S. Ct. 1916, 1933 (2018).

645. The efficiency gap was proposed as a measurement of partisan bias across an entire districting plan. 3 Tr. 44:22-25. It was first proposed in political science in 2014. 3 Tr. 43:15-18.

646. The efficiency gap cannot indicate whether “a specific congressional district was drawn with discriminatory partisan intent”; it measures “the plan as a whole.” 3 Tr. 45:1-6.

647. The efficiency gap analysis cannot indicate whether the plan exhibited a discriminatory partisan effect on the voters of a specific district. 3 Tr. 45:7-10.

648. Dr. Warshaw cannot identify a value at which an efficiency gap indicates a gerrymander. 3 Tr. 54:16-19.

649. Dr. Warshaw cannot identify a value at which an efficiency gap becomes a historical outlier. 3 Tr. 56:13-16.

650. Dr. Warshaw did not compare the Ohio plan against all 50 states, but rather used what he admitted was an “arbitrary” cutoff. 3 Tr. 45:11-25, His testimony was unclear as to what that cutoff was: sometimes he said six congressional districts, 3 Tr. 48:18-19, sometimes seven, 3

Tr. 49:24, sometimes eight, 3 Tr. 50:3-7. Dr. Warshaw omitted at least 26—more than half the states—from his analysis. 3 Tr. 50:20-25.

651. Dr. Cho, another of Plaintiffs' experts, criticized this flaw in the efficiency gap in a peer-reviewed article, saying that "[a] general measure of partisan fairness should...work for any size delegation." 3 Tr. 48:20-23. Dr. Warshaw disagrees. 3 Tr. 48:24-25. Thus, Plaintiffs' own experts cannot agree on how to use this metric.

652. However, Dr. Warshaw identified the small-delegation problem as "a ripe area for social research," 3 Tr. 51:1-1, meaning the Constitution will have to mean something different in the future if this method is adopted (against the implications of *Whitford*).

653. In fact, by Dr. Warshaw's measure of "outliers," the definition of what is and is not constitutional will be a moving target. Because an outlier is defined by other plans, as plans change new definitions for what is and is not an outlier arise. 3 Tr. 72:20-72:12. Dr. Warshaw, however, testified "I don't think that we need to figure out how...we might use this standard in ten years or 20 years." 3 Tr. 72:1-12. Apparently, courts will be required to continue striking down plans as new standards emerge every decade. *See* 3 Tr. 73:8-74:19.

654. From the political parties' perspective (says Warshaw), a vote cast for a winning candidate unnecessary to the victory and a vote cast for a losing candidate is "wasted." 2 Tr. 209:5-25. "[A] party wants all of their voters or as many as possible to be necessary in order to win the seats that they win." 2 Tr. 209:7-12. That is why the efficiency gap is a measure of partisan success, not of burdens on individual rights.

655. Dr. Warshaw views the efficiency gap as relevant from a political-science perspective because it "*theoretically*" "captures" the "mechanism...at the heart of

gerrymandering,” as Dr. Warshaw defines gerrymandering (as a statewide impact on partisan fortunes). 2 Tr. 211:19-20 (emphasis added).

656. Dr. Warshaw concedes that there are “salient criticisms” of the efficiency gap, such as that it is “volatile.” 2 Tr. 211:6-12.

657. Dr. Warshaw does not advocate any “threshold[]” for an unacceptable efficiency gap. 2 Tr. 212:20-213:9.

658. Dr. Warshaw instead looked “across metrics” to determine whether the plan “is an outlier in terms of the partisan...advantage....” 2 Tr. 231:10-16. An “outlier” in his view is one “more extreme than the vast majority of” perfectly (or at least presumptively) lawful “plans over the last 45 years.” 2 Tr. 213:17-18. Whether a plan on the more partisan side of a range of plans over decades is meaningless when all the points of comparison are lawful.

659. Dr. Warshaw conceded that a redistricting plan’s efficiency gap scores can be volatile over the life of a plan. 3 Tr. 69:1-4. Further, Dr. Warshaw conceded such volatility exists in Ohio, as the efficiency gap of the 2011 plan “jumps around a fair bit” from 2012 to 2018. 3 Tr. 69:22-24.

660. Indeed, Dr. Warshaw concedes the efficiency gap can be sensitive to the outcome of a handful of close elections. 3 Tr. 74:16-20. Ohio’s 2018 congressional races saw close elections. 3 Tr. 76:11-12. If those results had flipped, that would have impacted the efficiency gap in the plan. 3 Tr. 77:16-20.

661. Dr. Warshaw’s efficiency gap analysis of Mr. Cooper’s proposed remedial plan illustrates the point. It reflects a negative .11 efficiency gap in 2012—a “fairly strong pro-Republican efficiency gap” in his view. 3 Tr. 78:19-23. But by 2018, the efficiency gap for Mr. Cooper’s proposed remedial plan swung to a positive .05 (i.e., pro-Democratic). 3 Tr. 79:2-6.

662. Thus, assuming the efficiency gap were a basis to strike down the plan as unconstitutional, whether striking it down would be appropriate would depend on what years were factored in to the analysis. 3 Tr. 70:2-6.

663. That difference matters. In fact, Dr. Warshaw conceded that the 2014 and 2016 Ohio efficiency gaps—i.e., the gaps in *half* the elections under consideration—are not outliers. 3 Tr. 54:5-7. His conclusion that Ohio’s plan is an outlier privileges the results of two elections against two other elections, when the data speaking for itself is inconclusive.

664. Dr. Warshaw called the 2018 election results favorable to the Democratic Party, even though the Democratic Party lost every single statewide race in Ohio in 2018, and even though the Democratic Party failed to get a majority of Ohio’s two-party congressional vote share in 2018. 2 Tr. 215:22-216:24; 3 Tr. 42:25-43:10. In fact, Dr. Warshaw concedes that “Ohio is leaning farther to the political right in this decade than in the prior decade.” 3 Tr. 43:11-14.

665. Therefore, when Dr. Warshaw referred to 2018 as a Democratic “wave” year, he referenced the *national* vote, 2 Tr. 216:11-18; 3 Tr. 41:18-42:15, while ignoring the (more relevant) *Ohio* vote, where Democratic candidates fared poorly. Changing the terms of analysis mid-stream to achieve a pre-determined result is not a hallmark of expert credibility.

666. A zero efficiency gap “would indicate there’s no partisan bias for either party.” 3 Tr. 59:17-19. But factors other than gerrymandering can impact a plan’s efficiency gap measure. 3 Tr. 59:20-23.

667. For example, “if voters from one party, as sometimes happens for Democrats, are extremely concentrated in small geographic areas, that can lead to...small disadvantages in the vote-seat relationship.” 3 Tr. 60:9-13. The efficiency gap approach considers concentrated voting

constituencies to be “an inefficient...geographic distribution of voters in a single-member district system.” 3 Tr. 61:9-13.

668. The Voting Rights Act can also impact a districting plan’s partisan efficiency gap. 3 Tr. 61:22-62:9. For example, a district with 45% or 50% minority population will concentrate Democratic Party voters in that district, since most African Americans vote for Democratic candidates. 3 Tr. 62:5-10.

669. Traditional districting criteria can also create an efficiency gap in favor of one party. 3 Tr. 62:11-19. For example, a goal of protecting incumbents can lock in “partisan bias that just happened to have occurred right before the redistricting.” 3 Tr. 63:217:3-11.

670. Indeed, election-specific factors “affect any election,” 3 Tr. 77:11-12, but Dr. Warshaw’s analysis ignores those factors in favor of statewide abstractions.

671. Dr. Warshaw conceded that incumbency can offer states an advantage in Congress if they have more senior members in Congress, but concluded that—in his view—“the representational harms from that outweigh any advantages from having more senior incumbents in Congress.” 3 Tr. 63:15-21. Dr. Warshaw conceded that others could disagree with that view in good faith. 3 Tr. 63:22-23. In fact, the Supreme Court disagrees with Dr. Warshaw and allows state legislatures to protect incumbents. *See, e.g., White v. Weiser*, 412 U.S. 783, 792 (1973). It is the legislature’s job to determine whether alleged representation harms outweigh benefits.

672. Dr. Warshaw did not analyze what amount of the Ohio efficiency gap is attributable to factors other than partisan gerrymandering. 3 Tr. 64:7-11.

673. Dr. Warshaw cannot show how much of the 2011 plan’s efficiency gap is attributable to VRA-related concerns. 3 Tr. 67:24-68:3.

674. Dr. Warshaw cannot show how much of the 2011 plan's efficiency gap is attributable to communities of interest and other districting factors. 3 Tr. 68:4-8.

675. Instead, Dr. Warshaw attempted to demonstrate that the change in Ohio's efficiency gap from 2010 (the last election under the 2001 redistricting) and 2012 (the first election under the 2011 Plan) was due to partisanship by comparing 2010-2012 efficiency gap changes across all states, and sorting those states based on who (Republicans, Democrats, courts, or redistricting commissions) controlled the state's redistricting process. 3 Tr. 64:24-15.

676. For purposes of this exercise, Dr. Warshaw defined "Republican control" solely as the party's members' controlling a majority of the legislature and the governorship. 3 Tr. 66:1-7. Dr. Warshaw did not analyze control over the *prior* redistricting cycle, but rather assumed, since Republicans controlled also in 2001, "that would help magnify my findings." 3 Tr. 66:10-14. Whatever Dr. Warshaw assumed about the 2001 redistricting, the Supreme Court commands lower courts to apply a heavy presumption of good faith, and Plaintiffs have introduced no evidence indicating that the 2001 plan was unconstitutional.

677. Nor did Dr. Warshaw look at whether any shifts in voting patterns between 2010 and 2012 in Ohio affected the state's efficiency gap. Instead, he simply assumed that if such a shift existed, it would have to be perceptible nationwide. 3 Tr. 66:25-67:5. It is unclear why Ohio's voting patterns must, in Dr. Warshaw's view, follow nationwide trends. But, in any event, Dr. Warshaw did not study the politics of Ohio in particular in 2010 for his analysis. 3 Tr. 67:6-7. There is therefore no way to tell from his analysis if an idiosyncratic effect in Ohio influenced the efficiency gap between 2010 and 2012. 3 Tr. 76:13-17.

678. Dr. Warshaw concluded that Republican Party-affiliated candidates have won between one and four more seats because of partisan bias in the 2011 plan than they would have

won with no partisan bias. 3 Tr. 68:14-18. But he cannot tell what number it actually is; it could be one as easily as four. 3 Tr. 68:19-20.

679. Nor can Dr. Warshaw say how many seats—if any—Republican Party-affiliated candidates have gained due to partisan effects caused by factors other than intentional gerrymandering, such as geography or VRA-compliance goals. 3 Tr. 68:21-25.

680. The efficiency gap analysis does not rely entirely on actual election results; Dr. Warshaw instead “imputed” election results in districts with uncontested races. 3 Tr. 82:6-16.

681. Imputing those results makes a material difference in the bottom-line efficiency gap number. Dr. Warshaw. 3 Tr. 82:6-7. For example, he identified a negative .11 efficiency gap in Mr. Cooper’s remedial plan for the 2012 elections, but when he first calculated the metric without imputing results to uncontested seats, the gap was a negative .08. 3 Tr. 81:8-23. By imputing results, the efficiency gap went from under to over the 75th percentile. 3 Tr. 84:5-13.

682. Dr. Warshaw’s analysis also tries to have it both ways. He conceded that the Republican Party did not gain seats in the congressional delegation over the past eight years despite gaining statewide vote share between 2010 and 2018. 2 Tr. 214:19-215:18. Rather than conceding that this is evidence against his theory, Dr. Warshaw instead spun the Republican Party’s failure to translate the new votes into new seats as an example of why the supposed gerrymander is “durable” in the Republican Party’s favor.

683. The efficiency gap also contains assumptions about election swing ratios. 3 Tr. 86:18-87:3. The efficiency gap incorporates a swing-ratio formula that for every percentage increase in a party’s vote margin, the party is expected to receive a two percent increase in seat margin. 3 Tr. 87:4-8. This assumption is made based on “the historical norm in U.S. elections,” another *average* data point built into the efficiency gap metric. 3 Tr. 87:217:21-24. If the true

swing ratio is larger than that assumption, that will amplify the efficiency gap of the plan. 3 Tr. 87:18-21.

684. And, in fact, the two percentage point assumption is not entirely accurate; historical responsiveness has been somewhat higher than two percent. 3 Tr. 89:16-20. And “you would never expect the wing ratio “to be exactly two.” 3 Tr. 90:21-25. According to Dr. Warshaw, the efficiency gap only reflects the historical relationship between votes and seats in U.S. elections as an “overall” matter, not in any specific instance. 3 Tr. 90:21-25.

c. The Mean-Median Metric Is Not A Reliable Measure Of Gerrymandering.

685. The mean-median difference “captures” the supposed “intuition that if a party wins more votes in the medial district than in the man district, than their average vote share across all the districts, then...they have an advantage in the translation of votes to seats.” 2 Tr. 222:7-11.

686. But the mean-medial difference metric does not account for geography or incumbency protection. 3 Tr. 92:24-93:4.

687. Nor does the mean-medial difference distinguish between any partisan bias due to gerrymandering versus factors other than gerrymandering. 3 Tr. 93:5-8.

688. Moreover, cracking and packing can occur in a plan in a manner that does not affect the mean-median measure. 3 Tr. 93:9-11. So the measurement is both over- and under-inclusive, treating as partisan motives that are not partisan and treating as non-partisan motives that are partisan.

689. The mean-medial measurement does not measure discriminatory impact on any specific districts because it is not designed to look at specific districts. 3 Tr. 93:20-25. The mean-medial measurement therefore offers no indication if a plan exhibits discriminatory partisan effect on voters in any specific districts. 3 Tr. 94:1-5.

690. There is no line under the mean-medial measure beyond which a plan becomes a gerrymander. 3 Tr. 94:6-10.

691. The mean-medial difference is sensitive to the outcome in the median district, which is just one district. 2 Tr. 223:13-19.

692. The mean-medial difference cannot identify the number of seats that a party gains by reason of gerrymandering. 2 Tr. 223:17-19.

d. The Declination Metric Is Unreliable.

693. The declination measure, invented in 2017, proposes that “each party’s average vote share should be about the same distance from 50 percent,” but in a partisan gerrymander, “the advantaged party’s vote shares will all be much close to 50 percent than the disadvantaged party.” 2 Tr. 228:20-229:3.

694. The concept is similar to the efficiency gap, since “they’re both trying to [capture] the underlying partisan bias or advantage in a districting plan and they’re quite closely related empirically.” 3 Tr. 94:24:95:4

695. Declination provides no way to assess how many seats a party gains through a partisan bias in a redistricting plan. 3 Tr. 95:5-9.

696. Declination provides no way to assess if a specific district in a district plan was drawn with discriminatory partisan intent; it is “a statewide metric.” 3 Tr. 95:13-17.

697. The declination metric does not control for turnout various between districts. 3 Tr. 95:23-25.

698. The declination measure “has not been subject to a broad critique in the academic community.” 3 Tr. 94:10-23. It therefore is not yet a reliable metric that should be used in judicial proceedings.

e. Partisan Symmetry Metrics Are An Inadequate Measure of Partisan Gerrymandering.

699. Dr. Warshaw’s statewide approach to partisan gerrymandering turns on the notion of “partisan bias,” which he calls “the idea of trying to quantify whether one party or another has an advantage in the translation of votes to seats.” 2 Tr. 195:22-25. That is a statewide, not district-specific, concept.

700. The concept of partisan bias has been “a longstanding source of study in the scholarship in the political science literature,” including “[o]ver the last 20 years.” 2 Tr. 196:5-24. For that reason, the Supreme Court has had ample opportunity to identify partisan bias metrics as constitutionally significant, and it has not done so. Dr. Warshaw offers nothing in this case materially different from what the Supreme Court has not already seen.

701. The “predominant metric that has dominated the literature has been the symmetry metric developed by a political scientists named Gary King and a number of coauthors in the late 1980s and early ‘90s.” 2 Tr. 196-97:22-5. The Supreme Court holds sessions every year, has reviewed the work of Dr. King, and has not accepted it as providing a relevant standard. *League of United Latin Am. Citizens v. Perry*, 548 U.S. 399, 419 (2006). Dr. Warshaw, however, uses these same approaches yet again. 2 Tr. 197:6-14.

702. Dr. Warshaw used two symmetry metrics, symmetry and symmetry with a counterfactual 50–50 breakdown. 3 Tr. 96:1-4.

703. Under the 50–50 symmetry metric, Dr. Warshaw’s analysis shows that if Democratic Party candidates had only a vote share of 20%, the Party would win only one seat. 3 Tr. 96:23-97:1. That seat would be the 11th congressional district, the majority-minority district. 3 Tr. 97:3-13.

704. The 50–50 symmetry metric does not control for political geographic differences. 3 Tr. 98:3-5.

705. The 50–50 symmetry metric does not control for incumbency protection. 3 Tr. 98:6-7.

706. The 50–50 symmetry metric is a statewide average. 3 Tr. 98:7-10. So is Dr. Warshaw’s other symmetry metric. 3 Tr. 99:18-100:7.

707. It is therefore possible that some or all of the asymmetry measured in the 50–50 symmetry measure is caused by factors other than intentional partisan gerrymandering. 3 Tr. 98:11-15.

708. There is no line Dr. Warshaw can identify under the 50–50 symmetry metric at which a plan would no longer be the result of intentional gerrymandering. 3 Tr. 98:24-99:3.

f. Dr. Warshaw’s “Responsiveness” Analysis Is Not Relevant To Partisan Gerrymandering.

709. Dr. Warshaw also utilized the term “responsiveness,” which he understands to “capture theoretically how likely the election results are to change due to changes in voter preferences.” 2 Tr. 201:14-22. This, too, is turns on statewide vote totals and is not a district-specific inquiry.

710. There is “no one perfect metric” to measure responsiveness. 2 Tr. 202:4-5.

711. One metric Dr. Warshaw used is a metric developed by Dr. King (and rejected by the Supreme Court) that takes actual election results and “applies a uniform swing...across all districts such that the vote share, the statewide vote share varies across some range of results.” 2 Tr. 202:11-17 A uniform swing adds “a particular percentage to the results across the entire state.” 2 Tr. 202:19-22. A uniform swing, being *uniform*, takes no account for differences in voter behavior in given districts, political subdivisions, or other geographic units.

712. Dr. Warshaw based his responsiveness analysis on counterfactual uniform vote swings that would lead to a vote share in the average district between 45 and 55 percent. 3 Tr. 100:14-20.

713. In comparing responsiveness to other states' plans, Dr. Warshaw excluded states with six or fewer congressional seats. 3 TR. 101:4-7.

714. The responsiveness of Ohio's 2011 plan varied from election to election. 3. Tr. 101:8-12.

715. In fact, by Dr. Warshaw's calculation, the 2011 Plan was *more* responsive than the historical average in 2018. 3 Tr. 101:21-23. Dr. Warshaw agreed that, under this metric, "if Democrats would get more than 50 percent" of the statewide vote "seats might shift." 3 Tr. 102:6-7. He called this "hypothetical" only because Democratic Party candidates have not cumulatively won over 50% of the statewide vote. 3 Tr. 102:1-8.

716. But, if Democratic Party candidates won 52% of the vote, "then that would have been fairly responsive," 3 Tr. 102:21-24, and if they won 55% of the vote, they would win half the seats, 3 Tr. 103:1-4; 14-17. A 55% vote total would be a competitive election. 3 Tr. 107:7-9. Where there is a natural clustering of Democratic constituents in cities, it is not surprising that the Democratic Party would need to win more than half the votes to obtain half the seats. 3 Tr. 103:17-24. And Dr. Warshaw characterized a statewide vote share between 40 and 60 percent as competitive, 3 Tr. 104:22-23, even while changing his testimony on whether such vote shares are "narrow," directly contradicting his carefully written report, 3 Tr. 105:9-10.

717. Although Dr. Warshaw believes the supposed asymmetry is not entirely attributable to geography, he cannot identify how much of the asymmetry is attributable to geography and how much to other factors. 3 Tr. 104:1-11.

718. Dr. Warsaw's responsiveness metrics evaluate only whether a given candidate is Democratic or Republican. 3 Tr. 105:13-16. It therefore is not sensitive to any within-party variation to between different types of Republican or Democratic candidates. 3 Tr. 105:19-22. Accordingly, even a Republican or Democratic incumbent in a safe seat must be attuned to the will of constituents and be responsive—at very least—to primary voters. 3 Tr. 106:20-107:1.

g. Dr. Warsaw's "Competitiveness" Analysis Sheds No Light On The 2011 Plan.

719. Dr. Warsaw defines a competitive election as one where a party has 55% or less of the vote. 3 Tr. 107:3-6. But, when assessing whether there is a correlation between partisan bias and competitive elections, Dr. Warsaw used 60% as the standard. 3 Tr. 107:15-17.

720. Under Dr. Warsaw's analysis, two out of the four Ohio elections were of average competitiveness compared to the national average. 3 Tr. 109:1-4.

721. And the two elections Dr. Warsaw characterizes as non-competitive were "Really strong years for Republicans in congressional elections." 3 Tr. 09:13-15.

722. Dr. Warsaw offered conjecture about why *half* the elections offered as a basis to strike down the 2011 plan can be competitive consistent with his partisan-gerrymandering theory, but he conceded that this was pure conjecture, unsupported by any analysis he performed. 3 Tr. 109:15-110:11. Conjecture in support of a predetermined result is not a hallmark of expert witness credibility.

723. The degree of competitiveness in Ohio congressional plans has varied substantially since 1991. 3 Tr. 110:12-16.

h. Dr. Warshaw's Selective, Unscientific Analysis of "Polarization" Fails To Demonstrate A Causal Relationship With Alleged Gerrymandering.

724. Dr. Warshaw opined that gerrymandering magnifies the effect of political polarization. 2 Tr. 204:9-18. He opined that "it's really important to be cognizant of the growing polarization that we know is present...in Congress." 2 Tr. 204:13-15.

725. Half of Congress, of course, is the Senate, which is not redistricted by state legislatures. 3 Tr. 115:22-25. Dr. Warshaw agrees that the U.S. Senate is polarized. 3 Tr. 116:1-3. Ignoring data points that cut against a thesis is not a hallmark of expert credibility.

726. In fact, in Dr. Warshaw's view "[a]ll legislative bodies in the United States are increasingly polarized." 3 Tr. 115:24-25. All legislative redistricting in the United States by definition cannot be outliers. Failing to take into account other possible causes of a phenomenon or points directly contradicting a conclusion is not a hallmark of expert credibility.

727. In evaluating nationwide polarization rates against efficiency gap numbers, Dr. Warshaw used "DW-Nominate" scores, which incorporates "hundreds of votes." 3 Tr. 17-20.

728. Under that score, the Ohio's delegation had a minor change in polarization was .1, a small amount. 3 Tr. 117:17-118:12. Dr. Warshaw, however, did not rely on that number in his report.

729. Instead, Dr. Warshaw relied on an analysis relying solely on the roll call vote on the proposed repeal of the Affordable Care Act. 3 Tr. 120:22-25. The data, moreover, was from a survey. 3 Tr. 121:1-3.

730. Healthcare is a polarizing issue. 3 Tr. 121:6-9. But Dr. Warshaw did not look at other votes because he believes healthcare indicative of other issues. 3 Tr. 121:14-25.

731. Dr. Warshaw has no way to know whether, if other votes were factored in, his analysis would be different. 3 Tr. 122:14-17. By choosing a polarizing issue along

liberal/conservative lines, Dr. Warshaw preordained the result—that Republican members are more conservative, and Democratic members more liberal. Congress, however, votes on issues—including issue of unique importance to Ohio—that are not polarized on partisan lines. Dr. Warshaw did not factor in such votes.

732. Based on Dr. Warshaw’s limited analysis, constituents in the Democratic districts are more likely to agree with their congresspersons than constituents in so-called competitive districts. 3 Tr. 122:22-123:1-7.

733. Dr. Warshaw also conducted an analysis purporting to draw a connection between so-called partisan gerrymandering and citizens’ trust in government, based on the 2014 CCES survey. 3 Tr. 123:8-14.

734. The question posed—“Do you trust your district’s Representative in Congress to do what’s right”—has not been asked on other CCES surveys. 3 Tr. 123:20-24. Nor has the question been validated in political science literature. 3 Tr. 124:1-3. Nor, apparently, has it been asked since 2014. 3 Tr. 124:3-15. Thus, there is no comparison for these numbers in other years or eras.

735. The numbers across the board, regardless of efficiency gap, are low, indicating that Americans by and large do not have much confidence in their members of Congress. 3 Tr. 124:21-25. The highest observation is less than 40%. 3 Tr. 125:1-3. And the statistical significance of these numbers is at the ten percent level, indicating a wide margin of error. 3 Tr. 126:1-5.

736. Scores in states with gerrymandering litigation, including Wisconsin, Virginia, and Maryland, are relatively high. 3 Tr. 125:4-21.

737. Dr. Warshaw's reports do not establish any causal relationship between the absolute efficiency gap and the response to the CCES question. 3 Tr. 126:6-13.

738. Nor would such a causal relationship make any sense. Congressional districts in California are drawn by a commission, but Dr. Warshaw cannot say that California's delegation is less polarized than the Ohio delegation. 3 Tr. 126:18-24.

i. Dr. Warshaw's Views On Voter Opportunities To Influence Members of Congress Is Unscientific And Flawed.

739. Dr. Warshaw offers no informed opinion on voters' opportunity to influence their members of Congress, except the speculation that voters whose candidate wins the election are more likely to have their abstract policy views represented in Congress than voters whose preferred candidates lose. 3 Tr. 127:3-7. Nor can Dr. Warshaw opine (because it is not true) that Democratic voters have no Democratic members in Ohio's congressional delegation, 3 Tr. 127:8-16. Nor does Dr. Warshaw opine on the overall ability of Democratic voters to vote for their candidates of choice in other elections. 3 Tr. 127:11-24.

C. Plaintiff's Expert – Dr. Lisa Handley

740. Dr. Handley was asked to conduct a district-specific functional analysis to determine the black voting age population needed to provide black voters with a realistic opportunity to elect candidates of their choice in the vicinity of the 11th congressional district. (Trial Tr., Vol. II, at 137:2-8).

741. Dr. Handley believes it is "necessary" to conduct a "district-specific functional analysis" because "a single target number, percent black VAP, is not sufficient," and "you don't want to draw a district that, for example, fails to provide minorities with an opportunity to elect, nor do you want to draw a district that overly concentrates or packs minorities in a district." (Trial Tr., Vol. II, at 137:11-24).

742. Dr. Handley testified that “[c]omponents” of her analysis are “based on the same kind of analysis that I do in a Voting Rights Act case.” (Trial Tr., Vol. II, at 138:1-3).

743. Plaintiffs, however, did not bring a Voting Rights Act claim. (Trial Tr., Vol. II, at 169:4–13).

744. Dr. Handley was unaware, at the time she prepared her report, that Plaintiffs did not bring a Voting Rights Act claim. (Trial Tr., Vol. II, at 169:8–13).

745. Dr. Handley has no opinion relevant to partisan intent—or intent of any kind.

- a. Nothing in Dr. Handley’s report analyzes partisan intent. (Trial Tr., Vol. II, at 156:1–4).
- b. Dr. Handley offered no opinion on the intent of the map drawers in 2011 in Ohio. (Trial Tr., Vol. II, at 156:5–7).
- c. Dr. Handley has no opinion on whether the 11th congressional district was drawn as a majority-minority district under bad faith or other improper intent. (Trial Tr., Vol. II, at 171:24-172:12).
- d. Dr. Handley has no basis to conclude that Democratic members who proposed a majority-minority district in 2011 without a district-specific functional analysis were acting in bad faith or otherwise improperly. (Trial Tr., Vol. II, at 172:25-173:6).
- e. Dr. Handley has no opinion on whether the 11th congressional district was drawn as a majority-minority district for the purpose of advantaging Republican electoral prospects. (Trial Tr., Vol. II, at 172:12-15).

746. Dr. Handley’s Voting Rights Act analysis, even taken at face value, is irrelevant to this case, which alleges a constitutional violation predicated on alleged partisan motive. Dr. Handley’s analysis is unhelpful even for assessing the Ohio legislature’s Voting Rights Act obligations.

747. Dr. Handley, who is not a lawyer—and whose counsel objected to her stating legal opinion, *see* (Trial Tr., Vol. II, at 171:13-14)—believes the concept of “packing” does not have a legal definition under the Voting Rights Act. (Trial Tr., Vol. II, at 168:17-20). *But see Voinovich*

v. Quilter, 507 U.S. 146, 153 (1993) (discussing the legal definition of “packing” under the Voting Rights Act).

748. Dr. Handley identified no basis for a requirement that a legislature must employ a “district-specific functional analysis” of a majority-minority district. (Trial Tr., Vol. II, at 137:11-24). Compare *Bartlett v. Strickland*, 556 U.S. 1, 18 (2009) (rejecting a functional requirement in favor of a “majority-minority rule” comprising “an objective numerical” 50% minority VAP “test”).

749. Because Dr. Handley has no expert opinion on intent of any kind, (Trial Tr., Vol. II, at 156:1–4), she has no way to opine that racial considerations “predominated” so as to raise scrutiny under the Fourteenth Amendment. See *Miller v. Johnson*, 515 U.S. 900, 910–12 (1995). Nor has such a claim been presented or litigated in this case. Plaintiffs offered no evidence of predominance at trial, and Defendants and Intervenors did not consent to a predominance issue by express or implied consent.

750. Dr. Handley stated that a “district-specific” functional analysis is a term used by “the courts” and “the Department of Justice.” (Trial Tr., Vol. II, at 137:9-12). Dr. Handley identified no such use—nor is she qualified to determine what is legally required under the Voting Rights Act.

751. She apparently is referring to uses under Section 5 of the Voting Rights Act, in which the Department of Justice conducted “a functional analysis of the electoral behavior within the particular jurisdiction....” Guidance Concerning Redistricting Under Section 5 of the Voting Rights Act, 76 Fed. Reg. 7471 (2011).

752. Ohio is not now, nor was in 2011, covered by Section 5 of the Voting Rights Act. Dr. Handley's analysis is irrelevant to the legislature's discretionary choices or its assessment of its obligations under Voting Rights Act Section 2.

753. Dr. Handley offered a personal view that "packing" means placing more black voters in a district than would be necessary to elect the candidate of choice, but admitted "it's used in different contexts." (Trial Tr., Vol. II, at 170:1-7). Dr. Handley has no view on what the Ohio legislature viewed as packing in 2011 or what information it was presented on the topic.

754. Dr. Handley neglected to state in her report that she believes the 11th congressional district is "packed." (Trial Tr., Vol. II, at 166:15-167:20, 170:19-171:23).

755. Dr. Handley did not address all the *Gingles* factors necessary to establishing liability under the Voting Rights Act. (Trial Tr., Vol. II, at 168:21-169:2, 169:14-20). Dr. Handley therefore has no opinion on whether the 11th congressional district violates the Voting Rights Act.

756. Half of the elections Dr. Handley analyzed in her report post-dated the 2011 redistricting in her report. (Trial Tr., Vol. II, at 157:7-14, 171:2-10). The Ohio legislature did not have, and could not have had, access to half of the data Dr. Handley utilized.

757. Dr. Handley's analysis showed that, in 2008—one of the elections *pre*-dating the redistricting—most white voters in the 11th congressional district voted against the black-preferred candidate in the Democratic Party primary. (Trial Tr., Vol. II, at 173:23-174:6). Democratic Party primaries are useful in assessing racially polarized voting, (Trial Tr., Vol. II, at 174:7-16), because the "vast majority" of black voters in Ohio "participate in the Democratic primary," (Trial Tr., Vol. II, at 147:15-161). These numbers show polarized voting under data available as of the redistricting.

758. Dr. Handley agreed that it “wouldn’t be a bad idea if legislatures” took into account the results of recent litigation when undertaking legislative redistricting (even though she did not agree that experts should consider such information). (Trial Tr., Vol. II, at 157:23-158:14).

