

FILED

STATE OF NORTH CAROLINA

IN THE GENERAL COURT OF JUSTICE

COUNTY OF WAKE

2021 NOV 16 P 4: 28

SUPERIOR COURT DIVISION

CVS

NORTH CAROLINA LEAGUE OF CONSERVATION  
VOTERS, INC.; HENRY M. MICHAUX, JR.; DANDRIELLE  
LEWIS; TIMOTHY CHARTIER; TALIA FERNÓS;  
KATHERINE NEWHALL; R. JASON PARSLEY; EDNA  
SCOTT; ROBERTA SCOTT; YVETTE ROBERTS; JEREANN  
KING JOHNSON; REVEREND REGINALD WELLS;  
YARBROUGH WILLIAMS, JR.; REVEREND DELORIS L.  
JERMAN; VIOLA RYALS FIGUEROA; and COSMOS  
GEORGE,

Plaintiffs,

v.

REPRESENTATIVE DESTIN HALL, in his official capacity as  
Chair of the House Standing Committee on Redistricting;  
SENATOR WARREN DANIEL, in his official capacity as Co-  
Chair of the Senate Standing Committee on Redistricting and  
Elections; SENATOR RALPH E. HISE, JR., in his official  
capacity as Co-Chair of the Senate Standing Committee on  
Redistricting and Elections; SENATOR PAUL NEWTON, in  
his official capacity as Co-Chair of the Senate Standing  
Committee on Redistricting and Elections; REPRESENTATIVE  
TIMOTHY K. MOORE, in his official capacity as Speaker of  
the North Carolina House of Representatives; SENATOR  
PHILIP E. BERGER, in his official capacity as President Pro  
Tempore of the North Carolina Senate; THE STATE OF  
NORTH CAROLINA; THE NORTH CAROLINA STATE  
BOARD OF ELECTIONS; DAMON CIRCOSTA, in his official  
capacity as Chairman of the North Carolina State Board of  
Elections; STELLA ANDERSON, in her official capacity as  
Secretary of the North Carolina State Board of Elections; JEFF  
CARMON III, in his official capacity as Member of the North  
Carolina State Board of Elections; STACY EGGERS IV, in his  
official capacity as Member of the North Carolina State Board of  
Elections; TOMMY TUCKER, in his official capacity as  
Member of the North Carolina State Board of Elections; and  
KAREN BRINSON BELL, in her official capacity as Executive  
Director of the North Carolina State Board of Elections,

Defendants.

PLAINTIFFS'  
MOTION FOR  
PRELIMINARY  
INJUNCTION

NOW COME Plaintiffs, by and through counsel, and respectfully move this Court, pursuant to Rule 7(b) and Rule 65 of the North Carolina Rules of Civil Procedure, for entry of an order granting a preliminary injunction. Plaintiffs show the Court as follows:

1. This is an action for declaratory and injunctive relief to prevent Defendants State of North Carolina, North Carolina State Board of Elections, Anderson, Carmon, Eggers, Tucker, and Bell (“SBE Defendants”) from preparing for, administering, or conducting elections under unconstitutional districting plans for Congress, Senate, and House devised by Defendants Hall, Daniel, Hise, Newton, Moore, and Berger (“Legislative Defendants”) and enacted by the General Assembly on November 4, 2021 (the “Enacted Plans”). Absent a prohibitory injunction, elections will proceed under maps that the General Assembly crafted to effect unconstitutional partisan gerrymanders that effectively guarantee one party—the Republican Party—a majority of seats in Congress, the North Carolina Senate, and the North Carolina House of Representatives, even if voters prefer the other party. The voting rights of millions of North Carolinians are at stake. And unless this Court enters an injunction, Defendants’ actions will irreparably and permanently harm Plaintiffs by depriving them of their rights under the Free Elections Clause, Equal Protection Clause, Free Speech Clause, and Free Assembly Clause of the North Carolina State Constitution.
2. The Verified Complaint in this action has been filed contemporaneously with this Motion on this day, November 16, 2021.
3. Plaintiffs have standing to bring this action and to assert the legal claims therein.
4. Plaintiffs seek a preliminary injunction prohibiting SBE Defendants—as well as their officers, agents, servants, employees, attorneys, successors in office, and all persons in active concert or participation with them—from preparing for, administering, or

conducting the March 8, 2022, primary elections and any subsequent elections for Congress, the North Carolina Senate, or the North Carolina House of Representatives using the Enacted Plans.

5. Plaintiffs are likely to succeed in demonstrating that the Enacted Plans violate the North Carolina State Constitution because the Enacted Plans constitute an unlawful partisan gerrymander in violation of the Free Elections Clause, Equal Protection Clause, Free Speech Clause, and Free Assembly Clause of the North Carolina State Constitution, as set forth in Counts I, II, and III of Plaintiffs' Verified Complaint.<sup>1</sup>
6. Absent a preliminary injunction, Plaintiffs are likely to suffer irreparable harm from Defendants' constitutional violations, which will also irreparably harm millions of North Carolina voters who seek to associate with and support their candidates of choice.
7. In addition to entering the above-described injunction, the Court should order the following relief, for reasons more fully described in Plaintiffs' Verified Complaint:
  - a. To the extent that the General Assembly does not, within two weeks from the date of this Court's order entering a preliminary injunction, adopt districting plans that remedy the constitutional violations found in the Enacted Plans as fully as would the remedial maps laid out in Plaintiffs' Verified Complaint (identified therein as the "Optimized Maps"), then the 2022 primary elections and the 2022 general election for Congress, the North Carolina Senate, and the North Carolina House of Representatives shall be conducted under the Optimized Maps.

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<sup>1</sup> Plaintiffs are not seeking preliminary relief at this time based on Counts IV–VI of their Verified Complaint.

- b. To the extent that the Court determines that it would otherwise be infeasible to conduct the aforementioned 2022 primary elections as scheduled on March 8, 2022, with constitutionally compliant districting plans, then the Court retains jurisdiction to—in its discretion—delay the 2022 primary elections for Congress, the North Carolina Senate, and the North Carolina House of Representatives, shorten or eliminate the two-week period described in Subparagraph (a) above, or order such other relief as the Court deems just and equitable.
  - c. The candidate-filing period for the 2022 primary elections for Congress, the North Carolina Senate, and the North Carolina House of Representatives shall be delayed until such dates as this Court may by order provide.
  - d. If any citizen has established his or her residence in a North Carolina Senate or House district modified by any remedial redistricting plan approved by this Court, as of the closing day of the candidate filing period for the 2022 election in that district, that citizen shall be qualified to serve as Senator or Representative if elected to that office, notwithstanding the requirements of Sections 6 or 7 of Article II of the North Carolina State Constitution, which provide that each Senator and Representative, at the time of his or her election, shall have resided “in the district for which he is chosen for one year immediately preceding his election.”
  - e. Grant Plaintiffs such other and further relief as the Court deems just and equitable.
8. Pursuant to N.C. Gen. Stat. § 1A-1, Rule 57, Plaintiffs request a prompt hearing on this motion.

WHEREFORE, Plaintiffs request that this Court grant their request for a preliminary injunction.

Dated: November 16, 2021

Respectfully submitted,

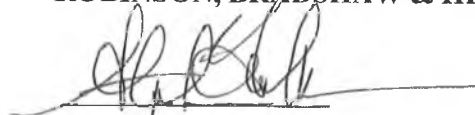
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*\* Pro hac vice motion forthcoming*

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STATE OF NORTH CAROLINA

WAKE COUNTY

NORTH CAROLINA LEAGUE OF WAKE CO., C.S.C.  
CONSERVATION VOTERS, INC.; HENRY  
M. MICHAUX, JR., et al.,

Plaintiffs,

v.

REPRESENTATIVE DESTIN HALL, in his  
official capacity as Chair of the House Standing  
Committee on Redistricting, et al.,

Defendants.

FILED

IN THE GENERAL COURT OF JUSTICE

SUPERIOR COURT DIVISION

2021 NOV 22 P 1:36

21 CVS 015426

SUPPLEMENTAL  
AFFIDAVIT OF  
STEPHEN D.  
FELDMAN

1. I, Stephen D. Feldman, am an attorney at Robinson, Bradshaw & Hinson, P.A., counsel for Plaintiffs in this matter.

2. On November 16, 2021, I submitted an affidavit to attest to the authenticity of exhibits in support of Plaintiffs' Verified Complaint and Motion for a Preliminary Injunction.

3. One of those exhibits, Exhibit I, was designated as consisting of the locational data for the redistricting map identified in Plaintiffs' Verified Complaint as the "Optimized House Map."

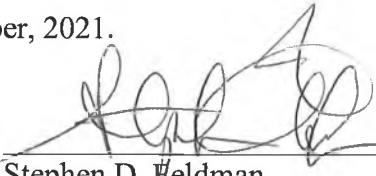
4. I have discovered, however, that even though Exhibit I is labeled as being for the "Optimized House Map," the data in Exhibit I is actually for the map identified in Plaintiffs' Verified Complaint as the "Optimized Senate Map."

5. I have attached hereto, as Exhibit AI, the correct locational data for Plaintiffs' Optimized House Map.

6. I ask the Court to disregard Exhibit I to my original affidavit and to rely instead on Exhibit AI attached hereto.

7. I affirm, under the penalties for perjury, that the foregoing representations are true.


This the 22nd day of November, 2021.

  
\_\_\_\_\_  
Stephen D. Feldman

North Carolina  
County of Wake

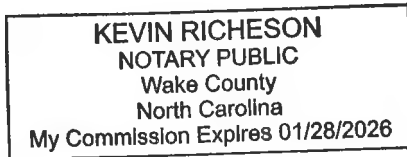
Sworn to (or affirmed) and subscribed before me this the 22nd day of November, 2021.

(Official Seal)

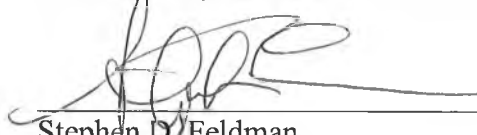
  
\_\_\_\_\_  
*Official Signature of Notary*

Kevin Richeson, Notary Public

My commission expires: 01/28/2026



ROBINSON, BRADSHAW & HINSON, P.A.

A handwritten signature in dark ink, appearing to read 'S. Feldman', is written over a horizontal line.

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CERTIFICATE OF SERVICE

I hereby certify that the foregoing document was served upon each of the parties to this action by electronic mail to counsel at the e-mail addresses indicated below, in accordance with North Carolina Rule of Civil Procedure 5(b)(1)(a):

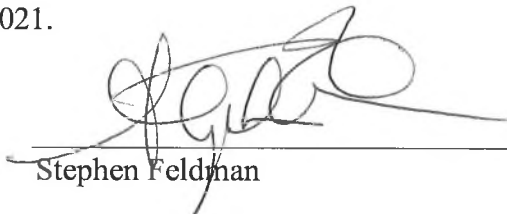
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Senator Ralph E. Hise, Jr., Senator Paul  
Newton, Representative Timothy K. Moore,  
and Senator Philip E. Berger.*

*\* Pro hac vice motion forthcoming*

This the 22nd day of November, 2021.

  
\_\_\_\_\_  
Stephen Feldman

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Stella Anderson, Jeff Carmon III, Stacy  
Eggers IV, Tommy Tucker, Karen Brinson  
Bell; and the State of North Carolina*

# **EXHIBIT AI**

User:

Plan Name: **Optimized State House Map**

Plan Type:

## Plan Components (Short)

Friday, November 19, 2021

8:34 PM

### District 1

**County Beaufort NC**

**County Chowan NC**

**County Perquimans NC**

**County Tyrrell NC**

**County Washington NC**

VTD LEES MILL

VTD PLYMOUTH 1

VTD PLYMOUTH 2

VTD PLYMOUTH 3

### District 2

**County Durham NC**

VTD AMERICAN LEGION POST 7

VTD BAHAMA RURITAN CLUB

VTD BAHAMA VFD - ROUGEMONT STATION

VTD GLENN ELEMENTARY

VTD NORTH REGIONAL LIBRARY

Block 001603:

4000	4001	4002	4003	4004	4005	4006	4007	4008	4009	4010	4011
4012	4013	4014	4015	4016	4017	4018	4019	5000	5001	5002	5003
5004	5005	5006	5007	5008	5009						

Block 001604:

6001

VTD NORTHERN HIGH SCHOOL

VTD TEMPLE BAPTIST CHURCH

Block 001601:

1023	1024	1025	1026	1034	1035	1037	1038	2000	2001	2002	2003
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
2016	3000	3001	3002	3003	3004	3005	3006	3007	4000	4001	4002
4003	4004	4005	4014	4016	5009	5010	5011				

Block 001603:

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
5012	5013	5014	5015	5016	5017	5018	5019	5020	5021	5022	5024
5025											

Block 001708:

4000	4003	4004	4011
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VTD THE RIVER CHURCH

VTD VFW POST 2740

**County Person NC**

### District 3

**County Craven NC**

VTD BRICES CREEK

VTD BRIDGETON

VTD Clarks-Rhems

**Plan Components (Short)**

**District 3**

**County Craven NC**

VTD COVE-FORT BARNWELL  
VTD CROATAN  
VTD DOVER-FORT BARNWELL  
VTD FAIRFIELD HARBOUR  
VTD FORT TOTTEN  
VTD GEORGE STREET  
VTD Glenburnie-Grover C  
VTD GRANTHAM 1A  
VTD GRANTHAM 2B  
VTD H.J. MACDONALD  
VTD HAVELOCK

Block 961101:

2002	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
2030	2031	2032	2033	2034	2035	2036	2037				

Block 961102:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023
1026	1027	2013	2014	2015	2016	2017	2018	2020	2023	2024	2025
2026	2027	2029	2030	2031	2032	2033	2035	2036	2037	2038	2041
2042	2043	2044	2045	2046	2047	2048	2049	2051	2052	2053	2054
2055	2056	2057	2058	2059	2060	2062	2063	2064	2066	2067	2068
2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080
2081	2082	2083	2084	2085	2086	2087	2088	2089			

Block 961201:

1000	1001	1002	1003	1004	1005	1006	1014	1015	1016	1017	1018
1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030
1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042
1043	1044	1045	3000	3001	3002	3003	3004	3005	3006	3007	3008
3009	3010	3011	3012	3013	3014	3015	3016	3017	3018	3019	3020
3021											

Block 961202:

1103

Block 961301:

1008	1010	1011	3027	3028
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VTD JASPER  
VTD RIVER BEND  
VTD TRENT WOODS  
VTD Truitt-Ernul  
VTD Van-Ep  
VTD WEST NEW BERN

**District 4**

**County Duplin NC**

**County Wayne NC**

VTD 01  
VTD 02  
VTD 03

**Plan Components (Short)**

Optimized State House Map

**District 4**

**County Wayne NC**

VTD 04  
VTD 08  
VTD 24  
VTD 2530  
VTD 26  
Block 000603:  
4019 4020 4021 4022 4024  
Block 000902:  
1039 1040 1042 1044 1052 1054 1055 1056 1062  
VTD 28  
Block 000700:  
3003 3004 3011 3023 3039 3042

**District 5**

**County Camden NC**

**County Gates NC**

**County Hertford NC**

**County Pasquotank NC**

**District 6**

**County Harnett NC**

VTD ANDERSON CREEK  
VTD BARBECUE  
VTD BLACK RIVER  
Block 070801:  
1015 1016 1017 1018  
Block 071003:  
2009  
VTD BOONE TRAIL  
VTD CENTRAL HARNETT LILLINGTON  
VTD CENTRAL HARNETT NEILLS CREEK  
Block 070801:  
1013 1014 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029  
1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 1044 1045  
1046 1047 1048 1049 1050 1051  
Block 070802:  
1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013  
1015 1016 1017 1021 1022 1023 1024  
Block 071003:  
2013 2015  
VTD JOHNSONVILLE  
VTD NORTHWEST HARNETT  
VTD STEWARTS CREEK  
Block 070600:  
1000 1002 1003 1006 1007 1008 1009 1010 1012 1013 1014 1015  
1016 1017 1018 1019 1021 1022 1023 1024 1025 1026 1027 1028  
1029 1030 1031 1032 1033 1034 1035 1036 1037 1040 1041 1042  
1043 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

**Plan Components (Short)**

Optimized State House Map

**District 6**

**County Harnett NC**

VTD STEWARTS CREEK

Block 070600:

2011	2012	2013	2017	2018	2019	2020	2021	2022	2023	2024	2025
2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049
2050	2052	2053									

Block 070700:

3026

Block 071201:

1013	1014	1022	1026	1043	1056	1057	1059				
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**District 7**

**County Franklin NC**

**County Granville NC**

VTD 00CRDM

Block 970601:

1020	1024	1025	1043	1044							
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Block 970606:

1005	1006	1007	1008	1009	1010	1011	1013	1014	1015	1017	1018
1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030
1035	1036	1037	1039	1040	1041	1042	2002	2003	2004	2005	2006
2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
2019	2020	2021	2022	2023	2030	2031	2032	2033	2034	2035	2036

Block 970607:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1015	1016	1018	1019	1022	2009	2010	2012	2013	2014
2015											

VTD 00MTEN

VTD 00WILT

**District 8**

**County Pitt NC**

VTD ARTHUR

VTD BELVOIR

VTD BETHEL

VTD CAROLINA

VTD FALKLAND

VTD FARMVILLE A

VTD FARMVILLE B

VTD FOUNTAIN

VTD GREENVILLE 1

VTD GREENVILLE 10A

VTD GREENVILLE 10B

VTD GREENVILLE 3

VTD GREENVILLE 4A

VTD GREENVILLE 6

VTD GREENVILLE 7

VTD GREENVILLE 7B

## Plan Components (Short)

Optimized State House Map

### District 8

#### County Pitt NC

VTD GREENVILLE 8A  
VTD GREENVILLE 8B  
VTD GREENVILLE 9  
VTD GRIMESLAND  
VTD PACTOLUS  
VTD SIMPSON A  
VTD SIMPSON B

### District 9

#### County Pitt NC

VTD AYDEN A  
VTD AYDEN B  
VTD CHICOD  
VTD GREENVILLE 13A  
VTD GREENVILLE 11A  
VTD GREENVILLE 11B  
VTD GREENVILLE 12A  
VTD GREENVILLE 12B  
VTD GREENVILLE 13B  
VTD GREENVILLE 4B  
VTD GREENVILLE 5A  
VTD GREENVILLE 5B  
VTD GRIFTON  
VTD SWIFT CREEK  
VTD WINTERVILLE NORTH  
VTD WINTERVILLE SOUTH  
VTD WINTERVILLE WEST

### District 10

#### County Wayne NC

VTD 05  
VTD 06  
VTD 07  
VTD 09  
VTD 10  
VTD 11  
VTD 12  
VTD 13  
VTD 14  
VTD 15  
VTD 16  
VTD 17  
VTD 18  
VTD 1920  
VTD 21  
VTD 22  
VTD 23  
VTD 26

**Plan Components (Short)**

Optimized State House Map

**District 10**

**County Wayne NC**

VTD 26

Block 000601:

3009 3010 3011 3012 3013 3014

Block 000603:

4000 4001 4002 4003 4004 4005 4006 4007 4009 4010 4011 4012  
4013

Block 000902:

1000 1001 1002 1003 1004 1023 1024 1038 1046 1047 1048 1063  
2012 2013 2014 2015 2016 2019 2020 2021 2022 2023 2024 2025  
2026 2027 2028 2029 2030 2031 2032 2033 2036 2037 2038 2039  
2040 2041 2042 3013 3015 3016 3019 3020 3021 3022 3023 3024  
3025 3026 3027 3028 3035 3036 3037 3038

VTD 27

VTD 28

Block 000402:

3016 3019 3020 3021 3022 3023 3025 3026 3027 3028

Block 000601:

1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027  
1028

Block 000603:

1000 1001 1002 1003 1004 1007 1008 1009 1010 1011 1012 1014  
1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 2000 2001  
2002 2003 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014  
2015 3000 3001 3002 3003 3004 3005 3006 3007 3008 3009 3010  
3011 3012 3013 3014 4008 4014 4015 4016 4017 4018 4023

Block 000604:

1024 1025 1026 1027 1028 2003 2004 2005 2006 2007 2010

Block 000700:

3000 3001 3002 3005 3006 3007 3008 3009 3033

VTD 29

**District 11**

**County Wake NC**

VTD 01-32

VTD 01-48

Block 052407:

2001 2002 2003 2004 2005 2006

VTD 01-49

VTD 04-01

VTD 04-02

VTD 04-03

VTD 04-04

VTD 04-05

Block 052401:

1028 1029 1030 1031 1078 1094 1111

Block 053520:

2000 2001 2002 2003 2004 2005 3009 3010 3011 3012 3013



**Plan Components (Short)**

Optimized State House Map

**District 11**

**County Wake NC**

VTD 04-05

Block 053521:

1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022
1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034
1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046
1047	1048	1049	1050	1052	1053	1054	1055	1056	1057	1058	1059
1060	1061	1062	1063	1064	1065	1066	1069	1070	1071	1076	2000
2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
2037	2038	2039	2040								

VTD 04-06

Block 053506:

3000	3001	3002	3003	3004	3005	3006	3007	3008	3009	3010	3011
3012	3013	4000	4001	4002	4003	4004	4005	4006	4007	4008	4009
4010	4011	4012	4013	4014	4015	4017					

VTD 04-07

VTD 04-08

VTD 04-09

Block 053522:

1026	1031	1034									
------	------	------	--	--	--	--	--	--	--	--	--

Block 053523:

1018	1021	1022	1025	1026	1027	1028	1029	1030	1031	1033	2001
2002	2003	2004	2005	2007	2008	2009	2010	2011	2012	2013	2014
2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		

VTD 04-10

Block 053423:

1001	1002	1003	1004	1005	1006	1007	1008	1009	2000	2001	2002
2003	2004										

Block 053509:

3000											
------	--	--	--	--	--	--	--	--	--	--	--

VTD 04-11

VTD 04-12

Block 053505:

1000	1001	1002	1003	1004	1005	2000	2001	2002	2003	2004	2005
2006	2007	2008	2009	3000							

VTD 04-14

VTD 04-15

VTD 04-16

VTD 04-17

VTD 04-18

VTD 04-19

VTD 04-20

VTD 04-21

VTD 11-01

Block 052401:

## Plan Components (Short)

Optimized State House Map

### District 11

#### County Wake NC

VTD 11-01

Block 052401:

1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024
1025	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042
1043	1044	1045	1046	1047	1048	1049	1050	1052	1053	1057	1058
1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070
1071	1072	1073	1074	1075	1076	1077	1079	1080	1081	1082	1083
1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1103	1104
1105	1106	1107	1108	1112							

### District 12

#### County Greene NC

#### County Jones NC

#### County Lenoir NC

### District 13

#### County Carteret NC

#### County Craven NC

VTD HARLOWE

VTD HAVELOCK

Block 961102:

1024	1025	2061	2065								
------	------	------	------	--	--	--	--	--	--	--	--

Block 961201:

1007	1008	1009	1010	1011	1012	1013	2000	2001	2002	2003	2004
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
2041	2042	2043									

Block 961202:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023
1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035
1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047
1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059
1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071
1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083
1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095
1099	1100	1101	1102	1104	1105						

Block 961301:

1000	1001	1002	1003	1004	1005	1006	1007	1009	1012	1013	1014
1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	2000
2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
2037	2038	2039	2040	2041	2042	2043	2044	2045	3000	3001	3002
3003	3004	3005	3006	3007	3008	3009	3010	3011	3012	3013	3014
3015	3016	3017	3018	3019	3020	3021	3022	3023	3024	3025	3026
3029	3030										

**Plan Components (Short)**

Optimized State House Map

**District 13**

**County Craven NC**

VTD HAVELOCK

Block 961302:

1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015
1016	1017	1019	1020	1021	1022	1023	2000	2001	2002	2003	2004
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
3000	3001	3002	3003	3004	3005	3006	3007	3008	3009	3010	3011
3012	3013	3014	3015	3016	3017	3018	3019				

Block 961303:

2044	2045	2046
------	------	------

**District 14**

**County Onslow NC**

VTD BEAR CREEK

VTD CATHERINE LAKE

VTD CROSS ROADS

VTD GUM BRANCH

VTD HALF MOON

VTD HUBERT

VTD JACKSONVILLE

Block 000500:

1076	1077	1079
------	------	------

Block 000902:

3009	3010	3011	3012	3013	3033	3034	3035
------	------	------	------	------	------	------	------

Block 001000:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023
1027	1028	1029	1031	1052	1053	1054	1055	1056	1057	1062	1063
1064	1065	1066	1067	1068	1069	1072	1073	1074	1075	1076	1077
1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089
1090	1091	1092	1093	1094	1095	1096	1097	1098	1099	1100	

Block 001101:

1008	1009	1010	1011	1012	1013	1015	1016	1018	1019	1020	1021
1022	1023	1024	1025	1026	1027	1028	2000	2001			

Block 001102:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	1017	1018	1019	1020	2000	2001	2002
2003	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
2020	2021	2029	2030								

Block 001700:

2014	2015	2016	2017	2018	2019	2020	2021	2023	2024	2025	2027
------	------	------	------	------	------	------	------	------	------	------	------

Block 001800:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023
1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035
1036	1037	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033

## Plan Components (Short)

Optimized State House Map

### District 14

#### County Onslow NC

VTD JACKSONVILLE

Block 001800:

2034 2035 2036 2037 2038 2039 2040

Block 002600:

2016 2017

VTD MILLS

VTD MORTONS

VTD NINE MILE

VTD RICHLANDS

VTD SWANSBORO

VTD TAR LANDING

VTD WEST NORTHWOODS

### District 15

#### County Onslow NC

VTD ONE22A

VTD ONE22B

VTD BRYNN MARR

VTD EAST NORTHWOODS

VTD JACKSONVILLE

Block 000306:

2021 2022

Block 000403:

1070 1071 1072 1076

Block 000500:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011

1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023

1024 1025 1026 1027 1030 1031 1032 1033 1034 1035 1036 1037

1038 1039 1040 1041 1042 1043 1044 1045 1046 1047 1048 1049

1050 1051 1052 1053 1054 1055 1056 1057 1058 1059 1060 1061

1062 1063 1064 1065 1066 1067 1068 1069 1070 1071 1072 1073

1074 1075 1078 1080 1081 1082 1083 1084 1085 1086 1087 1088

1089 1090 1091 1092 1093 1094 1095 1096 1097 1098 1099 1100

1101 1102 1103 1104 1105 1106 1107 1108 1109 1110 1111 1112

1113 1114 1115 1116 1117 1118 1120 1121 1122 1123 1126 1127

1128 1129 1130 1131 1132 1133 1134 1135 1136 1137 1138 1139

1140 1141 1142 1143 1144 1145 1146 1147 1148 1149 1151 1152

1155 1156 1157 1158 1159 1160 1161 1162 1164 1165 1166 1167

1171 1172 1173 1174 1175 1176 1177 1180 1182 1183 1184

Block 000600:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011

1012 1013 1014 1015 2000 2001 2002 2003 2004 2005 2006 2007

2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019

2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031

2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043

2044 2045 2046 2047 2048 2049 2050 2051 2052 2053 2054 2055

2056 2057 2058 2059 2060 2061 2062 2063 2064 2065 2066 2067

# Plan Components (Short)

Optimized State House Map

## District 15

### County Onslow NC

#### VTD JACKSONVILLE

##### Block 000600:

2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	3000
3001	3002	3003	3004	3005	3006	3007	3008	3009	3010	3011	3012
3013	3014	3015	3016	4000	4001	4002	4003	4004	4005	4006	4007
4008	4009	4010	4011	4012							

##### Block 000700:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023
1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035
1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047
1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	2000	2001
2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
2026	2027	2028	2029	2030	2031	3000	3001	3002	3003	3004	3005
3006	3007	3008	3009	3010	3011	3012	3013	3014	3015		

##### Block 000800:

1000	1001	1002	1003	1004	1005	1007	1009	1010	1011	1012	1013
1014	1015	1016	1017								

##### Block 000901:

1000	1001	1002	2000	2001	2002	2003	2004	2005	2006	2007	2008
2009	2010	2011									

##### Block 000902:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	2000	2001	2002	2003	2004	2005	2006
2007	2008	2009	2010	2011	2012	2013	2014	2015	3000	3001	3002
3003	3004	3005	3006	3007	3008	3014	3015	3016	3017	3018	3019
3020	3021	3022	3023	3024	3025	3026	3027	3028	3029	3030	3031
3032	3036	3037	3038	3039	3040						

##### Block 001000:

1024	1025	1026	1030	1032	1033	1034	1035	1036	1037	1038	1039
1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051
1058	1059	1060	1061	1070	1071						

##### Block 002400:

5017

##### Block 002801:

1029	1030	1032	1033
------	------	------	------

##### Block 990100:

0006	0007	0008	0009
------	------	------	------

#### VTD NEW RIVER

## District 16

### County Onslow NC

#### VTD FOLKSTONE

#### VTD HAWS RUN

#### VTD HOLLY RIDGE

#### VTD SNEADS FERRY

## Plan Components (Short)

Optimized State House Map

### District 16

#### County Onslow NC

VTD VERONA

#### County Pender NC

### District 17

#### County Brunswick NC

VTD 04C1\_04B1

VTD BELVILLE 1

VTD BOLIVIA

Block 020203:

1036	1037	1039	2005	2006	2007	2008	2009	2010	2011	2012	2013
2014	2015	2020									

Block 020204:

1005	1007	1008	1015	1016	1018						
------	------	------	------	------	------	--	--	--	--	--	--

Block 020602:

3116	3117	3128	3129	3130	3131	3132	3133	3134	3136	3137	3138
3140	3141	3154									

Block 020603:

2000	2002										
------	------	--	--	--	--	--	--	--	--	--	--

VTD HOOD CREEK

VTD LELAND

VTD TOWNCREEK

VTD WOODBURN

#### County New Hanover NC

VTD CF01

VTD FP06

VTD M03

VTD W03

VTD W08

VTD W25

VTD W26

VTD W29

VTD W30

### District 18

#### County New Hanover NC

VTD CF06

VTD H01

VTD H04

VTD H05

VTD H06

VTD H10

VTD M04

VTD W12

VTD W13

VTD W15

VTD W16

VTD W17

VTD W18

**Plan Components (Short)**

Optimized State House Map

**District 18**

**County New Hanover NC**

VTD W21

VTD W24

VTD W27

VTD W28

VTD W31

**District 19**

**County Brunswick NC**

VTD BOILING SPRING LAKES

VTD BOLIVIA

Block 020204:

1003	1017	1019	2000	2001	2002	2003	2004	2005	2006	2007	2008
2009	2010	2012	2013	2014	2015	2016	2017	2018	2019	2021	2022
2023	2024	2025	2026	2027	2028	2029	2034	2036	2037	2038	2045
2049	2050	2065	2085	2086	2105	2106	2107	2131			

Block 020603:

2001	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
2014	2015	2016	2017	2027	2028	2029	2031	2032	2033	2034	2035
2036	2075	2076	2077	2078	2079	2082					

VTD FRYING PAN

VTD GRISSETTOWN

VTD LONGWOOD

VTD MOSQUITO 1

VTD MOSQUITO 2

VTD OAK ISLAND 1

VTD OAK ISLAND 2

VTD OAK ISLAND 3

VTD SECESSION 1

VTD SECESSION 2

VTD SHALLOTTE

VTD SHINGLETREE 1

VTD SHINGLETREE 2

VTD SOUTHPORT 1

VTD SOUTHPORT 2

VTD SUPPLY

VTD WACCAMAW

**District 20**

**County New Hanover NC**

VTD CF02

VTD CF05

VTD FP03

VTD FP04

VTD FP07

VTD FP08

VTD H02

VTD H03

VTD H08

## Plan Components (Short)

### District 20

#### County New Hanover NC

VTD H11  
VTD H12  
VTD H13  
VTD M02  
VTD M06  
VTD M07  
VTD WB

### District 21

#### County Wake NC

VTD 04-06

Block 053506:

4016 4018 4019 4020 4021 4022 4023

VTD 04-12

Block 053505:

3001 3002 3003 3004 3005 3006 3007 3008 3009 3010 3011

VTD 06-05

Block 053202:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011  
1028 1029 1030 1032 2000 2001 2002 2003 2004 2005 2006 2007  
2008 2009 2010 2011 2012

VTD 06-06

VTD 06-07

VTD 06-08

Block 053204:

1004 1005 1006 1007 1008 1010 1011 1015

Block 053208:

1070

Block 053432:

1040 1041 1042 1043 1044 1045 1046 1047 1048 1049 1050 1051  
1052 1053 1054 1055 1056 1057 1058 1059 1064 1065 1066 1080

VTD 12-05

VTD 12-07

Block 053110:

1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014  
1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026  
1030 1031 1032 1033 1034 1035 1036 1037 2000 2001 2002 2003  
2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015  
2016 2017 2018 2019 2020 2021 2022 2023

VTD 18-02

VTD 18-03

VTD 18-04

Block 053007:

1000 1001 1002 1011 1012 1013 2000 2001 2002 2003 3000 3001  
3002

Block 053009:

1033 1034 1035 1036 1037 3001 3002 3003



**Plan Components (Short)**

Optimized State House Map

**District 21**

**County Wake NC**

VTD 18-04

Block 053010:

1012 1013 2000 2001 2002 2003 2004 2005 2006

VTD 18-05

VTD 18-06

Block 052306:

1001 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013

1014 1015 1016 1023 1024

Block 053003:

5031 5032 5033 5035

Block 053010:

1004 1005 1006 1007 1008 1009 1010 1011 1014

Block 053011:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011

1012 4001 4002 4003 4004 4005 4006 4007 4008 4009 4010 4011

4012 4013 4014 4015

VTD 18-07

Block 053006:

1000 1001 1002 1003 1004 1005 1006 3002 3003

Block 053009:

3004 3005 3006 3007 3008 3009

Block 053010:

3000 3001 3002 3003 3004 3005 3006 3007 3008

Block 053111:

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011

2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023

2024 2025 2026

VTD 18-08

VTD 20-01

Block 053431:

1000 1001 1002 1003 1004 1006 1007 1008 1009 1010 1011 1012

1013 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025

1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037

1038 1039 1040 1041 1042 2000 2001 2002 2003 2004 2005 2006

2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

2019 2020

Block 053436:

1052 1053 1054

VTD 20-05

**District 22**

**County Bladen NC**

**County Sampson NC**

**District 23**

**County Bertie NC**

**County Edgecombe NC**

**County Martin NC**

**Plan Components (Short)**

Optimized State House Map

**District 24**

**County Nash NC**

VTD SHARPSBURG

Block 010302:

1012 1013

Block 011201:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011

1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023

1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035

1036 1037 1038 1039 1040 1041 1042 1043 1044 1045 1046 1047

1048 1049 1050 1051 1052 1053 1054 2000 2001 2002 2003 2006

2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

2019 2020 2021 2022 2023

Block 011202:

2023 2024 2036 2037 2038 2039

**County Wilson NC**

**District 25**

**County Nash NC**

VTD BAILEY

VTD CASTALIA

VTD COOPERS

VTD DORTCHES

VTD GRIFFINS

VTD MIDDLESEX

VTD MOMAYER

VTD NASHVILLE

VTD OAK LEVEL

VTD RED OAK

VTD ROCKY MOUNT BATTLEBORO

VTD ROCKY MOUNT BENVENUE

VTD ROCKY MOUNT DOWNTOWN

VTD ROCKY MOUNT EDWARDS

VTD ROCKY MOUNT HUNTER HILL

VTD ROCKY MOUNT SOUTH

VTD ROCKY MOUNT SUNSET

VTD ROCKY MOUNT WINSTEAD

VTD SALEM

VTD SAMARIA

VTD SHARPSBURG

Block 010200:

5007 5008 5009 5010 5011 5012 5013 5014 5015 5016 5017 5018

5019 5020 5021 5022 5023 5024 5025 5026 5027 5028 5029 5030

5031 5032 5033 5034 5035 5036 5037 5038

Block 010302:

1014 1015 1016 1017 1018 1019 1020

VTD SPRING HOPE

VTD STANHOPE

VTD WHITAKERS

## Plan Components (Short)

Optimized State House Map

### District 26

#### County Johnston NC

VTD ARCHERS LODGE

VTD EAST CLAYTON

Block 040903:

2000	2001	2002	2003	2004	2005	2006	2007	2008	2010	3000	3001
3002	3003	3004	3005	3006	3007	3008	3009	3010	3011	3012	3013
3014	3015	3016	4000	4001	4002	4003	4004	4005	4006	4007	4008
4009	4010	4011	5000	5001	5002	5003	5004	5005	5006	5007	

Block 040904:

3008

Block 040905:

5020

Block 040906:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1017	1018	1019	1020								

Block 041001:

2036	3000	3001	3002	3003	3004	3005	3006	3007	3008	3009	3010
3011	3012	3013	3016	4000	4001	4002	4003	4004	4005	4006	4007
4008	4009	4010	4011	4012	4013	4014	4015	4016	4017	4018	

VTD FLOWERS PLANTATION

VTD NORTH CLAYTON 1

VTD NORTH CLAYTON 2

VTD NORTH CLEVELAND 1

VTD NORTH CLEVELAND 2

VTD SOUTH CLAYTON

VTD SOUTHEAST CLEVELAND

VTD SOUTHWEST CLEVELAND

Block 041107:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	1017	2005	2006	2007	2008	2009	2010

VTD WEST CLAYTON 1

VTD WEST CLAYTON 2

### District 27

#### County Halifax NC

#### County Northampton NC

#### County Warren NC

### District 28

#### County Johnston NC

VTD BENTONVILLE

VTD BEULAH

VTD EAST CLAYTON

Block 040904:

3009	3010	3011	3012	3013							
------	------	------	------	------	--	--	--	--	--	--	--

Block 040905:

5000	5001	5002	5003	5004	5005	5006	5007	5010	5011	5013	5014
5019											

Block 040906:

## Plan Components (Short)

Optimized State House Map

### District 28

#### County Johnston NC

VTD EAST CLAYTON

Block 040906:

1012 1013 1014 1015 1016 1021 1022 1025

VTD EAST SELMA

VTD EAST SMITHFIELD

VTD INGRAMS

VTD MEADOW

VTD MICRO

VTD NORTH BOON HILL

VTD NORTH ELEVATION

Block 041206:

1002

Block 041505:

1005 1006 1007 1009

VTD NORTH ONEALS

VTD NORTH SMITHFIELD 1

VTD NORTH SMITHFIELD 2

VTD NORTH WILDERS

VTD PINE LEVEL

VTD SOUTH BOON HILL

VTD SOUTH ONEALS

VTD SOUTH SMITHFIELD

VTD WEST SELMA

VTD WILSONS MILLS

### District 29

#### County Durham NC

VTD 0035.3

VTD 055-11

VTD 055-49

VTD CHRIST THE KING MORAVIAN

VTD CREEKSIDE ELEMENTARY

VTD HOLY INFANT CATHOLIC

VTD HOPE VALLEY BAPTIST

VTD IVY COMMUNITY CENTER

VTD PEARSONTOWN ELEMENTARY

VTD SHEPHARD MAGNET SCHOOL

VTD SOUTHWEST ELEMENTARY

VTD ST. STEPHENS EPISCOPAL

VTD TRIANGLE CHURCH

VTD TRIANGLE PRESBYTERIAN

VTD WATERFORD VILLAGE APTS

VTD WHITE ROCK BAPTIST CHURCH

VTD YATES BAPTIST CHURCH

Block 002007:

3000 3001 3002 3003 3004 3005 3006 3007 3008 3009

Block 002015:

**Plan Components (Short)**

**District 29**

**County Durham NC**

VTD YATES BAPTIST CHURCH

Block 002015:

3000 3001 3002 3003 3004 4000 4001 4002 4003 4004 4005 4006

Block 002031:

2000

**District 30**

**County Durham NC**

VTD BROGDEN MIDDLE SCHOOL

VTD CLUB BOULEVARD SCHOOL

VTD COLE MILL CHURCH

VTD COUNTY AGRICULTURAL BUILDING

VTD DPS STAFF DEVELOPMENT CENTER

VTD E K POWE ELEMENTARY

VTD EDISON JOHNSON CENTER

VTD FOREST HILLS CLUB HOUSE

VTD FOREST VIEW ELEMENTARY

VTD GEORGE WATTS ELEMENTARY

VTD LAKEWOOD SCHOOL

VTD MCMANNEN UNITED METHODIST

VTD MOREHEAD MONTESSORI

VTD NORTH REGIONAL LIBRARY

Block 001603:

6002 6003 6004 6005 6006 6007 6008 6009 6010 6011 6012 6013

6014 6015 6016 6017

Block 001604:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011

1012 1013 1014 1015 1016 1017 1018 2000 2001 2002 2003 2004

2005 4000 4001 4002 4003 4005 4010 4011 4012 4013 4014 4015

4016 4017 4018 4021 4024 5000 5001 5002 5003 5004 5005 5006

5007 5008 5009 5010 5011 5012 5013 5014 5015 5016 5017 5018

5019 5020 5021 6000 6002 6003 6004 6005 6006 6007 6008 6009

Block 002100:

1013 1014 1017 1018

VTD PATTERSON REC CENTER

VTD ROGERS-HERR MIDDLE SCHOOL

VTD SCHOOL OF SCIENCE AND MATH

VTD SCHOOL OF THE ARTS

VTD TEMPLE BAPTIST CHURCH

Block 001603:

5023

Block 001604:

3000 3001 3002 3003 3004 3005 3006 3007 3008 3009 3010 4004

4006 4007 4008 4009 4019 4020 4022 4023 4025 4026 7000 7001

7002 7003 7004 7005 7006 7007 7008 7009

VTD YATES BAPTIST CHURCH

Block 002015:

**Plan Components (Short)**

Optimized State House Map

**District 30**

**County Durham NC**

VTD YATES BAPTIST CHURCH

Block 002015:

1001	1002	1006	1007	1008	1009	1010	1011	1012	1013
------	------	------	------	------	------	------	------	------	------

**District 31**

**County Durham NC**

VTD BETHESDA RURITAN CLUB

VTD BURTON ELEMENTARY

VTD C C SPAULDING SCHOOL

VTD COUNTY MAIN LIBRARY

VTD EVANGEL ASSEMBLY OF GOD

VTD FIRST UNITED ANTIOCH

VTD HOLMES RECREATION CENTER

VTD LOWES GROVE BAPTIST

VTD MONUMENT OF FAITH CHURCH

VTD MT CALVARY CHURCH

VTD NEAL MIDDLE SCHOOL

VTD OAK GROVE ELEMENTARY

VTD SOUTHERN HIGH SCHOOL

VTD Y E SMITH SCHOOL

**District 32**

**County Granville NC**

VTD 00ANTI

VTD 00BERE

VTD 00BTNR

VTD 00CORI

VTD 00CRDL

VTD 00CRDM

Block 970601:

1004	1005	1006	1026	1027	1028	1029	1030	1031
------	------	------	------	------	------	------	------	------

Block 970606:

1000	1001	1002	1003	1004	1012	1016
------	------	------	------	------	------	------

Block 970607:

1014	1017	1020	1021	1023	1024	1025	1026	1027	1028	1029	1030
1031	1032	1033	1034	1035	1036	1037	2000	2001	2002	2003	2004
2005	2006	2007	2008	2011	2016	2017	2018	2019	2020	2021	2022
2023	2024	2025	2026	3000	3001	3002	3003	3004	3005	3006	3007
3008	3009	3010	3011	3012	3013						

VTD 00EAOX

VTD 00OKHL

VTD 00SALM

VTD 00SASS

VTD 00SOOX

VTD 00TYHO

VTD 00WOEL

**County Vance NC**

**District 33**

**Plan Components (Short)**

Optimized State House Map

**District 33**

**County Wake NC**

VTD 01-07

Block 050100:

3005	3006	3007	3008	3009	3010	3011	3012	3013	3014	3015	3016
3017	3026	3027	3028	3029	3030	3031	3032	3033			

Block 050300:

2006	3000	3004	3005	3006	3010	3011	3012				
------	------	------	------	------	------	------	------	--	--	--	--

VTD 01-13

VTD 01-14

VTD 01-19

VTD 01-20

VTD 01-23

Block 051000:

1012	1013	1014	1020								
------	------	------	------	--	--	--	--	--	--	--	--

Block 051101:

1000	1001	1002	1003	1004	1005	1006	1007	1008	2005	2006	
------	------	------	------	------	------	------	------	------	------	------	--

Block 051102:

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	3001	3002
3003	3004	3005	3006	3007							

Block 051400:

4008	4009										
------	------	--	--	--	--	--	--	--	--	--	--

Block 052305:

1000	1001	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
2022	2023	2024	2025	2026	2027	2030	2031	2049			

Block 052409:

2000	2001	2002	2003								
------	------	------	------	--	--	--	--	--	--	--	--

VTD 01-25

VTD 01-26

VTD 01-27

VTD 01-28

VTD 01-31

VTD 01-34

VTD 01-35

Block 050800:

2004	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
------	------	------	------	------	------	------	------	------	------	------	--

Block 050900:

2000	2001	2002	2003	2004	2010	2011	2012	2013	2014	2015	2016
2017	2018	2020	2021	2022	3002	3003	3004	3005	3006	3007	3008
3009	3010	3011									

Block 052101:

4001	4002	4003	4004	4005	4006	4007	4023	4026			
------	------	------	------	------	------	------	------	------	--	--	--

Block 054502:

1014	1030	3000									
------	------	------	--	--	--	--	--	--	--	--	--

VTD 01-40

Block 051900:

3011											
------	--	--	--	--	--	--	--	--	--	--	--

**Plan Components (Short)**

**District 33**

**County Wake NC**

VTD 01-40

Block 052001:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	2000	2001
2003	2004	2007	2019	2020							

Block 052002:

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023

Block 052102:

3000	3001										
------	------	--	--	--	--	--	--	--	--	--	--

Block 052811:

3001	3002	3003	3004	3032	3033	3034					
------	------	------	------	------	------	------	--	--	--	--	--

Block 054106:

2002	2003	2004	2038	2039	2040	2041	2042	2043	2044	2045	2046
2047	4016	4021	4022	4024	4025	4026	4027				

VTD 01-41

VTD 01-48

Block 052307:

3000	3001	3002	3003								
------	------	------	------	--	--	--	--	--	--	--	--

Block 052404:

1000	1002	1003	1004	1008	1009	1010	1011	1012	1013	1014	1015
1016	1017	1018	1019								

Block 052407:

1017	2000										
------	------	--	--	--	--	--	--	--	--	--	--

VTD 17-06

Block 054109:

2006	2007	2008	2009	2010	2011	2012	2013				
------	------	------	------	------	------	------	------	--	--	--	--

Block 054114:

3002	3006	3007	3008	3009	3010	3011	3012	3013	3014	3015	3016
3017	3018	3019	3020	3021	3022	3025	3039	3040			

VTD 17-07

Block 054106:

1011	1012	1013	1014	1015	1016	1017	2000	2001	2005	2006	2007
2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
2020	2021	2022	2023	2024	2025	2026	2027	2034	2035	2036	2037
2048	2049	2050	2051	2052	3014	4010	4011	4012	4013	4014	4015
4019	4020										

VTD 17-09

VTD 17-12

Block 054114:

3004	3005	3026	3027	3028	3029	3030	3031	3032	3033	3034	3035
3036	3037	3038									

VTD 18-01

Block 052305:

2032	2033	2034	2035	2036	2037	2050	2051				
------	------	------	------	------	------	------	------	--	--	--	--

Block 052307:

4002	4003	4004	4005	4006	4007	5000	5001	5002	5003	5004	5005
------	------	------	------	------	------	------	------	------	------	------	------



**Plan Components (Short)**

**District 33**

**County Wake NC**

VTD 18-01

Block 052307:

5006 5007

VTD 18-06

Block 052306:

1002

Block 052307:

1000 1001 1002 1003 1004 3004 3005 3006 3007 3008

Block 052404:

1020 1021

Block 053011:

2000 2001 2002 2003 2004 2005 2006 4000

**District 34**

**County Wake NC**

VTD 01-01

VTD 01-02

VTD 01-03

VTD 01-04

VTD 01-05

VTD 01-06

VTD 01-07

Block 050300:

2000 2001 2002 2003 2004 2005 3001 3002 3003 3007 3008 3009

Block 051200:

2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019

2020 2021 2022 3020 3021 3022 3023 3025 3026 3027 3028 3029

3030 3031 3032

VTD 01-09

VTD 01-10

VTD 01-11

VTD 01-12

VTD 01-15

VTD 01-17

VTD 01-18

VTD 01-23

Block 051000:

1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1015 1016

Block 051102:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011

1012 3000

Block 051400:

4007 4010 4011 4012 4013

VTD 01-29

VTD 01-30

VTD 01-33

VTD 01-36

**Plan Components (Short)**

Optimized State House Map

**District 34**

**County Wake NC**

VTD 01-37

VTD 01-39

VTD 01-43

VTD 01-45

VTD 01-51

VTD 02-01

Block 053721:

1008 1011 2000 2001

Block 053807:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011

1012 1013 1014 1015 1016 1017 1018 1019 1020 2002 2004 2016

2017 2018

VTD 02-06

Block 053808:

1011 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022

4015 4016 4017 4018

VTD 07-04

VTD 07-05

VTD 07-06

VTD 07-07

Block 053714:

1000

Block 053722:

1003 1004 1005 1006 1007 1008 1009 2003 2004 2005 2006 2007

2008 2009 2010 2011

VTD 07-11

VTD 07-13

**District 35**

**County Wake NC**

VTD 01-47

Block 054011:

1000 1001 1002 1003 1004 1005 1006

VTD 02-01

Block 053721:

1009 1010

Block 053807:

2000 2001 2003 2005 2006 2007 2008 2009 2010 2011 2012 2013

2014 2015 2019

VTD 02-02

VTD 02-03

VTD 02-04

VTD 02-05

VTD 02-06

Block 053808:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 4003

**Plan Components (Short)**

Optimized State House Map

**District 35**

**County Wake NC**

VTD 02-06

Block 053808:

4004 4005 4006 4007 4008 4009 4010 4011 4012 4013 4014

VTD 08-04

VTD 08-07

Block 053721:

1000 1001 1002 1003 1004 1007 3000 3001 3002 3003 3004 3005  
3006 3007

VTD 08-08

VTD 13-02

VTD 13-05

Block 054017:

1004 1005 1015

VTD 13-06

Block 054016:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 2003 2004  
2005 2006 2007 2008 2009 2011 2013 2014 2015 2016 2017 3000  
3003 3005 3008