759. Closely proceeding the 2011 redistricting, the City of Euclid lost two Voting Rights Act cases. (Trial Tr., Vol. II, at 158:15-159:4).

760. Dr. Handley was the expert for the U.S. Department of Justice, a plaintiff in both cases. (Trial Tr., Vol. II, at 159:2-23).

761. The City of Euclid is located entirely within the 11th congressional district. (Trial Tr., Vol. II, at 160:5-9).

762. Dr. Handley found in expert reports in those cases that voting is “quite polarized” along racial lines in the City of Euclid. (Trial Tr., Vol. II, at 161:16-162:19).

763. The court found in the Euclid litigation that a black voting age population of at least 60% was necessary in Euclid to satisfy Section 2 of the Voting Rights Act—a conclusion with which Dr. Handley had no disagreement. (Trial Tr., Vol. II, at 162:20-163:19).

764. That information, unlike half of the elections Dr. Handley analyzed, *was* available in 2011.

765. Dr. Handley conducted a study of elections nationwide that was published in 2009. (Trial Tr., Vol. II, at 164:1-9).

766. The study concluded that “the vast majority of minority elected officials, legislators, were elected from majority black or majority Hispanic districts.” (Trial Tr., Vol. II, at 154:20-23).

767. The study, which Dr. Handley testified “was certainly correct at the time,” concluded that there was “little hope of a dramatic change in the share of African American

legislators elected from majority-white districts.” (Trial Tr., Vol. II, at 164:17-165:7) (quoting IEX31 at 535).

768. Dr. Handley’s 2009 study also found that “the number of majority nonblack districts electing African American legislators has also increased slightly since 1992, but it remained quite low in 2007.” (Trial Tr., Vol. II, at 165:8-15). This is, in Dr. Handley’s view, a “fact.” (Trial Tr., Vol. II, at 166:11-14).

769. Dr. Handley opined that black-preferred candidates have succeeded in winning elections in the 11th congressional district. (Trial Tr., Vol. II, at 141:17-19). That is entirely unremarkable when it was drawn in *prior* redistricting cycles as a majority-minority district under Section 2 of the Voting Rights Act. The legislature had no reason to attempt to help white-preferred candidates win or make the races close calls.

770. In assessing rates of black and white support for candidates, Dr. Handley utilized common statistical methods used in Voting Rights Act cases, Ecological Inference, Ecological Regression, and homogenous precinct analysis. (Trial Tr., Vol. II, at 142:14-21).

771. These are estimates and are subject to uncertainty and error. (Trial Tr., Vol. II, at 143:2-13).

772. Dr. Handley provided a standard error, which is a measure of statistical uncertainty in the EI method. (Trial Tr., Vol. II, at 143:14-21). But Dr. Handley did not factor the standard error into her analysis.

773. Dr. Handley did not use the standard error to calculate a confidence interval. (Trial Tr., Vol. II, at 143:24-144:8). Dr. Handley concedes that other experts produce confidence intervals in their reports. (Trial Tr., Vol. II, at 144:11-18).

774. “EI estimates must include a confidence interval to determine whether the difference in the estimated support among candidates can be considered statistically significant.” *Missouri State Conference of the NAACP v. Ferguson-Florissant Sch. Dist.*, 201 F. Supp. 3d 1006, 1042 (E.D. Mo. 2016), *aff’d*, 894 F.3d 924 (8th Cir. 2018); *see also Montes v. City of Yakima*, 40 F. Supp. 3d 1377, 1404 n.5 (E.D. Wash. 2014); *see also Benavidez v. City of Irving, Texas*, 638 F. Supp. 2d 709, 724 (N.D. Tex. 2009); *Rodriguez v. Harris County, Texas*, 964 F. Supp. 2d 686, 766 (S.D. Tex. 2013). Courts have discredited expert testimony for its failure to account for statistical uncertainty, including testimony on the EI method that failed to include confidence intervals. *See Bethune-Hill v. Va. State Bd. of Elections*, 326 F. Supp. 3d 128, 178 n.60 (2018).

775. Dr. Handley has no basis to conclude that a district of 45% black voting age population and 50% black voting age population are not a statistical tie.

776. Dr. Handley’s “confidence” in her result is based on her eyeballing numbers across her three techniques and across contests (half of which were unavailable in 2011). (Trial Tr., Vol. II, at 150:2-12).

777. Dr. Handley’s method calculates the amount of black voting age population needed by subtracting out “how much white ‘crossover’ vote you can expect in support of the black-preferred candidate.” (Trial Tr., Vol. II, at 145:19-23). Drawing district by this method (and under 50% minority voting age population) requires the black-preferred candidates to obtain substantial support from the white community on an ongoing basis, thereby predicating the black community’s success on choices of white voters.

778. Dr. Handley did not take into account support for the majority-minority district from the black caucus in Ohio. (Trial Tr., Vol. II, at 156:8–11).

- a. Dr. Handley’s report did not take into account support from the late Honorable Representative Stokes. (Trial Tr., Vol. II, at 156:12–15).

- b. Dr. Handley's report did not take into account support from the Honorable George Forbes or from Congresswoman Fudge. (Trial Tr., Vol. II, at 156:16–21).
779. Dr. Handley's analysis was "based on data alone." (Trial Tr., Vol. II, at 156:20–21).
780. Dr. Handley believes the legislature should have hired an expert like her to conduct an analysis and relied on that instead of on the democratic process and the voices of black leaders in northeast Ohio. (Trial Tr., Vol. II, at 151:17-25).
781. That opinion, and all others Dr. Handley offered, are useless in this case.

D. Plaintiff's Expert – Dr. John David Niven

782. Dr. Niven has never served as an expert witness before. (4 Tr. 5:10-11).
783. Dr. Niven does not teach any courses on redistricting. (4 Tr. 5:17-20, 23-25).
784. Dr. Niven was a political speech writer for several prominent Ohio Democrats, including Governor Ted Strickland and Columbus Mayor Michael Coleman. (4 Tr. 69:23-70:5). He was also once a Democratic candidate for a seat in the Florida legislature. (4 Tr. 72:2-4).
785. Dr. Niven has never provided speech writing or political consulting services to Republican clients in the political context. (4 Tr. 70:11-16).
786. Before Dr. Niven became involved in this case, he did not have any involvement with redistricting matters. (4 Tr. 70:17-19).
787. Dr. Niven has never advised a legislature or redistricting authority on redistricting matters. (4 Tr. 70:20-22).
788. Dr. Niven has never published any academic articles on redistricting or gerrymandering. (4 Tr. 72:5-7).
789. Dr. Niven has never worked with geographic information software. (4 Tr. 72:10-13).

790. Dr. Niven has never studied communities of interest before being engaged to work on this case. (4 Tr. 72:14-16).

791. Dr. Niven had never tried to identify boundaries for communities of interest in any districting plan before this case. (4 Tr. 72:18-21).

792. Dr. Niven had never used census tracts before writing his reports in this case. (4 Tr. 72:22-24).

793. Dr. Niven purports to draw conclusions about alleged gerrymandering based on an analysis of the distance from a voter's home to the voter's nearest congressional office, to see whether a voter is nearer an adjoining district's office than the voter's own. (4 Tr. 12:24-13:6, 74:2-4). But Dr. Niven had never performed any analysis regarding the location of congressional district offices before writing his reports. (4 Tr. 73:2-5).

794. Dr. Niven had never published any articles on the provision of constituent services by members of Congress. (4 Tr. 73:6-8).

795. Dr. Niven did not perform any analysis of the ways in which constituents seek to contact their members of Congress for his reports in this case. (4 Tr. 73:9-12).

796. Dr. Niven agreed that currently the most popular means for constituents to contact their members of congress is by email or through the member's website and that they can do that contact anywhere they have internet. (4 Tr. 73:13-21).

797. Dr. Niven did not conduct any study of whether people in Ohio had difficulty accessing their member of Congress's district office. (4 Tr. 73:24-74:3).

798. Dr. Niven did not study the responsiveness of Ohio's members of Congress to their constituents in this case. (4 Tr. 74:5-8, 18-20).

799. Dr. Niven did not compare the locations of congressional district offices under the 2002 plan with the locations under the 2011 Plan. (4 Tr. 74:21-24).

800. Dr. Niven acknowledged that the only obstacle he identified that plaintiffs face in accessing congressional district offices is the physical distance from their census tract to the office. (4 Tr. 119:3-11).

801. Dr. Niven did not perform any analysis of the physical distance from the plaintiffs' census tract to the congressional district offices under the plaintiffs' proposed remedial map. (4 Tr. 119:12-14).

802. Dr. Niven cannot say whether the plaintiffs' proposed remedial map maximizes the efficiency of the distance between census tracts and congressional district offices. (4 Tr. 119:15-19).

803. Dr. Niven does not draw any distinction between instances where the distance between the plaintiffs' census tracts and the nearest congressional district is relatively small or relatively large. (4 Tr. 119:25-120:5).

804. Dr. Niven acknowledged that the districts had to grow larger in geography as a result of Ohio losing two congressional districts. (4 Tr. 121:6-8).

805. Dr. Niven acknowledged that significant portions of Ohio are sparsely populated, and that there may be cases where due to the vagaries of geography people are located quite a distance from their congressional representative. (4 Tr. 121:9-15).

806. Dr. Niven did not provide in his reports his analysis of the voters he claims have obstacles to their congressional district offices. (4 Tr. 122:18-123:1).

807. Dr. Niven acknowledged that it is possible the same concerns about access to congressional district offices could exist in the plaintiffs' proposed remedial map. (4 Tr. 123:2-8).

808. Dr. Niven agreed that seniority is an important factor in how effective a member of Congress can be, and that a member who is more senior is generally more likely to be influential in the legislative process. (4 Tr. 74:25-75:9).

809. Dr. Niven's report did not state what percentage of census tracts in Ohio were divided versus what percentage were not, and was not surprised to be told that approximately 89% of all census tracts in Ohio were not divided. (4 Tr. 76:23-77:5).

810. Dr. Niven testified that intact census tracts were more Republican than split census tracts, but the difference between Republican and Democratic support between intact and split census tracts was only three percent. (4 Tr. 21:2-5, 21:16-17).

811. Dr. Niven's rebuttal report states that 9.4% percent of Republican census tracts were split among multiple congressional districts, while 13.8% of Democratic census tracts were split among multiple congressional districts, a difference of approximately 4%. (P526, Niven Rebuttal Rep., at 2).

812. Dr. Niven is not aware whether the map drawers used census tracts to draw the district boundaries in the 2011 Plan. (4 Tr. 77:12-15).

813. Dr. Niven agreed that a district with a political index that is between .45 and .55 is considered competitive. (4 Tr. 78:21-23).

814. Dr. Niven's rebuttal report does not show what percentage of Ohio census tracts that were divided between congressional districts are competitive under the index he uses. (4 Tr.78:24-79:2).

815. Under an eight-race index Dr. Niven used in his rebuttal report, both the intact and split census tracts were Republican oriented. (4 Tr.79:3-10).

816. Dr. Niven used a mean to report the average Republican support in the split and intact census tracts but did not report a standard deviation or correlation coefficient even though he would have included those statistics in an academic paper (4 Tr. 79:24-80:15).

817. Dr. Niven also did not include the correlation coefficient provided in a Pearson's Product-Moment Correlation even though he would have included that statistic in an academic paper, and that coefficient would allow the reader to determine the strength of the relationship along with its significance. (4 Tr. 81:6-17).

818. Dr. Niven agreed that a Pearson's correlation does not allow one to draw causal inferences (i.e., correlation does not mean causation). (4 Tr. 81:22-24).

819. Dr. Niven did not include in his reports any analysis that controlled for other possible explanations for the differences in the splits between Republican oriented and Democratic oriented census tracts. (4 Tr. 81:25-82:21).

820. Dr. Niven acknowledged that the Census Bureau states that census tracts can have as little as 1,200 people or as many as 8,000 people. (4 Tr. 82:23-25).

821. Dr. Niven didn't design a statistical study that controlled for population or geographic distinctions between census tracts for his reports, and cannot say how many of the census tract splits occurred in rural counties versus how many occurred in urban counties. (4 Tr. 83:1-8).

822. Dr. Niven agreed that the only boundaries a census tract will not cross are those of a state or county. (4 Tr. 83:13-16).

823. Dr. Niven agreed that in drawing the 2011 Plan, the mapdrawers had to split large urban counties, such as Hamilton County, Franklin County, and Cuyahoga County, because they were too large to be included in a single congressional district. (4 Tr. 83:23-84:2).

824. Dr. Niven did not include the number of census tract splits in each county in his report, which were 26 in Cuyahoga County, 87 in Franklin County, and 36 in Hamilton County. (4 Tr. 84:17-85:12; P524, Niven Rep. at 6, n.13).

825. Dr. Niven did not perform any study comparing the population of Democratic oriented census tracts that were split with the population of the Democratic oriented census tracts that were not split. (4 Tr. 86:4-8).

826. Dr. Niven did not provide in his reports any comparison of the spatial size of census tracts that were split with the spatial size of the census tracts that were not split. (4 Tr. 86:9-13).

827. Dr. Niven did not report the population or the political orientation for each of the 14 neighborhoods in Cincinnati that were split. (4 Tr.87:8-18).

828. Dr. Niven did not provide in his reports any information showing whether the same neighborhoods were also split in the 2002 plan. (4 Tr. 87:14-17).

829. Dr. Niven acknowledged that he did not use maps of congressional districts from the U.S. Census Bureau's website for his analysis. (4 Tr. 90:17-21).

830. Dr. Niven acknowledged that the map of the 9th congressional district from the U.S. Census Bureau showed Vermillion Township was located entirely within the 9th congressional district. (4 Tr. 94:14-18).

831. Dr. Niven did not provide a list of houses in Florence Township that he claims that were split between the 9th and the 4th congressional districts. (4 Tr. 95:10-13).

832. Dr. Niven did not produce the maps he viewed that he claims shows Florence Township is split between the 9th and 4th congressional districts. (4 Tr. 95:15-18).

833. Dr. Niven did not state in his reports how much of the population in the places on page 15 of his report are in the 9th congressional district and how much is in another district. (4 Tr. 95:19-23).

834. Dr. Niven did not do a study of voter confusion specifically in the 9th congressional district and could not identify any specific voter in the 9th congressional district who was confused by the district lines. (4 Tr. 96:12-14, 96:21-24).

835. Dr. Niven acknowledged that it is unusual for the area of the 15th congressional district to be represented by a Democrat, and that before former Congresswoman Mary Jo Kilroy's one-term, the district had been represented by a Republican for as long as it had existed. (4 Tr. 97:17-98:1).

836. Dr. Niven acknowledged that Congressman Steve Stivers was elected to the 15th congressional district in 2010 under the 2002 plan. (4 Tr. 98:2-9).

837. Dr. Niven acknowledged that former Congressman Pat Tiberi represented the 12th congressional district from his election in 2000 until he resigned in early 2018 and did not include that fact in his report. (4 Tr. 98:19-23).

838. Dr. Niven did not interview any voters or elections officials in Franklin County about alleged voter confusion for the 12th congressional district elections in 2018; his testimony on this issue was solely based on news articles and he could not speak directly to what caused those issues. (4 Tr. 99:2-16).

839. Dr. Niven acknowledged that before Congresswoman Joyce Beatty was elected in 2012, no African-American candidate had ever been elected to Congress from Franklin County. (4 Tr. 99:25-100:3).

840. Dr. Niven acknowledged that under the 2002 plan, Franklin County was split into three congressional districts – the 7th, the 12th, and the 15th. (4 Tr. 100:13-19).

841. Dr. Niven acknowledged that, with the exception of a cycle or two, the areas of the 12th and 15th congressional districts had been electing Republicans to Congress for decades. (4 Tr. 100:20-101:1).

842. Dr. Niven acknowledged that Representatives Dave Hobson and Steve Austria represented the 7th district during the time when it included part of Franklin County, and that they were both Republicans and Dave Hobson was first elected in 1990. (4 Tr. 101:11-20).

843. Dr. Niven acknowledged that Summit County was split into three districts under the 2002 plan. (4 Tr. 102:3-6).

844. Dr. Niven acknowledged that under the 2002 plan, Summit County was represented by both Democrats and Republicans in Congress. (4 Tr. 103:23-104:1).

845. Dr. Niven does not know whether any of the splits in the counties in the 2011 Plan were made by the General Assembly at the request of Democrats. (4 Tr. 104:5-9).

846. Dr. Niven cannot say whether any of the census tracts splits he testified about were due to the General Assembly's accommodation of Democrat requests for changes to the map, or specific the exact nature and origin of each census tract split. (4 Tr. 104:10-15).

847. Dr. Niven agreed that Ohio's congressional plan had to split at least some census tracts. (4 Tr. 104:22-25).

848. Dr. Niven has not calculated the minimum number of census tracts that could be split under the 2011 Plan. (4 Tr. 105:4-6).

849. Dr. Niven agreed that some splits are necessary to comply with traditional redistricting criteria, "especially with regard to achieving equal population." (4 Tr. 105:10-12).

850. Dr. Niven agreed that census tracts can include more than one minor civil division. (4 Tr. 105:17-19).

851. Dr. Niven agreed that it is possible a census tract could be split if a redistricting authority drew a congressional line to follow the boundary of a municipality. (4 Tr. 105:23-106:1).

852. Dr. Niven admitted that he has never actually drawn a congressional district plan. (4 Tr. 106:22-24).

853. Dr. Niven stated that the “thrust of his endeavors” has not been on the minimum number of political subdivision or other splits to achieve any of the redistricting goals he discussed. (4 Tr. 106:25-107:6).

854. Dr. Niven admitted that he does not know what was in the map drawer’s minds when they drew HB 369. (4 Tr. 107:7-9).

855. Dr. Niven does not know how the state legislature chose where to draw district lines street by street or decide on particular home could go in one district versus the other. (4 Tr. 107:19-108:1).

856. Dr. Niven does not know “the full range of influences” the map drawers were attempting to respond to in drawing the 2011 Plan. (4 Tr. 108:2-7).

857. Dr. Niven admitted that his reports do not analyze the compactness of the 2011 Plan. (4 Tr. 109:15-17).

858. Dr. Niven agreed that a census tract in an urban area is going to have a smaller area and be more densely population than a census tract in a rural area. (4 Tr. 109:18-21).

859. Dr. Niven admitted that dividing a small town and a large city in half with a completely vertical line would be more likely to split a greater number of census tracts in the city than the small town. (4 Tr. 110:6-11).

860. Dr. Niven agreed that efforts intended to protect an incumbent representative to Congress could have the effect of shoring up votes supportive of that incumbent. (4 Tr. 111:6-9).

861. Dr. Niven agreed that the effect of HB 369 was to help protect incumbent members of Congress. (4 Tr. 111:17-20).

862. Dr. Niven agreed that census tracts that were included in the portions of Summit County contained in the 11th congressional district were Democratic leaning. (4 Tr. 113:8-15).

863. Dr. Niven agreed that it is potentially the case that census tracts in Summit County were split for the purpose of creating a minority opportunity district. (4 Tr. 113:16-24).

864. Dr. Niven acknowledged that he did not offer an opinion on the correct number of Republicans to include in the 15th congressional district. (4 Tr. 115:2-6).

865. Dr. Niven did not provide any analysis in his reports of the population shifts in the Columbus area. (4 Tr. 116:3-7, 116:17-117:2).

866. Dr. Niven acknowledged that he did not offer an opinion that plaintiffs in this case did not have opportunities to influence their members of Congress. (4 Tr. 117:9-21).

867. In the end, Dr. Niven's analysis is not probative of the issues in this case.

E. Plaintiff's Expert – Mr. William Cooper (In Main Case)

a. The Political Nature of Redistricting

868. Some intent to gain political advantage is inescapable whenever political bodies devise a districting plan and that intent will at least have some effect on the map. (Trial Tr., Vol. III at 184:13-21).

869. In drawing his hypothetical plans, Mr. Cooper did not take into account any request or preferences of members of the Ohio General Assembly. (Trial Tr., Vol. III at 184:22-185:1).

870. Mr. Cooper also did not consider comments submitted by members of the public before the 2011 Plan was drawn. (Trial Tr., Vol. III at 185:6-9).

871. Mr. Cooper “mainly” worked with municipal boundaries and townships and, to a limited extent, precincts in preparing his maps. (Trial Tr., Vol. III at 185:10-14).

872. Mr. Cooper used publically available data to determine vote share each party received in congressional elections over multiple cycles. (Trial Tr., Vol. III at 185:20-24).

873. Mr. Cooper agrees that, when a legislature is drawing a congressional districts, it is appropriate for them to consider political data. (Trial Tr., Vol. III at 205:12-14).

874. When drawing maps he had political data loaded into Maptitude and could reference that data. (Trial Tr., Vol. III at 204:25-205:11).

b. The Proposed Remedial Plan and the 2011 Plan

875. Mr. Cooper did not use election information from 2008 to evaluate any of the maps he drew for his report. (Trial Tr., Vol. III at 185:25-186:4).

876. Mr. Cooper did, however, evaluate HB 319 and the 2011 Plan under the 2008 election results. According to a chart in Mr. Cooper’s report, using the 2008 congressional election results, Democrats would have received a majority of the vote share in seven of 16 districts under the map in HB 319. Similarly, Democrats also would have received a majority of the vote share in the same seven of 16 districts under the 2011 Plan currently in place. (Trial Tr., Vol. III at 186:5-9, 186:14-187:22; P090, Fig. 9).

877. Mr. Cooper was retained as an expert in this case to draft a remedial plan that gave Democratic voters a better opportunity to elect candidates of their choice. In doing this, Mr. Cooper defined Democratic voters as people who cast ballots for Democrats but these voters don’t have to vote for Democrats in every election. (Trial Tr., Vol. III at 187:23-188:2, 188:3-11).

878. Mr. Cooper testified that the proposed remedial plan would lead to a “better outcome for the Democratic candidates” because there are more “competitive” districts that could “theoretically elect a Democrat as opposed to a Republican.” (Trial Tr., Vol. III at 188:21-189:6).

879. Mr. Cooper defines a “competitive district” using a “self-imposed range of 47.5 to 52.5” percent. (Trial Tr., Vol. III at 189:7-9).

880. Mr. Cooper admitted, however, that in trying to give Democratic voters a better opportunity to elect their candidates of choice, in some instances, Democratic voters could be shifted into a Republican district and that, in making some districts more competitive for Democrats in his Proposed Remedial Plan, he made other districts less competitive. (Trial Tr., Vol. III at 189:20-24, 190:3-7).

881. Using the congressional election results provided in Mr. Cooper’s report, Democrats received a majority of the vote share in Districts 3, 11, and 13 under both the 2011 Plan and Mr. Cooper’s Proposed Remedial Plan. (Trial Tr., Vol. III at 193:1-6,193:19-194:2).

882. During the 2014 election cycle, Democrats received a majority of the vote share in the same four districts in the Proposed Remedial Plan as they did under the 2011 Plan. (Trial Tr., Vol. III at 191:19-192:1).

883. Mr. Cooper admitted that the percentages in his chart are not intended to predict whether a Democrat or Republican would have won under any of the maps he drew for his reports because no one actually was running in those districts. Because they are hypothetical plans, he cannot say who would have won in his district. (Trial Tr., Vol. III at 194:3-25).

884. His original proposed plan paired Congressman Boehner with Congressman Davidson or Representative Jordan. That was not his intention, which he fixed in his errata report. It is probable that no plan pairing Boehner and Jordan would have been adopted by the Ohio General Assembly in 2011. (Trial Tr., Vol. III at 195:2-196:16).

885. In his hypothetical plans, he never paired the same incumbents as those who were paired under the 2011 Plan. (Trial Tr., Vol. III at 198:1-6).

886. He never paired Kaptur and Kucinich because to do so would result in his having to draw a version of District 9 that that “looked not unlike current District 9 under the 2012 plan.” (Trial Tr., Vol. III at 198:21-199:13).

887. In his deposition, Mr. Cooper admitted that he did not pair the same incumbents as those paired in the 2011 Plan because if he had done so he “might have ended up with the 2012 plan.” (Trial Tr., Vol. III at 200:3-201:8).

888. In his two hypothetical plans he changed the numbers of his congressional to correspond to the 2002 Plan rather than the 2011 Plan. This resulted in District 3 in Franklin County (used in the 2011 Plan and his Proposed Remedial Plans) being identified as District 15 in his hypothetical plans. (Trial Tr., Vol. III at 201:11-202:25).

889. Mr. Cooper drew District 11 as “a plurality minority district” based upon testimony by Dr. Lisa Handley that such a district would be “a minority opportunity district likely to elect a minority candidate of choice.” (Trial Tr., Vol. III at 205:15-206:5).

890. He does not know if anyone in Ohio General Assembly supported drawing District 11 as majority-minority. (Trial Tr., Vol. III at 206:8-12).

891. He did not try to draw a majority-minority district because it would require drawing the district into Summit County and Mr. Cooper did not like the way Summit County is divided by District 11 in the 2011 Plan. (Trial Tr., Vol. III at 206:13-20).

F. Plaintiff’s Expert – Mr. William Cooper (In Rebuttal)

892. Attorney Theresa Lee asked Mr. Cooper to draw a rebuttal congressional plan late Saturday evening on March 9, 2019, while trial was in progress. (8 Tr. 35:8-13).

893. Mr. Cooper testified that he drew the rebuttal congressional plan between the evenings on March 9, 2019 and March 12, 2019. (8 Tr. 35:14-15).

894. Mr. Cooper stated that he prepared the rebuttal map to take into account “some of the comments” made by Mr. DiRossi during his trial testimony regarding “certain requests from officials and others back in 2011” that Mr. DiRossi stated were part of his background for producing the 2011 Plan. (8 Tr. 36:16-20).

a. The Foundation of Mr. Cooper’s Rebuttal Map.

895. In response to being asked if his testimony rebutted the testimony of Mr. DiRossi, Mr. Cooper testified that he was trying to show that the concerns Mr. DiRossi mentioned “could have been taken into account and drawn into the map” to create a plan that “would have been more fair to voters in Ohio.” (8 Tr. 123:4-21).

896. Unlike Mr. DiRossi, Mr. Cooper testified that he did not use the HB 319 map as his starting point for the rebuttal plan. (8 Tr. 62:14-16). Instead, Mr. Cooper stated he started creating his rebuttal map from a new map focusing first on the Cincinnati area. (8 Tr. 61:24-62:1). He then added in Warren County and “went from there.” (8 Tr. 62:1-2).

897. Because Mr. Cooper did not use the map enacted in HB 319 as his starting point for the rebuttal plan, he admitted that he had not analyzed the “ripple effects of converting the map in House Bill 319 to the map in House Bill 369.” (8 Tr. 62:17-21).

898. When drawing his rebuttal map, Mr. Cooper testified that he included the following concerns considered by Mr. DiRossi when drawing the HB 369 map (8 Tr. 36:21-37:2):

- a. He made sure that he included all of Warren County with parts of Cincinnati and Hamilton County in District 1 (8 Tr. 37:2-4);
- b. He combined Toledo with Cleveland in District 9 and insured that he included a “minority opportunity” district in District 11 that extended from Cuyahoga County to Summit County (8 Tr. 37:5-10);
- c. He insured that District 9 included “much more of the Toledo area than the west Cleveland area” (8 Tr. 39:14-17);

- d. He split Mercer County 3 ways in “exactly the same fashion that it is split in the 2012 plan” (8 Tr. 37:11-13);
- e. He included the Timken Corporation in Stark County as part of District 16 (8 Tr. 37:19-21);
- f. He extended District 3 so that it encompassed a larger portion of the Ohio State University (8 Tr. 37:23-24);
- g. He insured that his rebuttal plan paired 2011 incumbents Kucinich and Kaptur together, Turner and Austria together, and Sutton and Renacci together (8 Tr. 38:5-11);
- h. He drew District 3 in Franklin County in a way that did not include a 2011 incumbent (8 Tr. 38:14-17);
- i. He placed all of Loveland in District 2 (8 Tr. 38:12-13);
- j. He kept Clark County whole (8 Tr. 39:4-6); and
- k. He included the NASA Glenn Research Center in District 9, as well as the NASA Plum Brook location (8 Tr. 39:7-12).

899. At the time Mr. Cooper drew the rebuttal map he confirmed that he had access to the Congressional election results from 2012, 2014, 2016, and 2018 (8 Tr. 115:12-25), and the trial testimony of Ray DiRossi (8 Tr. 116:1-3).

900. Mr. Cooper did not deny that he had access to the deposition testimony of Mr. DiRossi, the trial testimony of Troy Judy, and the trial testimony of Speaker Batchelder, or that he knew who Heather Blessing was, but he did not consult this information. (8 Tr. 116:4-117:6). Mr. Cooper also did not deny that he had access to “tens of thousands of pages of documents that were exchanged” in the case. (8 Tr. 117:9-17).

901. In preparing his rebuttal plan, Mr. Cooper did not:

- a. talk with any member of the Ohio Legislature regarding the drawing of Congressional District lines (8 Tr. 126:12-17);
- b. review the testimony of any employee of the Ohio Senate or House, except for Mr. DiRossi (8 Tr. 126:1-9); or

- c. read the testimony of any members of the Ohio House or Representatives or the Ohio Senate (8 Tr. 125:18-25).

902. Mr. Cooper admitted that the drawers of HB 369 did not have access to the deposition or trial testimony in this case, like he did, but they did have to balance many “competing considerations” in 2011 that Mr. Cooper did not have to consider in drawing his remedial plan or rebuttal plan. (8 Tr. 117:18-118:6).

903. Mr. Cooper testified that he could not quantify all the requests and competing considerations that the HB 369 map drawers may have received. (8 Tr. 118:15-19). Moreover, Mr. Cooper stated that the drawers of HB 369 “presumably” had other competing considerations in addition to the ones that he considered in drawing his rebuttal map. (8 Tr. 118:24-119:5).

904. Mr. Cooper testified that the “political factor” involved in passing a redistricting plan through the Ohio legislature “did not enter into the equation” when he was drawing his rebuttal and remedial maps. (8 Tr. 129:3-12).

905. Mr. Cooper stated he could imagine that there are “millions upon millions” of possible Congressional District maps that could be drawn “if you looked at every possibility,” and that it would not surprise him that there might be billions of potential plans. (8 Tr. 120:21-121:3).

b. District Discrepancies Between the 2011 Plan and the Rebuttal Plan.

906. Mr. Cooper testified that he could have drawn a rebuttal map that mirrored Congressional Districts 3, 9, and 11 from HB 369. (8 Tr. 101:18-21).

907. Yet Mr. Cooper admitted that Congressional Districts 9 and 11 included in his rebuttal plan are not the same as Districts 9 and 11 that appear in the HB 369 plan. (8 Tr. 62:22-63:8).

908. Mr. Cooper testified that his rebuttal plan changes something about every district compared to the maps in HB 319 and H.B 369. (8 Tr. 103:11-18). There are so many different

scenarios that could be conjured up that Mr. Cooper stated he could have created any number of different versions of the map to show the results of a different ripple effect on the districts. (8 Tr. 102:4-9).

i. District 11 Discrepancies

909. Mr. Cooper testified that he used the Maptitude software and relied on the U.S. Census 2010 P.L. 94-171 file to prepare his BVAP reports for the 2011 Plan (P454) and the rebuttal plan (P618, Cooper Rebuttal Plan, Tab 2). (8 Tr. 95:7-23, 41:18-22, 64:18-65:2). Mr. Cooper confirmed that he did not independently verify the information in the U.S. Census 2010 P.L. 94-171 file. (8 Tr. 95:24-96:5).

910. Mr. Cooper confirmed that the BVAP percentage for District 11 in his rebuttal plan was 50.72%. (8 Tr. 97:5-10).

911. Mr. Cooper confirmed that Exhibit D2 to P454 stated the BVAP percentage was 52.37% for District 11 in the 2011 Plan. (8 Tr. 65:7-10).

912. Mr. Cooper testified that the BVAP percentages included in P454 and P618 were based on the “any-part-black category.” (8 Tr. 97:22-24, 98:18-20, 95:7-23, 41:18-22, 64:18-65:2).

913. Mr. Cooper testified that he was not aware that the Court took judicial notice of census data from 2010 showing that the BVAP percentage for District 11 was 51.3% under the 2011 Plan. (8 Tr. 65:11-14). Mr. Cooper explained that the discrepancy between the BVAP percentage that the Court took judicial notice of (51.3%) and the BVAP percentage reported in Plaintiffs’ Exhibit 454 is due to the fact that he reported the percentages for the “any-part-black category”. (8 Tr. 98:17-25).

914. Mr. Cooper also confirmed that his rebuttal plan does not include the same population from the city of Akron for District 11 as the current plan does. (8 Tr. 99:18-21).

915. Although he could have “added another precinct or two” to get the non-Hispanic BVAP percentage above 50 percent for District 11 (8 Tr. 99:21-25), Mr. Cooper admitted that making such alterations to District 11 would have “affected the population figures in surrounding districts.” (8 Tr. 100:1-3).

ii. District 3 Discrepancies

916. Mr. Cooper testified that the Congressional District 3 included in his rebuttal plan is not the same as the District 3 from the map in HB 369. (8 Tr. 100:9-13). Specifically, Mr. Cooper stated that he only left two districts in Franklin County (Districts 3 and 15), as opposed to the 2011 Plan which contained 3 districts (Districts 3, 12, and 15). (8 Tr. 100:13-16).

917. Mr. Cooper testified that he was aware of testimony that the legislature wanted Franklin County to have 3 congressional districts. (8 Tr. 100:17-21).

iii. Discrepancies in Districts 4 and 8

918. The 2011 Plan included all of Clark County in District 8, but Mr. Cooper testified that he elected to move Clark County to District 4 in the rebuttal map. (8 Tr. 113:6-18). Mr. Cooper also confirmed that he moved a portion of Miami County that was included in District 8 under the 2011 Plan to District 4 in the rebuttal plan. (8 Tr. 113:19-22).

919. Mr. Cooper testified that the changes to involving Miami County and Clark County in the rebuttal plan compared to the 2011 Plan, caused a reduction in District 8’s population. (8 Tr. 113:23-25). The reduction in population of District 8 caused a ripple effect on Hamilton County because it required Mr. Cooper to designate a portion of the Hamilton County population in District 8. (8 Tr. 114:1-4).

920. Warren County was then kept whole in the rebuttal map based on Mr. DiRossi’s testimony that the Ohio Legislature wanted to keep Warren County whole. (8 Tr. 114:5-11).

c. Analysis of Election Result Data (Tab 9 of Notebook).

921. In reviewing a report regarding Congressional election results from 2012 to 2018 that displays the percentage of votes received by Democrat candidates in each Congressional District under the 2011 Plan and Mr. Cooper's rebuttal plan, Mr. Cooper testified as follows:

- a. under the rebuttal plan for the 2012 election cycle, Democrats received the majority vote in Districts 3, 9, 11, 13 and 16 (8 Tr. 104:10-13);
- b. under the rebuttal plan for the 2014 cycle, Democrats received the majority vote in Districts 3, 9 and 11 (8 Tr. 104:23-105:2);
- c. under the rebuttal plan for the 2016 cycle, Democrats received the majority vote in Districts 3, 9, 11 and 13 (8 Tr. 110:12-16); and
- d. under the rebuttal plan for the 2018 cycle, Democrats received the majority vote in Districts 1, 3, 9, 11, 13, and 16 (8 Tr. 111:1-5).

922. Under both the rebuttal plan and the 2011 Plan, Democrats received a majority vote in Districts 3, 9, and 11 for every election cycle from 2012 to 2018. (8 Tr. 111:9-14).

923. Mr. Cooper also confirmed that the only time District 13 did not receive a majority vote in any election cycle from 2012 to 2018 for either the rebuttal map or the 2011 Plan was in the 2014 election cycle for the rebuttal map. (8 Tr. 112:1-5). Mr. Cooper could only speculate as to why the Democrats received less than 50% of the vote in District 13 during the 2014 election cycle because he admits that he did not include that analysis in his report. (8 Tr. 108:7-14, 109:3-19).

G. Intervenors' Expert – Dr. Thomas Brunell

a. Dr. Brunell's Background

924. Dr. Thomas Brunell has a "bachelor's degree, master's degree and a Ph.D., all in political science, all from the University of California at Irvine." 6Tr. 187:23-25. He is a tenured professor employed at the University of Texas at Dallas. 6Tr. 188:1-6. Dr. Brunell has been a professor "[a]ll together" for about 20 years, 6Tr. 188:7-11, starting as an assistant professor of

political science at Binghamton University in upstate New York, 6Tr. 188:14-15; then moving to Northern Arizona University in Flagstaff, Arizona, 6Tr. 188:16; and then in 2005, moving to UT-Dallas as an associate professor with tenure, 6Tr. 188:16-18.

925. Dr. Brunell teaches undergraduate classes on “Intro[duction] to American Government,” “American political institutions,” and “Congress.” 6Tr. 188:20-24. Dr. Brunell plans to teach a class on “elections and campaigns” soon. 6Tr. 188:24-25. Dr. Brunell teaches a graduate level class on “American political institutions, on Congress,” and one on “election law.” 6Tr. 188:25-189:2.

926. Dr. Brunell teaches “[a]ll the time” on “issues of redistricting, elections, the Voting Rights Act and representation.” 6Tr. 189:4-5.

927. Dr. Brunell’s “main intellectual curiosity” for areas of his research has to do with the “notion of representation,” how to “transmit in the best way possible what the people want into the black box that is the government.” 6Tr. 189:7-13.

928. Most of Dr. Brunell’s work has to do with elections, but he does other work on party polarization and political parties in general. 6Tr. 189:14-16. In general, he studies “representation, which mainly involves studying elections,” 6Tr. 189:16-19.

929. Dr. Brunell has “somewhere over 50 peer-reviewed [published] articles.” 6Tr. 189:22-24.

930. Dr. Brunell has served frequently as a peer reviewer in the journals that have published his articles. 6Tr. 189:25-190:2.

931. Dr. Brunell has published articles on redistricting, elections, Voting Rights Act or representation. 6Tr. 6:190:3-5.

932. Dr. Brunell has authored one book—which was on representation and redistricting. 6Tr. 190:6-10.

933. Dr. Brunell has received grants and awards for his work, 6Tr. 191:15-16, and has given lectures and public speeches on his work “many times,” 6Tr. 191:17-19, which generally was related to redistricting elections, the Voting Rights Act, or representation, 6Tr. 191:22-192:1.

934. Dr. Brunell has been on television and been quoted in news publications. 6Tr. 192:2-4.

935. Dr. Brunell has served as an expert witness usually in redistricting and Voting Rights Act-related litigation, 6Tr. 192:5-8, to include testifying at trials, 6Tr. 192:10-11. His testimony was related to his expert witness work. 6Tr. 192:12-14.

936. Dr. Brunell was admitted as an expert witness in this case as an expert witness in the fields of redistricting, elections, Voting Rights Act, representation, and statistics. 6Tr. 192:15-193:14.

937. Regarding Dr. Brunell’s work on Dr. Cho’s report, in Dr. Brunell’s expert opinion, he “[a]bsolutely [does] not” need to be able to program in C++ or have run an analysis similar to Dr. Cho’s analysis in order to offer the Court insight about Dr. Cho’s analysis. Trial Transcript, Vol. VII, ECF No. 247 (“7 Tr.” or “7Tr.”), at 67:14-18.

938. Regarding Dr. Brunell’s report criticizing Dr. Warshaw’s analysis, in Dr. Brunell’s expert opinion, he “[a]bsolutely [does] not” need to conduct an independent analysis of partisan bias in order to offer the Court insight and expertise on that matter. 7Tr. 67:19-23.

939. Regarding Dr. Brunell’s work related to Dr. Handley’s report in this matter, in Dr. Brunell’s expert opinion and experience, he “[a]bsolutely [does] not” need to conduct an

independent, racially polarized voting analysis to offer insight and expertise to the Court on that matter. 7Tr. 67:24-68:4.

940. Dr. Brunell was not asked to conduct racially polarized voting analysis. 7Tr. 91:15-23.

941. Dr. Brunell ‘completely disagrees’ with Plaintiffs’ assertion that he did not understand Dr. Niven’s data and he did not analyze whether the divisions or splits in Ohio were necessary. 7Tr. 68:5-11. To the contrary, Dr. Brunell explained he “understood what [Dr. Niven] was doing and [he] understood what [Dr. Niven] was trying to do with the maps.” 7Tr. 68:12-13. Dr. Brunell “couldn’t figure out what [Dr. Niven] was doing” because Dr. Niven “didn’t explain it well.” 7Tr. 68:14-16. However, Dr. Brunell “understood, when [Dr. Niven] was talking about the maps and the splits, [Dr. Brunell] knew what [Dr. Niven] was talking about and [Dr. Brunell] knew . . . where [Dr. Niven] was making mistakes.” 7Tr. 68:24-69:1.

942. Dr. Brunell believes he is “perfectly reasonable to offer [his] opinion, [his] rebuttal expert opinion to what [Dr. Niven has] done here.” 7Tr. 69:2-4.

943. Dr. Brunell prepared an expert report in this case, I60 and 6Tr. 186:24-187:3, and provided trial testimony regarding his opinions, see Trial Days 6 and 7 for direct, cross and re-direct examinations of Dr. Brunell. For reasons detailed at paras. 245-257, *infra*, Dr. Brunell was admitted as an expert in this matter.

944. Dr. Brunell provided an expert opinion criticizing the expert opinions submitted in this case by Drs. Cho, Warshaw, Niven, Handley and Mr. Cooper. I60. Dr. Brunell identified a number of flaws in the opinions provided by Plaintiffs’ expert witnesses.

b. Dr. Cho has not shown the Court that the 2011 Ohio Congressional map was an outlier because her simulated maps are not a reliable basis of comparison.

945. Critical to the reliability of Dr. Cho's simulations analysis is that her simulated maps—purporting to show that the enacted map is an “outlier”—are a reliable basis of comparison to define that outlier. Dr. Cho's analysis is outlier analysis and “an outlier analysis is a relative analysis. It's an outlier relative to something.” 6Tr. 197:21-23.

946. Dr. Cho, according to her own report, was attempting to create “[a] random sample of the set of possible electoral maps [which would allow] us to place the enacted map in context and to understand, within a statistical foundation, whether its partisan characteristics are unusual with respect to other feasible electoral maps that could have been drawn.” 6Tr. 194:13-195:5.

947. But Dr. Cho failed to create simulations of other feasible electoral maps. Dr. Brunell illustrated the problem at trial: one cannot determine that a person is smart, or an “outlier” in intelligence, by comparing their intelligence quotient (“IQ”) to the IQs of 3 million chickens. 6Tr. 196:11-15. That person may be an outlier in intelligence to those 3 million chickens, but you have no better understanding of whether that person is smart as compared to other people. Here, Dr. Cho is effectively comparing the enacted map to a metaphorical 3 million chickens. That the enacted map may be an “outlier” to those birds, provides no insight to this Court's determination of Plaintiffs' claims of partisan gerrymandering.

948. Dr. Brunell's “main issue with Professor Cho's report and her testimony has to do with whether or not the hypothetical maps that she created using the supercomputer serve as a good basis for comparison to the actual enacted map,” 6Tr. 193:24-194:2, which Dr. Brunell sees as “critical . . . [b]ecause [Dr. Cho is] trying to make conclusions that this map differs . . . from all of these other hypothetical maps. And to the extent to which that's not true,” which Dr. Brunell thinks “there are very good reasons to think that these hypothetical maps aren't a good basis for

comparison, then [Dr. Cho's] conclusions about outliers really don't make a lot of sense," 6Tr. 194:3-9.

949. Dr. Brunell noted that Dr. Cho used some traditional districting criteria "like compactness and contiguity" but she did not incorporate into her analysis the requirement of equal population and other traditional districting criteria like preserving communities of interest, preserving cores of current districts, and incumbency protection. 6Tr. 195:12-23; 6Tr. 196:2-6; 7Tr. 99:5-21. Moreover, she considered Voting Rights Act ("VRA") issues but, as detailed further below, did not consider the VRA in the same manner the State of Ohio did in 2011 and, in fact, the way she incorporated Dr. Handley's VRA analysis into her own was flawed.

950. Dr. Brunell explained why it matters that Dr. Cho does not have all of the traditional districting criteria is because "the fact of the matter is none of these, none of the maps that she drew could actually serve as legitimate kind of on-the-fly replacement for the enacted map here." 6Tr. 196:6-9. Dr. Brunell provided the example why Dr. Cho's maps "could [not] actually serve as legitimate . . . replacement[s] for the enacted map here," 6Tr. 196:7-8, because Dr. Cho "doesn't equalize the population . . . She allows this one percent tolerance for how many people are put in each district. And so right off the bat, we know that . . . and she sort of waves her hand and says, 'Oh, this is easily fixable later on,'" 6Tr. 196:2-6.

951. Simply put, Dr. Cho is "not comparing the right things" between her maps—the figurative 3 million chickens—and the enacted maps. 6Tr. 196:10-11. Dr. Brunell explained, "[T]o the extent that we don't believe -- that we can't count on the comparisons that [Dr. Cho] is making, well, then, we can't rely on [Dr. Cho's] conclusions in terms of the outlier analysis." 6Tr. 196:15-18.

952. Dr. Brunell explained “clearly there are some problems with” Dr. Cho’s analysis, 6Tr. 197:22-24. Dr. Brunell provided the example that Dr. Cho did not include “protecting incumbents” in her maps, 6Tr. 197:24-25, explaining “we know that that’s going to make it different. That’s automatically going to make all of her districts different from the sort of stated - - one of the main stated goals by the legislature here in Ohio,” 6Tr. 197:25-198:4.

953. Dr. Brunell identified a problem that “when the data were given to us . . . we were never given any geographic shapefiles that would allow us to map any of these maps. So we don’t know what they look like.” 6Tr. 197:5-7. Dr. Brunell explained, “So we don’t know what [Dr. Cho’s maps] look like.” 6Tr. 197:7. Dr. Brunell explained nobody knows if Dr. Cho’s maps “look normal” or if they “look like a districting map or does it not[.]” 6Tr. 197:8-9. Dr. Brunell further explained, “[Dr.Cho] apparently . . . hasn’t looked at any either,” 6Tr. 197:10, so ‘he does not know, [counsel] does not know,’ and “the Court doesn’t know, not even Professor Cho knows what any of these maps look like, and so that makes it even harder,” 6Tr. 197:11-13. Dr. Brunell explained, “If we had [geographic shapefiles to map Dr. Cho’s maps], if it was given to us, of course, we would criticize it. . . . But we need to be able to see are these maps actual valid congressional district maps or are they not.” 6Tr. 197:13-16.

954. Dr. Brunell explained what happens to the conclusions Dr. Cho draws in her report if one cannot rely on the baseline of feasible electoral maps: “the whole outlier analysis becomes less useful. The utility kind of falls off really quickly,” 6Tr. 197:17-198:5, because one “can’t really compare these two, the actual map to this other group,” 6Tr. 198:2-3, since Dr. Cho is “not making the right comparisons.” 6Tr. 197:20-21.

955. Dr. Brunell does not think that there is “enough information to conclude that” Dr. Cho’s analysis places the enacted map in context. 6Tr. 198:9-13. Dr. Brunell explained that is the

case because: “[W]e didn’t get all the data. We haven’t seen -- out of the 3 million maps, we haven’t seen even one of them.” 6Tr. 198:13-15. Dr. Brunell elaborated he “would never expect [Dr. Cho] to produce all 3 million maps” because “[t]hat would be crazy. But a random sample . . . maybe 300 maps or 3,000 maps, just to make sure that . . . the computer is not doing something crazy.” 6Tr. 198:15-19. Dr. Brunell reasoned: “[W]hen you write computer code, . . . sometimes -- you’ve miscoded something, and the computer ends up doing something -- the computer follows your instructions perfectly right. But if you haven’t given it good instructions then it’s going to produce something that we can’t count on.” 6Tr. 198:20-24.

956. If Dr. Cho’s analysis shows that the enacted map is some form of outlier, but the Court cannot rely on the simulated maps that Dr. Cho has drawn as feasible alternatives, the Court cannot draw any conclusions about how much of the electoral map was drawn using improper partisan intent and how much of it was drawn using some other appropriate intent. 6Tr. 198:25-199:5.

957. Dr. Brunell explained redistricting is “really complex,” 6Tr. 199:7-8, so “understanding that process . . . all the inputs that go into drawing a map . . . and how you put this puzzle together . . . when you make a change in one part of the state, that change ripples through other nearby districts,” 6Tr. 199:9-13.

958. Dr. Brunell explained “the number in the amount of inputs . . . that a mapmaker has to deal with [in redistricting] makes the job really, really difficult to do.” 6Tr. 199:14-16. Dr. Brunell further explained:

[S]ome of these traditional redistricting criteria . . . [a]re intentional with one another. . . . So, for instance, we talk about preserving communities of interest . . . which usually ends up meaning preserving, keeping cities and counties whole to the extent that that’s possible. But the one-person, one-vote requirement from

Baker v. Carr and its related cases from the 1960s means that we're going to have to split cities and counties.

6Tr. 199:16-23.

[A] again, that's for -- that's for a good reason. . . . [I]n the early part of the 20th century, the states preserved counties really, really well . . . where we would have a rural county with 10,000 people that got one state legislator, and then an urban county with 100,000 people that got one state legislator. . . . So that's what Baker v. Carr fixed was this malapportionment.

6Tr. 199:24-200:5.

So I think it's good that the districts are equalized in terms of the population, but that means that we're going to have to give up something. Right? And the thing we're going to have to give up is keeping every city and every county whole. And it's also going to mean, since we're -- at least for congressional districts -- right? -- when we're really trying to literally make each district equally populous . . . it's going to mean we're going to have funny shapes, and we're going to have little nooks and crannies throughout the district, because the mapmaker is trying -- I literally need 19 more people . . . in this district, and I have to take it from somewhere. . . . And it's an incredibly hard puzzle to put together.

6Tr. 200:6-18.

959. "So a lot of times in litigation, . . . we take a step back and just say, "Oh, look, this is all" . . . "partisanship . . . driving everything." Well, there [were] a lot of inputs in that process."

6Tr. 200:19-22.

c. Dr. Cho failed to account for the one person, one vote requirement in creating her simulated maps.

960. Dr. Cho failed to account for the one-person, one-vote requirement, 6Tr. 201:13-17, and instead "allowing a one percent population deviation," 6Tr. 202:4, then "the fact that there are deviations . . . calls into question, right off the bat," whether Dr. Cho's simulated map "districts [are] constitutional." 6Tr. 201:13-17.

961. Dr. Brunell explained the impact of Dr. Cho's population deviation of plus or minus one percent in her simulated maps impacts the conclusion Dr. Cho came to about the enacted map, "to the extent that the deviations are plus or minus one percent, . . . seriously calls into question whether or not they make a legitimate comparison to the actual enacted map." 6Tr. 203:2-10.

962. Dr. Brunell explained, if a map drawer decided to split a municipality or a precinct because of the one-person, one-vote requirement, Dr. Cho's "model doesn't know the reason why" the map drawer made the decision. 6Tr. 203:16-21. This is important because this decision could appear in Dr. Cho's "outlier analysis" as being a partisan decision when, in fact, it was justified by this Constitutional requirement.

963. Dr. Cho's use of equal population is that Dr. Cho "doesn't draw maps that are equally populous, which is required for congressional elections, and, therefore, they aren't suitable substitutes for the enacted map. . . . [T]hey're not good comparisons." 7Tr. 110:18-25.

d. Dr. Cho failed to account for core retention in creating her simulated maps.

964. Dr. Cho did not address the issue of core retention in her analysis. 6Tr. 204:2-6.

965. Dr. Brunell explained that in redistricting, "[c]ore retention has to do with how two districts look . . . from the previous map, from the benchmark to the new map. And, generally speaking, one of the things that states try to do is, they try to preserve as much of the district as they possibly can." 6Tr. 204:7-14. Dr. Brunell further explained:

Now, this varies from state to state and from particular circumstances . . . So, . . . if a state loses seats or gains seats . . . that's probably going to have a big effect on how much of the cores of individual districts you can . . . actually protect. But it is . . . traditional[ly] . . . one of the things that mapmakers take into account. And it's pretty clear that . . . plays no role [in Dr. Cho's analysis,] there's this -- drawing these nonpartisan random districts. And so it sort of specifically doesn't try to preserve -- start with the cores of the districts before and then compared to how they would look after.

6Tr. 204:15-205:1.

966. Dr. Brunell continued, one preserves cores “because it’s part of protecting incumbents at one level,” 6Tr. 205:2-4, and core retention is for the “voters’ benefit. . . . [T]he voters are going to get moved between districts. It’s inevitable. But if you’re shaking up every single voter into districts, then that can cause more confusion than if you were trying to preserve as many cores as you possibly can to keep people in the same district that they were before.” 6Tr. 205:4-10.

967. Dr. Brunell agreed if a map drawer in 2011 decided to draw a line in order to preserve the core of the prior district, that would not appear in Dr. Cho’s analysis, 6Tr. 205:11-14, and instead a map drawer in 2011 deciding to draw a line to preserve the core of a prior district could appear as being improperly partisan, 6Tr. 205:15-18.

e. Dr. Cho failed to account for incumbency protection in creating her simulated maps.

968. Incumbency protection is a traditional districting principle. 6Tr. 206:24-207:2.

969. One reason why incumbency protection is a traditional districting principle is the democratic principle that voters should hire or fire a representative based on votes, instead of a map drawer or Court drawing incumbents out of their districts. “[T]he reason why protecting incumbents is a traditional principle,” 6Tr. 207:7-8, is because “these people were . . . duly elected by hundreds of thousands of people,” 6Tr. 207:2-3, “so for a mapmaker to . . . draw districts however he or she wanted to,” which in turn “forces lots of incumbents out of office, there’s something kind of undemocratic about that.” 6Tr. 207:4-7.

970. If map drawers in 2011 made a decision related to incumbency protection, whether for a Republican incumbent or a Democratic incumbent, Dr. Cho’s analysis does not account for that decision. 6Tr. 207:9-13.

971. Dr. Cho's analysis could conclude that some of a map drawer's decisions were motivated by improper partisan intent when, in fact, they were motivated by the traditional districting principle of incumbency protection. 6Tr. 207:14-21. However, one cannot know for sure because incumbency protection was not part of Dr. Cho's model. 6Tr. 207:22-208:1. Dr. Brunell explained, "Dr. Cho takes a nonpartisan approach and explicitly does not protect incumbents nor try to preserve cores," 6Tr. 208:1-3, so from "the fact that the map differs," Dr. Cho's analysis assumes that any incumbency protection effort, whether to protect Democratic or Republican incumbents, shows improper partisan intent. 6Tr. 208:3-11.

972. Even though incumbency protection is not legally required in redistricting, 7Tr. 100:1-4, Dr. Cho should have included incumbency protection in her simulated maps "[b]ecause it could have been one of the most important factors that the legislature was trying to use when it was redrawing its map." 7Tr. 100:5-14.

973. Simply put, there are "very serious issues about some of the decisions that [Dr. Cho] made that call . . . into question" whether the Court can rely on Dr. Cho's approximately 3 million possible electoral maps to form a nonpartisan baseline to compare the enacted plan. 6Tr. 208:14-209:2.

974. Making an electoral map is a "complex process with lots and lots of inputs" that is "not simple, and it's not easy." 6Tr. 209:14-17. Dr. Cho's simulated electoral maps do not fully capture the complexity of the districting process, 6Tr. 209:14-20, as Dr. Cho did not consider a variety of interests that "go into making [an electoral] map, 6Tr. 209:3-15.

f. No one knows what Dr. Cho's maps look like.

975. Nobody knows the extent to which Dr. Cho's 3 million simulated electoral maps really differed from each other. 6Tr. 210:16-18. Dr. Brunell explained there may be only "some small variations" between Dr. Cho's simulated maps, 6Tr. 210:5-10, which causes "concern"

because one questions “how much did [Dr. Cho’s] maps differ from one another, 6Tr. 210:11-13. Dr. explained the “weight of [Dr. Cho’s] report is that there was 3 million” simulated maps, 6Tr. 210:14-15, however, “if there really are only a handful of kind of distinct majority -- VRA districts in Cuyahoga County that [Dr. Cho] drew with a whole bunch of very small variations on them,” 6Tr. 210:20-22, then that “calls into question” whether there are really 3 million maps, 6Tr. 210:24, because “it’s not really 3 million maps anymore here that we’re comparing [the enacted map] to. It’s something that’s far less than that,” 6Tr. 210:25-211:1.

976. Dr. Cho could have resolved whether her simulated 3 million maps really differed amongst each other by “print[ing] out some maps,” 6Tr. 211:2-3, but “nobody’s seen the maps,” 6Tr. 211:3-4.

977. It is theoretically possible, and “could very well be the case,” that Dr. Cho’s algorithm draws maps that “look very, very similar and differ only trivially . . . at the margins.” 6Tr. 211:5-16. Dr. Brunell explained Dr. Cho’s algorithm could draw one map, “then the next map . . . could just switch one household between two districts right next to one another . . . and that would be a different map.” 6Tr. 211:8-12.

978. Nobody knows if Dr. Cho produced approximately 3 million simulated maps with major variations between maps or if Dr. Cho produced 3 million simulated maps that are really only 4 maps with “variations on different themes.” 6Tr. 212:4-213:5.

979. Dr. Brunell’s concern is the “extent to which [Dr. Cho’s simulated] maps . . . really are . . . 3 million maps that we would look at and say, [‘][O]kay, yeah, these really are 3 million different maps.[’]” 6Tr. 212:4-7. Instead, Dr. Brunell observed Dr. Cho’s 3 million simulated maps could simply be “iteration after iteration after iteration with very, very small differences between the maps.” 6Tr. 212:8-9. Consequently, the impact would be, as Dr. Brunell explained:

[T]hen the basis for comparison is not 3 million. Maybe now it's one million. Or maybe it's only a hundred thousand. Or maybe it's only four. . . . Maybe if we laid out all the 3 million maps, we'd say, you know, there are really four or five variations on different themes here in the state of Ohio, but we don't know.

6Tr. 212:10-15.

980. The reason it matters whether Dr. Cho's algorithm drew 3 million 'really different' maps or really only 4 maps with "variations on different themes" is because the utility of Dr. Cho's outlier analysis is the number of alternative maps she makes, 6Tr. 213:16-18; however, conclusions made comparing an enacted map against "a gigantic distribution" of simulated maps will not be the same conclusion drawn from a comparison of an outlier to "just a couple other" maps—"a much smaller distribution," 6Tr. 213:16-23. Dr. Brunell explained the difference with: "Are we flipping 3 million coins or are we flipping 17 coins?" 6Tr. 214:24-25.

981. To the extent that Dr. Cho's simulated maps are deemed a proper nonpartisan baseline for comparison, two-thirds of the simulated maps produce evidence a Republican "bias" indicating a type of "natural gerrymandering," 6Tr. 214:21-215:1, which arises because "sometimes Democrats are at a natural disadvantage to Republicans because they live in more tight geographic spaces . . . and more homogeneous areas," 6Tr. 215:1-4.

g. Dr. Cho is incorrect in concluding that the Ohio map is not "responsive."

982. Swing ratio and responsiveness are the same thing, 6Tr. 215:13-14, and have to do with "how an electoral system translates votes into seats," 6Tr. 215:15-16. Dr. Brunell explained in a proportional representation system, the swing ratio is one, as in a party that receives 17 percent of the nationwide vote gets 17 percent of the seats in parliament. 6Tr. 215:16-21. However, responsiveness is "more complicated with single-member districts," 6Tr. 215:22, because it is "going to vary depending on lots of different things, although it mainly has to do about . . . the

competitiveness of the districts . . . [T]he more districts that are closer to 50-50, you're likely to get a higher level of responsiveness or a higher swing ratio." 6Tr. 216:1-5.

983. Swing ratio is a "measure of the electoral system's responsiveness to change in the votes and how that maps into changes in the seats for the two parties in the legislature." 6Tr. 216:6-9.

984. Dr. Brunell explained one does not want the swing ratio too high, nor too low, rather it should be "somewhere in the middle, somewhere just right," 6Tr. 216: 22-25, because a "hyper[-]responsive system" incurs "gigantic changes in the partisanship of the legislature" from "very small changes in the vote," 6Tr. 217:1-3, which is termed "volatility," 6Tr. 217:8-10, which "wouldn't be healthy," 6Tr. 217:8. Similarly, one does not want an system without responsiveness, otherwise a "20 percent increase in one party's share of the vote leads to . . . to no changes in the seats." 6Tr. 217:13-14. Dr. Brunell explained responsiveness is best "kind of somewhere in the middle." 6Tr. 217:14-15.

985. Dr. Cho calculated the enacted map's responsiveness or swing ratio at a three. 6Tr. 217:16-17. Dr. Cho characterized a score of three as not very responsive to voters. 6Tr. 217:17-19. Dr. Brunell was surprised by Dr. Cho's characterization of a three being non-responsive, 6Tr. 217:18-19, because three is "pretty highly responsive," 6Tr. 217:19-20. Calculation of swing ratio for "several states and other countries" in the 1970s by Edward Tufte, 6Tr. 218:3-8, produced a "range from 1.28 up to a high of 3.65," 6Tr. 218:12-13, with only one instance where it was over 3, 6Tr. 218:13-14. Dr. Brunell estimated the average swing ratio based on the ranges in Tufte's data to be "somewhere around two and a half or maybe even less than that." 6Tr. 218:15-18. Dr. Brunell highlighted his disagreement with Dr. Cho about three being non-responsive, 6Tr. 219:1-2, because, as shown by Tufte's data, three is "actually maybe a little bit on the higher end [of

responsiveness]. . . . But certainly somewhere within the . . . not too hot, not too cold range,” 6Tr. 219:2-5.

986. The enacted map being at a swing ratio of around three means it is considered a little more responsive than most of the “several states and other countries” analyzed by Tufte in his study of swing ratio. 6Tr. 219:7-10.

987. Plaintiffs’ counsel was wrong that Tufte’s analysis predated, and therefore did not contemplate, the impact of the population equality requirement enunciated in the 1962 Supreme Court decision *Baker v. Carr*. 7Tr. 109:16-18. Tufte published his study about 1973, and all but two of the jurisdictions studied by Tufte included data post-dating Carr. 7Tr. 110:6-8.

988. Regardless, responsiveness does not have “anything to do with one person, one vote,” 7Tr. 110:9-10, rather one person, one vote and responsiveness are “two completely different things,” 7Tr. 110:10-11, so *Baker v. Carr* would not affect responsiveness, 7Tr. 110:11-12.

h. Dr. Handley conducted a district-specific functional analysis in Congressional District 11, not Cuyahoga County.

989. In her work for this case, Dr. Handley conducted a district-specific functional analysis within the existing Congressional District 11. 7Tr. 15:1-22. She determined that 45% Black Voting Age Population (“BVAP”) is sufficient for a district drawn today in the “vicinity of the 11th Congressional District of Ohio.” P254 at 1.

990. Plaintiffs’ expert Dr. Lisa Handley believes it is necessary to conduct a jurisdiction-specific functional analysis in whatever geographic area a district created pursuant to the VRA (“VRA district”) is drawn. 7Tr. 13:4-14.

991. As Dr. Brunell testified, “not all neighborhoods, not all counties, not all states are the same. So when you are looking to draw a majority-minority district in a certain area, you want to . . . take an intensely local appraisal . . . and examine actual data to see what the appropriate

percentage of minority voting age population would be in that district. Because it does differ.” 7Tr. 13:17-14:1.

992. The variables that influence the appropriate percentage of minority voting age population necessary for a VRA district “differ across the country,” across states, and even between counties within a state. 7Tr. 14:9; 14:18-21.