Block 054017:

1016

VTD 13-10

VTD 13-11

VTD 14-01

VTD 14-02

VTD 19-03

VTD 19-05

VTD 19-11

VTD 19-12

Block 054206:

2004

Block 054219:

2000 2002 2003 2005 2007 2008 2010 2012 2013 2014 2015 2016  
2018 2019 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030  
2045 2051

Block 054220:

1015 1018 1019 1021 1022 1023 1024 1025 1026 1027 1028 2000  
2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2013  
2014

VTD 19-13

VTD 19-14

VTD 19-15

**District 36**

**County Wake NC**

VTD 03-00

Block 053208:

1010

**Plan Components (Short)**

Optimized State House Map

**District 36**

**County Wake NC**

VTD 03-00

Block 053428:

1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013
1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025
1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037
1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049
1050	1051	1052	1053	1054	1055	1056	1057	1058	1060	1062	1063
1064	1065	1066	1067	1068	2007	2008	2009	2010	2011	2012	2013
2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049
2050	2051	2052	2053	2054	2055	2056	2057	2058	3004	3022	3023
3024	3028	3029	3030	3031	3032	3033	3034	3035	3036	3037	3038
3039	3040	3041	3042	3043	3044	3045	3046	3047	3048	3049	3050
3051	3052	3053	3054	3055	3056	3057	3058	3059	3060	3061	3062
3063	3064	3065	3066	3067	3068	3069	3070	3071	3072	3073	3074
3075	3076	3078	3079	3081	3082	3083	3084	3085	3086	3087	3088
3089	3090	3091	3092	3093	3094	3110	3111	3112	3115	3116	

VTD 04-10

Block 053424:

2007	2030	2031	2035	2037	2038						
------	------	------	------	------	------	--	--	--	--	--	--

Block 053509:

3001	3002	3003	3004	3005	3006	3007	3008	3009	3010	3011	3012
3013	3014	3015									

VTD 04-13

Block 053424:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1012
1013	2000	2001	2002	2003	2004	2005	2006	2008	2009	2010	2011
2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
2024	2025	2026	2027	2028	2029	2032	2033	2034	2036	2039	

VTD 20-01

Block 053429:

1012	1013	1014	1016								
------	------	------	------	--	--	--	--	--	--	--	--

Block 053431:

1005											
------	--	--	--	--	--	--	--	--	--	--	--

Block 053436:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023
1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035
1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047
1048	1049	1050	1051								

VTD 20-03

VTD 20-04

VTD 20-06A

VTD 20-06B

VTD 20-08

**Plan Components (Short)**

Optimized State House Map

**District 36**

**County Wake NC**

VTD 20-09

VTD 20-10

Block 053408:

1002 1003 1004 2000 2001 2002 2003 2004 2005 2006

Block 053409:

2000 2001 2002 2003

VTD 20-11

VTD 20-12

VTD 20-14

Block 053410:

1031 1033 1035 1036 1037 1038 1039 1040 1041 1042 1043 1044  
1045 1046 1047 1049 1050

Block 053411:

1085 1086 1087 1088 1089 1090 1091 1092 1093 1094 1095 1096  
1097 1098 1099 1100 1101 1102 1103 1104 1105 1106 1107 1108  
1109 1110 1111 1112 1113 1114 1115 1116 1118 1119 1134 1135  
1136 2027 2028 2030 2031 2032 2033 2034 2035 2036 2037 2038  
2039 2040 3016

Block 053426:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011  
1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1030 1042  
1043 1044 1045 1046 1047 1048

**District 37**

**County Wake NC**

VTD 03-00

Block 053208:

1004 1005 1006 1007 1008 1009 1011 1039 1040 1041 1043

Block 053209:

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011  
2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023  
2024 2025 2026 2027 2044 2074

Block 053417:

2039 2040 2041 2042 2043 2044 2045

Block 053428:

1059 1061

Block 053432:

1019 1034 1035 1036 1037

VTD 06-04

VTD 06-05

Block 053202:

1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023  
1024 1025 1026 1027 1031 1033 1034 1035 1036 2013 2014 2015  
2016 2017 2018 2019 2020

VTD 06-08

Block 053204:

1009 1012 1013 1014 1023 1024 1025 1026 1027 1028 1029 1030

**Plan Components (Short)**

**District 37**

**County Wake NC**

VTD 06-08

Block 053208:

1073 1103 1104

Block 053432:

1006 1038 1039

VTD 06-09

VTD 06-10

VTD 12-01

VTD 12-02

VTD 12-04

VTD 12-06

VTD 12-07

Block 053110:

3000 3001 3002 3003 3004 3005 3006 3007 3008 3009 3010 3011

3012 3013 3014 3015 3016 3017 3018 3019 3020 3021 3022

VTD 12-08

VTD 12-09

VTD 15-03

VTD 20-01

Block 053431:

1014 1043

**District 38**

**County Wake NC**

VTD 01-21

VTD 01-22

VTD 01-35

Block 052101:

3000 3001 3002 3003 3004 3005 3006 3007 3008 3009 4009 4010

4011 4012 4013 4014 4015 4016 4017 4018 4019 4020 4021 4022

4024 4025

VTD 01-40

Block 052102:

2000 2001 2002 2003 2004 2005 2006 2007

VTD 01-50

VTD 15-01

VTD 15-02

VTD 15-04

VTD 16-01

Block 052807:

1028 1029 2013 2017 2042 2048 2049 2050 2051 2052 2053 2054

2055 2056 2057 2058 2059 2060 2061 2062 2063 2064 2065 2066

2067 2068 2069 2070

Block 052809:

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011

2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023

2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035

**Plan Components (Short)**

**District 38**

**County Wake NC**

**VTD 16-01**

Block 052809:

2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047
------	------	------	------	------	------	------	------	------	------	------	------

Block 052813:

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
2024											

Block 052815:

2012	2013	2021	2022	2023	2035
------	------	------	------	------	------

**VTD 16-02**

Block 052101:

1035	1036	1037	1038	1039	1040
------	------	------	------	------	------

Block 052815:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024
1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	2000	2001
2002	2003	2004	2005	2006	2007	2011	2018	2024	2025	2026	2027
2028	2029	2030	2031	2032	2033	2034	2036	2037	2038	2039	2040
2041	2042	2043	2044	2045	2046	2047	2050	2051	2052	2053	2054

Block 052816:

1032
------

Block 054502:

3040	3043	3044	3045	3046	3049	3050	3051	3052	3053	3054	3055
------	------	------	------	------	------	------	------	------	------	------	------

**VTD 16-03**

**VTD 16-04**

**VTD 16-05**

**VTD 16-06**

**VTD 16-07**

**VTD 16-09**

**VTD 16-11**

Block 052807:

2014	2044	2045	2071
------	------	------	------

Block 052815:

2008	2009	2010	2014	2015	2016	2017	2019	2020	2048	2049
------	------	------	------	------	------	------	------	------	------	------

**VTD 18-01**

Block 052303:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
2012	2013	2014	2015	2016	2017	2018	2019	2020			

Block 052304:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	2000	2001	2002	2003							

Block 052305:

2047	2048
------	------

Block 052306:

1000	1017	1018	1019	1020	1021	1022
------	------	------	------	------	------	------

**Plan Components (Short)**

Optimized State House Map

**District 38**

**County Wake NC**

VTD 18-01

Block 053010:

1000 1001 1002 1003

VTD 18-04

Block 053009:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011  
1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023  
1024 1025 1026 1027 1028 1029 1030 1031 1032 3000 3012

Block 054501:

1023

VTD 18-07

Block 053009:

3010 3011 3013

**District 39**

**County Wake NC**

VTD 09-01

VTD 09-02

VTD 09-03

VTD 10-01

VTD 10-02

VTD 10-03

VTD 10-04

VTD 16-01

Block 052807:

1000 1001 1002 1003 1004 1015 1016 1017 1018 1019 1020 1021  
1022 1023 1024 1025 1026 1027 1030 1033 1034

VTD 16-02

Block 052811:

3035 3036 3049 3050 3051 4024 4025

Block 052816:

1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012  
1013 1023 1024 1030 1031 2001 2002 2003 2004 2005 2006 2007  
2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019  
2020 2022 2023 2024 2025 2027

VTD 16-10

VTD 16-11

Block 052807:

1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1031 1032  
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011  
2012 2015 2016 2018 2019 2020 2021 2022 2023 2024 2025 2026  
2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038  
2039 2040 2041 2043 2046 2047 3000 3001 3002 3003 3004 3005  
3006 3007 3008 3009 3010 3011 3012 3013 3014 3015 3016 3017  
3018 3019 3020 3021 3022 3023 3024 3025 3026 3027 3028 3029

Block 052811:

1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 3055 4014



**Plan Components (Short)**

**District 39**

**County Wake NC**

VTD 16-11

Block 052811:

4015 4016 4018 4019 4020 4021 4022 4023

Block 052816:

1000 2000 2026

VTD 17-02

Block 054108:

2011 2012 2016 2027 2029 2062 2063 2064 2065 2073 2074 2075  
2076 2077 2078 2079

Block 054115:

2015

VTD 17-04

Block 054111:

1000 1007 1012 1013 1014 2004 2005

VTD 17-06

Block 054109:

2000 2001 2002 2003 2004 2005 2014 2015

Block 054114:

3023 3024

Block 054115:

2014 2016 2019 2020

VTD 19-07

VTD 19-09

Block 054214:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011  
1012 1013 1014 1015 1016 1018 1019 1020 1021 2000 2001 2002  
2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014  
2015 2016 2017 2018 2019 2023 2024 2025 2026 2027

Block 054215:

2000 2001 2002 2009 2010 2011 2012 2016 2034 2035 2036 2037

Block 054221:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1024 1025  
1026 1028 1029 1030 1031 1041 1042 1043 1044 1045 1046 1047  
1048 1049 1050 1054

VTD 19-12

Block 054206:

2000 3000 3011 3012 3023 3024

Block 054219:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011  
1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 2001  
2004 2050

Block 054221:

2000 2001 2002 2003 2004 2005 2006 2007

Block 054222:

4000

Block 054224:

**Plan Components (Short)**

**District 39**

**County Wake NC**

VTD 19-12

Block 054224:

2004	2012	2013	2014	2015	2016	2017	2018	2019	3000	3001	3002
3003	3004	3005	3006	3007	3008	3009	3012	3013	3014	3015	3016
3017	3018	3019	3020	3021	3022	3023	3024	3025	3026	3027	

VTD 19-16

Block 054111:

2000	2001	2002	2003
------	------	------	------

VTD 19-18

Block 054221:

1013	1022	1027	2008	2009	2010	2011	2012	2013	2014	2015	2016
3000	3001	3002	3003	3004	3005	3006	3007	3008	3009	3010	3011
3012	3013	3014	3015	3016	3017	3018	3019	3020	3021	3022	

Block 054222:

2009
------

**District 40**

**County Wake NC**

VTD 01-38

VTD 01-42

VTD 01-44

VTD 01-46

Block 052701:

2000	2001	2012	2013	2016	2018	2019	2020
------	------	------	------	------	------	------	------

Block 052704:

1000	1001	1002	1003	1004	1005	1006	1007	1008	2001	2002	2003
2004	2005	2007	3002	3008	3009	3010	3011	3012	3013	3014	3015
3016											

Block 052705:

1000	1001
------	------

VTD 01-47

Block 054011:

1007	1008	1009	1010	1011	1012	1013	1014	1015	2000	2001	2002
2003	2004	2005	2006	2007	2008	2009	2010				

VTD 13-01

Block 052704:

3000	3017
------	------

Block 054008:

3000
------

Block 054018:

1017	1018	1036	1037
------	------	------	------

Block 054116:

1055	1056	2008	2009
------	------	------	------

Block 054117:

2003	2004	2005	2006	2007	2008	2012
------	------	------	------	------	------	------

VTD 13-05

Block 054017:

**Plan Components (Short)**

**District 40**

**County Wake NC**

VTD 13-05

Block 054017:

1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036
1037	1038	1039	1040	1041	1042	1043					

Block 054018:

1007

VTD 13-06

Block 054017:

1017	1018	1019	1020	1021	1022	1023	1024				
------	------	------	------	------	------	------	------	--	--	--	--

VTD 17-01

VTD 17-02

Block 054108:

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2017
2018	2019	2020	2021	2022	2023	2024	2025	2026	2028	2030	2031
2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
2056	2057	2058	2059	2060	2061	2081	2082				

Block 054112:

1017 1018

Block 054115:

2000	2001	2002	2003	2004	2005	2006	2013	2021			
------	------	------	------	------	------	------	------	------	--	--	--

VTD 17-03

VTD 17-04

Block 054111:

1002	1003	1004	1005	1008	1009	1010	1011	1015	1016	1017	
------	------	------	------	------	------	------	------	------	------	------	--

Block 054112:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	2000	2001	2002	2003	2004	2005	2006
2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
2019	2020	2021	2022	2023	2024	2025	2026				

Block 054113:

1000	1001	1002	1003	1004	1018	1019	1021	1022	1023	1024	1025
1026	1027	1028	1029	1032	1033	1034	1035	1036	1037	1038	1039
1040	1042	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
2037	2038	2039	2043	2044	2045	2046	2047	2048	2049	2050	2051

VTD 17-05

VTD 17-06

Block 054114:

2016	2017	2018	3000	3001							
------	------	------	------	------	--	--	--	--	--	--	--

Block 054115:

2007	2008	2009	2010	2011	2012	2017	2018				
------	------	------	------	------	------	------	------	--	--	--	--

VTD 17-07

Block 054106:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	3000
------	------	------	------	------	------	------	------	------	------	------	------

**Plan Components (Short)**

Optimized State House Map

**District 40**

**County Wake NC**

VTD 17-07

Block 054106:

3001	3002	3003	3004	3005	3006	3007	3008	3009	3010	3011	3012
3013	3015	3016	3017	3018	3019	4000	4001	4002	4003	4004	4005
4006	4007	4008	4009	4017	4028	4029	4030	4031			

Block 054118:

1021	1031	2026									
------	------	------	--	--	--	--	--	--	--	--	--

VTD 17-10

VTD 17-11

Block 054116:

3002	3005	3006	3007	3008	3009	3010	3011	3012	3013	3014	
------	------	------	------	------	------	------	------	------	------	------	--

Block 054117:

1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012
1013	1014	1015	1016	1017	1018	1019	2000	2001	2002	2009	2010
2011	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
2024	2025	2026	2027	3002	3003	3004	3005	3006	3007	3008	3009
3010	3011	3012	3013	3014	3015	3016	3017	3018	3019	3020	3021

VTD 17-12

Block 054114:

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
2012	2013	2014	2015	3003							

Block 054115:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023
1024	1025	1026									

VTD 17-13

**District 41**

**County Wake NC**

VTD 04-09

Block 053523:

1017	1023	2000	2006								
------	------	------	------	--	--	--	--	--	--	--	--

VTD 04-13

Block 053425:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
------	------	------	------	------	------	------	------	------	------	------	------

VTD 05-01

VTD 05-03

VTD 05-06

VTD 05-07

VTD 05-08

VTD 20-10

Block 053408:

1000	1001										
------	------	--	--	--	--	--	--	--	--	--	--

Block 053425:

2000	2001	2002	2003	2004	2005						
------	------	------	------	------	------	--	--	--	--	--	--

Block 053603:

2042	2043	2044	2048	2049							
------	------	------	------	------	--	--	--	--	--	--	--

## Plan Components (Short)

### District 41

#### County Wake NC

VTD 20-14

Block 053410:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023
1024	1025	1026	1027	1028	1029	1030	1032	1034	1048	2000	2001
2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
2026											

Block 053411:

1063	1064	1065	1068	1069	1070	1071	1072	1073	1074	1075	1076
1077	1079	2019									

VTD 20-15

VTD 20-16

VTD 20-17

### District 42

#### County Cumberland NC

VTD BEAVER DAM-G6

VTD BLACK RIVER-G7

VTD CEDAR CREEK-G6

VTD CROSS CREEK 02-G1

VTD CROSS CREEK 03

Block 002001:

1002	1003	1004	1011								
------	------	------	------	--	--	--	--	--	--	--	--

Block 002200:

1017	1018	1019	1020	2000	2001	2002	2003	2004	2005	2006	2007
2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
2020	2021	2022	2023	2024	2029						

Block 002302:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	1017	1018	2002	2009	2011	2013	2014

VTD CROSS CREEK 09-G2

VTD CROSS CREEK 16

VTD CROSS CREEK 17

VTD CROSS CREEK 21

Block 000900:

2002	2003										
------	------	--	--	--	--	--	--	--	--	--	--

Block 002100:

1000	1001	1003	1005	1006	1007	1012					
------	------	------	------	------	------	------	--	--	--	--	--

Block 002301:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	2002	2016	2017	2018	2021	2022	2023	2024	2025
2026	2027	2028	2029	2030	3000	3001	3002	3003	3004	3005	3006
3007	3008	3009	3010	3011	3012	3013	3014	3015	3016	3017	3018