993. “[I]n some jurisdictions, . . . to draw a district that would give . . . the minority voters an equal opportunity to elect a candidate of their choice, you might need 55, 56, [or] 57 percent voting age population in that jurisdiction.” 7Tr. 14:10-14. “[M]aybe in other areas in the state or maybe in other areas of the country you might need significantly less than that.” 7Tr. 15-17.

994. The appropriate percentage of minority voting age population in a VRA district depends on many factors including “the differential rates of turnout between whites and African-Americans or Latinos, and it also relies on the percent of support that both the minority candidates give to each candidate . . . the minority candidate, the minority-preferred candidate and the other preferred candidate and also the percent of white voters who are willing to cross over and vote for the candidate that the minorities prefer.” 7Tr. 14:1-8.

995. The political science thinking at the time of the 2011 redrawing was to proceed with extreme caution in drawing any VRA district below majority minority. 7Tr. 12:22-13:1. In an article Dr. Handley co-authored with Dr. Brunell in 2009, just two years prior to redistricting in Ohio, I31, they were “interested in looking at the effects of the Voting Rights Act in race-conscious redistricting . . . that started primarily in the 1980s, to see the impact that it has had over time.” 7Tr. 11:5-8. Based on census data gathered just prior to the last round of redistricting on the racial and ethnic data for both state legislative districts and congressional districts across the

country, Drs. Handley and Brunell found that “the overwhelming majority of minority-elected representatives come from districts that are majority minority.” 7Tr. 11:8-18.

i. Dr. Cho’s maps did not draw any VRA districts where Dr. Handley conducted her district-specific functional analysis.

996. Dr. Brunell learned at trial that Dr. Cho drew all 3 million of her simulated maps not in the “vicinity of” District 11 but, rather, within the confines of Cuyahoga County. 7Tr. 16:16-18:6; see also Plaintiffs’ Demonstrative 20 and I132.

997. This shift in geography is meaningful: the northern part of Congressional District 11 is in Cuyahoga County, but parts of the county are excluded from District 11 and District 11 includes geography excluded from Cuyahoga County. 7Tr. 19:2-7; 20:6-21:10.

998. Dr. Brunell did not know, before Dr. Cho testified at trial, that no district-specific functional analysis had been conducted where Dr. Cho’s maps had been drawn. 7Tr. 18:13-15.

999. Dr. Brunell did not know, before Dr. Cho testified at trial, that the location of the VRA districts in her maps was not known to Dr. Handley when Dr. Handley conducted her analysis on different geography. 7Tr. 18:17-20.

1000. No one, not even Dr. Cho, can determine where within Cuyahoga County her three million maps were drawn. 7Tr. 133:15-22. Nobody has seen any of her maps. 7Tr. 133:18. No one can know whether Dr. Cho’s maps included municipalities like Parma but excluded Shaker heights. 7Tr. 32:4-6.

1001. A district-specific functional analysis could and should have been conducted on Cuyahoga County, but it was not. 7Tr. 21:11-13; 21:14-15; 131:3-20.

1002. Using Dr. Handley’s figure from CD11 is that “the recommendation that Dr. Handley’s able to make with her report is district specific. And so, therefore, . . . if . . . Dr. Cho is

going to use those numbers . . . then she has to use the same district, because if the district changes, then we have to do a different functional analysis for the new district.” 7Tr. 20:12-17.

1003. However, “it appears,” although nobody knows for certain because “nobody’s seen any of [Dr. Cho’s] maps,” 7Tr. 20:17-19, that Dr. Cho’s maps “were confined to Cuyahoga County, which means parts of the district would be part of what Lisa Handley looked at, but we would need a new functional analysis for the areas that Dr. Cho looked at . . . which includes part of CD11, but it specifically does not include . . . the other half of the district.” 7Tr. 20:23-21:3.

1004. Dr. Brunell further explained he thought the “population outside of Cuyahoga County is actually a majority of CD11, lives outside of Cuyahoga County,” 7Tr. 21:4-5, so Dr. Cho drawing all her districts within the confines of Cuyahoga County is “inappropriate because . . . the number, the magic number that the functional analysis provides could be different from District 11. . . . It could be lower. It could be higher. It might be the same . . . but we don’t know.” 7Tr. 21:6-10.

1005. No jurisdiction-specific functional analysis been conducted and provided to this Court on any one of Dr. Cho’s 3 million maps. 7Tr. 134:23-135:1.

1006. Even a cursory review of recent political data, J19, suggests that care must be taken in how any VRA district is drawn within Cuyahoga County at below a majority level. 7Tr. 26:11-33:11. Dr. Brunell found, in reviewing election results from the 2016 presidential election for Cuyahoga County that “obviously, the support for the two candidates for -- President Trump and Hillary Clinton differ widely across the county.” 7Tr. 26:24-27:3.

1007. Many municipalities, and even parts of some Cleveland wards, in Cuyahoga County had strong support for Republican Presidential candidate Donald Trump in the 2016 election, a candidate who is not understood to be the candidate of choice for African American voters. 7Tr.

26:11-33:11 (“from the polling numbers and from the postmortems on the elections [...] “President Trump didn’t do particularly well with African-American voters.” 7Tr. 27:22-24.. There were “quite a few” Cuyahoga County municipalities and parts of wards that voted for then Candidate Trump by 40 percent or more, including Fairview Park and Rocky River. 7Tr. 27:4-6; 30:19-21. In Municipalities like Parma and Brook, Brecksville and Broadview Heights, President Trump received support between 50 and 60 percent. 7Tr. 30:22-24. Municipalities like Valley View, Cuyahoga Heights and Independence, provided more than 60 percent support for President Trump against Hillary Clinton. 7Tr. 30:25-31:2.

1008. Indeed, the contours of District 11, specifically the southeastern border of District 11 in Cuyahoga County, reveal the very distinct possibility that this area of the district was drawn in order to protect Congresswoman Fudge from hostile voting territory and not for some improper Republican gain. 7Tr. 33:7-19. The portion on the eastern side Cuyahoga County termed “Trump Country,” based on providing President Trump with over 60 percent support in the 2016 election, which includes Cuyahoga Heights, Valley View, Independence and Walton Hills, is just outside Congressional District 11. 7Tr. 32:11-33:10.

1009. Dr. Brunell cannot know whether Dr. Cho’s maps included so-called Trump country but excluded areas like Cleveland Heights or University Heights. 7Tr. 32:7-10.

1010. Plaintiffs assert in their findings of fact that Dr. Brunell “agrees that the Percentage BVAP needed is 45%,” but of course this ignores the problem. Plaintiffs’ Findings of Fact ¶ 871. Dr. Brunell does not dispute Dr. Handley’s analysis that the percentage of black voting age population needed to draw a VRA in CD 11 today is 45%. 7Tr. 94:21-95:10 (“For current District 11, I think that Dr. Handley’s advice of 45 percent is correct.”). The problem is that we cannot

know from the record that 45% BVAP is sufficient for any of the 3 million simulated maps drawn by Dr. Cho's algorithm within Cuyahoga County. 7Tr. 33:25-34:7.

1011. This same problem extends to any remedial maps drawn by Mr. Cooper and proposed by Plaintiffs in this case: if those remedial maps include a VRA district within the confines of Cuyahoga County, as opposed to in the "vicinity" of District 11, the Court does not have the analysis Plaintiffs believe it needs to comply with the Voting Rights Act. 7Tr. 132:15-25.

1012. In general, the risk of drawing a formerly majority-minority district at a minority level of BVAP is that it is possible "as you reduce the percent of minority voters in a district . . . the odds of the minority-preferred candidate losing, particularly at the primary election, starts to increase. . . . So at some point you're going to have more white Democrats in the district than African-American Democrats. And it could be the case then at some point . . . the white Democrats are going to carry the election. And so then that would mean . . . even in the general [election], you still might elect a Democrat . . . but that's not the preferred candidate of the minority voters." 7Tr. 22:12-21.

1013. Dr. Brunell explained, "When you have an African-American running against a white[,] . . . there tends to be polarized voting, and so typically the minority [voters] prefer the minority candidate." 7Tr. 23:22-25. Dr. Brunell further explained, "[T]hat differs from place to place," but one can look at data to "see what the minority-preferred candidate is." 7Tr. 24:1-3.

1014. When Dr. Brunell learned of Dr. Cho's trial testimony that she represents that all of her districts were drawn within Cuyahoga County, he had concerns about

1015. drawing a 45 percent BVAP district or 3 million variations of one within Cuyahoga County. 7Tr. 25:16-21. Dr. Brunell explained his concerns:

[W]e don't know[.] [T]he whole point of the Handley functional analysis is, then, to feed that in to what Dr. Cho did. And so since

those things are mismatched[,] we don't have the number . . . [.] [T]he number in Cuyahoga County could coincidentally be 45 percent. . . [W]e might need a higher black voting age percentage. We might need a lower one. We don't know. . . . That's the problem[,] . . . we don't know.

7Tr. 25:22-26:5.

1016. The BVAP necessary for a VRA district drawn in the western half of Cleveland could be different than the BVAP necessary for a district to be drawn in the eastern half of Cleveland. 7Tr. 26:6-10.

1017. Dr. Brunell concluded it mattered that there was notable Trump support in Cuyahoga County because “some of those areas which were not in CD11 then might be included in the VRA districts drawn by Professor Cho’s algorithm, and, therefore, that would lead us to believe that the 45 number might very well be wrong.” 7Tr. 27:25-28:5.

1018. Dr. Brunell concluded Dr. Cho’s use of a 45% BVAP “absolutely” could be “too low,” 7Tr. 28:6-7, because, as Dr. Brunell explained, “if there’s more white voters in the areas in Cuyahoga County that were not in Congressional District 11, relative to the areas that were in Congressional District 11 that were not in Cuyahoga County . . . that’s the difference -- the two different parts of what Handley did and what Cho did . . . then, the 45[% BVAP] [,] . . . if there is less white crossover voting in Cuyahoga County . . . that was not in CD11, then the 45 percent number is going to be too low.” 28:8-16.

1019. Of course, Dr. Brunell was not hired in this case to determine the appropriate way to address Voting Rights Act districts in simulations like Dr. Cho’s. 7Tr. 33:21-24. He was hired to alert this Court to issues with Dr. Cho’s analysis such as the fact that Dr. Handley’s analysis does not tell the Court what it needs to know to draw a VRA district below 50 percent within Cuyahoga County. 7Tr. 33:25-34:3.

1020. Plaintiffs invited Dr. Brunell to engage in a functional analysis of Cuyahoga County on the fly, on the witness stand, 7Tr. 88:9-90:12; 93:1-95:21, but, of course, this is impossible, 7Tr. 130:8-131:2. It was Plaintiffs' job to provide this Court with the analyses it needs to find that a remedial map and 3 million simulated maps all drawn within the confines of Cuyahoga County can be drawn below majority BVAP and still comply with the Voting Rights Act. For the reasons detailed above, this was possible—Plaintiffs could have commissioned this analysis—but they failed. And they did not invite Dr. Handley to return to the stand on rebuttal to explain why her district specific functional analysis for some different district was sufficient, or to provide the analysis of Cuyahoga County this Court needs.

1021. The Court took judicial notice of census data for the 11th Congressional District at the time it was drawn in the form of a P10 file titled, "Race for the Population 18 Years and Over." 7Tr. 34:13-35:1; 7Tr. 37:22-25.

1022. The Black Voting Age Population in CD11 at the time the enacted map was drawn was 51.3%. 7Tr. 35:15-19.

1023. By any measure of political science, 51.3% BVAP is not considered to be packing in a traditional majority-minority district. 7Tr. 35:20:23. Dr. Brunell explained: "50's the magic number. . . . So you want to have over 50 percent. So [51.3%,] that's just slightly over 50 percent. So I wouldn't consider that packed." 7Tr. 35:23-25.

j. Dr. Warshaw's report is flawed and does not provide the Court a reliable standard.

1024. Dr. Brunell reviewed the expert reports of Dr. Christopher Warshaw in preparing his opinion in this case.

1025. A substantial problem with Dr. Christopher Warshaw's expert report is that he used data from congressional elections, to include uncontested congressional elections—which requires

the use of “guesses” as “part of the input” to his method and not “actual election data.” 7Tr. 38:12-39:22.

1026. There also is “great variation” between districts and within districts over time in terms of the quality of the candidates. 7Tr. 39:23-40:1. For example, an incumbent may at times face a “very good candidate opponent” and at other times will “scare everybody off” with only a “sacrificial lamb candidate” running. 7Tr. 40:1-4. The quality of the opponent candidate will affect the election outcome in a district, with the effects “idiosyncratic for all of the individual districts,” 7Tr. 40:5-8, and “within a single district across time,” 7Tr. 40:8. The quality of the opponent candidate affects factors that affect vote outcome. 7Tr. 40:9-13. Consequently, using congressional district election results with the factors changing over time and across districts affects an analysts estimates. 7Tr. 40:12-15.

1027. Statewide election results are more useful for conducting electoral behavior in a particular state because statewide results do not have the same problems of “guessing” data for uncontested elections and the “great variation” in factors incurred by the quality of congressional candidates. 7Tr. 40:16-41:3. Dr. Brunell explained using a statewide election, such as a presidential election, eliminates “guessing” because presidential candidates run across all states and counties within the states and the “great variation” of factors is flattened out because the same two candidates run across all of the districts. 7Tr. 40:16-41:3.

1028. The use of statewide elections is far better than using congressional elections for data used in elections analysis despite the first blush impression that congressional data would be more appropriate. 7Tr. 41:4-9.

1029. Efficiency gap is another measure of symmetry, so a new measure of an old concept. 7Tr. 41:20-25.

1030. The efficiency gap measures a relative ratio—how many votes both parties “waste.” 7Tr. 42:4-5. However, the efficiency gap “doesn’t really measure wasted votes,” 7Tr. 42:14-15, because it only considers all the votes for the losing candidate as “wasted,” 7Tr. 42:18-20, yet there are “wasted” votes for the winning candidate as well—the number of votes for the winning candidate that exceeds that of the losing candidate, 7Tr. 42:23-24.

1031. Dr. Brunell explained if a candidate won an election by 100,000 votes to 1, the winning candidate only needed 2 votes to win, so there were 99,998 “wasted votes” for the winning candidate. 7Tr. 43:5-8. However, using this scenario, Dr. Brunell explained the way Dr. Warshaw calculated “wasted votes” was to determine there were “50,000 wasted votes. . . . Half. Fifty percent plus one.” 7Tr. 43:8-10.

1032. Depending how one defines and measures a “wasted vote” will change the estimates of the measure. 7Tr. 43:11-13.

1033. The efficiency gap is not a standard, rather it is a metric. 7Tr. 43:17-18. There is no obvious way to take a metric and make a standard out of it. 7Tr. 43:19-22. Plaintiffs ask this Court to pick the standard from this metric but whatever standard gets picked will be arbitrary. 7Tr. 43:23-25.

1034. A substantial criticism of the use of the efficiency gap as a metric is its volatility. For example, Dr. Warshaw’s efficiency gap estimate was 22.4 percent in 2012; negative 9 percent in 2014; and negative 9 percent in 2016. 7Tr. 44:14-18. A more useful metric would be one that would provide roughly the same answer over time or over elections. 7Tr. 45:24-25.

1035. One of Dr. Warshaw’s “main criticisms” with the enacted map is the “lack of . . . competitiveness at the general election level.” 7Tr. 45:14-20. However, Dr. Brunell disagrees with Dr. Warshaw’s criticism, 7Tr. 45:14-46:18, and Dr. Brunell thinks it is “completely wrong” to

believe competitive general elections are required to “keep elected officials . . . responsive to what the people want,” 7Tr. 45:20-46:12, because the primary election system provides a means to “get rid of the incumbent,” even in districts without competitive general elections, 7Tr. 46:13-17, as voters can replace an incumbent in a primary with another member of the same party, 7Tr. 46:15-18, so no candidate is “truly safe,” 7Tr. 46:14-15.

k. Prof. Niven’s Report ignores basic realities of redistricting and assigns partisan motive to non-partisan decisions.

1036. Prof. Niven argues that Ohio’s congressional districts needlessly divide communities, 7Tr. 48:13-16, but “boundaries have to go somewhere,” 7Tr. 48:22-23, “[i]t’s inevitable,” 7Tr. 49:1.

1037. Prof. Niven’s analysis fails to appreciate the problems that mapmakers are faced with when “drawing these districts. . . like equalizing the population down to a single person,” 7Tr. 49:3-7, which will “mean split counties, split cities, jagged edges, funny shapes,” 7Tr. 49:7-9. Dr. Brunell observed Prof. Niven “particularly doesn’t like funny-shaped districts, but funny-shaped districts happen all the time” for reasons other than improper partisan motive. 7Tr. 49:9-10.

1038. For example, Congressional District 11 is not a “perfect square” and “looks funny,” but “it’s solving a problem[,] . . . [i]t’s providing . . . the minority voters in that part of Ohio an opportunity to elect the candidate of their choice.” 7Tr. 49:13-16.

1039. Another example is where Prof. Niven “honed-in . . . down to the individual household level” and identified “one house on this street was put in one district than the rest of it,” 7Tr. 49:17-50:1-2, without focusing on “why was that house taken out.” 7Tr. 50:4. Dr. Brunell does not know the specific reason why the house was drawn out of the district. 7Tr. 80:22-81:1. However, it “wasn’t for political reasons,” 7Tr. 50:5-6, because data does not exist at the

household level, rather data exists at the “voting tabulation district level,” 7Tr. 50:8, so unless the mapmaker had personal information on the specific house in question, 7Tr. 50:9-12, placing the house in a district separate from the rest of its neighborhood was “not done for political purposes,” 7Tr. 50:12-14. Rather, for congressional districts, “it’s down to the person,” 7Tr. 50:16-17, so mapmakers “end up . . . making these small little cuts to make sure that we have equal population in every district,” 7Tr. 50:18-19, because the “Supreme Court demands it . . . ,” 7Tr. 50:20-21. Another reason a single house may be carved out of a district for an incumbent’s personal request. 7Tr. 50:25-51:2. For example, an incumbent would like to have his mother in his congressional district or his close friend in his congressional district or his lake house in his congressional district. 7Tr. 51:2-5. These types of personal requests are “made all the time.” 7Tr. 51:6-7.

1040. Another example of Prof. Niven assuming, without support, that a map drawing decision was made for reasons of improper partisan motive relates to a Ford Truck plant. Dr. Brunell observed Prof. Niven made a “big deal out of the fact that [a district line] splits a truck assembly plant . . . a Ford assembly plant in half,” 7Tr. 51:4-6, yet “[t]here’s no political advantage [in splitting the plant], because there’s no voters there,” 7Tr. 51:8-9. Dr. Brunell compared the split to splitting Cowboy Stadium in half, which would be “completely meaningless,” 7Tr. 52:10-11, because it would have “absolutely no effect politically in terms of elections,” 7Tr. 52:12-13, because “nobody lives there,” 7Tr. 52:12.

1041. Many reasons exist that have “no political purpose whatsoever . . . in terms of election outcomes and splitting voters,” 7Tr. 53:3-5, for splitting a facility, such as a Ford plant, between two districts—reasons include keeping the line straight for compactness purposes; incumbents desiring to each have a part of the facility in their district; personal relationships

between incumbents and the facility's owner; or the facility's owners desiring to have a portion of the facility two different districts, 7Tr. 52:17-53:2.

1042. Without knowing "the problems that the mapmaker [was] solving," no one can conclude that the line drawn on Plaintiffs' Exhibit 524, page 18, or any line, was needlessly divided. 7Tr. 50:20-51:3.

1043. Another problem with Prof. Niven's analysis was his use of census tracts to run his analysis—part of what he looked at was split census tracts. 7Tr. 53:22-25.

1044. It does not make sense to revere the wholeness of census tracts in redistricting, 7Tr. 55:11-13, because census tracts were never intended to be used by districting map makers for electoral map making, 7Tr. 54:19-23. To assume a census tract means anything to a district map maker is wrong. 7Tr. 54:24-25.

1045. Census tracts were created by the Census Bureau as an analytical tool related to census-taking and were never intended for the purpose of keeping neighborhoods whole by district map makers. 7Tr. 54:14-23.

1046. Dr. Brunell explained, "[W]hether . . . [a] census tract got split or not [in a districting map] wouldn't be particularly interesting . . . in part, because nobody . . . knows what census tract they live in." 7Tr. 55:6-8.

1047. There can be many reasons why a district could have a funny shape. 7Tr. 57:20-24. One reason is based on geography and whether the geography is a known place, city, county, or incorporated place. 7Tr. 60:6-10. We know from fact witnesses that Ohio has noncontiguous municipalities, which means that a city can have multiple pieces in multiple places, with irregular borders in municipalities throughout the state of Ohio. (Kincaid Dep. II 448:7-449:12). This is

especially apparent in Franklin County and on the borders of Congressional Districts 10, 12, and 15. (Kincaid Dep. II 448:7-449:12).

1048. Dr. Brunell explained, “Sometimes cities and municipalities take on funny shapes of their own, and then if the city is kept whole, or parts of the city are kept whole, then that will then translate into a district that also appears funny.” 7Tr. 60:10-13.

1049. Dr. Brunell explained “funny-shaped electoral districts” may be drawn because “mapmakers, as often as they can, try to keep municipal and county and natural political boundaries whole to the extent that they possibly can. And if that municipality or township or county has its own funny shape, and then they follow those lines, then the district itself is going to look funny. And so . . . there’s a reason for the funny shape. So, sometimes, funny shapes have legitimate reasons for them.” 7Tr. 62:2-10.

1050. The Court took judicial notice of the 2010 Census Block Map for Springfield Township, Ohio. 7Tr. 61:8-9. I134.

1051. In Springfield Township, Dr. Niven objected to the district line drawing at the intersection of Argus Road and North Bend Road for being related to an improper partisan purpose based on the ‘oddly shaped cutout’ in that district. 7Tr. 60:14-20. However, it is “absolutely” possible that the cutout at Argus Road and North Bend Road intersection had nothing to do with improper partisan intent, 7Tr. 60:21-23, because the cutout is part of the township that is itself also in the district, 7Tr. 60:24-61:1.

1052. The Court took judicial notice of the census map, E17 for Franklin County. 7Tr. 62:20; I135. The Court took judicial notice of the census map, E19 for Hamilton County. 7Tr. 63:3; I136.

1053. Dr. Brunell attributed the shapes of Franklin County and Hamilton County to the “funny-shaped” electoral districts drawn in the area based on mapmakers’ efforts to “keep municipal and county and natural political boundaries whole to the extent that they possibly can,” which results in “funny-shaped” districts when mapmakers follow “funny shaped” municipal and county political boundaries. 7Tr. 61:25-62:7.

l. Plaintiffs’ expert witness analyses ignore the complexity of voter representation.

1054. Representation is not “black and white” or a “dyadic relationship.” 7Tr. 64:22-24. If a voter’s party candidate loses, that does not mean the winning candidate from the other party does not represent the voter because the voter still has “a relationship with that representative.” 7Tr. 64:15-18.

1055. Dr. Brunell observed representation is “not just about policy issues.” 7Tr. 64:21. Representation includes representatives, “both at the state legislative level and the congressional level, . . . help[ing] their constituents navigate the vast bureaucracies of state and federal governments.” 7Tr. 64:22-25. This is termed “constituency service,” and has been defined as “the nonpartisan, nonprogrammatic effort to help individual constituents in their dealings with the larger government,” 7Tr. 65:7-8, and is “done on a nonpartisan basis, 7Tr. 65:8. Representatives performing constituency service “creates goodwill,” 7Tr. 65:17-20, and representatives will serve their constituents regardless of whether the constituent voted for the representative, 7Tr. 65:13-20.

1056. The line between being represented and not being represented has not been drawn in political science research or in this case. 7Tr. 66:5-13.

m. Mr. Cooper’s alternative maps are not appropriate alternatives to the duly enacted HB 369.

1057. Dr. Brunell reviewed the expert report of Mr. Cooper and his alternative map. 7Tr. 81:2-12.

1058. It is not clear whether the remedial map proposed by Plaintiffs would meet the policy preferences of the Ohio Legislature. 7Tr. 81:18-22. Specifically, it “isn’t clear why the policy decisions made by Mr. Cooper would be better for the citizens of Ohio than the preferences of the state legislators.” 7Tr. 81:22-24.

n. Given time constraints, Dr. Brunell relied on data support from Clark Bensen.

1059. Dr. Brunell had one month to prepare his rebuttal report, 7Tr. 128:1-3, which reviewed four different expert reports prepared by Plaintiffs, 7Tr. 128:4-6. The expert reports Dr. Brunell reviewed included complex data. 7Tr. 128:7-8.

1060. Dr. Brunell talked with Clark Bensen in preparing his report “because there simply wasn’t enough time for [Dr. Brunell] to do all of the data work, and Clark is better at data management than [Dr. Brunell].” 7Tr. 128:11-13. Mr. Bensen is ‘faster using data and database management software systems’ than Dr. Brunell. 7Tr. 128:13-14. Mr. Bensen is “much better” at putting together data than Dr. Brunell. 7Tr. 128:14-15. Dr. Brunell explained: “it’s very often the case that in a case Clark is helping me with the data.” 7Tr. 128:16-17.

1061. To give a “sense” of who is Clark Bensen, Dr. Brunell provided:

Clark Bensen . . . owns a data – an election data company called POLIDATA. . . . I’ve known Clark for over 20 years, and he is involved in cases like this, but lots of other things too. I mean, he creates --he’s one of the people that takes presidential election data and then disaggregates it into congressional districts, which is one of the, you know, data sources that we use, quote a lot. So he kind of plays a role where he creates data and then sells it, but then he also does play a role, oftentimes, in litigation helping experts like me and other people. And sometimes he testifies, sometimes he doesn’t, but that -- that’s Clark.

7Tr. 126:22-127:10.

1062. Mr. Bensen provides the political data for *Cook Political Report*. 7Tr. 127:11-13. The *Cook Political Report* is considered a nonpartisan report. 7Tr. 128:18-21. The *Cook Political*

Report is a report by Charlie Cook—a ‘political guy’ in Washington, D.C. Mr. Cook is ‘basically an expert’ on congressional elections. Mr. Cook puts out this report about elections, covering topics such as whether to expect them to be competitive, where changes may occur—flips between Democrats and Republicans or vice versa. 7Tr. 127:16-22. People sometimes rely on the *Cook Political Report* in Dr. Brunell’s field of work. 7Tr. 127:23-25.

1063. Dr. Brunell worked with Mr. Bensen in this case because Mr. Bensen is “very reliable and very useful in making the data more workable,” 7Tr. 128:22-129:3, the same reason the State of Ohio map drawer hired Mr. Bensen in 2011, 7Tr. 128:22-129:1.

1064. Dr. Brunell believes he discussed Dr. Handley’s data with Mr. Clark Bensen. 7Tr. 86:22-23.

1065. Map drawers cannot draw maps without workable data. 7Tr. 129:4-6. Dr. Brunell could not have offered his opinion in this case without workable data. 7Tr. 129:11-13.

1066. Mr. Bensen did not prepare any of the substance of Dr. Brunell’s expert opinion. 7Tr. 129:14-15.

H. Defendants’ Expert – Dr. Janet Thornton

a. Dr. Thornton’s Background

1067. Dr. Janet Thornton (“Dr. Thornton”) has a masters and doctorate degree in economics from Florida State. She has a bachelor’s degree in economic and political science from the University of Central Florida. 6 Tr. 86:4-9.

1068. Dr. Thornton is currently a managing director at Berkeley Research Group and has worked as an economist and applied statistician for 35 years. 6 Tr. 86:13-21. She does all kinds of statistical analysis including whether there is a statistical bias for disparate impact regarding questions of race, gender, ethnicity, age, religion. 6 Tr. 88:11-20. Dr. Thornton has prepared

statistical analysis in voting cases, for example whether there are differences, statistically speaking, in voter participation rates by race and minority status. 6 Tr. 88:20-24.

1069. Dr. Thornton has taught statistics and quantitative methods for the business school at Florida State. 6 Tr. 87:7-10. She has worked as an economist and applied statistician for 35 years. 6 Tr. 86:16-18.

1070. Dr. Thornton is a member of the American Economics Association and the National Association of Forensic Economists. She has published in peer-reviewed publications including the Journal of Forensic Economics and the Journal of Legal Economics. 6 Tr. 88:2-10.

1071. Dr. Thornton has experience with samples, sample size and margins of error. 6 Tr. 89:24-90:2. She has been asked in this case to look at data and underlying assumptions to determine if there are statistically significant differences. 6 Tr. 90:3-10.

1072. On a daily basis Dr. Thornton reviews data and assumptions and prepares statistical tests accordingly. 6 Tr. 91:13-17. As part of her work, she has been writing and reading computer code since the early 1980s. She has written code and read code. 6 Tr. 91:18-23. There are many similarities in terms of coding environments. 6 Tr. 91:24-92:14. Starting in the early 1980s, Dr. Thornton has worked with census data dating from the 1960s decennial census to the current time. She also frequently uses the American Community Survey (ACS). 6 Tr. 87:19-88:1.

1073. Dr. Thornton is an expert in the field of economic and applied statistical analysis. 6 Tr. 92:20-93:11. She has been qualified as an expert in other cases regarding these subjects. 6 Tr. 90:11-13. She has performed this type of analysis in discrimination cases over 250 times. 6 Tr. 90:14-24. Dr. Thornton has never been excluded from testifying. 6 Tr. 91:6-7.

b. Dr. Thornton's Analysis of Election Results Used By Dr. Cho

1074. Dr. Cho relies on statewide elections from 2008 and 2010. She combines these to create a Democratic vote share that she then uses in her simulated maps. The statewide elections

Dr. Cho uses average 49% Democratic share. Consequently, Dr. Cho will be estimating maps with this vote share as the foundation. 6 Tr. 93:14-94:3.

1075. To simulate maps, Dr. Cho used 2008 and 2010 statewide elections that when averaged constitute 49% Democratic vote share. (6 Tr. 93:14-94:3). Since Dr. Cho is using data that averaged 49%, the political lean of the simulated districts will always move towards the middle. 6 Tr. 109:15-19. Thus, it is not surprising that Dr. Cho, using 2008 and 2010 data, produced many simulated maps that contained eight to nine Republican seats out of sixteen seats. 6 Tr. 109:7-14.

1076. Dr. Cho never used statewide election Democratic vote share from the 2016 election in her simulation. That vote share was only 42%. 6 Tr. 109:20-25. If Dr. Cho had used the 2016 data instead of 2008-2010, the simulated maps would have leaned to a higher Republican vote share. 6 Tr. 110:1-8.

c. Missing Data By Dr. Cho

1077. Dr. Cho provided the estimated vote share for her 3 million simulations for each of the 17 plaintiffs in her initial report. 6 Tr. 96:21-25.

1078. Dr. Cho did not provide this information in her December supplemental report. 6 Tr. 97:1-3. In Dr. Cho's initial report, when she applied 2008 and 2010 statewide elections to the 2012-2016 congressional election, Dr. Cho provided each of the details for each of the plaintiffs from each simulation. Dr. Thornton could then see the maps and frequency of values for each plaintiff. Dr. Cho also provided other columns of data that explain how many county splits came out of each map. However, Dr. Cho did not provide this information in her analysis in her supplemental report. 6 Tr. 97:8-17.

1079. Dr. Cho used an algorithm known as the Markov chain Monte Carlo simulation, which she refers to as the evolutionary Markov chain Monte Carlo simulation. 6 Tr. 97:18-24.

The Markov chain is based upon Bayesian Theorem with which Dr. Thornton is familiar and Dr. Thornton has run Mote Carlo simulations. 6 Tr. 98:2-4.

1080. Dr. Cho prepared a three-page abstract for a conference which was published in November 2018 after Dr. Cho and Dr. Thornton had filed their reports in this case. 6 Tr. 99:14-100:1. The abstract does not describe the parameters Dr. Cho used. Dr. Cho's prior articles reference two "strategies" used by Dr. Cho in her simulations but she testified in this case that she used three "strategies." There is no information about the third strategy in the abstract. 6 Tr. 100:2-11.

1081. Dr. Cho's method weighs population, city breaks, county breaks, compactness and black voting age population ("BVAP"). She uses weights in what is referred to as a fitness function and the fitness function is used to drive her process. If she changes the weights then the process is changed, and therefore the set of maps and their political lean is changed. 6 Tr. 104:9-20; 105:1-3.

1082. One cannot replicate Dr. Cho's simulated maps because every time her program is run it generates a different set of maps. 6 Tr. 105:4-9. And Dr. Cho did not provide a copy of any of the maps produced by her process. 6 Tr. 108:6-8.

1083. Dr. Cho entered the parameters used for her map simulations into a command line. A command line is a command prompt on the computer. A record of the command prompts is not maintained in the computer. 6 Tr. 105:10-106:8.

1084. Dr. Cho did not keep a record of what she entered on the command line in preparing her analysis for this case. 6 Tr. 106:21-23, 105:19-22. As a result, it is not possible to determine what parameters were actually used or entered at the command line. 6 Tr. 106:24-107:9.

1085. It is not possible to determine how many of Dr. Cho's simulations divided Franklin County or Cuyahoga County, or how many times either county was divided. 6 Tr. 107:10-16. Also, nothing in the data provided by Dr. Cho can be used to confirm that all of her simulations include a district with a 45% BVAP. 6 Tr. 110:9-23.

d. Dr. Thornton's Analysis of the Difference Between Republican Vote Share and Seat Share

1086. Dr. Cho reported the Republican vote share for 2012, 2014 and 2016 as compared to the Republican seat proportion, 75 percent in each year. Dr. Cho stated there could be "concern" if there was a "large discrepancy" between seat share and vote share. However, Dr. Cho did not prepare a statistical test to compare these values. 6 Tr. 111:4-17.

1087. Dr. Thornton prepared a statistical test to determine statistically if there are in fact "large discrepancies" between Republican seat share and vote share for those years. 6 Tr. 111:18-21.

1088. For this analysis, Dr. Thornton used a binomial distribution analysis. The binomial distribution analysis is used when determining whether there are differences between two groups but there is no information regarding a benchmark. 6 Tr. 88:25-89:8, 94:11-19.

1089. Dr. Thornton provided an example of the use of the binomial distribution from the employment context. Suppose there is an allegation of failure to hire minority accountants and the firm accused of discrimination does not have data on the actual applicants. The researcher could use the decennial census or ACS data that supplies information on the minority composition of accountants in the workforce in the geographic area as a proxy for actual appellant flow to determine whether there is a statistically significant difference between the actual composition of the accountant hires and the accountant hires that one would predict based on the proxy. 6 Tr. 89:9-23.

1090. Dr. Thornton applied this analysis to Dr. Cho’s data regarding Republican seat share and Republican vote share. 6 Tr. 94:11-19. Outcomes outside of two positive or negative standard deviations are deemed statistically significant. That means these outcomes have a probability of occurring by chance of five percent or less. Outcomes that are within two standard deviations are deemed not statistically significant – meaning they have a probability of occurring by chance that is greater than 5%. 6 Tr. 112:20-113:8.

1091. For 2016, 2014, and 2012, the difference between actual and predicted Republican seats using Republican vote share is not statistically significant. 6 Tr. 113:9-14. Given these vote proportions and seats, statistically speaking they are within the realm of chance, 6 Tr. 113:21-114:8, meaning, as Dr. Thornton explained, the “outcomes could have occurred by chance alone.” 6 Tr. 113:23-25.

1092. Dr. Thornton used the same statistical significance standard adopted by courts in voting rights cases for this case. 6 Tr. 183:6-184:10.

e. Dr. Thornton’s Analysis of Dr. Niven’s Report

1093. Regarding Dr. Niven’s statistical test, Dr. Thornton found there was no statistically significant difference in the Republican vote share in census tracks with a split as compared to those without a split. 6 Tr. 95:10-18, 116:4-22.

1094. In other words, there is no statistically significant difference in the proportion of Republicans and whether or not a census track is split. 6 Tr. 116:4-117:24, 95:10-18.

I. Defendants’ Expert – Dr. M.V. Hood, III

a. Dr. Hood’s Background

1095. Dr. M.V. Hood III (“Dr. Hood”) is a tenured professor of political science at the University of Georgia with a Ph.D. from Texas Tech University. (Trial Tr., Vol. VII at 135:6-21).

1096. He teaches courses, performs research, and is responsible for running a survey research center doing academic surveys, surveys for state and local governments and nonprofits, and a non-partisan polling services for Cox Communications, which includes the *Atlanta Journal-Constitution*. (Trial Tr., Vol. VII at 135:22-136:19).

1097. Dr. Hood has published 40 to 50 papers in peer-reviewed journals, including four articles directly related to redistricting. (Trial Tr., Vol. VII at 137:16-24).

1098. A copy of Dr. Hood's complete CV is contained in his report. (Trial Tr., Vol. VII at 138:18-139:11; D004).

1099. Dr. Hood has been retained to testify on behalf of redistricting plans enacted by both Republican and Democrats. (Trial Tr., Vol. VII at 141:14-16).

1100. Dr. Hood is an expert in American politics and policy, quantitative political analysis, and election administration, including redistricting. (Trial Tr., Vol. VII at 141:17-20).

1101. Dr. Hood was retained by the Defendants to perform an analysis of Ohio's current congressional plan and respond to Plaintiffs experts, Dr. Cho, Dr. Warshaw, and Mr. Cooper. (Trial Tr., Vol. VII at 142:3-7).

b. Dr. Hood's Analysis of 2011 Plan

1102. The first section of Dr. Hood's report looks at the enacted plan in light of traditional districting principles. This included population deviation, contiguity, compactness, incumbency protection, core retention and maintaining communities of interest. (Trial Tr., Vol. VII at 142:8-14; 142:15-19).

1103. The plan achieves the goal of zero population deviation between 16 compromised districts. (Trial Tr., Vol. VII at 142:20-24).

1104. He compares the previous or benchmark plan adopted in 2002 with the 2011 Plan in two measures of compactness: Reock and Polsby Popper – two of the most commonly used measures of compactness used by map drawers. (Trial Tr., Vol. VII at 142:25-125:10).

1105. There are close to 50 different compactness tests. With Reock, a long rectangle would be penalized because the measurement is based upon a circle that goes around the district. For Polsby Popper, the score will be penalized for a district with jagged edges such as a river or ocean boundary. The scores for both go from zero to 1 with 1 being the most compact. (Trial Tr., Vol. VII at 143:11-144:4).

1106. As compared to the 2002 plan, the mean Reock score for the 2011 Plan is identical (.35). For Polsby Popper, the score slightly decreases from .23 in 2002 to .19 in 2012. (Trial Tr., Vol. VII at 144:5-14; D004, Hood Rep. at 4).

1107. With respect to incumbency protection, the 2002 Plan had 18 districts compared to 16 districts in the 2011 Plan so some paring of incumbents was inevitable. Six incumbents or three sets were paired. Two Democratic incumbents were paired, two Republican incumbents were paired, and one Republican and one Democratic incumbent were paired. (Trial Tr., Vol. VII at 144:18-145:6).

1108. One measure of incumbency protection is how much of the incumbent's prior district is retained or core retention. This can be determined by comparing the census blocks in the 2002 district that were retained in the 2012 districts. For the 2011 Plan, the mean core retention across 16 districts was 55.7%. (Trial Tr., Vol. VII at 145:7-146:9). Dr. Hood concluded the 2011 Plan also gave weight to incumbency protection. (7 Tr. 146:3-9).

1109. Dr. Hood looked at communities of interest by examining the number of county splits between districts. There were 21 counties split in 2002 versus 23 in 2012. While the 2011

Plan did not improve the number of county splits, it was on par with the 2002 Plan. (Trial Tr., Vol. VII at 146:10-147:4).

1110. Regarding communities of interest, Dr. Hood also compared the percentage of municipalities divided in 2002 versus 2012. 4.3 percent of municipalities were divided in 2002 versus 4.5 percent in 2012. In both plans, more than 95 percent of municipalities were kept whole and not divided into different districts. (Trial Tr., Vol. VII at 147:5-20; D004, Hood Rep. at 7).

1111. Based upon the traditional redistricting criteria examined by Dr. Hood, the 2011 Plan was on par with the 2002 Plan. (Trial Tr., Vol. VII at 147:25-148:4).

c. Dr. Hood's Analysis of Proposed Remedial Plan

1112. In contrast to the 2011 Plan, which pairs only three sets of incumbents, Plaintiffs' expert William Cooper prepared a proposed remedial plan paired six sets of incumbents, including John Boehner, the Speaker of the United States House of Representatives at the time the 2011 Plan was enacted. There were four sets of Republican incumbents paired, one set of Democratic incumbents paired, and one set that include one Republican and one Democratic incumbent. (Trial Tr., Vol. VII at 149:8-17; D004, Hood Rep. at 9).

1113. After these incumbents pairing were identified by Dr. Hood in his rebuttal report, Mr. Cooper prepared a "corrected" plan where he eliminated the pairing involving former Speaker of the House John Boehner but left the other three sets of incumbent pairings. (Trial Tr., Vol. VII at 150:1-10).

1114. The mean (or average) core retention for the proposed remedial plan based as compared to the 2002 benchmark plan is only 39.5 percent. (Trial Tr., Vol. VII at 150:11-151:3).

d. Dr. Hood's Analysis of Ohio's Political Geography

1115. Dr. Hood also analyzed Ohio's political geography to examine the distribution of partisans in Ohio to determine the presence of spatial clustering or "natural packing" of voters of one party or the other in Ohio. (Trial Tr., Vol. VII at 151:4-14).

1116. Dr. Hood did this by using VTD-level data and creating a vote index to look at partisanship through the lens of a vote index. He used 15 state-wide elections that occurred prior to the 2012 redistricting plan to create this index. The index uses a two-party share of the vote. The index reflects the proportion of the vote received by Republican candidates and goes from zero to one hundred percent using a red-and-blue color scheme. (Trial Tr., Vol. VII at 151:15-152:23).

1117. Under the pre-2012 election results, the maps produced by Dr. Hood show a much larger Republican footprint outside of urban areas while much of the Democratic footprint is in urban areas like Cleveland, Columbus, Cincinnati, and in the Ohio River Valley. (Trial Tr., Vol. VII at 153:17-154:5).

1118. Based upon these election results from before 2012, 78.5% of Ohio's land area in square miles was comprised of Republican-leaning VTDs while only 21.5% included Democratic-leaning VTDs. (Trial Tr., Vol. VII at 154:6-13).

1119. Dr. Hood performed a statistical test called Moran's I to assess the presence of spatial clustering or geographic clustering. This test showed that Democratic VTDs with similar partisanship tend to geographically cluster next to one another. This result is statistically significant and is a fairly strong relationship. (Trial Tr., Vol. VII at 155:4-25).

1120. Dr. Hood conducted a second test showing that as population density increases – a proxy for urban areas – Democratic partisanship and VTD level also increases. In other words,

Democratic VTDs are more likely to be located in urban areas compared to Republican VTDs. (Trial Tr., Vol. VII at 156:1-18).

1121. Dr. Hood did another VTD-level map based upon elections from 2012, 2014, and 2016. That map, identified as Figure 7 in his report, shows that Democratic areas in the Ohio River Valley have greatly diminished while areas of Democratic strength remain in the urban areas. VTDs in the western and central parts of the state appear more Republican. (Trial Tr., Vol. VII at 168:1-8, 168:12-169:1).

1122. Dr. Hood also created a county-level map showing the numeric increase in the percentage of Republican vote share in these counties from 2012 to 2016 as compared to the 2004 to 2010 election cycles. All 88 of Ohio's counties saw an increase in Republican partisan strength during this time period. Specifically, eleven counties (12.5%) had an increase in Republican vote share the range of 0 to +4.9 %; fifty counties (56.8%) had an increase in Republican vote share in the +5.0 to +9.9% range; and twenty-seven counties (30.7%) were in the +10 to +16.4% range. (Trial Tr., Vol. VII at 169:2-23, 170:10-21).

1123. Dr. Hood prepared an updated version the county-level map that included election results from 2018. Under this analysis, Republican voting strength continued to increase in the Ohio River Valley and the central and western parts of Ohio over the pre-2012 election cycles while Democrats showed gains in Hamilton, Warren, Delaware and Franklin Counties. Overall, Republican voting strength has increased in the vast majority of counties in Ohio across when comparing the 2004 to 2010 election cycles with the 2012 to 2018 election cycles. (Trial Tr., Vol. VII at 178:1-179:17).

e. Dr. Hood's Analysis of Political Performance of the 2011 Plan and Proposed Remedial Plan

1124. Dr. Hood used the index he created to evaluate the 2011 Plan and the districts in the Proposed Remedial Plan for competitiveness. He classified any district at 55% or higher as a "safe" Republican district and any district at 45% or lower as a safe Democratic district. Dr. Hood classified any district between 45 and 50% as "competitive" but Democratic leaning while any district between 50 and 55% was classified as "competitive" but Republican leaning. This definition of competitiveness is commonly accepted in political science. (Trial Tr., Vol. VII at 156:22-157:18).

1125. Classifying a seat as "safe" for one party or the other does not guarantee that the seat is safe for any person who wins that party's nomination. (Trial Tr., Vol. VII at 157:24-158:6).

1126. Dr. Hood used statewide races instead of congressional races because there is no missing data since everyone in the state can vote for these races and congressional elections can be impacted by national forces or be a microcosm within a state. Statewide races are a better gauge because multiple races are available. (Trial Tr., Vol. VII at 158:7-25).

1127. As compared to the 2011 Plan, the proposed remedial plan has one less safe Republican district and one additional competitive Democratic-leaning district. (Trial Tr., Vol. VII at 159:24-160:4).

1128. Other than the partisan makeup of a district, other factors influence the outcome of congressional elections include the candidates and their campaigns, fundraising, media attention, name recognition, incumbency, and factors that are election specific. (7 Tr. 160:10-21). Since World War II, congressional incumbents have been re-elected at a rate of "90-plus percent." (Trial Tr., Vol. VII at 160:23-161:4).

1129. From 2012 through 2018, all incumbents (other than those paired in 2012) have won reelection under the 2011 Plan. (Trial Tr., Vol. VII at 161:5-20).

1130. Lack of quality challengers is another reason why incumbents have won re-election in Ohio. In Ohio congressional elections from 2012 to 2018, most of the challengers were political novices with no prior office holding experience. (Trial Tr., Vol. VII at 162:8-12; 162:25-163:12).

1131. In the 2012 election cycle, Ohio congressional incumbents outraised their challengers by an average of about \$1.2 million. (Trial Tr., Vol. VII at 163:20-164:15; D004, Hood Rep. at 20, Tbl. 19).

1132. Dr. Hood also determined that 50% of the variance in the Efficiency Gap measure from 1992 to 2016 is caused by seat share. (Trial Tr., Vol. VII at 166:20-167:19).

1133. As the seat share in Ohio becomes more evenly balanced, the Efficiency Gap measure moves more within the “acceptable range.” (Trial Tr., Vol. VII at 167:20-25).

1134. Dr. Hood compared each plaintiff’s district under the 2011 Plan using Hood’s vote index to the district to which each plaintiff was assigned in the Proposed Remedial Plan. Only plaintiffs Griffiths in District 7 and Hutton in District 4 would be placed in a district under the Proposed Remedial Plan that would have a better chance of electing a Democratic member of Congress. (Trial Tr., Vol. VII at 170:25-172:4).

1135. Dr. Hood prepared a supplemental report in which he updated his partisan vote index to include the results from the 2018 elections and again looked at factors related to incumbency, campaign contributions, and challenger equality from the 2018 election. (Trial Tr., Vol. VII at 175:9-25).

1136. In 2018, one seat was open and incumbents won all fifteen other seats which is consistent with the pattern that Ohio congressional incumbents are almost always reelected. (Trial Tr., Vol. VII at 176:1-9).

1137. Dr. Hood found that challenger quality again contributed to these results as only three challengers to incumbents had held any prior elective experience. In 2018, incumbents outraised challengers in 12 of the 16 races; and in those races, the incumbent outraised the challenge by an average of \$1.03 million. (Trial Tr., Vol. VII at 176:18-177:13).

1138. In the open seat, the successful Republican candidate outraised the Democratic candidate by approximately \$1.6 million. (Trial Tr., Vol. VII at 177:14-23).

V. Plaintiffs Lack Standing And Rarely, If Ever, “Benefit” From The Proposed Remedial Plan

A. Individual Plaintiffs/Fact Witnesses

a. First District – Linda Goldenhar

1139. Dr. Linda Goldenhar has resided in Ohio’s First Congressional District in Cincinnati for 17 years. (Deposition of Linda Goldenhar, ECF No. 230-15 (“Goldenhar Dep.”) at 7:5-12). While Dr. Goldenhar is a Democrat and has always voted for Democrats, she would consider voting for a Republican candidate if that candidate supports the policies and ideals she supports. (*Id.* at 13:4-10, 13:16-14:4).

1140. Dr. Goldenhar’s current representative, Steve Chabot, is a Republican. (*Id.* at 11:7-19). Mr. Chabot has represented the First Congressional District continuously since 1994, except for one term where the district was represented by Democrat Steve Driehaus. (*Id.* at 11:7-19). While Representative Chabot was not her candidate of choice, he has represented Dr. Goldenhar for nearly all of her time living in Cincinnati, including before the 2011 Plan was enacted. (*Id.* at 11:7-19; 54:19-20).

1141. Dr. Goldenhar was asked by ACLU employee Laurie Briggs to be a plaintiff in this lawsuit. (*Id.* at 16:3-17:3). Ms. Briggs knows Dr. Goldenhar socially, and sent Dr. Goldenhar an email stating that the ACLU's research showed the map was unfair and that the ACLU was seeking a plaintiff from each district. (*Id.* at 17:4-12; 24:17-25:16).

1142. While Dr. Goldenhar believes that individuals choose to live in an area surrounded by like-minded people and that her urban vote is "diluted" by rural Republican votes, (*Id.* at 43:2-44-13), she admits that when she votes, her vote, is in fact, counted (*Id.* at 41:13-17).

1143. Dr. Goldenhar also believes that the map is unfair because of the way it looks, in that urban areas like Cincinnati, Columbus, and Cleveland are split. (*Id.* at 30:8-23) However, Dr. Goldenhar did not know the reasons for splitting those urban areas, and did not know if each Congressional district needed to have a certain, equal, population. (*Id.* at 40:7-17).

1144. Moreover, Dr. Goldenhar has no suggestions on how to fix the current congressional maps and would simply like to know "why" the legislature drew them in that manner. (*Id.* at 46:15-47:13).

1145. Dr. Goldenhar has reviewed Cooper's proposed map and prefers it to the current plan because it looks "fairer." (*Id.* at 47:22-48:14, 49:4-11). Specifically, Dr. Goldenhar likes the way that the districts around Cincinnati, Columbus, and Cleveland are drawn but did not provide more specific details. (*Id.* at 48:5-14).

1146. While Dr. Goldenhar claims the 2011 Plan harms her because it splits Hamilton County, she prefers the Proposed Remedial Map even though it also splits Hamilton County. (*Id.* at 49:12-16).

1147. Under the Proposed Remedial Plan,⁶ Dr. Goldenhar would be placed in the First District where Republicans have a majority of the vote share under the three congressional elections cited in Cooper’s report. (PX091, Revised Cooper Rep. at Ex. S). This is the same result as under the 2011 Plan. (*Id.*)

b. Second District - Douglas Burks

1148. Douglas Burks lives in Ohio’s 2nd Congressional District. (Trial Tr., Vol I at 225:13-14). Mr. Burks’ current congressional representative is Brad Wenstrup. (Trial Tr., Vol I at 241:14-17).

1149. Mr. Burks “identifies” with the Democratic Party. (Trial Tr., Vol I at 224:20-22). He has voted Democrat in “each and every election” since the 2012 map was passed. (Trial Tr., Vol I at 225:17-22).

1150. Mr. Burks testified that he has voted for a Republican candidate in the past. (Trial Tr., Vol I at 250:7-10). He also agreed that people can change their partisan ideologies or their voting preference over time. (Trial Tr., Vol I at 250:18-25).

1151. Mr. Burks testified that he does not believe that he has a constitutional right to have his representative agree with him on issues that he feels are important. (Trial Tr., Vol I at 246:23-247:1). Mr. Burks also testified that he does not believe he has a constitutional right to have his representative vote the way he wants him to vote on specific legislation. (Trial Tr., Vol I at 247:2-5).

1152. Mr. Burks testified that has engaged in numerous political activities in his district—including voting, canvassing, donating money to a political campaign, and lobbying. (Trial Tr., Vol I at 23:15-21). Mr. Burks admits that there is nothing “about the way in which District 2 is

⁶All references to the Proposed Remedial Plan are to the “corrected” Proposed Remedial Plan which Cooper testified that he intended to be the “operative” Remedial Plan for Plaintiffs after he submitted it on November 30, 2018. (P091).

drawn that's prohibited [him] from engaging in any of these activities.” (*Id.*; *see also* Trial Tr., Vol I at 247:12-15).

1153. He has also participated in protests in Ohio and nothing about the 2011 Plan has kept him from doing that. (Deposition of Douglas Burks, ECF No. 230-8 (“Burks Dep.”), at 119:24-120:10)

1154. Mr. Burks testified that he was constitutionally harmed by the way the district lines are drawn for all Ohio districts, not just his own district. (Trial Tr., Vol I at 254:15-20).

1155. Through this lawsuit, Mr. Burks believes he is challenging what he perceives to be an uneven split between Republicans and Democrats in the makeup of Ohio’s statewide congressional delegation. (Burks Dep at 38:15-42:4; 45:23-47:16). He also feels that Democratic votes are “wasted” in Ohio because of the way the Republican legislature “rigged” the 2011 Plan but could not state at what point a district becomes “rigged.” (Burks Dep. at 42:5-42:23).

1156. Mr. Burks testified that he was harmed by the 2012 map because it prevents “good candidates” from running in predominately Republican districts, like District 2. (Trial Tr., Vol I at 240:1-5). Mr. Burks, however, also testified that he voted for the Democratic candidate, Jill Schiller, for U.S. Congress and agreed that she was not a “bad candidate.” (Trial Tr., Vol I at 240:8-12). Further, Mr. Burks agreed that “nothing about the 2012 plan and the way the lines were drawn prevented [him] from going about and engaging with [Ms. Schiller’s] campaign and handing out literature.” (Trial Tr., Vol I at 240:13-16; *see also* 239:19-22).

1157. Mr. Burks testified that he is a member the Friends Committee on National Legislation, a non-partisan lobby group. (Trial Tr., Vol I at 232:21-224, 233:12-13).

1158. As part of his affiliation with the Friends Committee on National Legislation, Mr. Burks has lobbied many political figures—including Brigid Kelly, Steve Chabot, Brad Wenstrup, Sherrod Brown, and Rob Portman. (Trial Tr., Vol I at 233:4-6).

1159. In regard to lobbying Representative Wenstrup, Mr. Burks testified that he “felt that in our lobbying Representative Wenstrup we always were enabled to do our petitioning. We went in and we talked about many issues, we were listened to in a courteous, [and] attentive way.” (Trial Tr., Vol I, at 233:14-18).

1160. Mr. Burks has lobbied Representative Wenstrup on numerous occasions; in fact, he has met with Representative Wenstrup “at least four, maybe five” times. (Trial Tr., Vol I at 241:18-21).

1161. Mr. Burks also testified that he has communicated by letter with Representative Wenstrup. (Trial Tr., Vol I at 248:3-7). In that correspondence, Mr. Burks agreed that the Representative Wenstrup told Mr. Burks that his “thoughts were important” and that “[Representative Wenstrup] wanted to work to effectively represent [Mr. Burks] in [the] nation’s capital.” (Trial Tr., Vol I at 248:12-17).

1162. Mr. Burks testified that he has also met with Representative Wenstrup’s district director and deputy director. (Trial Tr., Vol I at 242:7-13). Mr. Burks agreed that he had “good discussions with these individuals.” (Trial Tr., Vol I at 242:14-19). He described the meetings as “cordial” and “civil,” and testified that “people were attentive on both sides.” *Id.* Mr. Burks further testified:

We tried to be polite. We tried to build a relationship. We tried to work in a non-partisan way. And I think what I was trying to convey is that Representative Wenstrup’s office gave us those same courtesies.

(Trial Tr., Vol I at 244:21-245:1).

1163. Following his meetings with Representative Wenstrup's district and deputy directors, Mr. Burks noted that the Representative's "aides seemed receipt to both of the concerns presented and [even] voiced some support." (Trial Tr., Vol I at 242:7-10; 244:7-10).

1164. In an email to Representative Wenstrup following one of his meetings, Mr. Burks thanked the Representative and his staff "for always being willing to meet with [Mr. Burk's] group and for the civil and respectful conversations. ((Trial Tr., Vol I at 245:25-246:4).

1165. Mr. Burks admits that he believes Representative Wenstrup "has respected [his] First Amendment rights to petition the government." (Trial Tr., Vol I at 246:15-17)

1166. Mr. Burks complained that while his meetings with Representative Wenstrup were "cordial [and] polite," they "had little impact on outcome" and he had never gone into Representative Wenstrup's office "with the delusion that we were going to be successful." (Trial Tr., Vol I at 246:19-22). However, Mr. Burks admits that he does not have a constitutional right to have his representative agree with him on issues that he feels are important or vote in the manner that he feels is appropriate. (Trial Tr., Vol I at 246:23-247-5).

1167. Mr. Burks testified that he also met with Republican Senator Rob Portman. (Trial Tr., Vol I at 249:15-23).

1168. After meeting with Senator Portman, Mr. Burks sent an email in which he stated that his meeting with Senator Portman "renewed [his] faith in the Democratic process." (Trial Tr., Vol I at 249:24-250:6). Mr. Burks testified that he felt this way "because [he] was allowed to petition [his] officially elected representative." (Trial Tr., Vol I at 250:2-6).

1169. Dr. Burks became a plaintiff in this lawsuit after being asked by Paul Moke at the ACLU. (Burks Dep. at 11:12-14:16; 15:11-16). He would never have considered filing a lawsuit on his own if he had not been approached by the ACLU. (Burks Dep. at 16:11-16:16).

c. Third District - Sarah Inskeep

1170. Ms. Inskeep has resided in Ohio's Third Congressional District in Columbus since May 2016. (Deposition of Sarah Inskeep, ECF No. 230-21 ("Inskeep Dep.") at 6:19-7:2). Ms. Inskeep is a Democrat and has always voted Democrat but would "absolutely consider" voting for a Republican or an independent candidate who supports policies that she supports. (*Id.* at 65:20-66:19).

1171. Ms. Inskeep is currently represented in Congress by Representative Joyce Beatty. (*Id.* at 11:25-12:7). Representative Beatty is a Democrat and Ms. Inskeep testified that she wants to live in a district that is represented by Democrat because they "support the values that [she] share[s]." (*Id.* at 56:11-56:17; 63:16-64:5).

1172. Prior to May 2016, Ms. Inskeep lived in Cincinnati, Ohio in Ohio's First Congressional District. (*Id.* at 7:3-8:19; 27:19-28:10). She prefers living in the Third Congressional District where she is represented by a Democrat over living in the First Congressional District where she was represented by a Republican. (*Id.* at 57:6-16). She believes Representative Beatty has been a "wonderful representative" and that she has "made herself available" to the people in her district. (*Id.* at 57:10-57:16).

1173. Ms. Inskeep was asked by an employee of the ACLU, Ann Ruege, to be a plaintiff in this lawsuit. (*Id.* at 29:15-32:11). She would not have filed this lawsuit on her own if she had not been recruited by the ACLU. (*Id.* at 32:12-32:15).

1174. Ms. Inskeep works at Planned Parenthood where she is tasked with crafting all internal and external messaging of the organization's political arm. (*Id.* at 9:3-9:15). She also participates in electoral activity on the organization's behalf. (*Id.* at 9:3-9:15; 10:13-11:19; 13:3-13:24; 14:6-21:19; 80:12-87:13). She raised money for the organization's Super PAC, ran door-to-door canvassing, ran phone bank operations, and directed voter contact operations. (*Id.*) In 2018,

Planned Parenthood's political arm endorsed Joyce Beatty, Marcia Fudge, and Tim Ryan, all Democratic victorious congressional candidates in Ohio. (*Id.* at 11:20-13:2).

1175. Ms. Inskeep complained that the 2011 Plan negatively impacted Planned Parenthood's decision on where its PAC should spend election money. (*Id.* at 93:9-93:13). Specifically, the PAC chose not to contribute to Representative Beatty in the Third District because it was believed to be a foregone conclusion that she would win. (*Id.* at 93:17-93:24). Ms. Inskeep admitted, however, that had the PAC become involved in the Third District, it would have been to support Representative Beatty. (*Id.* at 94:14-95:8). Ms. Inskeep could not explain how she was harmed by the PAC's decision not to become involved in the Third District since her candidate of choice, Representative Beatty, won the election. (*Id.* at 94:14-95:10).

1176. Ms. Inskeep wants a map "that gives voters an opportunity to feel like their vote matters and that they feel like they're participating in a democratic process." (*Id.* at 39:6-40:5). She believes that one way to show that a district is not fair is when it splits communities of interest but she could not identify any communities that she believes should be included in her district under the 2011 Plan but are not. (*Id.* at 42:22-45:5, 45:23-47:2;74:23-75:6). Ms. Inskeep believes that the 2011 Plan has increased voter apathy, but admits that voter apathy existed prior to 2012 and could not articulate how the 2011 Plan has actually increased voter apathy. (*Id.* at 90:8-93:7).

1177. Ms. Inskeep believes that the current congressional map as a whole is "unfair and not competitive" and believes that she lives in a "packed" district and that her vote is not "weighed the same" but admitted that all votes are counted equally regardless of whether they are cast by a Democrat or a Republican. (*Id.* at 33:13-34:2; 51:1-12).

1178. Ms. Inskeep believes she is in a "packed" district because her "district looks like a box" and because it is a majority Democratic district. (*Id.* at 70:10-70:24; 73:5-73:15). She does

not believe that every district that is a majority Democratic district is unfair or noncompetitive and does not have any specific suggestions on how to “fix” the alleged problem she identified in her district. (*Id.* at 73:16-74:21; 97:7-100:15). She also does not have any opinion on when a district becomes “packed.” (*Id.* at 78:16-80:9).

1179. Under the Proposed Remedial Plan, Ms. Inskeep remains in the Third District, a safe Democratic seat. (PX091, Revised Cooper Rep. at Ex. S).

d. Fourth District - Cynthia Libster

1180. Cynthia R. Libster lives in Marion County, Ohio which is located in Ohio’s Fourth Congressional District. (Deposition of Cynthia Libster, ECF No. 230-30 (“Libster Dep.”) at 10:12-21). She has lived in this district for almost thirty years. (*Id.*). Her representative since 2006 has been Jim Jordan, a Republican. (*Id.* at 10:21-11:25). Previously, Ms. Megnin was represented by Republican Congressman Mike Oxley since the 1980s. (*Id.* at 10:21-11:25)

1181. Ms. Libster’s husband was contacted by an acquaintance asking him if he would be interested in participating in a lawsuit regarding the alleged gerrymandering in Ohio. (*Id.* at 15:16-17:2). He declined because he felt that his former position as a legal aid attorney made it inappropriate, however, he asked his wife, Ms. Libster if she wanted to participate. (*Id.* at 15:16-21). She was then interviewed by the ACLU and joined the lawsuit. (*Id.* at 15:16-17:2). Prior to joining the lawsuit, she had no intention of filing a lawsuit related to redistricting in Ohio. (*Id.* at 17:10-14).

1182. Ms. Libster wants her “district to have an opportunity for both Democrats and Republicans to run equally.” (*Id.* at 23:24-24:6). However, she does not know how what such a district would look like. (*Id.* at 23:24-25:11). She admits that her district is “very Republican” and that a Republican has represented her district for the last thirty years. (*Id.* at 26:24-27:21; 48:21-

49:9). She testified she believes her district has been cracked in some areas, but could not say specifically how. (*Id.* at 72:15-21).