Block 002302:

2015	2017	2018	2019	2020	2021						
------	------	------	------	------	------	--	--	--	--	--	--

VTD CROSS CREEK 22-G2

## Plan Components (Short)

### District 42

#### County Cumberland NC

VTD CROSS CREEK 23-G2C-1  
VTD EASTOVER 1  
VTD EASTOVER 2  
VTD JUDSON-VANDER-G1  
VTD LINDEN  
VTD LONGHILL-G2  
VTD STEDMAN-G6  
VTD WADE-G7  
VTD WESTAREA-G2E-1  
VTD WESTAREA-G2E-2

### District 43

#### County Cumberland NC

VTD ALDERMAN  
VTD CROSS CREEK 01  
VTD CROSS CREEK 04  
VTD CROSS CREEK 05  
VTD CROSS CREEK 06  
VTD CROSS CREEK 07  
VTD CROSS CREEK 08  
VTD CROSS CREEK 10  
VTD CROSS CREEK 11-G3  
VTD CROSS CREEK 12  
VTD CROSS CREEK 13  
VTD CROSS CREEK 14  
VTD CROSS CREEK 15

##### Block 000600:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	3000
3001	3002	3003	3004	3005	3006	3007	3008	3013	5000	5001	5002
5003	5004	5005	5006	5007	5008	5009	5010	5011	5012	5013	5014
5015	5016	5017	5019	5020							

##### Block 001800:

1000 1007

##### Block 003800:

3038

VTD CROSS CREEK 18

VTD CROSS CREEK 19

VTD CROSS CREEK 20-G4

##### Block 001701:

1000	1001	1018	1019	1020	1021	1026	2000	2001	2002	2003	2004
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2029
2030	2031	2032	2033								

##### Block 001800:

1036	1037	1038	1039	1040	1041	1042	1043	1045			
------	------	------	------	------	------	------	------	------	--	--	--

VTD CROSS CREEK 21

## Plan Components (Short)

Optimized State House Map

### District 43

#### County Cumberland NC

##### VTD CROSS CREEK 21

###### Block 000900:

1000	1001	1005	1006	2000	2001	2004	2005	2006	2007	2008	2009
2010	2011	2012	2013								

###### Block 002100:

1002	1004	1008	1009	1010	1011	1013	1014				
------	------	------	------	------	------	------	------	--	--	--	--

##### VTD CROSS CREEK 34

###### Block 000701:

1003	1004	1005	1015	1016	1017	1018	1019	1027			
------	------	------	------	------	------	------	------	------	--	--	--

###### Block 002001:

1029	1030	1031	1032	1033	1034	1036					
------	------	------	------	------	------	------	--	--	--	--	--

##### VTD CUMBERLAND 3-G8

###### Block 001702:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1015	1017									

##### VTD HOPE MILLS 2-G9B-1

###### Block 001606:

1010	1019	1020	1038								
------	------	------	------	--	--	--	--	--	--	--	--

###### Block 003105:

2001	2003	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
2015	2017	2018	2019	2020	2021	2022	2023	2024	2026		

###### Block 003106:

1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1015
2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
2012	2013	2014	2015	2016	2018	2019	2021	2024	2025	2026	2027
2028	2030	2031									

##### VTD HOPE MILLS 2-G9B-2

##### VTD HOPE MILLS 3-G9

##### VTD PEARCES MILL 2-G3A-1

##### VTD PEARCES MILL 2-G3A-2

##### VTD PEARCES MILL 3-G3

##### VTD PEARCES MILL 4-G4

##### VTD SHERWOOD

### District 44

#### County Cumberland NC

##### VTD CLIFFDALE\_WEST- 1-CL57

##### VTD CLIFFDALE\_WEST- 2-CL57

##### VTD CROSS CREEK 03

###### Block 002200:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	2025	2026	2028				

##### VTD CROSS CREEK 24

###### Block 002001:

1005	1006	1007	1008	1009	1010	1012	1013	1014	1020	1021	1022
1023	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
2011	2012	2013	2014	2015	2016	2017	2018	2023	2025		

**Plan Components (Short)**

**District 44**

**County Cumberland NC**

VTD CROSS CREEK 25

VTD CROSS CREEK 26

VTD CROSS CREEK 27

Block 002001:

2024

Block 003307:

1003

Block 003310:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 2000 2001

2002 2003 2004 2005 3001 3002 3003 3004 3005 3006 3007 3008

3009 3010 3011 3012 3013 3014 3015 3016 4000 4001 4002 4003

4004 4006 4007 4008 4009 4010 4012 4013 4014

Block 003311:

1000 1001 1003 1004 1005 1006

Block 003317:

1021

VTD CROSS CREEK 32

VTD CROSS CREEK 33

VTD LAKE RIM

VTD MANCHESTER-G11

VTD MONTIBELLO

VTD MORGANTON RD 2

VTD Spring Lake 3

**District 45**

**County Cumberland NC**

VTD ARRAN HILLS

VTD AUMAN-G5A-1

VTD AUMAN-G5A-2

VTD BRENTWOOD-G5

VTD CROSS CREEK 15

Block 001800:

1001 1002 1003 2000 2001

VTD CROSS CREEK 20-G4

Block 001701:

1002 1003 1004 1005 1014 1015 1016 1017 1022 1023 1024 1025

1027 1030 1032 1033 1034 2028

Block 001702:

3006 3007 3011

VTD CROSS CREEK 24

Block 002001:

1015 1016 1017 1018 1019 1024 1025 1026 1027 1028 1037 2019

2020 2021 2022

Block 002002:

1001

Block 003302:

3000



**Plan Components (Short)**

**District 45**

**County Cumberland NC**

VTD CROSS CREEK 27

Block 003311:

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009

VTD CROSS CREEK 28-G5B-1

VTD CROSS CREEK 28-G5B-2

VTD CROSS CREEK 29

VTD CROSS CREEK 30-G4

VTD CROSS CREEK 31

VTD CROSS CREEK 34

Block 000701:

1020 1021 1022 1023 1024 1025

Block 002002:

1000 4000 4001 4002 4003

VTD CUMBERLAND 1A-G8

VTD CUMBERLAND 2

VTD CUMBERLAND 3-G8

Block 001701:

1031

Block 001702:

1013 1014 1016 2027 3008 3009 3010

Block 001901:

1000 1001 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009  
2010 2011 2012 2013 2014 2015

Block 001902:

2007 2008 2009 2010 2011 2012 2013 2023 2024 2025 2026 2027  
2028 2029 2030 2031 2032 2033 2034 2037 2038 2039 2040 2041

VTD CUMBERLAND 4-G8

VTD HOPE MILLS 1A-G8

VTD HOPE MILLS 2-G9B-1

Block 001605:

1028

Block 003102:

1000 1001 1003 1008 1009 1011 1015 1016 1017 1018 1019 1020  
1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033  
1034 1035 2025 2027 2033 2034 2035 2036 2037

Block 003103:

2040 2041 2053 2058 3006 3007 3008 3009 3010 3011 3012 3013  
3014 3015 3016 3017 3018 3019 3020 3021 3022 3023 3024 3025  
3026 3027 3028 3029 3030 3031

Block 003105:

1000 1017 1018 1019 1020 1021 1022

VTD HOPE MILLS 4-G10

VTD STONEY POINT 1-G10

VTD STONEY POINT 2-G10

**District 46**

**County Columbus NC**

**Plan Components (Short)**

Optimized State House Map

**District 46**

**County Robeson NC**

VTD BRITTS

VTD EAST HOWELLSVILLE

VTD LUMBERTON 1

Block 960701:

3037

Block 961301:

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011

2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023

2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035

2036 2037 2038 2039 2040 2041 3018 3023 3024 3025 3026 3027

3028 3029 3030 3032 3033 3034 3035 3037 3038 3039 3040 3041

3042 3050 3051 3052 3053 3054

Block 961302:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011

1012 1013 1014 1017 1018 1019 1020 1021 1022 1023 1024 1025

1026 1027 1028 2000 2001 2002 2003 2004 2005 2006

VTD LUMBERTON 2

VTD LUMBERTON 3

VTD LUMBERTON 4

VTD LUMBERTON 5

VTD LUMBERTON 6

VTD ORRUM

VTD SMYRNA

VTD STERLINGS

VTD WEST HOWELLSVILLE

VTD WHITEHOUSE

VTD WISHARTS

**District 47**

**County Robeson NC**

VTD ALFORDSVILLE

VTD BACK SWAMP

VTD BURNT SWAMP

VTD FAIRMONT

VTD GADDYS

VTD LUMBER BRIDGE

VTD LUMBERTON 1

Block 960701:

3027 3028 3035 3036 3039 3040 3041 3042 3043 3044 3045 3046

3047 3048 3049 3050 3052 3053 3054 3055 3056 3057 3058 3059

3060 3078 3081

Block 960702:

2033 2035 2040 2041 2042

Block 961302:

1015 1016

VTD LUMBERTON 1A

VTD LUMBERTON 7

## Plan Components (Short)

Optimized State House Map

### District 47

#### County Robeson NC

VTD LUMBERTON 8A  
VTD MAXTON  
VTD NORTH PEMBROKE  
VTD OXENDINE  
VTD PARKTON  
VTD PHILADELPHUS  
VTD PROSPECT  
VTD RAFT SWAMP  
VTD RED SPRINGS  
VTD RENNERT  
VTD ROWLAND  
VTD SADDLETREE  
VTD SHANNON  
VTD SOUTH PEMBROKE  
VTD ST PAULS  
VTD THOMPSON  
VTD UNION

### District 48

#### County Hoke NC

#### County Scotland NC

### District 49

#### County Wake NC

VTD 01-16  
VTD 04-05  
Block 052401:  
1000 1001 1002 1003 1004 1026  
Block 052509:  
2005 2006 3001 3002 3003 3005  
Block 053512:  
2000 2012  
Block 053521:  
1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010  
Block 980200:  
1012 1013 1016 1017 1018  
VTD 05-05  
VTD 07-01  
VTD 07-02  
VTD 07-03  
VTD 07-07  
Block 053714:  
1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012  
1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 3000 3001  
3002 3003 3004 3005 3006 3007 3008 3009 3010 3011 3012 3013  
Block 053729:  
1005 1006 1007 1008 1009 1010 1011 1012  
VTD 07-09

**Plan Components (Short)**

Optimized State House Map

**District 49**

**County Wake NC**

VTD 07-10

VTD 07-12

VTD 08-02

VTD 08-03

VTD 08-05

VTD 08-06

VTD 08-07

Block 053721:

2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2018
2019	2020	2021									

VTD 08-09

VTD 08-10

VTD 08-11

VTD 11-01

Block 052401:

1005	1006	1007	1008	1009	1010	1011	1012	1027	1109	1110	
------	------	------	------	------	------	------	------	------	------	------	--

Block 052509:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
2000	2001	2002	2003	2004	2007	2008	2009	2010	2011	2012	2013
2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
2026	2027	2028	2029	2030	2031	3000	3004	3006	3007	3008	

VTD 11-02

**District 50**

**County Caswell NC**

**County Orange NC**

VTD CALDWELL

VTD CAMERON PARK

VTD CARR

VTD CEDAR GROVE

VTD CHEEKS

VTD COLES STORE

VTD EFLAND

VTD ENO

VTD GRADY BROWN

VTD HILLSBOROUGH

VTD HillsboroughEast

VTD HOGAN FARMS

Block 011209:

1007	1008	1009	1010	2000	2009	2010	2011	2012	2013	2014	2015
2016	2017	2018	2019	2020	2021	2022	2023	3017			

VTD ORANGE GROVE

VTD PATTERSON

VTD ST MARYS

VTD TOLARS

VTD WEST HILLSBOROUGH

VTD WHITE CROSS

**Plan Components (Short)**

Optimized State House Map

**District 51**

**County Lee NC**

VTD C1

VTD C2

VTD D1

VTD D2

Block 030101:

4007 4008 4009

Block 030102:

1006	1007	1008	1009	1010	1011	1012	1013	1015	1016	1017	1018
1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030
1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042
1043	1044	1045	1046	1047	2000	2001	2002	2003	2004	2005	2006
2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
2044	2045	2046	2047	2048	2049	2050	2051	3000			

Block 030601:

1000	1002	1052	1053	1054	1055	1056	1057	2043	2044	2045	2046
2047	2049										

**County Moore NC**

VTD BENSLEM

VTD CAMERON

VTD CARTHAGE

VTD DEEP RIVER/HIGH FALLS/RITTER

VTD EAST ABERDEEN

Block 950900:

3049

Block 951001:

3006

Block 951102:

1010 1014 1020 1070 1071

VTD EAST KNOLLWOOD

VTD EASTWOOD

Block 950402:

1082 1084

Block 950404:

1027	1028	1029	1030	1031	1032	1033	1034	1035	1038	1039	1040
1041	1042	1043	2016	2017	2027	2028	2029	2030	2032	2033	2034
2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058
2059	2060	2061	2062	2063							

Block 950603:

4000	4001	4002	4003	4004	4008	4009	4010	4011	4012	4013	4014
4015	4016	4017	4018	4019	4020	4021	4026				

VTD EUREKA/WHISPERING PINES

VTD LITTLE RIVER

VTD NORTH SOUTHERN PINES

## Plan Components (Short)

Optimized State House Map

### District 51

#### County Moore NC

##### VTD PINEDENE

###### Block 950900:

3000	3001	3002	3003	3004	3005	3006	3007	3008	3009	3010	3011
3020	3021	3022	3023	3024	3025	3026	3027	3028	3029	3030	3031
3032	3033	3034	3035	3037	3038	3039	3040	3041	3042	3043	3044
3045	3048	3050	3051								

###### Block 951001:

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
2036	2037	2038	2039	3000	3001	3002	3003	3012	3013	3014	3015
3016	3017	3020	3021	3022	3023	3024	3025	3026	3028	3029	3030
3031	3032										

###### Block 951002:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1012
1013	1014	1015	1016	1017	1018	1019	1020				

###### Block 951102:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1011	1012
1072	1073	1075	1077	3002	3003	3004	3005	3006			

##### VTD PINEHURST B1

###### Block 950801:

4016	4017	4022	4023								
------	------	------	------	--	--	--	--	--	--	--	--

##### VTD PINEHURST B2

###### Block 950702:

1019	1020										
------	------	--	--	--	--	--	--	--	--	--	--

##### VTD ROBBINS

##### VTD SOUTH SOUTHERN PINES

###### Block 950702:

1021	1022	1023	1024	1025	1026	1029	1030	2000	2001	2002	
------	------	------	------	------	------	------	------	------	------	------	--

###### Block 950801:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023
1024	1025	1026	1027	2000	2001	2002	2003	2004	2005	2006	2007
2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
2056	2057	2058	2059	2060	2061	2062	2063	3000	3001	3002	3003
3004	3005	3006	3007	3008	3009	3010	3011	3012	3013	3014	3015
3016	3017	3018	3019	3020	3021	3022	3023	3024	3025	3026	3027
3028	3029	3030	3031	3032	3033	3034	3035	3036	3037	3038	3039
3040	3041	3042	3043	4020	4021	4024	4025	4026	4027	4028	4029
4030	4031	4032	4033	4034	4035	4036	4037	4039			

###### Block 951102:

2004	2005	2015	2016	2024	2025	2030	2031	2073			
------	------	------	------	------	------	------	------	------	--	--	--

##### VTD VASS

**Plan Components (Short)**

**District 51**

**County Moore NC**

VTD WEST ABERDEEN

Block 951102:

2017	2018	2019	2020	2021	2022	2027	2032	2052	2067	2068	3007
------	------	------	------	------	------	------	------	------	------	------	------

VTD WEST KNOLLWOOD

Block 950506:

3028	3029	3030	3031	3032	3033	3034	3037	3038	3040	3041	3042
3043	3044	3045									

Block 950604:

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
2012	2013	2014	2015	2016	2017	2018	2020	2021	2033	2034	2035
2036	2037	2038	2039	2040	2041	2042	2043	2058			

Block 950802:

2000	2001	2002	2003	2004	2005	2006	2018	2019	2020	2021	2022
2023	2024	2028	2029	2030	2031	2032	3000	3001	3002	3003	3004
3005	3006	3007	3008	3009	3010	3011	3012	3013	3014	3015	3016
3017	3018	3019	3020	3021	3022	3023	3024	3025	3026	3027	3028
3029	3030	3031	3032	3033	3034	3035	3036	3037	3038	3039	3040
3041	3042	3043	3044	3045	3046	3047	3048	3049	3050	3051	3052
4028											

VTD WESTMOORE

**District 52**

**County Moore NC**

VTD EAST ABERDEEN

Block 950900:

3046

Block 951001:

3004	3005	3007	3008	3009	3010	3018	3019				
------	------	------	------	------	------	------	------	--	--	--	--

Block 951101:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023
1024	1025	1026	1027	2000	2001	2002	2003	2004	2005	2006	2007
2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
2032	2040	2041	2042	2043	2044	2045	2047	2048	2049	2050	2051
2052	2053	2055	2056	2057	2058						

Block 951102:

1013	1015	1016	1017	1018	1019	1021	1022	1023	1024	1025	1026
1027	1029	1030	1031	1041	1042	1043	1044	1045	1046	1047	1048
1049	1050	1051	1054	1055	1056	1057	1061	1062	1063	1064	1065
1066	1067	1068	1069	1074	1076	3029	3030	3031	3032	3033	3034
3035	3036	3037	3038	3039	3052						

VTD EASTWOOD

Block 950603:

3000	3001	3002	3010	3011	3014	4005	4006	4007	4022	4023	4024
4025	4027	4028	4029								

Block 950604:

**Plan Components (Short)**

**District 52**

**County Moore NC**

VTD EASTWOOD

Block 950604:

2027 2028 2029

VTD PINEBLUFF

VTD PINEDENE

Block 950900:

3036 3047 3053

Block 951001:

3011 3027

Block 951002:

1011

Block 951102:

1028 3000 3001 3009 3028

VTD PINEHURST A1

VTD PINEHURST A2

VTD PINEHURST B1

Block 950604:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011  
1012 1013 1014 1015 1016 1017 1018 1019 2024 2025 2026 2030  
2031 2032 2044 2045 2046 2047 2048 2049 2050 2051 2052 2053  
2054 2055 2056 2057

Block 950801:

4000 4001 4002 4003 4004 4005 4006 4007 4008 4009 4010 4011  
4012 4013 4014 4015 4018 4019

Block 950802:

2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2025  
2026 2027

VTD PINEHURST B2

Block 950702:

1000 1001 1002 1003 1004 1005 1006 1008 1009 1012 1013 1014  
1015 1016 1017 1018 1027 1028 1032 2003 2004 2005 2006 2007  
2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019  
2020 2022 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033  
2034 2035 2036 2037 2038 2039 2040 2041 2042 2056 2057 2058

Block 951102:

2000 2001 2002 2003 2006 2007 2008 2009 2011 2012 2013 2014  
2092

VTD PINEHURST C

VTD SEVEN LAKES

VTD SOUTH SOUTHERN PINES

Block 950702:

1031

Block 950801:

4038

Block 951102:

2028



## Plan Components (Short)

Optimized State House Map

### District 52

#### County Moore NC

VTD TAYLORTOWN

VTD WEST ABERDEEN

Block 950306:

1045 1046 1049 1050 1052 1053 1054

Block 950702:

2021 2023 2043 2044 2045 2046 2047 2048 2049 2050 2051 2052  
2053 2054 2055 2059 2060 2061 2062 2063

Block 950703:

2012 2021 2028 2029 2030 2031

Block 951101:

2033 2034 2035 2036 2037 2038 2039 2046 3000 3001 3002 3003  
3004 3005 3006 3007 3008 3009 3010 3011 3012 3013 3014 3015  
3016 3017 3018 3019 3020 3021 3022 3023 3024 3025 3026 3027  
3028 3029 3030 3031 3032 3033 3034 3035 3036 3037 3038 3039  
3040 3041 3042 3043 3044 3045 3046 3047 3048

Block 951102:

1032 1033 1034 1035 1036 1037 1038 1039 1040 1052 1053 1058  
1059 1060 2010 2023 2026 2029 2033 2034 2035 2036 2037 2038  
2039 2040 2041 2042 2043 2044 2045 2046 2047 2048 2049 2050  
2051 2053 2054 2055 2056 2057 2058 2059 2060 2061 2062 2063  
2064 2065 2066 2069 2070 2071 2072 2074 2075 2076 2077 2078  
2079 2080 2081 2082 2083 2084 2085 2086 2087 2088 2089 2090  
2091 3008 3010 3011 3012 3013 3014 3015 3016 3017 3018 3019  
3020 3021 3022 3023 3024 3025 3026 3027 3040 3041 3042 3043  
3044 3045 3046 3047 3048 3049 3050 3051

Block 951200:

1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017  
1018 1022 1024 1025

VTD WEST END

VTD WEST KNOLLWOOD

Block 950603:

4030

Block 950604:

2019 2022 2023

#### County Richmond NC

### District 53

#### County Harnett NC

VTD BLACK RIVER

Block 070801:

1000

Block 070901:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011  
1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023  
1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035  
1036 1037 1038 1039 1040 1041 1042 1043 1044 1045 1046 1047  
1048 1049 1050 1051 1052 1053 1054 1055 1056 1057 1058

**Plan Components (Short)**

Optimized State House Map

**District 53**

**County Harnett NC**

VTD BLACK RIVER

Block 070902:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023
1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035
1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047
1048	1054	1055	1058	1059	1060	1063					

Block 070903:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023
1024	1025	1030	1031	1034	1037	1038					

Block 070904:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023
1024	1025	1026	1027	1028	1029	2000	2001	2002	2003	2004	2005
2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		

Block 071004:

1009

VTD CENTRAL HARNETT NEILLS CREEK

Block 070401:

2050 2051

Block 070801:

1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012
1040	1041	1042	1043								

Block 070802:

1000	1001	1014	1018	1019	1020	1025	1026	1027	2003	2004	2005
2006	2007	2009	2011	2012	2013	2014	2015	2016	2017	2018	2019
2020	2022	2023	2024	3000	3001	3002	3003	3004	3005	3006	3007
3008	3009	3010	3011	3012	3013	3014	3015	3016	3017	3018	3019
3020	3021	3022	3023	3024	3025	3026	3027	3028	3029	3030	3031
3032	3033	3034	3035	3036	3037	3038	3039	3040			

Block 070903:

1026	1027	1028	1029	1032	1033	1035	1036	1039			
------	------	------	------	------	------	------	------	------	--	--	--

VTD COATS/GROVE

VTD EAST AVERASBORO

VTD ERWIN/DUKE

VTD STEWARTS CREEK

Block 070600:

2014 2015 2016 2051

VTD WEST AVERASBORO

**County Johnston NC**

VTD BANNER

VTD NORTH ELEVATION

Block 041206:

1001

Block 041504:

## Plan Components (Short)

### District 53

#### County Johnston NC

##### VTD NORTH ELEVATION

###### Block 041504:

3000	3001	3002	3003	3004	3005	3007	3008
------	------	------	------	------	------	------	------

###### Block 041505:

1000	1001	1002	1003	1004	1008	1010	1011	1012	2000	2001	2002
2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
2015	2016										

###### Block 041509:

1003	1006	1007	1008	1009	1010	1011	3006
------	------	------	------	------	------	------	------

##### VTD NORTH PLEASANT GROVE 1

##### VTD NORTH PLEASANT GROVE 2

##### VTD SOUTH ELEVATION

##### VTD SOUTH PLEASANT GROVE

##### VTD SOUTHWEST CLEVELAND

###### Block 041112:

1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021
1022	1023	1024	1025	1026	2002	2003	2004	2005	2006	2007	2008
2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		

###### Block 041113:

1000	1001	1002	1003	1004	2000	2001	2002	2003	2004	2005	2006
2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		

### District 54

#### County Chatham NC

##### VTD BYNUM

##### VTD EAST WILLIAMS

##### VTD HADLEY

##### VTD MANNS CHAPEL

##### VTD NEW HOPE

##### VTD NORTH WILLIAMS

##### VTD OAKLAND

##### VTD PITTSBORO

##### VTD THREE RIVERS

##### VTD WEST WILLIAMS

#### County Lee NC

##### VTD A1

##### VTD A2

##### VTD B1

##### VTD B2

##### VTD D2

###### Block 030102:

1000	1001	1002	1003	1004	1005	1014
------	------	------	------	------	------	------

###### Block 030601:

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
2040	2041	2042	2048								

**Plan Components (Short)**

**District 54**

**County Lee NC**

VTD D2

Block 030703:

1005 1017 1018 1021 1022 1044 1045

VTD E1

VTD E2

**District 55**

**County Anson NC**

**County Union NC**

VTD ALLENS CROSSROADS VFD

VTD BEAVER LANE VFD

VTD BENTON HEIGHTS CHURCH OF GOD

VTD CROSSROADS AME ZION CHURCH

VTD ELLEN FITZGERALD SENIOR CENTER

VTD EUTO BAPTIST CHURCH

VTD GRACE BAPTIST CHURCH

Block 020308:

2000 2006 2025 2026 2027 2028 3000 3001 3002 3003 3004 3005

3006 3007 3008 4005 4006 4008 4009 4011

Block 020403:

3000 3001 3002 3003 3004 3005 3006 3007 3008

Block 021005:

1000

VTD GRIFFITH ROAD VFD

VTD MIDWAY BAPTIST CHURCH

Block 020100:

2039 2040 3013 3019 3020 3021 3024 3025 3026 3028 3029 3030

3034 3035 3036 3037 3038 3039 3040 3041 3042 3043 3044 3045

3046 3047 3048 3049 3050 3051 3052 3053 3054 3055 3056 3057

3059 3068

Block 020601:

3008 3009 3010 3017 3018 3019 3020 3021 3030 3031 3032 4007

4008 4012 4014 4015 4016 4017 4018 4019 4020 4021 4027

Block 020701:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1017 1018

3000 3001 3002 3003 3004 3005 3006 3007 3008 3009 3010 3011

3012 3014 3015 3016 3017 3028 3029 3042

VTD MONROE MIDDLE SCHOOL

VTD MT. CARMEL METHODIST CHURCH

Block 020501:

3002 3004 3005 3006 3007 3008 3009 3010 3011 3012 3013 3014

3015 3016 3046 3047 3048 3049 3050 3051 3052 3053 3054 4000

4001 4002 4003 4004 4005 4006 4007 4008 4009 4010 4011 4012

4013

Block 020902:

4000 4001 4006 4007 4008

Block 021005:

**Plan Components (Short)**

Optimized State House Map

**District 55**

**County Union NC**

VTD MT. CARMEL METHODIST CHURCH

Block 021005:

1018	1019	1042	2000	2001	2002	2003	2004	2005	2006	2007	2008
2009	2010	2018	2026	2027	2028	2029	2030	2031	2032	2033	2036

VTD NEW SALEM BAPTIST CHURCH

Block 020308:

1000	1001	1002	1003	1004	1027	1028	1029	4000	4001	4002	4003
4004	4007	4010	4012	4013	4014	4015	4016	4017	4018	4019	

Block 020403:

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2011	2012
2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024

Block 020406:

4002 4003

Block 020501:

1009

VTD PROSPECT ELEMENTARY SCHOOL

VTD ROCK REST ELEMENTARY SCHOOL

VTD SPCC CONFERENCE CENTER

Block 020307:

1026	1028	1029	1030	1031	1032	1033	1069	1070	1071	1072	1073
1074	1075	3000	3001	3002	3014	3015	3016	3017	3018	3019	3020

Block 020403:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	
------	------	------	------	------	------	------	------	------	------	------	--

Block 020405:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014									

Block 020406:

3020 4000 4001 4006

VTD ST. LUKES LUTHERAN CHURCH

VTD SUTTON PARK RECREATION CENTER

VTD THE BAZEMORE CENTER

VTD UNION BAPTIST CHURCH

VTD WINGATE COMMUNITY CENTER

**District 56**

**County Orange NC**

VTD CARRBORO

VTD CEDAR FALLS

VTD COKER HILLS

VTD COLONIAL HEIGHTS

VTD DAMASCUS

VTD DOGWOOD ACRES

VTD EAST FRANKLIN

VTD EASTSIDE

VTD ESTES HILLS

VTD GLENWOOD

VTD HOGAN FARMS

**Plan Components (Short)**

**District 56**

**County Orange NC**

VTD HOGAN FARMS

Block 011208:

1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012
1013	1014	1015	1016	3004	4000	4001	4002	4003	4004	4005	4006
4007	4008	4009	4010	4011	4012	4013	4014	4015	4016	4017	4018
4019	4020	4021	4022	4023	4025	4026	4027	4028			

VTD KINGS MILL

VTD LIONS CLUB

VTD NORTH CARRBORO

VTD NORTHSIDE

VTD OWASA

VTD RIDGEFIELD

VTD ROGER EUBANKS

VTD ST JOHN

VTD TOWN HALL

VTD UNC

VTD WEAVER DAIRY

VTD WEAVER DAIRY SAT

VTD WESTWOOD

**District 57**

**County Guilford NC**

VTD CG2

VTD CG3A

VTD CG3B

VTD G03

Block 010100:

1000	1001	1002	1003	1004	1005	1006	1007	1009	1010	1011	1012
1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024
1025	1026	1027	1029	1030	1031						

Block 012705:

1000	1001	1002	1003	1004	1006	1011	1012	1013	1014	1015	1016
1017	1021	1022	1023	1024	1025	1031	1032				

Block 012706:

1001	1002	1003									
------	------	------	--	--	--	--	--	--	--	--	--

VTD G04

Block 012706:

1004	1005	1006	1009	1010	1013	1014	1015	1016	1017	1018	1019
1020	2004	2005	2006	2007	2010	2011	2012	2013	2014	2015	

Block 012707:

1004	1007										
------	------	--	--	--	--	--	--	--	--	--	--

VTD G05

VTD G06

VTD G07

VTD G08

VTD G09

VTD G10

**Plan Components (Short)**

**District 57**

**County Guilford NC**

VTD G17

Block 012508:

3014 3015 3016 3017 3022 3023 3024 3030

VTD G18

Block 010401:

2002 2003 2004 2005 2006

Block 010403:

2015 2016

Block 010404:

2011 3005 3006 3007 3008 3009 3010 3013 3017 3018 3019 3020  
3021

VTD G19

Block 010200:

3021 3022

Block 010404:

1017 1018 1019 1020 1021 2000

VTD G20

VTD G21

VTD G22

VTD G23

VTD G24

VTD G25

VTD G26

VTD G27

VTD G28

VTD G31

Block 012508:

2025 3001 3002 3005 3006 3007 3008 3009 3010 3011 3012 3013  
3018 3019 3020

VTD MON1

VTD MON2A

VTD MON2B

VTD MON3

VTD NCGR1

Block 015500:

3049

Block 015601:

1000 1001 1002 1003 1004 1005 1007 1008 1009 1010 1011 1025  
1026 1027 1028 1029 1030 1031 1033 1036 1037 1038

Block 015602:

1025 1026 1027 1049 1050

Block 015706:

2002 2003 2004

VTD NCGR2

Block 015601:

2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2031

**Plan Components (Short)**

**District 57**

**County Guilford NC**

VTD NCGR2

Block 015601:

2041 2042 2043 2044 2045

Block 015602:

3030 3032

**District 58**

**County Guilford NC**

VTD FR1

VTD FR2

VTD G53

Block 012804:

1004 1005 1006 1007 1008 1009 1010 1014 1015 1016 1017 1018  
1019 1020 1021 1022 1029 2003 2007 3000 3001 3002 3003 3004  
3005 3006 3007 3008 3009 3012 3013 3014 3015 3016

Block 016800:

2023 2024

VTD G54

VTD G55

VTD G56

VTD G57

VTD G58

VTD G59

VTD G60

VTD G61

VTD G62

VTD G64

Block 016011:

1001 1002 1003 2036 2059 2062

Block 016405:

1000 1001 1002 1003 1004 1005 1006 1007 1009 1014 1015 1016  
1017 1018 1019 1020 1023 1024 1031 1035 1036 1037 1038 1039  
1040 1041 1042 1043 1044 1045 1062 1063

Block 016406:

2000

Block 016503:

1000 1001 1002 1003 1004 1005 1006 1007

VTD G65

VTD G66

VTD H04

Block 014502:

1000 1001 1002 1003 1004 1005 1010 1011

Block 016600:

1067 1069 1070 1071 1073

VTD H05

VTD H06

VTD H10



**Plan Components (Short)**

**District 58**

**County Guilford NC**

VTD H19B

VTD H28

Block 016306:

1018	1028	1029	1030	1031	1032	1033	1034	1035	1040	1041	1042
1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054
1055	2041										

Block 016409:

1025	1052	1053	1056	1057	1060	1061	1064	1065	1066	1067	1068
1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080
1081											

VTD H29A

Block 016407:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1025	1026
1027	1028	1042	1043	1044	1047	1049					

Block 016409:

1054	1055	1058	1059	1062	1063						
------	------	------	------	------	------	--	--	--	--	--	--

VTD H29B

Block 016405:

1021	1022	1025	1026	1027	1028	1029	1030	1032	1033	1034	1046
1047	1064										

Block 016406:

1003	1005	1006	1008	1009	1011	1012	1016	1017	1018	1019	1020
1021	1022	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
2017	2018	2019	2020	2032	2033	2034	2038	2039	2040	2041	2042
2043											

VTD JAM1

VTD JAM2

VTD JAM3

VTD JAM4

VTD JAM5

Block 014502:

1006

Block 016600:

1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015
1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027
1028	1030	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043
1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055
1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1068
1072	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084
1085	1086	1087	1088	1089	1090	1093	1094	1095	1096	1097	1098
1099	1100	1101	1102	1103	1104	1109	1110	1111	1112	1113	1116
1117	1118	1119	1122	1148	1149	1150	1153	1154	1155	1156	1157
1158	1159	1160	1161	1162	1163	1164					