1183. While Ms. Libster criticized an alleged nonappearance by Representative Jordan's at a forum put on by the League of Women Voters, she admitted that she was unsure as to whether Representative Jordan had a conflict that prohibited him from attending the forum. (*Id.* at 30:19-33:18). In any event, Ms. Libster chose not to attend the candidate forum (*Id.* at 30:21-22).

1184. Although Ms. Libster admitted that her district was "solidly Republican," she testified that "I don't want to feel like every time I go vote for the Democrat they're going to get pounded by thirty percent, forty percent." (*Id.* at 28:24-29:12).

1185. Under the Proposed Remedial Plan, Ms. Libster remains in the Fourth District, a solidly Republican District, but the district has an even higher Republican vote share under the Proposed Remedial Plan than under the 2011 Plan. (PX091, Revised Cooper Rep. at Ex. S).

e. Fifth District - Stephanie White (Fact Witness)

1186. Stephanie White lives in Ohio's 5th Congressional District. (Trial Tr., Vol I at 109:10-11, 109:16-19).

1187. Ms. White's current congressional representative is Bob Latta. (Trial Tr., Vol I at 110:10-11).

1188. Ms. White has been a registered Democrat for 15 years. (Trial Tr., Vol I at 112:8-9).

1189. Ms. White never has voted for a congressional candidate that is not a Democrat. (Trial Tr., Vol I at 113:3-15).

1190. Ms. White has been a member of APRI since 2015. (Trial Tr., Vol I at 111:16-17). Currently, she serves as the vice president of the Toledo Chapter. (Trial Tr., Vol I at 111:5-7). Ms. White has served in this role since 2017. (Trial Tr., Vol I at 111:10-12).

1191. Prior to serving as vice president, Ms. White served as the secretary of APRI from 2016 to 2017 and the treasurer from 2015 to 2016. (Trial Tr., Vol I at 111:13-15).

1192. Ms. White is also a member of the UAW. (Trial Tr., Vol I at 109:8-9).

1193. Through her work for APRI and the UAW, Ms. White spends most of her time in District 9. (Trial Tr., Vol I at 117:2-6; 117:11-13). Marcy Kaptur, a Democratic member of Congress, is the congressional representative for District 9. (Trial Tr., Vol I at 116:14-17).

1194. Ms. White testified that the issues of “healthcare reform, immigration, and unions” are especially important to her. (Trial Tr., Vol I at 113:8-8).

1195. Ms. White testified that Representative Latta does not represent her interests with regards to these issues. (Trial Tr., Vol I at 113:19-114:13). But Ms. White does not believe that she is entitled to have a congressional representative that agrees with her on every issue. (Trial Tr., Vol I at 125:1-6). Ms. White never has written a letter to or tried to communicate with Congressman Latta about these, or other, issues. Trial Tr., Vol I at 123:9-12).

1196. Ms. White testified that Representative Latta does not have a presence in District 5 because she has not seen him at any campaign rallies or events, or town halls. (Trial Tr., Vol I at 116:11-16, 116:23-25). Ms. White testified, however, that she has seen other Republican candidates at rallies. (Trial Tr., Vol I at 125:24-126:1). And Ms. White has never invited Congressman Latta to a townhall in her area. (Trial Tr., Vol I at 123:13-16).

1197. Other than voting for a Democratic representative, Ms. White offers support to Democratic candidates through door-to-door canvassing, phone banking, and attending voter registration drives. (Trial Tr., Vol I at 118:1-6).

1198. Ms. White has engaged in canvassing efforts in both District 5 and District 9. (Trial Tr., Vol I at 116:20-117:2).

1199. Ms. White believes she has been harmed by the “design” of District 5 because her vote does not count in that district. (Trial Tr., Vol I at 115:25-126:3). But Ms. White also believes that she is not entitled to always have a congressional representative from her political party. (Trial Tr., Vol I at 116:4-6). Ms. White agreed that Ohio congressional lines do not prevent her from communicating her viewpoints to any congressperson, irrespective of political affiliation. (Trial Tr., Vol I at 123:20-23).

1200. Ms. White testified that she has been harmed by the current map because it has negatively impacted her canvassing, phone banking, and voter registration efforts. (Trial Tr., Vol I at 119:3-19; 120:4-11). Ms. White testified that she had to spend more time educating people and convincing them to vote. (Trial Tr., Vol I at 119:3-8, 120:4-11).

1201. Ms. White agreed that voters are apathetic for many reasons. (Trial Tr., Vol I at 121:18-122:1, 122:6-10). Ms. White further agreed that voter apathy has been a problem in America for decades; and this why she continues her efforts to educate voters and increase voter participation. (Trial Tr., Vol I at 122:11-13, 121:18-20).

1202. Ms. White testified that voters are harmed by the current maps because they are confused about what district they are in and who represents them. (Trial Tr., Vol I at 120:12-18). But Ms. White also testified that she was not working with APRI prior to 2015 and thus does not know if voters were equally as confused before the current map was enacted. (Trial Tr., Vol I at 124:10-15).

1203. Ms. White’s goal in this litigation is to “see fair districting lines and to make sure everybody’s vote counts.” (Trial Tr. at 10:19-23). But Ms. White testified that the current district lines have not stopped her from voting in any election. (Trial Tr., Vol I at 123:18-21).

f. Fifth District – Kathy Deitsch

1204. Plaintiff Kathy Deitsch has resided in Mercer County and Celina, Ohio since 2013. (Deposition of Kathy Deitsch “Deitsch Dep.” at 10:21-23; 11:7-8). Before 2013, Ms. Deitsch lived in another state. (*Id.* at 11:16-18).

1205. Ms. Deitsch’s address is in Ohio’s Fifth Congressional District, and her current representative is Bob Latta, a Republican. (*Id.* at 14:3-10).

1206. Representative Latta has served as Ms. Deitsch’s congressional representative since her move to Ohio in 2013 and represented the Fifth District before the 2011 Plan. (*Id.* at 14:16-19).

1207. Although Ms. Deitsch does not support Representative Latta, she has voted for Republican candidates in the past. (*Id.* at 16:14-24). She also would consider voting for Republicans in the future if she believed they represented “responsible government.” (*Id.* at 18:24-25). Despite not supporting Mr. Latta, Ms. Deitsch could not specify anything Representative Latta had said or done that made her feel that he lacked knowledge of or concern for Mercer County. (*Id.* at 82:14-19).

1208. Despite alleging in the complaint that she lives in a cracked district, Ms. Deitsch could not define the term “cracked” or state why she believed she lived in a cracked district. (*Id.* at 65:7-8). She testified that she had heard the terms “cracking and packing,” but could only describe packing as what “you put things in.” (*Id.* at 65:14).

1209. Although Ms. Deitsch suspects that the division of Mercer County contributes to voter confusion and voter apathy, Ms. Deitsch noted that she has consistently been able to help voters figure out what districts they live in. (*Id.* at 53:15-23).

1210. Since moving to Ohio in 2013, Ms. Deitsch has been able to vote and campaign for Democrat candidates of her choice in every congressional election. (*Id.* at 15:12-16:13; 48:5-8;

30:25-31:6). In fact, Ms. Deitsch believes that the 2012 map has “encouraged” some of her efforts to recruit Democrat candidates and engage in Get Out the Vote efforts. (*Id.* at 84:6-24; 86:24-87:5).

1211. Ms. Deitsch testified that Mercer County is in a reliably conservative part of the state and described the area as “Trumpland” and as “a really predominant, strong Republican rural area.” (*Id.* at 13:19-14:2; 35:8-9; 106:21-107:25).

1212. Under the Proposed Remedial Plan, Ms. Deitsch would be assigned to the Fourth District, which, like the Fifth District under the 2011 Plan, is a “safe” Republican district. (PX091, Revised Cooper Rep. at Ex. S).

g. Sixth District – Luann Boothe

1213. Ms. Boothe has lived in Jefferson County in Ohio’s Sixth Congressional District for 64 years, her entire life. (Deposition of Luann Booth “Boothe Dep.” at 7:25-9:4).

1214. Ms. Boothe became a plaintiff in this lawsuit after a law school friend of her son, Kyle Hutnick, referred the ACLU to her. (*Id.* at 9:14-14:7). Ms. Boothe did not have any plans to file a lawsuit until she was contacted by the ACLU. (*Id.* at 93:21-94:7).

1215. Ms. Boothe is a Democrat, but has voted for Republicans in the past, and admits that she could potentially vote Republican in the future. (*Id.* at 49:8-49:10; 49:25-50:18; 103:15-103:18). She is not always a “straight ticket” voter. (*Id.* at 52:23-53:8).

1216. Ms. Boothe does not like how Republican her district has become and believes it was more competitive when she was growing up in the 1970s than it is now. (*Id.* at 19:21-22:6). But Ms. Boothe did not recall the electoral results in her district during the time in which she lived in it and didn’t know if her area of the state has become more Republican since her childhood as a result of factors other than the 2011 Plan. (*Id.* at 36:8-36:25, 40:4-41:19; 54:23-55:24).).

1217. Ms. Boothe believes that her community of interest includes Jefferson, Harrison, Carroll, and Belmont counties, all of which are included in the Sixth District under the 2011 Plan. (*Id.* at 58:19-59:20; 68:2-69:15; 70:18-70:21).

1218. Ms. Boothe claims that her current congressional representative, Republican, Bill Johnson, is not as responsive as her previous Democratic Representative, Charlie Wilson. (*Id.* at 38:5-8; 41:20-41:23). But she admits that she has not tried to contact Representative Johnson recently. (*Id.* at 42:13-42:15). She also has not written Representative Johnson any letters or tried to visit him at his offices. (*Id.* at 43:9-43:14). She admits that nothing about the 2011 Plan prevents her from trying to contact Congressman Johnson. (*Id.* at 43:15-43:21).

1219. Ms. Boothe thinks the 2011 Plan has caused her harm because she believes her district is too partisan and people were “rude and obnoxious” to her when she canvassed. (*Id.* at 16:5-18:19). Ms. Boothe, however, admitted that she could not say whether her experiences were the result of the 2011 Plan or other factors such as national political attitudes and does not know the political affiliation of the individuals who were “rude and obnoxious” to her when she canvassed. (*Id.* at 19:2-19:20, 72:2-73:5, 94:8-98:15).

1220. Ms. Boothe admitted that she has always been able to cast a valid ballot under the 2011 Plan. (*Id.* at 29:20-30:10). She admitted that voting under the 2011 Plan “requires an effort like it always did” prior to the enactment of the plan and that she “will make the effort to vote.” (*Id.* at 30:4-30:10). She also admits that the current Plan has not prevented her from engaging in organizing or other election-related activities in her district. (*Id.* at 57:11-57:13; 64:18-66:15).

1221. Ms. Boothe believes her vote “doesn’t carry any weight” because she lives in a majority Republican district. (*Id.* at 53:9-53:13). But she admits that both Republican and Democrat votes are counted equally when they are cast in her district. (*Id.* at 53:14-53:18) She

does not know what percentage of Democrat voters would need to be placed into her district in order for her to feel the district was “competitive.” (*Id.* at 58:25-59:7; 75:7-75:11).

1222. Ms. Boothe was unsure of whether she wanted the Court to adopt the Proposed Remedial Plan. (*Id.* at 60:18-64:12). Under the Proposed Remedial Plan, Ms. Boothe is assigned to the Sixth District just as she is under the 2011 Plan, however, the Democratic Party vote share in the Sixth District under the Proposed Remedial Plan would be lower than under the 2011 Plan when evaluated under the election statistics cited in Cooper’s report and the Republican vote share in the District would remain majority Republican. (PX091, Revised Cooper Rep. at Ex. S).

h. Seventh District – Mark Griffiths

1223. Mark Griffiths lives in Ohio’s 7th Congressional District. (Trial Tr., Vol II at 40:15-19). He is represented in Congress by Republican Bob Gibbs. (Trial Tr., Vol II at 40:20-23; *see also* Trial Tr., Vol II at 47:6-9).

1224. Mr. Griffiths is a registered Democrat. (Trial Tr., Vol II at 40:24-25).

1225. Mr. Griffiths testified that he votes “[w]henver [he] can.” (Trial Tr., Vol II at 41:9-10).

1226. Mr. Griffiths testified that party affiliation is not the sole reason he would vote for a political candidate, including a congressional candidate. (Trial Tr., Vol II at 56:13-19).

1227. Mr. Griffiths testified that in some circumstances he would vote for a Republican candidate if he believed the Republican candidate to be the better option. (Trial Tr., Vol II at 56:9-12).

1228. Mr. Griffiths testified that he has voted for a Republican on at least one occasion—in 2016, Mr. Griffiths voted for Republican Senator Rob Portman. (Trial Tr., Vol II at 41:24-42:1, 55:23-25).

1229. Mr. Griffiths testified that he voted for Senator Portman because he believed him to be the better candidate and the candidate with more experience. (Trial Tr., Vol II at 56:1-8).

1230. Since early 2017, Mr. Griffiths has “been involved in a number of political activist organizations”—including Lorain County Rising, Indivisible in Wellington, League of Women Voters in Oberlin, and the North Ridgeville Democratic Club. (Trial Tr., Vol II at 42:6-14).

1231. Mr. Griffiths testified that the Lorain County Rising operates in Ohio’s 4th Congressional District. (Trial Tr., Vol II at 42:23-43:1).

1232. Mr. Griffiths testified that his role in the Lorain County Rising group has been to participate in demonstrations, voter registration drives, and canvassing. (Trial Tr., Vol II at 42:15-22, 43:2-6).

1233. Mr. Griffiths testified that the Oberlin Chapter of the League of Women Voters also operates in District 4. (Trial Tr., Vol II at 43:23-44:2).

1234. As a member of the Oberlin Chapter of the League of Women Voters, Mr. Griffiths has “participated in voter registration activities and in circulating the gerrymandering petition and support for Issue 1.” (Trial Tr., Vol II at 43:18-22).

1235. Mr. Griffiths testified that Indivisible in Wellington—a progressive activist organization—operates in District 7. (Trial Tr., Vol II at 44:3-6).

1236. Mr. Griffiths testified that the North Ridgeville Democratic Club “is a group of Democrats in North Ridgeville.” (Trial Tr., Vol II at 45:12-14).

1237. Mr. Griffiths testified that the North Ridgeville Democratic Club was “out of existence for a number of years,” but through his efforts since the 2016 election, the club has been revived. (Trial Tr., Vol II at 45:16-22, 45:25-46:9).

1238. Mr. Griffiths testified that Representative Gibbs did not represent him on the issue of healthcare. (Trial Tr., Vol II at 48:19-22).

1239. But Mr. Griffiths testified that as part of his involvement with the Indivisible in Wellington, he has had the opportunity to meet with Representative Gibbs on two occasions in which healthcare was discussed. (Trial Tr., Vol II at 48:22-23).

1240. On the first occasion, Mr. Griffiths met with Representative Gibbs at Representative Gibbs' district office in Canton, Ohio. (Trial Tr., Vol II at 48:24-25).

1241. On the second occasion, Mr. Griffiths met with Representative Gibbs at Representative Gibbs' office in Ashland, Ohio. (Trial Tr., Vol II at 48:25-49:1).

1242. Mr. Griffiths testified that by meeting with the Indivisible in Wellington group, Representative Gibbs was agreeing to meet with his opposition. (Trial Tr., Vol II at 57:22-25).

1243. Mr. Griffiths testified that the members of Indivisible in Wellington were able to share their views with Representative Gibbs—specifically, on the issue of the healthcare and the Affordable Care Act. (Trial Tr., Vol II at 58:1-5).

1244. Mr. Griffiths testified that he felt, in part, that Representative Gibbs was unresponsive to him because Representative Gibbs did not ultimately change his positions on healthcare and the Affordable Care Act. (Trial Tr., Vol II at 58:10-13).

1245. Mr. Griffiths admitted that he doesn't "expect a Congressman to always agree with [his] views," so long as the Congressman "take[s] [his] views into account and pay[s] attention to them." (Deposition of Mark Griffiths ("Griffiths Dep."), at 63:4-8).

1246. Mr. Griffiths acknowledged that Representative Gibbs' multiple meetings with these groups showed that Representative Gibbs took Mr. Griffiths' and Democrats' views into account. (Griffiths Dep. at 63:10-15).

1247. Mr. Griffiths testified that when he discovered that there were five congressional representatives with offices closer to his house than any of Representative Gibbs' offices, he thought that Representative Gibbs "was not someone that was representing [his] community." (Trial Tr., Vol II at 49:13-18).

1248. Mr. Griffiths testified that he was harmed by the 2012 map because Representative Gibbs had a strong base regardless of whether he garnered Democratic support and thus does not "need to care about [Mr. Griffiths' views]. (Trial Tr., Vol II at 51:2-8, 53:20-24).

1249. Mr. Griffiths has attempted to contact Representative Gibbs or his office 10 to 15 times, either by emails, phone calls, or letters. (Trial Tr., Vol II at 53:25-54:1). Mr. Griffiths testified that he talked to one of Representative Gibbs staffers 6 to 8 times. (Trial Tr., Vol II at 54:2-3). Mr. Griffiths received a couple of letters back from Representative Gibbs—although Mr. Griffiths testified the letters "were rather ineffective or did not necessarily address the issue that [he] was raising." (Trial Tr., Vol II at 54:5-7).

1250. Mr. Griffiths testified that he was aware of two instances in which Representative Gibbs was in Mr. Griffiths' community of North Ridgeville—one time to meet with the chamber of commerce and another time to meet with a local business. (Trial Tr., Vol II at 54:6-12).

1251. Mr. Griffiths testified that he was not aware that Representative Gibbs was in North Ridgeville in October 2017 for a forum on tax reform. (Trial Tr., Vol II at 61:10-14).

1252. As part of his involvement with the Indivisible of Wellington group, Mr. Griffiths was "very involved with the Ken Harbaugh campaign." (Trial Tr., Vol II at 44:19-23; *see also* Trial Tr., Vol II at 58:18-22). Ken Harbaugh was the Democratic candidate running against Representative Gibbs in the 2018 election. (Trial Tr., Vol II at 44:22-23).

1253. During his canvassing efforts, Mr. Griffiths testified that he took notes regarding his interaction with voters. (Trial Tr., Vol II at 58:23-25).

1254. Mr. Griffiths testified that most voters in District 7 that he spoke with had not yet decided which candidate to vote for in the 2018 election. (Trial Tr., Vol II at 60:12-24). In other words, the District 7 voters had not yet decided to vote for the Republican candidate, Bob Gibbs. (Trial Tr., Vol II at 60:20-24).

1255. Mr. Griffiths testified that he was harmed by the 2012 map because in canvassing throughout his district and through his voter registration efforts, he encountered voter apathy and confusion. (Trial Tr., Vol II at 52:1-13, 52:22-53:5).

1256. Mr. Griffiths testified that with a telephone application for the Ohio Secretary of State's office, he was able to determine the district for each voter that was confused about to which district they belonged. (Trial Tr., Vol II at 53:6-10).

1257. Mr. Griffiths testified that he was experienced apathy and a lack of interest from voters in this attempt to revive the North Ridgeville Democratic Club because they thought their efforts would not make a difference. (Trial Tr., Vol II at 53:11-19).

1258. Mr. Griffiths also testified that he has been able to grow the size of the North Ridgeville Democratic Club significantly over the last eighteen months. (Trial Tr., Vol II at 45:25-46:9).

i. Eighth District – Larry Nadler

1259. Mr. Nadler has lived in Oxford, Ohio, in the Eighth District for 28 years. (Deposition of Larry Nadler "Nadler Dep." at 6:18-7:15). Mr. Nadler is a Democrat, who has voted for Democrats, with one exception, during his time in the Eighth District. (*Id.* at 8:4-20). However, Mr. Nadler stated that he doesn't "blindly" vote by party, and would consider voting for candidates other than Democrats under the right circumstances. (*Id.* at 11:7-25).

1260. Mr. Nadler is currently represented by Representative Warren Davidson, a Republican, who was not his candidate of choice. (*Id.* at 29:12-19). A Republican has also represented Mr. Nadler in the Eighth District for the last 28 years, including former Speaker of the House John Boehner. (*Id.* at 31:24-33:24) Mr. Nadler admits that a Republican has represented Ohio's Eighth Congressional District since 1939. (*Id.* at 31:24-33:24). Mr. Nadler further admits that Representative Davidson is involved in his community and sends a congressional aide to his town every month to hear constituent concerns, which Mr. Nadler and his wife routinely attend. (*Id.* at 29:18-30:4).

1261. Mr. Nadler was asked to be a plaintiff in this lawsuit by an executive board member of the Oxford League of Women Voters, Jenny Fisher, and Counsel for the ACLU. (*Id.* at 12:20-13: 14). Mr. Nadler did not seek out an opportunity to become a plaintiff, and in fact, was not specifically targeted as the plaintiff for the Eighth District, as Ms. Fisher sent an email to multiple individuals seeking participation in this lawsuit. (*Id.* at 15:3-16:3).

1262. Mr. Nadler has been concerned about gerrymandering "for a long time" because "it's been around for a long time." (*Id.* at 25:9-15). Mr. Nadler believes that the districts, including his own district, should be indicative of the area they represent, but admits that he has no constitutional right to be represented by someone who holds his same values. (*Id.* at 43:8-23; 48:11-14). In fact, Mr. Nadler admits that his current Republican representative was elected "fair and square." (*Id.* at 40:25-41:15).

1263. Mr. Nadler believes that he is harmed by the 2011 Plan due to the way other districts in the state are drawn, including around Columbus, and Cincinnati. (*Id.* at 43:20-44:8; 55:9-19; 81:14-82:8).

1264. Mr. Nadler could not identify any concern with his district that would be resolved by the Proposed Remedial Plan. (*Id.* at 66:22-67:9)

1265. Under the Proposed Remedial Plan, Mr. Nadler remains in the Eighth District in which Republicans received a majority of the vote share. (PX091, Revised Cooper Rep. at Ex. S).

j. Ninth District – Tristan Rader

1266. Plaintiff Tristan Rader resides in Lakewood, Ohio, in Cuyahoga County. (Deposition of Tristan Rader “Rader Dep.” at 8:16-9:21). He has resided in Lakewood since 2012. (*Id.* at 8:16-9:21).

1267. Mr. Rader lives in Ohio’s Ninth Congressional district, and his candidate of choice, Marcy Kaptur, represents him. (*Id.* at 14:11-13). Mr. Rader is a Democrat, and has generally always voted Democratic. (*Id.* at 18:14-20). Mr. Rader has campaigned for numerous Democrats including for Hillary Clinton, Ted Strickland, and Bernie Sanders during the 2016 election cycle. (*Id.* at 30:4-14; 31:3-6). Mr. Rader also identifies as a Democratic Socialist. (*Id.* at 39:15-17).

1268. Mr. Rader was contacted about becoming a plaintiff in this lawsuit by a friend, Ihaab Syed, who works for the ACLU. (*Id.* at 57:9- 58:5). Mr. Rader believes that the decision for him to become a plaintiff in this lawsuit was entirely the ACLU’s. (*Id.* at 62:21- 63:4) In fact, Mr. Rader testified that the decision “had nothing to do with what I wanted” and “was on [the ACLU].” (*Id.* at 62:21- 63:4).

1269. Mr. Rader testified that he was harmed by the 2011 Plan because he lives approximately 100 miles from where his congressional representative is located. (*Id.* at 66:10-67:19). He preferred being represented by Dennis Kucinich who resided in the Cleveland area. (*Id.* at 67:20-68:18). Despite complaining about the size of the Ninth District, Mr. Rader acknowledged that from 2002 to 2012, the Ninth District spanned from Toledo to Lorain, where

Mr. Rader resided with his parents prior to 2012 and is only about 20 miles away from where he currently lives. (*Id.* at 73:20-74:4; 80:10-11).

1270. Mr. Rader believes the size of his district infringes upon his First Amendment Right to Freedom of Speech, as the distance to Ms. Kaptur's office headquarters makes it difficult for him to go to her office to engage in protests. (*Id.* at 111:4-15). Mr. Rader, however, concedes that nothing in the current districting plan prevents him from going and protesting in front of her office in Toledo and that nothing about the 2011 Plan prevents him from protesting in front of her smaller office in Cleveland. (*Id.* at 111:16-112:23).

1271. Mr. Rader also testified that he is harmed because he is "packed" in a district with other Democratic voters and that Democratic candidates win by a "40 point spread" and that his vote does not count. (*Id.* at 97:22-98:4). He is disappointed that his vote is not "able to determine the outcome of an election." (*Id.* at 77:5-78:2). However, Mr. Rader could not provide criteria for how his district could not be "packed" and did not have any basis for determining how many Democrats or Republicans should make up a district so that it is not "packed." (*Id.* at 110:5-10). Despite Mr. Rader's concern that his vote does not "determine the outcome" of an election, Mr. Rader admits that his candidate of choice, Representative Kaptur, represents him. (*Id.* at 77:21-23).

1272. Mr. Rader believes that voters in his district are apathetic because the district is not competitive but acknowledges that he has no right as a citizen to live in an area where people volunteer or engage politically at a level he deems appropriate and could not identify any person who has refused to volunteer on a campaign or to vote as a result of the 2011 Plan. (*Id.* at 123:16-19; 124:25-125:24; 129:19- 130:3).

1273. Under the Proposed Remedial Plan, Mr. Rader would be assigned to the Ninth Congressional District in which Democrats would receive a majority of the vote share under the 2012 elections referenced in Cooper's report but Republicans would receive a majority of the vote share under the 2014 and 2016 elections referenced in Cooper's report. (PX091, Revised Cooper Rep. at Ex. S).

1274. Mr. Rader testified that he "would not be okay" if the Proposed Remedial Plan placed him in a Republican majority district even if that district were more compact. (Rader Dep. at 91:21-92:7).

k. Ninth District – Chitra Walker

1275. Plaintiff Chitra Walker has resided in Lakewood, Ohio in Cuyahoga County since at least 2008. (Deposition of Chitra Walker "Walker Dep." at 8:12-9:12). Ms. Walker currently resides in Ohio's Ninth Congressional District and is represented by Marcy Kaptur, a Democrat. (*Id.* at 83:16-85:3). Ms. Walker recalls voting for Representative Kaptur every year she has been on her ballot. (*Id.* at 83:16-85:3).

1276. Ms. Walker registered to vote after becoming a United States Citizen in 1987 and considers herself to be a Democrat. (*Id.* at 10: 20-11:25).

1277. Despite a strong preference for Democrats, Ms. Walker admits that there could be circumstances where she would vote for a Republican or independent congressional candidate. (*Id.* at 55:9-17).

1278. Ms. Walker became a plaintiff in this lawsuit after being recruited by an ACLU Cleveland board member, Erik Meinhardt. (*Id.* at 35:14-24) Ms. Walker believes Mr. Meinhardt asked her to be a plaintiff in the suit because she's "a member of the Democratic club..." (*Id.* at 36:21-37:3). Prior to her discussions with Mr. Meinhardt, Ms. Walker had not previously expressed any interest in challenging the current districting plan. (*Id.* at 37:4-8).

1279. When asked about her problems with the 2011 Plan, Ms. Walker stated that her “concern is for all of Ohio...” and that her “objection is to the map in general.” (*Id.* at 40:2-6; 46:3-8). Ms. Walker said she would “like to see a map that’s based on the population of the state...” and that the map should be “more equitable” between Republicans and Democrats. (*Id.* at 46:25-47:7; 48:8-10). Ms. Walker believes there should be more Democratic districts than there are currently but does not know how many more there should be. (*Id.* at 48:17-49:5).

1280. Despite her issues with the 2011 Plan as a whole, Ms. Walker is “concerned for [herself] as well.” (*Id.* at 40:2-17). Ms. Walker’s concern about her district is that she is “packed” or “squeezed” in her district with other Democrats. (*Id.* at 49:6- 15). However, Ms. Walker does not have any ideas on how to fix this issue and cannot say what percentage of Democrats or Republicans makes a district “packed.” (*Id.* at 49:6-15; 74:21-75:10).

1281. Because she lives in a heavily Democrat district, Ms. Walker complains that her vote is “diluted” or that it “does not count as much as it should” but concedes that her vote is actually counted and that nothing in the 2011 Plan has kept her, or anyone else she knows from casting a ballot. (*Id.* at 56:18-57:24). Further, Ms. Walker notes that nothing in the 2011 Plan has prevented her from campaigning for her preferred candidates, donating to the candidate of her choice, or engaging in any voter education activities. (*Id.* at 56:18-57:24).

1282. Ms. Walker believes that she is harmed because Representative Kaptur lives in Toledo and cannot “adequately” represent her views 100 miles away from Lakewood but is happy with the way Representative Kaptur represents the district and is pleased that Representative Kaptur votes the way Ms. Walker would like her to vote on issues before Congress. (*Id.* at 40:20-24; 41:4-13; 41:23-42:2).

1283. Ms. Walker testified that Representative Kaptur is responsive to her when she contacts her office and that she is able to attend meetings with Representative Kaptur. (*Id.* at 42:3-19).

1284. Under the Proposed Remedial Plan, Ms. Walker, like Mr. Rader, would be assigned to the Ninth Congressional District in which Democrats would receive a majority of the vote share under the 2012 elections referenced in Cooper's report but Republicans would receive a majority of the vote share under the 2014 and 2016 elections referenced in Cooper's report. (PX091, Revised Cooper Rep. at Ex. S).

I. Tenth District - Ria Megnin

1285. Ria Megnin has resided in Dayton, Ohio in Ohio's Tenth Congressional District since December of 2010. (Deposition of Ria Megnin "Megnin Dep." at 9:4-10:4; 13:5-10). Ms. Megnin is a Democrat but agrees with Republicans on certain issues and thinks "it's perfectly possible to agree with Republicans and people of any party background on specific issues." (*Id.* at 34:3-36:4; Megnin Exhibit 1)

1286. Ms. Megnin's current representative, Mike Turner, is a Republican who has represented the District for 16 years. (*Id.* at 13:11-19).

1287. Although Ms. Megnin's does not believe that Representative Turner is responsive enough to citizens in the area, she admits that when she has called Mr. Turner's office, someone has always returned her calls. (*Id.* at 17:5-8, 19:6-20:23, 28:2-19). She also could not identify an email that was sent to Representative Turner that was not responded to. (*Id.* at 25:6-9). Further, she cannot identify any communications sent by any of the groups that she associates with that Representative Turner did not respond to. (*Id.* at 33:6-22).

1288. Ms. Megnin is the regional representative for Region 7 of the National Association of Social Workers, Ohio chapter. (*Id.* at 36:13-20). The political action representative of this

region reached out to her sometime in April of 2018 and told her that the ACLU was looking for plaintiffs for a gerrymandering case. (*Id.* at 36:13-37:14). Ms. Megnin then called Ebony Speakes-Hall at the ACLU to learn more about the potential lawsuit. (*Id.* at 36:13-37:14). She admits that, prior to this contact, she had not considered filing a lawsuit related to gerrymandering. (*Id.* at 38:18-39:14).

1289. Ms. Megnin also testified that during her canvassing efforts, she encountered voters who stated that they would contribute more money to the campaign races in the district if not for the gerrymandering because they feel that there is not a chance for their candidate to succeed. (*Id.* at 88:10-91:3). However, Ms. Megnin admitted that in her canvassing efforts, she was only “door knocking” on areas that had a “strong record” of “voting Democrat” in the past. (*Id.* at 109:14-110:21). Ms. Megnin further admitted that no law has ever prevented her from canvassing or otherwise volunteering or campaigning for any candidate. (*Id.* at 83:15-25).

1290. Ms. Megnin believes that her district is cracked because it includes certain areas such as Greene County that do not reflect Dayton or the majority of the people who live in Dayton or other surrounding suburbs (*Id.* at 49:10-50:4; 51:14-54:9). Ms. Megnin, did not know if the Dayton area and suburbs are large enough to constitute a congressional district on their own. (*Id.* at 101:25-102:10)

1291. Under the Proposed Remedial Plan, Ms. Megnin would remain assigned to the Tenth District. Although Ms. Megnin testified that she believed Democrats would have a much better chance to vote out Representative Turner under the Proposed Remedial Plan (Megnin Dep. at 64:20-65:4), the election results relied upon by Cooper in his reports are within a single percentage point of the election results under the 2011 Plan and Cooper admitted that the Tenth

District would be “a safe Republican district” under both maps (PX091, Revised Cooper Rep. at Ex. S).

m. Eleventh District – Andrew Harris

1292. Plaintiff Andrew Harris has resided in Cleveland in the Eleventh Congressional District his entire life. (Deposition of Andrew Harris “Harris Dep.” at 7:4-8:17). Mr. Harris is a registered Democrat who has always voted for Democrats. (*Id.* at 10:9-13).

1293. Marcia Fudge, a Democrat, represents Mr. Harris in the Eleventh District. (*Id.* at 10:2-8). Despite voting for Representative Fudge, Mr. Harris testified that Representative Fudge is not his ideal candidate and wishes that Cleveland was represented by a more moderate, pro-business Democrat. (*Id.* at 16:25-18:20).

1294. Despite being a Democrat, Mr. Harris’ chief complaint with the current Eleventh District is the inclusion of Akron, Ohio in the district along with that area’s “liberal” Democrats. (*Id.* at 19:25-21:8). Mr. Harris believes that Akron’s brand of Democrats and Cleveland’s brand of Democrats are different, and that despite characterizing many of his friends in the Cleveland area as more liberal than him, believes that a congressional district drawn without Akron would result in a more moderate district. (*Id.* at 20:20- 21:8; 26:14-19; 28:2-30:12).

1295. Mr. Harris directly relates his harm from the current plan to being placed in a district with other Democrats whose beliefs are “not representative of ...[his] perspective politically” as he has different beliefs that do not relate to those “different brand[s] of liberalism.” (*Id.* at 21:4-8).

1296. Mr. Harris also believes that he is in a “packed” congressional district, and because the district is “packed”, that his vote is “diluted” and does not count. (*Id.* at 15:22- 16:20). Mr. Harris believes that “packing” occurs when there is intent to place Democrats in one area together for the purpose of diluting their vote. (*Id.* at 16:5-20; 34:9-21). Mr. Harris believes his vote is “diluted” because he is “surrounded by an inordinate number of democratic voters” therefore his

vote is not necessary for a Democrat to win the election. (*Id.* at 16:5-20; 19:25-20:12). However, Mr. Harris cannot point to a percentage of votes required for a district to be “packed”, or for his district not to be “diluted” with an “inordinate amount” of Democrats. (*Id.* at 19:17-21; 21:9-14).

1297. Despite his contentions regarding his district, Mr. Harris agrees that his vote is, in fact, counted by the board of elections and he does not know anyone who has been prevented from voting or who has refused to vote as a result of the 2011 Plan. (*Id.* at 22:9-12; 16:21-17:6). Mr. Harris further admits that the candidate he cast his vote for, Representative Fudge, has routinely been elected. (*Id.* at 16:21-17:6).

1298. Under the Proposed Remedial Plan, Mr. Harris would remain in the Eleventh District. (PX091, Revised Cooper Rep. at Ex. S).

n. Twelfth District – Aaron Dages

1299. Aaron J. Dages lives in Ohio’s 12th Congressional District. (Trial Tr., Vol II at 84:25-86:85:1).

1300. Mr. Dages’ current congressional representative is Troy Balderson. (Trial Tr., Vol II at 89:24-25). Representative Balderson was first elected in August 2018 during a special election. (Trial Tr., Vol II at 90:1-3). He was then re-elected in November 2018 during the most recent general election. (Trial Tr., Vol II at 90:8-13).

1301. Before Representative Balderson took office, Mr. Dages was represented by Congressman Pat Tiberi. (Trial Tr., Vol II at 90:5-6)

1302. Mr. Dages is a self-described political activist. (Trial Tr., Vol II at 84:19-20).

1303. Mr. Dages is a registered Democrat. (Trial Tr., Vol II at 85:10-11). Except on one occasion, Mr. Dages has consistently voted for the Democratic candidate. (Trial Tr., Vol II at 85:12-18).

1304. Mr. Dagnes testified that he did not participate in several elections from 2013 to 2015 due to a demanding work schedule. (Trial Tr., Vol II at 85:23-86:3).

1305. Mr. Dagnes has been involved in numerous political activities, including volunteering on multiple campaigns. (Trial Tr., Vol II at 86:4-87:22).

1306. Mr. Dagnes previously served as the president of the Licking County Democrat Club – Political Action Committee. (Trial Tr., Vol II at 86:6-7). He also served as on the Licking County Central and Executive Committee. (Trial Tr., Vol II at 86:8-9). Both of these roles expired in January 2019. (Trial Tr., Vol II at 86:9-10).

1307. In his role as president of the Licking County Democrat Club, Mr. Dagnes testified that he was involved in a “multitude of activities, including membership drives, direct voter contact, engaging with voters, registering voters, recruiting candidates, as well as fundraising for local candidates.” (Trial Tr., Vol II at 86:21-87:2).

1308. In his role as a member of the Licking County Central and Executive Committee, Mr. Dagnes engaged in many of the same activities. (Trial Tr., Vol II at 87:3-7). But his role was “more focused on assisting candidates with voter outreach, Get Out the Vote events, direct contacts through things like phone banks, mailings, ... and engaging voters on door-to-door canvasses.” (Trial Tr., Vol II at 87:7-13).

1309. The Democratic party had a physical office in Licking County that was used to register voters. (Trial Tr., Vol II at 87:19-20).

1310. Mr. Dagnes testified that he is harmed because Representatives Balderson and Tiberi did not represent him on issues that are important to him. (Trial Tr., Vol II at 93:18-18, 93:24-94:4, 94:5-7, 94:9-11).

1311. Mr. Dages also testified that he has “absolutely no right” to have a representative who represents him on all issues. (Trial Tr., Vol II at 94:19-22).

1312. Mr. Dages testified:

I don't feel that I'm entitled to have any representative who represents all of my ideals. As a matter of fact, I believe someone once said that if you're looking for a candidate that represents you a hundred percent of the time, then you're the candidate that needs to be running, because nobody ever represents 100 percent. (Trial Tr., Vol II at 93:8-13).

1313. Mr. Dages testified that he was harmed by the 2012 map because it prevented him from having access to his representatives. (Trial Tr., Vol II at 95:13-15). But Mr. Dages also testified that he has not reached out Representative Balderson since Representative Balderson was elected in August 2018. (Trial Tr., Vol II at 107:3-6).

1314. Prior to the August 2018 election, Mr. Dages testified that he had the opportunity to communicate with Representative Balderson during a community parade, and they “had cordial conversation even though [Mr. Dages] was there supporting his opponent.” (Trial Tr., Vol II at 107:6-12).

1315. Mr. Dages testified that he is harmed because the 2012 map has caused voter apathy, and prevented fundraising and candidate recruiting.

1316. Mr. Dages testified that voter apathy did not begin with the enactment of the 2012 map. (Trial Tr., Vol II at 104:4-8).

1317. Mr. Dages testified that there are many reasons that “people may make personal choices to vote or not to vote.” (Trial Tr., Vol II at 104:9-12; *see also* Trial Tr., Vol II at 4-7). In fact, Mr. Dages testified that in 2013, 2014, and 2015, he did not vote for personal reasons. (Trial Tr., Vol II at 104:14-20).

1318. Mr. Dages testified that he did not conduct a survey and has no basis to know why any particular voter in the 12th Congressional District did not vote. (Trial Tr., Vol II at 106:2-3).

1319. Mr. Dages agreed that Congressman Balderson won the August 2018 special election in Congressional District 12 by a “tight margin.” (Trial Tr., Vol II at 101:7-13).

1320. Regardless, Mr. Dages testified that the election for the 12th Congressional District was not winnable. (Trial Tr., Vol II at 103:6-10). Mr. Dages, however, could not say that a Democrat could win Ohio’s 12th Congressional District seat prior to the enactment of the 2012 map. (Trial Tr., Vol II at 103:14-16).

1321. Further, Mr. Dages testified that the Democrats in Licking County were excited to turn out for the U.S. Senate and gubernatorial races. (Trial Tr., Vol II at 109:20-110:2). And those same voters had the opportunity to also vote for a Democratic U.S. House Representative. (Trial Tr., Vol II at 109:12-17).

1322. Under the remedial map proposed by Plaintiffs, the county in which Mr. Dages resides would be split into two districts. (Trial Tr., Vol II at 108:25-109:1).

1323. Although the Twelfth District has consistently been represented by a Republican, Mr. Dages believes that his vote has been diluted and “watered down through a cracking and packing gerrymandering” and “that representation is truly inexistent.” (Deposition of Aaron Dages (“Dages Dep.”), at 27:21-28:4). However, Mr. Dages admitted that, since 1939, there has been only one Democratic congressional representative from this district. (Dages Dep. at 72:24-25). He also could not state how the district could be drawn so that it is not “cracked.” (Dages Dep. at 53:8-19).

1324. Mr. Dages received a phone call from the ACLU asking him to join this lawsuit. (Dages Dep. at 19:14-24). Prior to being contacted, Mr. Dages was not contemplating filing a lawsuit over political gerrymandering. (Dages Dep. at 106:20-107:9).

o. Thirteenth District – Elizabeth Myer

1325. Dr. Elizabeth Myer lives in Ohio's 13th Congressional District. (2 Tr. 113:1-3).

1326. Ohio's 13th Congressional District is a majority Democratic district, and has been a majority Democratic district for as long as Dr. Myer can remember. (2 Tr. 125:1-6, 130:15-17).

1327. Dr. Myer's congressional representative is Democrat Tim Ryan. (2 Tr. 113:23-114:1).

1328. Dr. Myer is a registered Democrat. (2 Tr. 114:2-4). She, however, does not always vote for the Democratic candidate in every election. (2 Tr. 118:4-13).

1329. Dr. Myer testified that she has participated in many political activities on behalf of the Democratic party, including canvassing, working as a volunteer at rallies and as a poll monitor, participating in voter registration drives, and fundraising and donating money. (2 Tr. 118:17-23; *see also id.* at 122:19-123:6).

1330. Dr. Myer testified that she is a member of the Sierra Club and the Human Rights Campaign. (2 Tr. 123:14-17).

1331. Dr. Myer testified that she has donated money to the ACLU and Democratic political candidates Sherrod Brown and Hillary Clinton. (2 Tr. 123:18-124:11).

1332. Dr. Myer was asked by her daughter, who knew someone at the ACLU, to become a plaintiff in the lawsuit. (Deposition of Elizabeth Myer ("Myer Dep."), at 25:11-27:16).

1333. Dr. Myer testified that she has been able to continue this work since the 2012 map was enacted. (2 Tr. 123:7-9, 123:22-24, 124:12-14).

1334. Dr. Myer testified that in her work on Democratic issues, she has noticed voter apathy, but does not “know how much [the 2012 map] is contributing to this.” (2 Tr. 120:12-17).

1335. Dr. Myer testified that she was harmed by the 2012 map because Representative Ryan does not need to pay attention to local issues and concerns in the Youngstown area. (2 Tr. 125:11-15, 126:126:1-8). But Dr. Myer also testified that Representative Ryan “has not ignored” issues that are important to her. (2 Tr. 126:24-25).

1336. Dr. Myer testified that one local issue affecting her area is the closure of the GM plant in Lordstown, Ohio—an issue that is important to Ms. Myer and her community. (2 Tr. 126:7-15).

1337. Dr. Myer testified that Representative Ryan has spoken out against the closure of the GM plant. (2 Tr. 126:19-21). Dr. Myer also testified that Representative Ryan met with the CEO of GM in December 2018. (2 Tr. 127:1-2). Dr. Myer testified that Representative Ryan has not “ignored the issue.” (2 Tr. 126:24-25).

1338. Dr. Myer testified that another important issue to her is immigration. (2 Tr. 127:9-10).

1339. Dr. Myer testified that Representative Ryan has helped people in her community with immigration issues. (2 Tr. 127:11-13).

1340. Dr. Myer testified that in fact, Representative Ryan postponed the deportation of a Youngstown businessman and attended the man’s deportation hearing. (2 Tr. 127:14-19).

1341. Dr. Myer testified that Representative Ryan sponsored an immigration bill related to this issue. (2 Tr. 127:20-23).

1342. Dr. Myer testified that after this man’s deportation, Representative Ryan continued to speak out against it—an action that Dr. Myer testified she supported. (2 Tr. 127:24-128:4).

1343. Dr. Myer testified that she is harmed by the 2012 map because Representative Ryan is spread too thin and has pay attention to different communities with different interests. (2 Tr. 128:16-19). But Dr. Myer testified that under the remedial map, Representative Ryan would be representing different communities with different interests. (2 Tr. 128:25-130:14). Dr. Myer testified that there could be people in Akron and Summit County, currently included in the 13th Congressional District, impacted by the same local issues that affect her community, such as the GM factory closure. (2 Tr. 130:10-14).

1344. Dr. Myer agreed that she likes living in a majority Democratic district, is “happy” currently being represented by a Democrat, and that she wants to continue to be represented by Congressman Ryan. (2 Tr. 130:15-21).

p. Fourteenth District – John Fitzpatrick (Fact Witness)

1345. John Fitzpatrick lives in Ohio’s 14th Congressional District. (Trial Tr., Vol I at 197:15-17).

1346. Mr. Fitzpatrick’s congressional representative is David Joyce. (Trial Tr., Vol I at 197:18-19). Representative Joyce is a Republican. (Trial Tr., Vol I at 197:20-21).

1347. Although Mr. Fitzpatrick is a registered Democrat, he does not vote for the Democratic candidate in every election. (Trial Tr., Vol I at 197:22-23, 202:1-7, 212:5-7).

1348. Mr. Fitzpatrick agreed that because someone votes for a Democrat in one election, does mean he will necessarily vote for a Democrat in all elections. (Trial Tr., Vol I at 221:8-11). In fact, Mr. Fitzpatrick testified that he believes that Democratic voters sometimes vote for a Republican, and vice versa. (Trial Tr., Vol I at 221:12-16).

1349. Mr. Fitzpatrick testified that he is “not entitled to a candidate that necessarily agrees with [him] on all of the issues or even any of the issues” (Trial Tr., Vol I at 204:17-21; 221:1-4). Mr. Fitzpatrick also believes that he should not “live in a district where the candidate [is]

almost guaranteed not to share some of the views of the issues that are important to [him].” (Trial Tr., Vol I at 204:21-23).

1350. Mr. Fitzpatrick testified that a Republican can represent the interests of someone who voted for the Democratic candidate. (Trial Tr., Vol I at 221:23-25).

1351. In fact, Mr. Fitzpatrick, who voted for Representative Joyce’s Democratic opponent, agrees with Representative Joyce’s stance on Great Lake protections—an interest that Mr. Fitzpatrick believes many people in his district share. (Trial Tr., Vol I at 202:24-203:4, 221:25-222:1-3).

1352. Mr. Fitzpatrick is a member of the League of Women Voters. (Trial Tr., Vol I at 198:20). Mr. Fitzpatrick has been involved with the League of Women Voters’ Akron Chapter for the past three years and currently serves as the Chapter’s treasurer. (Trial Tr., Vol I at 199:2-6).

1353. Mr. Fitzpatrick has never personally interacted with Congressman Joyce. (Trial Tr., Vol I at 205:14-15). He has, however, called Congressman Joyce’s office on a few occasions and has received a call back. (Trial Tr., Vol I at 205:15-18).

1354. And even though Mr. Fitzpatrick testified that he would like the opportunity to have a discussion with Representative Joyce, he has never personally invited Representative Joyce to a public forum. (Trial Tr., Vol I at 216:9-13, 217:11-13). Mr. Fitzpatrick also testified that he was not aware that Representative Joyce spoke at a League of Women Voter’s forum in his area just last year. (Trial Tr., Vol I at 216:14-25).

1355. Mr. Fitzpatrick testified that there is nothing he can do to move Representative Joyce’s positions from the right toward the center because Representative Joyce does not feel any pressure from his voting base to do so. (Trial Tr., Vol I at 217:17-23). But Mr. Fitzpatrick has not

attempted to build bipartisan coalitions in order to move the positions of the candidates in his district. (Trial Tr., Vol I at 218:16-20).

1356. Mr. Fitzpatrick testified that he is harmed by vote dilution. (Trial Tr., Vol I at 218:21-23). Mr. Fitzpatrick believes a vote is diluted if it is “wasted.” (Trial Tr., Vol I at 219:20-25). And whether a vote is wasted is based on the “intent of the map drawers.” (Trial Tr., Vol I at 220:16-20).

1357. Mr. Fitzpatrick testified that there are multiple causes for voter apathy. (Trial Tr., Vol I at 212:19-21). Mr. Fitzpatrick cannot, however, quantify how much apathy in his district is due to redistricting and how much is due to something else. (Trial Tr., Vol I at 212:22-25).

1358. Mr. Fitzpatrick testified that the 2011 Plan burdens the League of Women Voters’ mission by forcing it to divert more resources to support voter engagement. (Trial Tr., Vol I at 213:8-12). But Mr. Fitzpatrick could not quantify the amount of funds diverted. (Trial Tr., Vol I at 213:13-14, 214:8-11, 214:14-18).

1359. Further, Mr. Fitzpatrick was not involved in congressional campaigns in Ohio prior to 2011. (Trial Tr., Vol I at 211:20-22).

1360. Mr. Fitzpatrick testified that the League of Women Voters spent substantial time on Ballot Issue 1—which was not focused on changing the 2011 map, but rather on changing the process by which the congressional maps are drawn in Ohio. (Trial Tr., Vol I at 214:14-215:1).

1361. Accordingly, Mr. Fitzpatrick agreed that even if the League of Women Voters liked the 2011 Plan, it believed the redistricting process was flawed and thus would have spent the same amount of resources to change the process. (Trial Tr., Vol I at 215:2-7).

q. Fourteenth District – Beth Hutton

1362. Plaintiff Beth Hutton resides in Mentor, Ohio, in Lake County, where she has lived for 34 years. (Deposition of Beth Hutton “Hutton Dep.” at 8:21-9:6). Ms. Hutton resides Ohio’s

Fourteenth District, which during her time living in Mentor, “has basically stayed the same, but it’s gotten bigger as the number of representatives has decreased in Ohio” (*Id.* at 9:22-10:16).

1363. She is a registered Democrat, but often votes for Republicans at the local level. (*Id.* at 12:21-13:23). In deciding who to vote for, Ms. Hutton testified that she considers individuals and their stances, rather than just party membership. (*Id.* at 16:6-25).

1364. Ms. Hutton testified that the Fourteenth District is a majority Republican district. (*Id.* at 26:23-27:4).

1365. Representative David Joyce, a Republican, represents Ms. Hutton in the Fourteenth district. (*Id.* at 25:12-20). Previously, Ms. Hutton was represented by another Republican, Steven LaTourrette. (*Id.* at 26:7-20). Ms. Hutton voted for Representative LaTourrette at least once. (*Id.* at 14:22-15:22).

1366. Ms. Hutton became a plaintiff in this lawsuit after the previous Fourteenth District plaintiff withdrew. (*Id.* at 27:5- 28:22). Ms. Hutton was approached by a cousin who told her the ACLU was looking for a new plaintiff in her district. (*Id.* at 27:5-28:14).

1367. Ms. Hutton believes the lawsuit is challenging the statewide map. (*Id.* at 37:23-38:11). Her chief complaint is that the 16 districts are “predictable” in that they usually elect 12 Republicans and four Democrats. (*Id.* at 39:22-41:12; 43:15-18). She thinks that breakdown is unfair “because it doesn’t give the Democrats the kind of voice and representation that they should have based on being a swing state” and that the statewide congressional delegation should closely mirror the split between Democrat and Republican voters in the state. (*Id.* at 40:9-41:2).

1368. Ms. Hutton also believes that Democrats tend to reside in more concentrated urban areas and are not evenly spread throughout the state. (*Id.* at 41:25-42:5).

1369. Ms. Hutton believes that, because of the predictability of the districts, her vote is sometimes “wasted” but concedes that she knows her vote is actually counted by the board of elections. (*Id.* at 47:17-48:2; 58:17-59:11).

1370. Despite her belief that her vote is “wasted”, Ms. Hutton has continued to vote in each election and says that she doesn’t know anyone who has not voted because of the 2011 Plan. (*Id.* at 47:21-48:7).

1371. Ms. Hutton also wants the districts to be more competitive. (*Id.* at 48:22-49:11). She defines competition as “two people coming in with an equal chance to succeed.” (*Id.* at 49:6-11). But she could not identify any percentage of Republicans or Democrats in a district that would make it competitive, or how to make each district more competitive. (*Id.* at 49:12-50:14). She further states that she doesn’t think it’s possible for each district in the state to be competitive. (*Id.* at 50:5-14).

1372. Under the Proposed Remedial Plan, Ms. Hutton would be moved to the Thirteenth District in which Democrats had a majority of the vote share in each of the three elections cited in Cooper’s report. (PX091, Revised Cooper Rep. at Ex. S).

r. Fifteenth District- Teresa Thobaben

1373. Ms. Thobaben has resided in Clinton County in Ohio’s Fifteenth Congressional District for the past 37 years. (Deposition of Teresa Thobaben “Thobaben Dep.” at 8:12-9:2). She is represented by Steve Stivers, a Republican. (*Id.* at 9:3-9:8).

1374. Ms. Thobaben is a Democrat but has voted for Republicans in the past. (*Id.* at 11:5-11:22).

1375. Ms. Thobaben was asked to be a plaintiff in this lawsuit by a friend, Paul Moke, who is on the board of the ACLU. (*Id.* at 24:19-25:12).

1376. While Ms. Thobaben believes her vote is “diluted” because it “doesn’t matter if [she] votes for Democrats...because there are so many Republican votes,” (*Id.* at 29:3-29:9), she admitted that a Democrat did not have to be elected as her representative for her to feel that her vote “counted” but could not describe any scenarios, other than a Democrat winning, where she would feel her vote “counted.” (*Id.* at 29:10-29:18).

1377. Ms. Thobaben agrees that her vote as a Democrat is counted equally as those cast by Republican voters. (*Id.* at 34:19-35:4).

1378. She does not know what other areas of counties should be added to her district so that it would have enough Democrat voters to elect a Democrat. (*Id.* at 38:7-38:11).

1379. Ms. Thobaben admits that she “would have to move” to live in a district that was not a majority Republican district. (*Id.* at 40:11:40:13). Ms. Thobaben testified that she did not believe there was any way to draw her district where “you could have it not be a majority Republican” district because she lives in an area of the state where a lot of Republican voters reside. (*Id.* at 40:14-40:23).

1380. Ms. Thobaben also believes she is “harmed” because she “doesn’t feel represented by” Representative Stivers because he lives in a part of the district that is not where she resides. (*Id.* at 29:20-30:4). But she admits that groups she has been a part of have protested at his office, that she has written letters and received responses back, and that she has his office “on speed dial” and regularly communicates with his staff. (*Id.* at 30:5-32:14). She has never tried to set up a meeting with Congressman Stivers. (*Id.* at 32:15-32:18).

1381. Ms. Thobaben admitted that she doesn’t know whether or not Representative Stivers has considered the views and opinions that she has voiced to his staff prior to voting on issues in Congress. (*Id.* at 57:15-58:12).

1382. Ms. Thobaben has canvassed for a number of politicians including Barack Obama, Hillary Clinton, Ted Strickland, and Scott Warden for U.S. Congress in both 2012 and 2016. (*Id.* at 19:17-20:17). All of her campaign activities have taken place in Clinton County where she lives. (*Id.* at 21:2-21:4). Nothing about the 2011 Plan has prevented her from taking part in these activities. (*Id.* at 47:8-47:13).

1383. Ms. Thobaben claimed that the 2011 Plan makes Democrat voters in Clinton County “timid or afraid” to be involved in politics, but later admitted that she had no way of knowing if their lack of involvement could be attributed to the 2011 Plan or just the fact that they live in a heavily Republican area of the state. (*Id.* at 46:15-50:2). No Democratic voters have told her that they are reluctant to participate in the political process as Democrats in her district because of the 2011 Plan. (*Id.* at 60:18-61:12).

1384. Under the Proposed Remedial Plan, Ms. Thobaben would be moved to the Second District, a safe Republican district. (PX091, Revised Cooper Rep. at Ex. S).

s. Sixteenth District – Constance Rubin

1385. Constance Rubin resides in North Canton, Ohio, in Stark County, where she has lived for over thirty years. (Deposition of Constance Rubin “Rubin Dep.” at 7:16-8:15). She has been a Democrat since at least 1984, but previously identified as a Republican. (*Id.* at 16:14-17; 24:4-12-25:2). While Ms. Rubin believes that it is “highly doubtful” that she would ever vote for a Republican again, she believes that a candidates policy positions are more important than party affiliation when deciding for whom to vote for. (*Id.* at 24:4-26:4).

1386. Ms. Rubin resides in the Sixteenth District and has been represented by Republican Jim Renacci since 2011. (*Id.* at 8:11-25). Previously, Ms. Rubin was represented by Republican Ralph Regula for all of her time living in North Canton, except for one term where she was

represented by John Boccieri. (*Id.* at 9:2-10:6). After the 2018 election, the Sixteenth District is represented by Anthony Gonzalez, a Republican.

1387. Ms. Rubin was asked to become a plaintiff in this suit by ACLU attorney Freda Levenson, due to Ms. Rubin's testimony about her concerns with the 2012 statewide congressional plan, in front of a group of state legislators. (*Id.* at 10:7-11:4).

1388. Despite her complaints about the current congressional plan, Ms. Rubin believes that she and the League of Women Voters have remained effective in their voter education efforts, and believes nothing about the current plan has prevented voters from educating themselves about their districts, or preventing the League of Women Voters from conducting education efforts. (*Id.* at 13:10-14:18).

1389. Ms. Rubin also believes that her vote has been diluted in every election Republican Ralph Regula won since 1972. (*Id.* at 54:9-57:3). However, Ms. Rubin admits that she continued to participate and vote despite being represented by Representative Regula for over thirty years. (*Id.* at 77:7-78:2).

1390. Ms. Rubin believes that her district is "100 percent predictive" in its outcome statewide, which causes voters to be apathetic. (*Id.* at 63:11-64:24; 90:14-91:16). However, Ms. Rubin admits that she has to engage with apathetic voters "all the time" and that she has no right to engage with voters in who are as politically involved as she would like them to be. (*Id.* at 90:14-91:6).

1391. Ms. Rubin believes the solution to fixing her harm under the current congressional plan is to make the districts "more fairly divided so that either party has an opportunity to win that district." (*Id.* at 61:17-23). She ideally would like that fair divide to be "as close to 50/50 as possible" but, she also admits that is "probably statistically unreasonable." (*Id.* at 62:14-63:3). Ms.

Rubin admits that her ultimate goal in a new map is to have the statewide outcome be “closer to a 50/50 outcome of congressional representatives for Republicans and Democrats.” (*Id.* at 72:20-73:18).

1392. Under the Proposed Remedial Plan, Ms. Rubin would be moved to the Fourteenth District. (PX091, Revised Cooper Rep. at Ex. S). Under the three elections cited by Cooper in his report, Republicans would have a majority of the vote share in both the Fourteenth District in the Proposed Remedial Plan and in the Sixteenth District in which Ms. Rubin resides under the 2011 Plan. (PX091, Revised Cooper Rep. at Ex. S).

B. Organizational Plaintiffs

a. League of Women Voters of Ohio

1393. Ms. Jen Miller represents the League of Women Voters of Ohio and its members, 1Tr. 129:5-6, serving as its Executive Director in Ohio, 1Tr. 129:1-2. Ms. Miller leads the League of Women Voters along with the League’s board. 1Tr. 132:1-3.

1394. The League of Women Voters claims to have “about 2800” members. 1Tr. 133:1-2. The League’s membership total has increased since 2008. (Deposition of League of Women Voters of Ohio (“LWVO Dep.”), at 36:24-37:6, 39:15-22). Members of the League of Women Voters must pay dues to become a member. 1Tr. 133:3-4.

i. Litigation Background—The League’s Board Proceeded Without Member Awareness.

1395. The League of Women Voters Board decided the League would join the lawsuit. 1Tr. 140:24-25. In fact, the League spoke with attorneys about filing a potential lawsuit to challenge the 2011 Plan in 2013, but did not file it at that time. (LWVO Dep. at 109:15-110:10). The League of Women Voters did not notify its member that it planned to sue prior to suing. 1Tr.

162:14-17. Ms. Miller has not spoken to every single member of the League of Women Voters on their personal opinion about the litigation. 1Tr. 162:20-24.

1396. The League's local leagues have said that the League's redistricting work, overwhelmingly, is "most important." 1Tr. 169:10-11. But this statement was based on a questionnaire to which not all the League's members responded, and moreover, Ms. Miller is unaware of the League producing any documents in this litigation showing its members' top issue was gerrymandering. 1Tr. 171:8-9, 12-21.

1397. In fact, the League of Women Voters' members are not required to agree with the League's position on all public policy issues, 1Tr. 168:3-6, and do not need to agree with the League's position with respect to congressional district lines. 1Tr. 168:9-12.

ii. The League Remains Fully Engaged in Encouraging Participation in the Political Process.

1398. Ms. Miller believes "confusing and unfair maps make[] it hard" for the League to "encourage participation in the political process" as well as it could. 1Tr. 166:19-24.

1399. Yet, Ms. Miller considers the League of Women Voters as the "most effective non-partisan organization[] in Ohio in encouraging participation in the political process." 1Tr. 166:19-22. Among other activities, the League claims to educate "high school students on civics," 1Tr. 130:25-131:2, registers college students and adults to vote, 1Tr. 131:5-71Tr. 131:11-15; 1Tr. 130:22-23; conducts get out the vote drives, 1Tr. 131:11-13 and hosts "public education forums" with candidates attending or "about how government works," 1Tr. 130:18-19.

iii. The League Fails To Support Its "Unfair" Map Claim.

1400. The League believes the current map is an "unfair map." 1Tr. 140:16-20. The League considers "fair maps" or "fair districts" to mean "non-gerrymandered districts" and "maps

. . . drawn by good public policy objectives, neutral criteria, and . . . not designed to guarantee a 12-4 outcome, or any outcome for that matter.” 1Tr. 137:18-24.

1401. Yet, the League of Women Voters does not want the Ohio congressional districts evenly split 50 percent of the voters being Republicans and 50 percent of the voters being democrat. 1Tr. 174:24-175:3. The League of Women Voters does not consider “fairness” to be an even split among voters in a district between Republicans and Democrats. 1Tr. 174:24-175:5.

1402. However, the League considers the percentage of individuals identifying as Republican and the percentage identifying themselves as Democrat is a relevant consideration to what constitutes a “fair district.” 1Tr. 175:15-21. Yet, the League of Women Voters cannot identify a specific percentage difference between Republicans and Democrats in a district that it views as too high or unacceptable in and of itself. 1Tr. 176:11-177:20. In fact, by itself, without other data, the League of Women Voters cannot determine whether a ten percent difference between Republicans and Democrats in a district is unacceptable. 1Tr. 175:22-176:10.

iv. The League Admits Members’ Votes Are Not Wasted.

1403. Ms. Miller believes many of the League’s members’ votes were wasted in the 2018 election. 1 Tr. 193:5-7, because “they’re either in packed or cracked districts.” 1Tr. 159:2-5; 1Tr. 194:9-12. Ms. Miller considers a wasted vote one for a Democratic candidate when the Democratic candidate did not win. 1Tr. 193:8-11. But Ms. Miller does not consider votes cast by Democrats for governor or attorney general as wasted votes. 1Tr. 193:20-194:6.

v. The League’s Members Vote Under Current Map—They Are “Voting Evangelists”.