Block 016701:

2045

Plan Components (Short)

Optimized State House Map

District 58

County Guilford NC

VTD JAM5

Block 016702:

2039 2040

VTD SUM1

Block 016502:

2008 2009 2010 2014 2015 2016 2017 2018 2019 2020 2021 2022

2024 2025 2026 2027 2031 2036 2037 2038 2039 2040 2041 2042

2043 2044

Block 016701:

1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019

1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1033 1034

1043 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

2011 2012 2013 2014 2015 2016 2017 2018 2019 2022 2023 2024

2026 2027 2028 2029 2050 2051 2052 2054

VTD SUM3

Block 016701:

1044 1072 1073 1074 2020 2021 2025

Block 016702:

1000 1001 1002 1003 1004 1005 1006 1007 1010 1011 1012 1013

1014 1015 1016 1026 2000 2001 2002 2003 2012

VTD SUM4

Block 016600:

1091 1092

Block 016702:

1008 1009 1017 1018 2013 2014 2015 2016 2017 2018 2021 2022

2023 2024 2025 2026 2027 2028 2030 2031 2032 2033 2034 2035

2036 2037 2038 2041

District 59

County Guilford NC

VTD FEN1

VTD FEN2

VTD G53

Block 012804:

1026 1027 1028 2000 2001 2002 2004 2005 2006 3010 3011

Block 016800:

2006 2007 2008 2009 2010 2011 2013 2014 2015 2016 2017 2018

2019 2020 2022 2028 2031 2042 2043 2044 2048

VTD G71

Block 011101:

2000 2023 3012 3013 3014 3015 3016 3017 3018 3019 4005 4006

4007 4008 4009 4010 4012 4013 4014

Block 012803:

3008 3009 3010

VTD G72

VTD G74

VTD G75

## Plan Components (Short)

Optimized State House Map

### District 59

#### County Guilford NC

VTD GIB

VTD GR

VTD JEF1

VTD JEF2

VTD JEF3

VTD JEF4

VTD NCLAY1

VTD NCLAY2

VTD NMAD

VTD NWASH

VTD PG1

VTD PG2

VTD RC1

VTD RC2

VTD SCLAY

VTD SMAD

VTD SUM1

Block 016701:

1035 1038 1039 1040 1041 1042 1050 1051 1052 1053 1061

VTD SUM2

VTD SUM3

Block 016701:

1045 1046 1054 1075

VTD SUM4

Block 016702:

1019 1024 1025 2019 2020 2029

Block 016900:

1000 1001 1002 1003 1004 1005 1006 1014 4006 4007 4010 4023

VTD SWASH

### District 60

#### County Guilford NC

VTD G64

Block 016204:

1004 1005 1057 1058 1062

Block 016405:

1008 1010 1011 1012 1013

VTD H01

VTD H02

VTD H03

VTD H04

Block 014501:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1020 1021

1022 1023 1024 1025 1026 1027 1028 1029 1030 1037 1038 1039

1043

Block 014502:

1008 1009 1012 1013 1014 1015 1016 1018 1019 1020 1021 1022

**Plan Components (Short)**

**District 60**

**County Guilford NC**

VTD H04

Block 014502:

1023	1024	1025	1026	1027	1028	1029	1030	1032	1033	1034	1037
1038	1039	1040	1041	1042	1046	1048	1049	1054	1055	1056	1061
1068	1069	1070	1071	1072	1075	2000	2001	2002	2003	2004	2005
2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
2030	2031	2032	2033	2034	2035						

Block 016600:

1128	1135	1136	1137	1140							
------	------	------	------	------	--	--	--	--	--	--	--

VTD H07

VTD H08

VTD H09

VTD H11

VTD H12

VTD H13

VTD H14

VTD H15

VTD H16

VTD H17

VTD H18

VTD H19A

VTD H20A

VTD H20B

VTD H21

VTD H22

VTD H23

VTD H24

VTD H25

VTD H26

VTD H27-A

VTD H27-B

VTD H28

Block 016306:

1019	1020	1021	1022	1023	1024	1025	1026	1027	1036	1037	1038
2001	2002	2005	2006	2007	2008	2009	2010	2011	2012	2013	2015
2016	2017	2018	2019	2020	2021	2022	2023	2024	2028	2029	2030
2031	2032	2034	2035	2036	2037	2040					

VTD H29A

Block 016306:

1002	1003	1004	1005	1007	1008	1009	1010	1011	1012	1013	1014
1015	1016	1017	1039	2003							

Block 016407:

1022	1023	1024	1029	1030	1031	1032	1033	1034	1035	1036	1037
1038	1039	1040	1041	1045	1046	1048					

VTD H29B

**Plan Components (Short)**

Optimized State House Map

**District 60**

**County Guilford NC**

VTD H29B

Block 016204:

1063 1064 1065 1066

Block 016406:

1000 1001 1002 1004 1007 2011 2012 2013 2014 2015 2016 2021  
2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2035 2036  
2037 2044 2045 2046 2047 2048 2049 2050 2051 2052 2053 2054  
2055 2056 2057 2058 2059 2060 2061 2062 2063 2064 2065 2066  
2067 2068 2069 2070

VTD JAM5

Block 014502:

1007 1017 1031 1035 1036 1043 1044 1045 1047 1050 1051 1052  
1053 1057 1058 1059 1060 1062 1063 1064 1065 1066 1067 1073  
1074

Block 016600:

1105 1106 1107 1108 1114 1115 1120 1121 1123 1124 1125 1126  
1127 1129 1130 1131 1132 1133 1134 1138 1139 1141 1142 1143  
1144 1145 1146 1147 1151 1152 1165

VTD SDRI

**District 61**

**County Guilford NC**

VTD G01

VTD G02

VTD G03

Block 010100:

1008 1028

Block 011000:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011

VTD G04

Block 012707:

1005 1006 1012 1013 1014 1015 1016 1017 1018 1019 1021 1022  
1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034  
1035 1036 1037 1038 2000 2001 2010 2011 2012 2013 2014

VTD G11

VTD G12

VTD G13

VTD G14

VTD G15

VTD G16

VTD G17

Block 010500:

1001 1002 1003 1018

Block 012508:

3021 3025 3026 3027 3028 3029 3031 3032 3033 3034 3035 3036  
3037 3038 3039 3040 3041 3042 3043 3044 3045 3046

Block 012509:

**Plan Components (Short)**

**District 61**

**County Guilford NC**

VTD G17

Block 012509:

1021	1032	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043
1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055
1056	1057	1058	1059								

VTD G18

Block 010401:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
2000	2001	2007	2008	2009	2010	2011	2012	2013	2014	2016	2017
2022											

Block 010404:

2012	2013	3014	3016	3022	3025						
------	------	------	------	------	------	--	--	--	--	--	--

VTD G19

Block 010200:

3017	3018	3019	3020	3023	3024	3025	3026	3027	3028	3029	3030
3031	3032										

Block 010300:

2026	2027	2028	2029	2030	2031	2032					
------	------	------	------	------	------	------	--	--	--	--	--

Block 010404:

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2014	2015
2016	2017	2018	2019	2020	2021	2022	3015	3023	3024	3026	3027
3028	3029	3030									

Block 010800:

1000	1001	1002	1004	1005							
------	------	------	------	------	--	--	--	--	--	--	--

VTD G35

Block 012504:

1000	1012										
------	------	--	--	--	--	--	--	--	--	--	--

Block 012505:

2000	2001	2018	2020	2021	3003	3004	3005				
------	------	------	------	------	------	------	------	--	--	--	--

VTD G36

Block 012504:

1001	1002	1003	1004	1007	2000	2001	2002	2003	2004	2006	2007
2008	2009	2010									

Block 012505:

1020	1021	1023	1024	1025	2022						
------	------	------	------	------	------	--	--	--	--	--	--

VTD G37

VTD G44

VTD G45

VTD G46

VTD G47

VTD G48

VTD G49

VTD G50

VTD G51

VTD G52

VTD G63

**Plan Components (Short)**

Optimized State House Map

**District 61**

**County Guilford NC**

VTD G64

Block 016011:

1000	2064	2065	2066	2067	2069	2070	2071	2072	3000	3001	3002
3003	3004	3005	3006								

VTD G67

VTD G68

VTD G69

VTD G70

VTD G71

Block 011000:

1043	1044	1048	1051								
------	------	------	------	--	--	--	--	--	--	--	--

Block 011101:

1000	1001	1002	1003	1004	1005	1006	2001	2002	2003	2004	2005
2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
2018	2019	2020	2021	2022	3000	3001	3002	3003	3004	3005	3006
3007	3008	3009	3010	3011	4003	4004					

Block 012707:

2015											
------	--	--	--	--	--	--	--	--	--	--	--

VTD G73

**District 62**

**County Guilford NC**

VTD CG1

VTD FR3

VTD FR4

VTD FR5A

VTD FR5B

VTD G17

Block 012509:

1014	1022	1023	1024	1026	1027	1028	1029	1031	1033		
------	------	------	------	------	------	------	------	------	------	--	--

VTD G29

VTD G30

VTD G31

Block 012508:

1005	1006	1007	1012	1013	1014	1015	1016	1017	1018	1019	2008
2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2021
2022	2023	2024	3000	3003	3004						

Block 012509:

1013	1015	1016	1017	1018	1019	1020	1025				
------	------	------	------	------	------	------	------	--	--	--	--

VTD G32

VTD G33

VTD G34

VTD G35

Block 012505:

1000	1001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
2012	2013	2014	2015	2016	2017	2019					

VTD G36

**Plan Components (Short)**

**District 62**

**County Guilford NC**

VTD G36

Block 012505:

1002 1003 1004 1005 1006 1011 1017 1018 1019 1022 1026

VTD G38

VTD G39

VTD G40A1

VTD G40A2

VTD G40B

VTD G41A

VTD G41B

VTD G42A

VTD G42B

VTD G43

VTD G64

Block 016011:

2017 2018 2019 2020 2021 2022 2025 2026 2028 2029 2030 2031  
2032 2033 2034 2035 2037 2038 2039 2040 2041 2042 2043 2044  
2045 2046 2047 2048 2049 2050 2053 2054 2055 2057 2058 2060  
2061 2063 2068

Block 016204:

1000

Block 980100:

1039 1040

VTD NCGR1

Block 015601:

1006 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022  
1023 1024 1032 1034 1035

Block 015704:

1004 1006 1007 1008

Block 015800:

2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028  
2029 2030 2036 2037 2039 2040 2041 2042 2048

VTD NCGR2

Block 015601:

2013 2014 2015 2018 2019 2020 2021 2022 2023 2027 2028 2029  
2030 2032 2033 2034 2035 2036 2037 2038 2039 2040 2046 2047  
2048 2049 2050

Block 015800:

2000 2004 2005 2006 2007 2008 2009 2010 2012 2013 2014 2015  
2016 4041 4042

VTD NDRI

VTD OR1

VTD OR2

VTD SF1

VTD SF2

VTD SF3



## Plan Components (Short)

### District 62

#### County Guilford NC

VTD SF4

VTD STOK

### District 63

#### County Alamance NC

VTD BOONE 5

Block 020400:

1009 1010

Block 020501:

1000 1001 1002 1005 1006 1007 1008 1009 1010 1011 1012 1013

1014 1015 1016 1020 1021 1022 1024 1025 1043 1044 1055

Block 020502:

3018

Block 021500:

3009 3011 3024

Block 021600:

1015 1023 1024 1025 1026 1030 1031 1032 1033 2000 2001 2002

2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 4000

4001

VTD BURLINGTON 10

VTD BURLINGTON 4

VTD BURLINGTON 7

VTD BURLINGTON 8

VTD EAST BURLINGTON

VTD EAST GRAHAM

VTD FAUCETTE

VTD GRAHAM 3

VTD HAW RIVER

VTD MORTON

VTD NORTH BURLINGTON

VTD NORTH GRAHAM

VTD NORTH MELVILLE

VTD PLEASANT GROVE

VTD SOUTH BURLINGTON

VTD SOUTH MELVILLE

Block 021205:

1000 1001 1002 1003 1004 2000 2001 2002 2003 2004 2005 2006

2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030

2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042

2043 3000 3013 3014 3015 3016 3017 3018 3020 3021 3022 3023

3024 3027 3028 3029 3030 3031 3032 3033 3034 3035 3036 3037

3038 3039 3040 3041 3042 3043 3044 3045 3057

Block 021206:

1000 1001 1002 1003 1004 1010 1011 1012 2000 2001 2002 2003

2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015

2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027

**Plan Components (Short)**

**District 63**

**County Alamance NC**

VTD SOUTH MELVILLE

Block 021206:

2028	3000	3001	3002	3003	3004	3005	3006	3007	3008	3009	3010
3011	3012	3013	3014	3015	3016	3017	3018	3019	3020	3021	3022
3023	3024	3025	3026	3027	3028	3029	3030	3031	3032	3033	3034
3035	3036										

VTD WEST BURLINGTON

VTD WEST GRAHAM

**District 64**

**County Alamance NC**

VTD ALBRIGHT

VTD BOONE 5

Block 020501:

1017	1018	1019	1023	1029	1030	1031	1032	1033	1034	1035	1036
1037	1038	1039	1042								

Block 021600:

3006	3007	3008	3009	3010	3012	3013	3014	3015	3016	3017	3018
3019	3020	3021	3022	3023	3029	3031	3032	4002	4003	4004	4005
4006	4007	4008	4009	4010	4011	4012	4013	4014	4015	4016	4017
4018	4019	4020	4021	4022	4023	4024	4025	4026	4027	4028	4029
4030	4031	4032	4033	4034	4035	4036	4037	4038	4039	4040	4041
4042	4043	4044	4045	4046	4047	4048	4049				

VTD BURLINGTON 5

VTD BURLINGTON 6

VTD BURLINGTON 9

VTD CENTRAL BOONE

VTD COBLE

VTD GRAHAM 4

VTD MELVILLE 3

VTD NORTH BOONE

VTD NORTH BOONE 2

VTD NORTH NEWLIN

VTD NORTH THOMPSON

VTD PATTERSON

VTD SOUTH BOONE

VTD SOUTH GRAHAM

VTD SOUTH MELVILLE

Block 021205:

3001	3002	3003	3004	3005	3006	3007	3008	3009	3010	3011	3012
3019	3025	3026	3046	3047	3048	3049	3050	3051	3052	3053	3054
3055	3056	3058	3059	3060	3061	3062	3063	3064	3065	3066	3067
3068	3069	3070	3071	3072	3073	3074	3075	3076	3077		

VTD SOUTH NEWLIN

VTD SOUTH THOMPSON

VTD WEST BOONE

**District 65**

**Plan Components (Short)**

**District 65**

**County Rockingham NC**

**District 66**

**County Wake NC**

VTD 01-46

Block 052704:

2000 2006 3001 3003 3004 3005 3006 3007

Block 054018:

1028 1029 1030 1031 1032 1034 1035

VTD 13-01

Block 054008:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011

1012 1013 1014 1015 1016 2000 2001 2002 2003 2004 2005 2006

2007 2008 2009 2010 2011 3001 3002 3003 3004 3005 3006 3007

4000 4001 4002

Block 054018:

1019 1024 1025 1026 1027 1033

Block 054116:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011

1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023

1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035

1036 1037 1038 1039 1040 1041 1042 1043 1044 1045 1050 1051

1052 1054 1057 1058 1059 1060 1061 1062 1063 1064 2000 2002

2003 2004 2005 2006 2007

VTD 13-05

Block 054017:

1000 1001 1002 1003 1006 1007 1008 1009 1010 1011 1012 1013

1014 1044 1045 1046 1047 1048 1049

Block 054018:

1000 1001 1002 1003 1004 1005 1006 1008 1020 1021 1022 1023

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011

2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023

2024 2025 2026

VTD 13-06

Block 054016:

2000 2001 2002 2018 2019 2020 2021 2022 2023 2024

VTD 13-07

VTD 13-08

VTD 13-09

VTD 17-04

Block 054111:

1001 1006

Block 054113:

1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016

1017 1020 1030 1031 1041 2000 2001 2002

Block 054120:

1015 1016 1017 1018

Block 054121:

**Plan Components (Short)**

Optimized State House Map

**District 66**

**County Wake NC**

VTD 17-04

Block 054121:

2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042

VTD 17-11

Block 054116:

1046 1047 1048 1049 1053 1065 2001 2010 2011 2012 3000 3001  
3003 3004

Block 054117:

1000 3000 3001

VTD 19-09

Block 054214:

1017

Block 054215:

2003 2004 2005 2006 2007 2008 2013 2014 2015 2017 2018 2019  
2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031  
2032 2033 2038 2039 2040

Block 054221:

1051 1052 1053 1055

VTD 19-12

Block 054219:

2006 2009 2011 2017 2020 2031 2032 2033 2034 2035 2036 2037  
2038 2039 2040 2041 2042 2043 2044 2046 2047 2048 2049