1404. Ms. Miller agreed an incumbent sometimes has an advantage over a challenger, 1Tr. 174:11-12; sometimes individuals may vote for Republicans, but also for Democrats on the

same ballot, 1Tr. 174:13-15; and a person's political opinions are not necessarily defined by simply looking at his or her party affiliation. 1Tr. 174:16-19.

1405. Ms. Miller agreed winning elections involves a lot more than just looking at a candidate's party affiliation. 1Tr. 179:17-21. Moreover, Ms. Miller agreed some individuals may vote for Republicans on the same ballot as they vote for Democrats. 1Tr. 179:14-16. Additionally, the League has not polled its members on how they voted in congressional elections. 1Tr. 179:25-180:2.

1406. In fact, the current map has not stopped the League's members from voting. 1Tr. 180:3-12. Ms. Miller emphasized: "Our members vote in congressional elections. This is what we do. We're elections people. We're voting evangelists." 1Tr. 180:5-7.

vi. The League Continues Its Education of Voters—Which Long Predated the Current Map.

1407. The League challenges the current map because "it diverts [the League's] resources," which "means [the League] [has] to work a lot harder to do what [it] need[s] to do, to meet [its] mission." 1Tr. 141:10-16. Ms. Miller believes the map's "confusing borders" diverts the League's resources because the League does "so much on voter registration, so much on voter education." 1Tr. 142:9-18.

1408. However, Voter education has been a part of the League's mission prior to 2011—voter education was the League's mission in 1920. 1Tr. 180:25-181:2. Education about a voter's residential district has been a key part of the League's mission since before 2011. 1Tr. 181:3-5. Moreover, the League provided its members with which district they resided in since before 2011. 1Tr. 181:6-13.

1409. Moreover, the League of Women Voters publishes a voter guide, 1Tr. 166:4-5, and has done so since about 1920. 1Tr. 166:8-10. Ms. Miller believes the voter guide is an effective

tool for voter education. 1Tr. 166:6-8, describing the guide as a “celebrated part of every league’s efforts across the country,” which the League “pride[s]” itself in making the “voter guide accessible and fair.” 1Tr. 166:10-12.

vii. The League Is Unable To Substantiate “Voter Apathy” Claim—To the Contrary, It Boasts “Lots of Members” Who Participate in the Political Process and Its Membership Rolls Have Grown Over the Past Few Years.

1410. Ms. Miller testified the map creates ‘voter apathy’ because it generates a 12-4 outcome each election regardless how many people show up to vote. 1Tr. 146:7-18.

1411. The League determines its “priority issues” by “study[ing] everything first.” 1Tr. 137:7-9. However, the League has never in any way quantified that voter apathy exists in Ohio based on congressional district lines, nor has the League ever conducted any type of study on the topic. 1Tr. 178:20-179:7. The League has never quantified the extra time that it purportedly requires encouraging voting based on voter apathy related to congressional district lines. 1Tr. 177:21-25. The League has never quantified any costs associated with encouraging voting based on “voting apathy” (as described by Ms. Miller) based on congressional district lines apart from the OCAR (Ohio Campaign for Accountable Redistricting) competition. 1Tr. 178:1-7.

1412. The League of Women Voters, as compared with other organizations in Ohio, has a lot of volunteers who participate in the election process. 1Tr. 166:13-18. Volunteers are the “lifeblood” of the League of Women voters, 1Tr. 166:17-18, and have been for its “entire 100 years.” 1Tr. 134:4-6. The League’s volunteers “conduct candidate forums”; “register voters”; “produce a lot of our documents or voter education material”—volunteers “do every aspect of [the League’s] mission.” 1Tr. 134:6-9. The League’s members “call their elected officials on policies [the League] cares about.” 1Tr. 134:22-24. The League of Women Voters membership has been increasing over the last couple of years. 1Tr. 167:25-168:2.

viii. The League Admits It Has No Idea Why Representatives Did Not Attend League's Candidate And Recognizes Candidates Attended Other Fora.

1413. Ms. Miller testified the current map caused candidates to not show up at the League's candidate fora, which resulted in the League cancelling the forum. 1Tr. 147:23-149:9. Ms. Miller acknowledged attending a town hall is not the only way a congressperson can be responsive to their constituents. 1Tr. 165:15-17.

1414. The League invited Congressmen Stivers and Jordan to appear at a candidate forum hosted by the League. 1Tr. 163:4-13. The League did not ask either congressmen if they had a conflict in attending the candidate fora or why they did not attend. 1Tr. 163:14-231Tr. 163:23-164:21; 1Tr. 164:22-25; 1Tr. 165:8-13.

1415. Ms. Miller acknowledged the League is not the only organization that puts on bipartisan or non-partisan candidate forums in Ohio. 1Tr. 190:1-3. Ms. Miller recalled Representative Stivers participated in candidate forums across Ohio. 1Tr. 190:3-191:2. Ms. Miller was not aware that Representative Stivers participated in a candidate forum at the Metropolitan Club in Columbus. 1Tr. 191:16-18.

ix. The League's "Ohio Campaign for Accountable Redistricting" (OCAR) Map-Drawing Competition Provided a Source of Potential Maps in the 2011 Map-Drawing Process.

1416. Ms. Miller testified the League's OCAR (Ohio Campaign for Accountable Redistricting) map-drawing competition was "not necessarily" a way for the public to participate in the 2011 map-drawing process, rather it was a "way of participating in a mapmaking process" but "not a way of participating in the mapmaking process by the folks in power who were ultimately going to adopt the map." 1Tr. 191:19-192:6.

1417. However, the League hired Mr. Jim Slagle to 'head up' the OCAR map-drawing competition, 1Tr. 192:7-9, and the League was aware that Mr. Slagle was communicating with

Democrats in the Ohio legislature about using one or more of the OCAR competition maps to submit as a potential map in the General Assembly. 1Tr. 192:10-16. Further, the League worked with “individual legislators to bring forth possible maps,” 1Tr. 192:19-22, and submitted OCAR maps to Republicans in the Ohio legislature. 1Tr. 192:22-24.

x. League’s “Relief” Already In Place.

1418. The League seeks a “fair map by 2020” as the relief it seeks in the litigation. 1Tr. 161:20-22. However, the League or Ms. Miller (or both) were aware that the Democrats in the Ohio legislature had political data that used during the redistricting process. 1Tr. 189:5-9.

1419. Conversely, Ms. Miller was not aware that the Democrats had a political index specifically called the “LWV Partisan Index,” 1Tr. 189:10-12, with “LWV” a common reference to the League. 1Tr. 189:15-16. Further, Ms. Miller was not aware that Democrats in the Ohio legislature were relying on the “LWV Partisan Index” in evaluating maps during the 2011 redistricting process. 1Tr. 189:18-21.

b. Ohio State University College Democrats

1420. Alexis Oberdorf serves as the President of the Ohio State University College Democrats and was designated as the group’s Rule 30(b)(6) representative. (Deposition of Ohio State University College Democrats “OSUCD Dep.” at 8:19-21). The OSU College Democrats meet weekly, with “around 55” people in attendance at each meeting. (*Id.* at 42:18-19). Ms. Oberdorf confirmed that the number rose in 2018, from around 25 weekly attendees to more than 50. (*Id.* at 43:10-14).

1421. The OSU College Democrats “advocate, educate, and engage” people at OSU in alignment with the Democratic Party’s platform. (*Id.* at 13:14-19). The organization communicates with its members and the public primarily through email, as well as its Facebook

and Twitter accounts. (*Id.* at 50:23-51:2). Ms. Oberdorf testified that the OSU College Democrats increased their Twitter following over the past two years. (*Id.* at 27:25-28:4).

1422. The organization receives programming funds from Ohio State and raises additional funds through fundraisers conducted by the organization itself. (*Id.* at 29:10-16).

1423. The organization participates in election activities, including voter registration. Within one month in 2018, it completed more than 500 voter registrations. (*Id.* at 35:8-16).

1424. The group held a fundraiser with Twelfth Congressional District Democrat candidate Danny O'Connor at a local bar. (*Id.* at 37:5-13).

1425. The OSU College Democrats canvassed for the 2018 congressional election and organized phone banks in prior election years. (*Id.* at 78:25-79:7)

1426. Ms. Oberdorf estimated that the club spent 30% of its resources in the 2018 election on the Twelfth Congressional District race. (*Id.* at 89:16-22). While Ms. Oberdorf testified that Danny O'Connor's loss in the Twelfth District dampened enthusiasm among the OSU College Democrats, she could not quantify the loss of enthusiasm or name a single member who left the organization as a result. (*Id.* at 120:20-121:3).

1427. The executive board unanimously approved the decision to join the lawsuit, and Ms. Oberdorf confirmed with the university's legal department that the organization could participate. (*Id.* at 53:24-54:5). The board informed the group's membership of the lawsuit only after deciding to join the case. (*Id.* at 58:2-9).

1428. The OSU College Democrats believe that the 2011 Plan has harmed them by creating voter apathy and voter confusion, with members living across the Third, Twelfth, and Fifteenth Districts. (*Id.* at 62:19-25). Ms. Oberdorf failed to identify any specific member of the OSU College Democrats who failed to vote due to voter apathy. (*Id.* at 72:15-21).

1429. Ms. Oberdorf acknowledged that the OSU College Democrats could educate members and the public about their voting locations by directing them to the Secretary of State's website. (*Id.* at 74:19-25).

1430. Ms. Oberdorf stated that the Proposed Remedial Map would place the OSU campus area into a single district but conceded that many students do not vote according to their campus addresses. (*Id.* at 107:8-20).

1431. The group claims that the map has made it more difficult to reach out to candidates. Ms. Oberdorf stated that Representative Joyce Beatty has declined to speak at their meetings because, Ms. Oberdorf believes, the Third Congressional District is "safe." (*Id.* at 103:22-104:5). Ms. Oberdorf admitted that no one from Representative Beatty's office told her this and she was speculating. (*Id.* at 105:3-12).

c. Ohio A. Philip Randolph Institute

1432. Andre Washington has been a member the Ohio Chapter of the A. Philip Randolph Institute ("APRI") for over 10 years and served as its president for the last eight years. (Trial Tr. at 44:2-4, 45:19-22).

1433. APRI is a plaintiff in this litigation. (Trial Tr., Vol. I at 63:25-64:2).

1434. Mr. Washington is a resident of the 12th District and the APRI's Rule 30(b)(6) designee. (Trial Tr., Vol I at 54:21-55:2; Deposition of Ohio A. Phillip Randolph Institute ("APRI Dep.") at 12:2-6).

1435. APRI was founded in 1965. (Trial Tr., Vol. I at 44:20-22).

1436. Mr. Washington testified that the APRI Ohio Chapter has grown in recent years. (APRI Dep. at 51:16-25).

1437. The ACLU approached Mr. Washington about joining the lawsuit. (APRI Dep. at 81:7-8).

1438. APRI did not seek approval from the national APRI organization before joining this suit. (APRI Dep. at 20:13-14). It consulted with representatives from each regional chapter of APRI before joining the lawsuit, but it did not poll its members individually. (APRI Dep. at 47:4-15; Trial Tr., Vol I at 52:6-9, 66:4-15).

1439. When Ohio was drawing its congressional lines in 2011, even though public officials were seeking public input, Mr. Washington testified that APRI did not provide any input to public officials about those lines. (Trial Tr., Vol I at 64:6-17; APRI Dep. at 44:4-14).

1440. Aside from suing, APRI has never notified any public official that it opposes the current map. (Trial Tr., Vol I at 64:18-21; APRI Dep. at 44:15-20).

1441. Mr. Washington testified that the 2012 map harms APRI and its members because the members feel that their votes do not matter, but Mr. Washington could not identify a member of APRI who did not vote for this reason. (Trial Tr., Vol I at 53:12-14, 60:7-11; APRI Dep. at 67:5-9, 68:21-23). APRI also does not know whether its members vote or do not vote in congressional elections. (Trial Tr., Vol I at 69:2-1; APRI Dep. at 69:5-15).

1442. Mr. Washington admitted that voters are apathetic for all types of reasons unrelated to congressional races, but APRI is able to go out, talk to people, and encourage them to vote. (Trial Tr., Vol I at 71:17-19, 71:3-5).

1443. Mr. Washington contended that the map complicates voter-education efforts because APRI has to expend additional resources to make voters feel that their votes matter. (Trial Tr., Vol I at 53:15-21; APRI Dep. at 70:13-18). But he could not quantify these redirected resources. (Trial Tr., Vol I at 69:13-70:3; APRI Dep. at 72:7-9).

1444. Mr. Washington also contended that the maps cause voter confusion because voters do not know where to vote. (Trial Tr., Vol. I at 52:18-22). But Mr. Washington agreed that

regardless of how the districts are divided, people need to be educated about the district they live in and who they can vote for. (Trial Tr., Vol. I at 70:4-8).

1445. Mr. Washington testified that he believes that the injuries inflicted by the 2012 map can be cured by drawing “fair lines,” but he had no opinion on what those lines should be. (APRI Dep. at 36:2-9).

1446. Since the enactment of the 2011 Plan, APRI has successfully engaged in election activities, including voter registration, voter education, and Get Out the Vote efforts. (Trial Tr., Vol I at 67:18-68:4). These are APRI’s primary roles with respect to voting. (Trial Tr., Vol I at 67:9-27).

1447. Even with the 2011 Plan in place, Mr. Washington testifies that he considers APRI effective in political activity efforts. (Trial Tr., Vol I at 67:18-68:4).

1448. APRI agrees that political positions are not necessarily defined by a person’s party affiliation, (Trial Tr., Vol I at 69:9-12), and individuals can be motivated to vote based on issues unrelated to congressional races, (Trial Tr., Vol I at 71:14-16).

1449. Mr. Washington testified that he is entitled to having a congressional representative that listens to him and hears his concerns. (Trial Tr., Vol I at 59:3-9). But Mr. Washington also testified that there is nothing preventing him from reaching out to his congressional representative. (Trial Tr., Vol. I at 72:5-10).

1450. Mr. Washington testified that there are two political issues that are very important to him—the Affordable Care Act and reauthorization of Section 5 of the Voting Rights Act. (Trial Tr., Vol. I at 56:23-57:2).

1451. Mr. Washington testified that his current congressional representative, Troy Balderson, did not represent him on the Affordable Care Act. (Trial Tr., Vol I at 58:8-12, 15-17).

And his former representative, Pat Tiberi, did not represent him with respect to the Affordable Care Act or the reauthorization of the Voting Rights Act. (Trial Tr., Vol I at 58:15-22).

1452. Despite Mr. Washington’s testimony, the last time the Voting Rights Act was renewed, Republicans controlled Congress. *Today, The President Signed Into Law The Fannie Lou Hamer, Rosa Parks, And Coretta Scott King Voting Rights Act Reauthorization And Amendments Act Of 2006*, White House Archives (July 27, 2006)⁷ (press release discussing President Bush signing Voting Rights Act reauthorization); *Case: Voting Rights Act Reauthorization 2006*, NAACP Legal Defense and Educational Fund, Inc. (Feb. 16, 2018)⁸ (discussing reauthorization of Voting Rights Act occurred on July 27, 2006, with a 25-year extension).

1453. Further, every Ohio Republican congressional member voted to reauthorize the Voting Rights Act—including Mr. Washington’s representative. *Final Vote Results For Roll Call 374*, Congress.gov (July 13, 2006)⁹ (providing roll-call vote for VRA reauthorization and showing all Ohio congressional representatives voting “aye”); *U.S. House of Representatives: November 2, 2004*, Ohio Secretary of State¹⁰ (depicting elections for all Ohio congressional representatives in November 2004 general election); *2nd Congressional District: August 2, 2005*, Ohio Secretary of State¹¹ (depicting results of special election for Ohio’s 2nd Congressional District in 2005).

d. Northeast Ohio Young Black Democrats

1454. Northeast Ohio Young Black Democrats (“NEOYBD” or “Organization”) was represented by Gabrielle Jackson, its President for the last two years. (Deposition of Northeast

⁷ <https://georgewbush-whitehouse.archives.gov/news/releases/2006/07/20060727-1.html>.

⁸ <https://www.naacpldf.org/case-issue/voting-rights-act-reauthorization-2006/>

⁹ <http://clerk.house.gov/evs/2006/roll374.xml>

¹⁰ <https://www.sos.state.oh.us/elections/election-results-and-data/2004-elections-results/u.s.-house-of-representatives-november-2-2004/>

¹¹ <https://www.sos.state.oh.us/elections/election-results-and-data/2005-elections-results/2nd-congressional-district-august-2-2005/>.

Ohio Young Black Democrats “NEOYBD Dep.” at 7:12-8:6). Ms. Jackson became a member of the Organization in 2014 and prior to serving as president, served as treasurer. (*Id.*).

1455. NEOYBD is a group that “looks to mentor, empower and recruit the next generation of young people of color who want to be involved in the political process.” (*Id.* at 8:9-12). The organization engages in advocacy work, including voter education, training and information sharing. (*Id.* at 8:7-9:22). The organization also supports democratic candidates and would prefer to be in districts represented by a Democrat. (*Id.* at 43:3-18)

1456. The organization has members living in Congressional Districts 9, 11, 13, and 14. (*Id.* at 41:15-42:7; 45:12-16). Members living in Congressional Districts 9, 11, and 13 are all represented by Democrats. (*Id.*).

1457. NEOYBD became a plaintiff in this lawsuit after being contacted by Erik Meinhardt at the ACLU. (*Id.* at 35:2-37:7). The organization’s membership at large was not involved in the decision to become a plaintiff in this lawsuit, as the decision was made by NEOYBD’s four member board. (*Id.* at 38:8-40:12). Despite admitting that the membership was not consulted, and did not consent to becoming plaintiffs in this suit, Ms. Jackson testified that the organization intends for all its members to be bound by the outcome of this case. (*Id.* at 38:8-40:12).

1458. NEOYBD believes that it has been harmed by the 2011 Plan because the plan makes it harder to recruit members and raise money for their organizations and candidates. (*Id.* at 10:25-1:13; 42:18-44:3) Despite this contention, NEOYBD admits that its membership has grown since 2012, and that the organization raised more money this past year, than ever before. (*Id.* at 20:2-13; 27:5-22)

1459. NEOYBD also believes that the 2011 Plan had harmed the organization because their members, and members the meet in the community “don’t feel like their votes matter.” (*Id.* at 42:18-44:3) Despite believing that votes don’t matter, NEOYBD admits that votes of their members are actually counted, and that no one has been prohibited from voting in any election. (*Id.* at 66:17-67:4). NEOYBD also admits that members living in Congressional Districts 9, 11, and 13, are all represented by Democrats, which the organization prefers to be represented by, and that District 9 representative Marcy Kaptur “represents [the organization’s] interests.” (*Id.* at 44:12-45:13; 48:10-18; 53:22-54:2)

1460. Finally, NEOYBD believes that it is harmed by the 2011 Plan because when members are out canvassing and conducting voter outreach efforts, the community, feel like it does not have to vote, or that they will not vote. (*Id.* at 42:18-44:3; 69:3-70:2) However, the organization also admits that nothing about the 2011 Plan has prevented NEOYBD from engaging in voter-registration activities, providing training for democratic leaders or from being able to hold candidate forums. *Id.* at (84:7-85:17). Furthermore, Ms. Jackson stated that the organization was a “millennial- focused group” and that “millennials are not voting because of “[j]obs, job training, education, [and] affordable education” not the 2011 Plan. (*Id.* at 10:7-20).

e. Hamilton County Young Democrats

1461. Nathaniel Simon has been a member of the Hamilton County Young Democrats since 2017. (Trial Tr., Vol II at 64:13-22, 64:25-65:2). Mr. Simon restarted the organization in 2017 and served a president until December 2018. (Trial Tr., Vol II at 64:16-19).

1462. Mr. Simon testified on behalf of the Hamilton County Young Democrats. (Trial Tr., Vol II at 64:20-22).

1463. The Hamilton County Young Democrats is “an organization that is devoted to getting young people involved and educated about politics.” (Trial Tr., Vol II at 66:13-14).

1464. The Hamilton County Young Democrats has members in both District 1 and District 2. (Trial Tr., Vol II at 67:20-23).

1465. Mr. Simon is a resident of Ohio's 2nd Congressional District. (Trial Tr., Vol II at 63:4-5). His congressional representative is Republican Brad Wenstrup. (Trial Tr., Vol II at 63:6-9).

1466. As a part of the Hamilton County Young Democrats, Mr. Simon engaged in canvassing for Aftab Pureval and Jill Schiller, the Democratic candidates for the 1st and 2nd Congressional Districts. (Trial Tr., Vol II at 68:15-16, 68:24-69:1).

1467. Mr. Simon testified that the Hamilton County Young Democrats were harmed by the 2012 map because election results are "locked in" due to the district lines. (Trial Tr., Vol II at 72:3-7).

1468. Mr. Simon testified, however, that many factors can impact a congressional race, including a scandal involving the candidate or a staffer. (Trial Tr., Vol II at 81:22-82:3). For example, Mr. Simon testified that he was aware that the campaign manager for Aftab Pureval—the Democratic candidate for the 1st District—resigned less than a month before the election. (Trial Tr., Vol II at 82:8-10).

1469. Mr. Simon testified that the Hamilton County Young Democrats have been harmed by the 2012 map because the organization has experienced voter apathy. (Trial Tr., Vol II at 69:11-21). But despite the alleged apathy, the Hamilton County Young Democrats have gained about 150 members since 2017. (Trial Tr., Vol II at 75:2-7).

1470. Further, Mr. Simon testified that nothing about the 2012 has prevented him or members of the Hamilton County Young Democrats from engaging with potential members and voters. (Trial Tr., Vol II at 78:14-17, 19-22).

1471. Mr. Simon also testified that the Hamilton County Young Democrats have also experienced voter confusion since the enactment of the 2012 map. (Trial Tr., Vol II at 75:22-76:1).

1472. Namely, Mr. Simon complained that voters do not know where they should vote based on where they lived. (Trial Tr., Vol II at 75:55-76:4). Mr. Simon testified, however, that during his time as president of the Hamilton County Young Democrats, he has always been able to inform voters about where they could vote. (Trial Tr., Vol II at 76:9-13).

1473. Further, Mr. Simon testified that nothing about the 2012 map has prevented the Hamilton County Young Democrats from hosting voter education forums. (Trial Tr., Vol II at 78:24-79:1).

1474. Mr. Simon testified that the Hamilton County Young Democrats were harmed by the 2012 map because they were having to hold additional events to educate and engage voters. (Trial Tr., Vol II at 76:18-21). But Mr. Simon was not involved with the Hamilton County Young Democrats prior to when the 2012 map was enacted and thus does not know how much time the organization spent hosting events and educating voters on where to vote before the 2012 map was enacted. (Trial Tr., Vol II at 76:22-77:7).

1475. Similarly, because Mr. Simon was not involved with the Hamilton County Young Democrats prior to the enactment of the 2012 map, he could not testify as whether the organization's canvassers were frustrated by voter apathy prior to the enactment of the 2012 map. (Trial Tr., Vol II at 77:18-21).

1476. Although Mr. Simon testified that the 2011 Plan negatively burdened the Hamilton County Young Democrats' fundraising efforts, he could not testify as so whether the

organization's fundraising burden increased after the 2012 map was enacted. (Trial Tr., Vol II at 77:22-25, 78:3-5).

1477. Mr. Simon testified that he could not quantify the harm alleged. (Trial Tr., Vol II at 77:8-12).

1478. Mr. Simon testified that the Hamilton County Young Democrats were harmed because the organization is not aligned with its representatives on important issues, like the Parkland shooting and safety in schools. (Trial Tr., Vol II at 70:14-18, 70:23-71:2, 79:24-80:1). But Mr. Simon also testified that he was not aware that a bill introduced by Representative Chabot—the U.S. Representative for District 1—provided funding for teacher training; new equipment, like metal detectors; and additional police officers in schools. (Trial Tr., Vol II at 80:24-81:4).

VI. Plaintiffs' Delay In Bringing This Case Harmed Defendants

1479. Given the delay since the 2011 Plan was enacted, four important fact witnesses in this case —Bob Bennett, Louis Stokes, Tom Hofeller, Mike Wild and Steven LaTourette—are now deceased. (Trial Tr., Vol VI at 75:19-25; Dennis Hevesi, Louis Stokes, Congressman from Ohio and Champion of the Poor, Dies at 90, N.Y. Times (Aug. 19, 2015), <https://www.nytimes.com/2015/08/20/us/louis-stokes-ohio-first-black-congressman-dies-at-90.html>; Reid Hill, Pioneer of Modern Redistricting Dies at 75, The Hill (Aug. 8, 2018, 5:00 PM), <https://thehill.com/homenews/state-watch/402489-pioneer-of-modern-redistricting-dies-at-75>; Sabrina Eaton, Former Ohio Congressman Steve LaTourette Dies At Age 62, Cleveland Plain Dealer (Aug. 4, 2016), at https://www.cleveland.com/metro/2016/08/former_ohio_congressman_steve.html).

1480. Both Mr. DiRossi and Mr. Judy testified that Mr. Bennett was instrumental in facilitating discussions with Democratic leaders. (Trial Tr., Vol. V at 160:5-19; Trial Tr., Vol VI at 74:4-11, 75:19-21). In particular, Mr. Judy testified that Mr. Bennett played a key role in the Kaptur-Kucinich pairing in District 9. (Trial Tr., Vol VI at 74:4-11, 75:19-21, 76:16-19).

1481. Congresswoman Marcia Fudge did not dispute that Congressman Louis Stokes, a revered community leader who represented the old 21st district for 30 years, approved of the configuration of the 11th district in the 2011 Plan. (*See* J01 at 71:12-21; Trial Tr., Vol I at 88:9-16, 88:23-25, 89:16-18, 98:2-7).

1482. Plaintiffs have attempted to use various email communications to or from Dr. Thomas Hofeller in this case—but, because he is deceased, there is no opportunity to conduct proper discovery of him or to provide any context for his alleged email communications. Similarly, while discovery has revealed that Rep. LaTourette was heavily involved in discussions with Democratic members of Ohio’s congressional delegation about the construction of the 2011 Plan, he has taken those conversations to the grave.

1483. Christopher Glassburn, who led redistricting efforts in 2011 for the Ohio House Democratic Caucus, testified that he had since lost access to his Hotmail email account, and he no longer has access to his Ohio House email address. (Glassburn Dep. at 17:24-18:6, 18:11-25).

1484. Accordingly, Glassburn, a key Democratic House staffer involved in the 2011 redistricting did not have access to either of his email accounts to produce documents in response to a subpoena. (Glassburn Dep. at 17:15-18:6).

1485. Michael Lenzo testified that the Ohio House has different retention schedules for general legislative emails, which are retained to the end of the General Assembly in which they are generated, and a five-year retention schedule on litigation records. (Lenzo Dep. at 23:3-24:17).

1486. Mr. Lenzo further testified that redistricting and the apportionment of state legislative districts are often seen as “intertwined,” so it was necessary to retain records of the 2011 redistricting process “five years past the conclusion” of the *Wilson v. Kasich* litigation regarding state legislative apportionment, which was concluded in November 2012; this made November 2017 the last possible retention date for records relating to redistricting. (Lenzo Dep. at 23:20-24:10).

1487. Catherine Turcer began working for Common Cause Ohio in April of 2012, and as of the date of her deposition was serving as the organization’s Executive Director. (Turcer Dep. 15:2-10).

1488. Ms. Turcer testified that she is familiar with the organization Ohio Campaign for Accountable Redistricting, “affectionally” referred to as OCAR, which was started in either 2010 or 2011 with the assistance of OCAR Director Jim Slagle. (Turcer Dep. 17:3-7; 18:5-6, 18:15-17).

1489. Mr. Slagle testified that after the redistricting process concluded, OCAR made a number of public records requests to different bodies via letter, email, and phone communication. (Slagle Dep. 19:6-8, 19:13-18, 120:7-17).

1490. Ms. Turcer confirmed that in the course of its work in 2011, OCAR—via Mr. Slagle—made public records requests to a variety of people and entities, including the governor’s office; the secretary of state; the Ohio House; the Ohio Senate; Congressman LaTourette; Speaker John Boehner; Communications Director Mike Dittoe; and map sponsor Matt Huffman. (Turcer Dep. 19:23-20:13, 23:15-23:2).

1491. Mr. Slagle testified that in response to his public records requests, he received around eight to ten banker boxes of responsive hard-copy records. (Slagle Dep. 23:11-19).

1492. Ms. Turcer testified that “lots and lots and lots of boxes” of hard copy documents were produced in response to Mr. Slagle’s public records requests, as well as electronic documents on disks. (Turcer Dep. 24:9-12, 26:17-19).

1493. Ms. Turcer went with Mr. Slagle to the Ohio House to pick up and help “schlep” boxes of hard-copy documents. (Turcer Dep. 20:19-21:4).

1494. Ms. Turcer testified that after she and Mr. Slagle picked up the boxes of documents, the documents were transported to and stored in an office building shared by OCAR and Ohio Citizen Action on 35 East Gay. (Turcer Dep. 27:18-28:12).

1495. The boxes of hard copy documents were stored in OCAR and Ohio Citizen Action’s shared office for the entire time that OCAR was doing its work. (Turcer Dep. 28:17-20).

1496. In 2012, Ms. Turcer took the boxes of hard copy documents to the Ohio Education Association (OEA) on Broad Street, which had provided her with work and storage space. (Turcer Dep. 27:5-12).

1497. After the boxes of hard copy documents were taken to OEA, Ann Henkener from the League of Women Voters of Ohio agreed to be responsible for them. (Turcer Dep. 28:21-29:2).

1498. Ann Henkener, who has worked with OCAR through her position with LWVOH, testified that an estimated ten or fifteen boxes of documents were produced in response to OCAR’s public records requests. (Henkener Dep. 18:16-20, 21:20-22:3).

1499. While OCAR was doing its work, the hard-copy documents were kept at the office that OCAR shared with Ohio Citizen Action on Gay Street. (Henkener Dep. 12:22-25).

1500. Ms. Turcer testified that she does not know what happened to the boxes of hard copy documents after Ms. Henkener took custody of them. (Turcer Dep. 29:3-6).

1501. Ms. Henkener testified that after OCAR published its report “The Elephant in the Room,” the hard copy documents remained in the shared office “for quite a while.” (Henkener Dep. 13:4-6).

1502. At some point after OCAR published its report, Ohio Citizen Action discontinued its lease on the Gay Street office, and as a result the office space had to be cleaned out. (Henkener Dep. 13:7-10).

1503. Ms. Henkener testified that when the Gay Street office was being cleaned out, she took two boxes of the hard-copy documents from that office. (Henkener Dep. 13:13-16).

1504. Ms. Henkener testified that she does not recall whether she looked at the documents in those two boxes prior to moving them in order to determine if any or all of them were responsive to the public records requests. (Henkener Dep. 22:19-23:8).

1505. Ms. Henkener further testified:

I do remember pondering whether we wanted any of this stuff, whether it made sense to just take two boxes when there were a lot of other boxes that we weren't taking. We just didn't have room for everything so I thought I'll just . . . I was picking up some books and some other things, I have room on the cart, I'll just throw two boxes on there and bring them back to the League's office. (Henkener Dep. 13:16-14:2).

1506. Ms. Henkener testified that she does not know what happened to the rest of the boxes—aside from the two she took—of hard copy documents after they were stored in the offices on Gay Street. (Henkener Dep. 22:12-18).

1507. At trial, Jennifer Miller testified that the documents in the other boxes were likely shredded at the end of 2017 (Trial Tr., Vol. I, at 183:17:18).

1508. Moreover, Ms. Miller suggests that Ms. Henkener only selected the two boxes she did because they “probably were the most helpful ones,” although Ms. Miller’s “assumption” was that the shredded items “didn't have much substance” (Trial Tr., Vol. I, at 185:15-186:3).

Respectfully submitted,

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CERTIFICATE OF SERVICE

I certify that on March 28, 2019, the foregoing was filed via the Court's CM/ECF system and served via electronic filing upon all counsel of record in this case.

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