Block 054220:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011  
1012 1013 1014 1016 1017 1020 1029 1030 1031 1032 1033 1034  
2012 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025  
2026 2027 2029 2030 2031 2032 2033 2034 2035 2036 2037

VTD 19-16

Block 054120:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011  
1012 1013 1014 1019 1020 1021

Block 054121:

1000 1001 1002 1003 1017 1024 1025 1026 1029 1030 1031 1032  
1033

Block 054215:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011  
1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022

VTD 19-17

VTD 19-18

Block 054221:

3023 3024 3025 3026

Block 054222:

2000 2001 2002 2003 2004 2005 2006 2007 2008 2010 2011 2012  
2013 2014 2015 4002 4003

VTD 19-19

VTD 19-20

## Plan Components (Short)

Optimized State House Map

### District 66

#### County Wake NC

VTD 19-21

### District 67

#### County Montgomery NC

#### County Stanly NC

### District 68

#### County Union NC

VTD GRACE BAPTIST CHURCH

Block 020308:

2001	2002	2003	2004	2005	2007	2008	2009	2010	2011	2012	2013
2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2029
2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
2042	2043	3009									

VTD KENSINGTON ELEMENTARY SCHOOL

VTD MARVIN AME ZION CHURCH

VTD MARVIN ELEMENTARY SCHOOL

VTD MINERAL SPRINGS VFD

VTD MT. CARMEL METHODIST CHURCH

Block 021005:

1016	1017	1034	2011	2012	2013	2014	2024	2025	2034	2035	3015
3016											

VTD NEW SALEM BAPTIST CHURCH

Block 020308:

1005	1006	1007	1008	1009	1022	1023	1024	1025	1026	1030	1031
1032	1033	1034	1035	1036	1037	1038	1039	1040	1041		

VTD PROVIDENCE VFD

Block 021019:

1003	1004	1005	1006	1007	1008	1009	1011	1012	1013	1014	1015
1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027
1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039
2000	2001	2002	2003	2007	2015	3000	3001	3002	3003	3004	3005
3006	3007	3008									

VTD SANDY RIDGE ELEMENTARY SCHOOL

VTD SHILOH ELEMENTARY SCHOOL

Block 020317:

3015	3016	3017
------	------	------

VTD SILER PRESBYTERIAN CHURCH

VTD SPIRIT OF JOY LUTHERAN CHURCH

Block 020315:

1015	1016	1017	1020	1021	1022	1023	1024	1025	1026	1027	1028
1029	1031	1032	1033	1034	1035	2018	3011	3012	3013	3014	

Block 021019:

2004	2005	2006	2008	2009	2010	2011	2012	2013	2014	2016
------	------	------	------	------	------	------	------	------	------	------

VTD STALLINGS UNITED METHODIST CHURCH

Block 021019:

1002
------

VTD STALLINGS VFD

**Plan Components (Short)**

**District 68**

**County Union NC**

VTD STALLINGS VFD

Block 020316:

1031 1032 1034 1035 1036 1037 1038 1040 1041 1042 1044

Block 020317:

3018 3019 3020 3021 3026

VTD TIRZAH PRESBYTERIAN CHURCH

VTD WALKERSVILLE PRESBYTERIAN CHURCH

VTD WAXHAW BIBLE CHURCH

VTD WAXHAW ELEMENTARY SCHOOL

VTD WAXHAW VFD

VTD WEDDINGTON ELEMENTARY SCHOOL

VTD WESLEY CHAPEL ELEMENTARY SCHOOL

Block 020307:

2011 2012 2013 2014 3023 3024

Block 020308:

1010 1011 1012 1013 1014 1015 1018 1019 1020 1021

Block 020317:

3022 3023 3024

Block 021020:

1000 1001 1002 2000 2001 2002 2003

Block 021021:

2024 2025

**District 69**

**County Union NC**

VTD BENTON HEIGHTS PRESBYTERIAN CHURCH

VTD BETHLEHEM PRESBYTERIAN CHURCH

VTD BRANDON OAKS CLUBHOUSE

VTD FAIRVIEW ELEMENTARY SCHOOL

VTD GRACE UNITED METHODIST CHURCH

VTD HEMBY BRIDGE ELEMENTARY SCHOOL

VTD INDIAN TRAIL LIBRARY

VTD LAKE PARK COMMUNITY CENTER

VTD LIFELINE COMMUNITY CHURCH

VTD MIDWAY BAPTIST CHURCH

Block 020100:

3027 3031 3032 3033 3060 3061 3062 3063 3064 3065 3066 3067

3069 3070 3071 3072 3073 3074 3075 3076 3077 3078 3079 3080

3081 3082 3083

Block 020601:

3000 3001 3002 3003 3004 3005 3006 3007 3011 3012 3013 3014

3015 3016 3022 3023 3024 3025 3026 3027 3028 3029 4000 4001

4002 4003 4004 4005 4006 4009 4010 4011 4013

VTD NEXT LEVEL CHURCH

VTD PORTER RIDGE ELEMENTARY SCHOOL

VTD PROVIDENCE VFD

Block 021019:

## Plan Components (Short)

### District 69

#### County Union NC

##### VTD PROVIDENCE VFD

Block 021019:

1010

##### VTD ROCK HILL AME ZION CHURCH

##### VTD SARDIS ELEMENTARY SCHOOL

##### VTD SHILOH ELEMENTARY SCHOOL

Block 020307:

1051 1054 1055 1057

Block 020317:

1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 2000  
2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012  
2013 2014 2015 2016 2017 2018 2019 2020 3000 3001 3002 3003  
3004 3005 3006 3007 3008 3009 3010 3011 3012 3013 3014 3028

##### VTD SPCC CONFERENCE CENTER

Block 020307:

1019 1020 1021 1022 1027 1034 1035 1036 1042 1043 1044 1045  
1046 1047 1048 1049 1050 1052 1053 1056 1058 1059 1060 1061  
1062 1063 1064 1065 1066 1067 1068 2001 2004 2005 2006 2007  
2008 2009 3003 3004 3005 3006 3007 3008 3011 3012 3013

##### VTD SPIRIT OF JOY LUTHERAN CHURCH

Block 020314:

1026 1030 1031 1032 1033 1034 3003 3004 3006 3016 3017 3018  
3019 3020

Block 020315:

1006 1007 1008 1009 1010 1011 1012 1013 1014 1018 1019 1030  
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011  
2012 2013 2014 2015 2016 2017 2019 3000 3001 3002 3003 3004  
3005 3006 3007 3008 3009 3010

##### VTD STALLINGS UNITED METHODIST CHURCH

Block 020312:

1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1048 1051  
1052 1053 1058 1061 1062 1063 1064 1065 1066 1067

Block 020313:

1000 1002 1003 1004 1005 1006 1007 1008 1009 1010 1013 1014  
1015 1018 1029 1030 1031 1035 1036 1037

Block 020314:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011  
1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023  
1024 1025 1027 1028 1029 1035 1038 2000 2001 2002 2003 2004  
2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016  
2017 2018 3000 3001 3002 3005 3007 3008 3009 3010 3011 3012  
3013 3014 3015

Block 021019:

1000 1001

##### VTD STALLINGS VFD

Block 020314:

**Plan Components (Short)**

Optimized State House Map

**District 69**

**County Union NC**

VTD STALLINGS VFD

Block 020314:

1036 1037

Block 020315:

1000 1001 1002 1003 1004 1005

Block 020316:

1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015

1016 1017 1018 1019 1020 1021 1022 1023 1024 1026 1027 1028

1029 1030 1033 2016

VTD UNIONVILLE VFD

VTD WESLEY CHAPEL ELEMENTARY SCHOOL

Block 020307:

2000 2002 2003 2010 2015 2016 3009 3010 3021 3022

Block 020308:

1016 1017

**District 70**

**County Randolph NC**

VTD ARCHDALE

VTD ASHEBORO EAST

VTD ASHEBORO NORTH

VTD ASHEBORO WEST

VTD BACK CREEK

VTD LEVEL CROSS

VTD NEW MARKET

VTD RANDLEMAN

VTD TABERNACLE

VTD TRINITY

VTD TRINITY TABERNACLE

**District 71**

**County Forsyth NC**

VTD ARDMORE BAPTIST CHURCH

VTD COVENANT PRESBYTERIAN

VTD EASTON ELEMENTARY SCHOOL

VTD FELLOWSHIP BAPTIST

VTD FIRST ALLIANCE CHURCH

VTD FOREST PARK ELEMENTARY

VTD FORSYTH TECH WEST CAMPUS

Block 002100:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011

1012 1013 1014 2008

Block 002200:

1021 1022 1024 1026 1027 1028 1029 1030 1031 1032 1033 1034

1035

Block 003804:

1000 1001 1002 1004 1005 1006 1007 1011 1012 1028

VTD FRIEDLAND MORAVIAN



**Plan Components (Short)**

**District 71**

**County Forsyth NC**

VTD FRIEDLAND MORAVIAN

Block 003402:

1011	1024	1025	1026	1027	1028	1029	2014	2015	2016	2017	2019
2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2045	

Block 003403:

1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012
1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024
1025	2002	2003	2004	2005	2006	2013					

Block 003404:

2009	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
2024	2025	2026									

VTD GRIFFITH FIRE STATION

VTD HILL MIDDLE SCHOOL

VTD LATHAM ELEMENTARY

VTD MILLER PARK RECREATION

VTD PARKLAND HIGH SCHOOL

VTD PARKWAY UNITED CHURCH OF CHRIST

VTD PHILO MIDDLE SCHOOL

VTD PIEDMONT BAPTIST COLLEGE

VTD SHEPHERDS CENTER

VTD SIMS RECREATION CENTER

VTD ST ANDREWS METHODIST

VTD TRINITY MORAVIAN CHURCH

VTD WARD ELEMENTARY SCHOOL

VTD WSFC SCHOOLS ADMINISTRATION BLDG

**District 72**

**County Forsyth NC**

VTD ARTS COUNCIL THEATER

VTD ASHLEY ELEMENTARY SCHOOL

VTD BETHABARA MORAVIAN CH

VTD BROWN-DOUGLAS REC CTR

VTD BRUNSON ELEMENTARY

VTD CARVER HIGH SCHOOL

VTD EAST WINSTON HERITAGE CENTER

VTD FIRST CHRISTIAN CHURCH

VTD FORSYTH TECH CC MAZIE WOODRUFF CTR

VTD FOURTEENTH STREET REC

VTD GREEK ORTHODOX CHURCH

VTD HANES-LOWRANCE MIDDLE SCHOOL

VTD HOME AND GARDEN BUILDING (FAIRGROUNDS)

VTD JOHN WESLEY AME ZION CHURCH

VTD LEAP ACADEMY AT KENNEDY

VTD MARTIN LUTHER KING REC

VTD MINERAL SPRINGS ELEM SCHOOL

VTD MT TABOR HIGH SCHOOL

VTD NORTH HILLS ELEMENTARY SCHOOL

## Plan Components (Short)

### District 72

#### County Forsyth NC

VTD OAK SUMMIT UNITED METHODIST CHURCH

Block 001500:

2000	2001	2002	2003	2004	2007	2008	2009
------	------	------	------	------	------	------	------

Block 002901:

1000	1001	1002	1003	1007	1008	1009	1010	1011	1012	1018	1019
1020	3001	3002	3004	3005	3006	3007	3008	3009	3010	3011	

Block 002903:

1000	1001	1002	1003	1004	1005	1006	1007	1008	3000	3001	3003
3018	3019	3022	3023	3024	3025	3026	3029	3031	3032	3033	3034
3035	3036										

VTD PAISLEY MIDDLE SCHOOL

VTD POLO PARK RECREATION CTR

VTD REYNOLDS HIGH GIRLS GYM

VTD SHERWOOD FOREST ELEM SCHOOL

VTD SOUTH FORK ELEMENTARY

VTD ST ANNES EPISCOPAL

VTD SUMMIT SCHOOL

VTD TRINITY UNITED METHODIST CHURCH

VTD WHITAKER ELEMENTARY

### District 73

#### County Cabarrus NC

VTD 01-02

VTD 01-04

VTD 01-07

VTD 01-08

VTD 01-10

VTD 01-11

VTD 02-02

VTD 02-03

VTD 02-05

VTD 02-07

VTD 10-00

VTD 11-01

VTD 12-09

VTD 12-12

### District 74

#### County Forsyth NC

VTD CALVARY BAPTIST CHURCH - BOY SCOUT HUT

VTD CLEMMONS CIVIC CENTER

VTD CLEMMONS ELEMENTARY

VTD CLEMMONS PRESBYTERIAN

VTD FORSYTH FRIENDS MEETING

VTD FORSYTH TECH WEST CAMPUS

Block 003804:

1003

Block 003805:

**Plan Components (Short)**

**District 74**

**County Forsyth NC**

VTD FORSYTH TECH WEST CAMPUS

Block 003805:

1007	1008	1009	1010	1011	1012	1013	1014	1016	1017	1018	2000
2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
2025	2026	2027	2028	2029	2030	2031	2032	4000	4004		

Block 003903:

2008

VTD HOLY FAMILY CATHOLIC CHURCH

VTD JEFFERSON MIDDLE

VTD LEWISVILLE ELEMENTARY SCHOOL

VTD LITTLE CREEK RECREATION

VTD MEADOWLARK MIDDLE SCHOOL

VTD MESSIAH MORAVIAN CHURCH

VTD NEW HOPE AME ZION CHURCH

VTD PFAFFTOWN CHRISTIAN CHURCH

Block 002801:

3043	3047	3055	3056	3057	3058	3059	3060	3061	3062	3063	3064
3065	3066										

Block 004102:

1018	1019	1020	1024	1025	2000	2001	2002	2003	2004	2005	2006
2007	2008	2009	2010	2011	2012	2013	2021	2022	2023	2026	2039

Block 004104:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023
1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035
2004	2005	2006	2010	2011	2012	2013	2014	2015	2016	2017	3000
3001	3002	3003	3004	3005	3006	3007	3008	3009	3010		

VTD SHILOH LUTHERAN CHURCH

VTD SOUTHWEST ELEMENTARY

VTD UNITY MORAVIAN CHURCH

VTD VFW POST 9010

VTD VIENNA ELEMENTARY SCHOOL

VTD W-S FIRST SEVENTH DAY ADVENTIST CHURCH

**District 75**

**County Forsyth NC**

VTD BEESONS CROSSROADS FIRE

VTD BELEWS CREEK FIRE

VTD CASH ELEMENTARY SCHOOL

VTD EAST FORSYTH HIGH SCHOOL

VTD FRIEDLAND MORAVIAN

Block 003310:

2015 2016 2017

Block 003402:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1012
1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1030

## Plan Components (Short)

### District 75

#### County Forsyth NC

VTD FRIEDLAND MORAVIAN

Block 003402:

1031	1032	2011	2012	2013	2018	2030	2031	2032	2033	2034	2035
2036	2037	2038	2039								

Block 003403:

1000	2000	2001	2007	2008	2009	2010	2011	2012			
------	------	------	------	------	------	------	------	------	--	--	--

VTD GLENN HIGH SCHOOL

VTD GOOD SHEPHERD MORAVIAN

VTD IBRAHAM ELEMENTARY

VTD KERNERSVILLE 7TH DAY ADVENTIST CHURCH

VTD KERNERSVILLE ELEMENTARY

VTD KERNERSVILLE LIBRARY

VTD KERNERSVILLE RECREATION

VTD OAK SUMMIT UNITED METHODIST CHURCH

Block 002903:

3002	3007	3008	3027	3028							
------	------	------	------	------	--	--	--	--	--	--	--

VTD PINEY GROVE ELEMENTARY

VTD PINEY GROVE FIRE STATION

VTD PROVIDENCE MORAVIAN CHURCH

VTD SEDGE GARDEN ELEMENTARY

VTD SEDGE GARDEN REC CTR

VTD SOUTHEAST MIDDLE SCHOOL

VTD UNION CROSS ELEMENTARY SCHOOL

VTD WALKERTOWN LIBRARY

VTD WINSTON LAKE FAMILY YMCA

### District 76

#### County Rowan NC

VTD BARNHARDT MILL

VTD EAST SPENCER

VTD EAST WARD

VTD ELLIS

VTD FAITH

VTD FRANKLIN

VTD GOLD KNOB

VTD GRANITE QUARRY

VTD HATTERS SHOP

VTD MILFORD HILLS CITY

VTD MILFORD HILLS COUNTY

VTD MORGAN 1

VTD MORGAN 2

VTD NORTH LOCKE

VTD NORTH WARD

VTD ROCKWELL

VTD SOUTH LOCKE

VTD SOUTH WARD

VTD SPENCER

## Plan Components (Short)

Optimized State House Map

### District 76

#### County Rowan NC

VTD SUMNER  
VTD TRADING FORD  
VTD WEST INNES  
VTD WEST WARD 1  
VTD WEST WARD 2  
VTD WEST WARD 3

### District 77

#### County Davie NC

#### County Rowan NC

VTD CLEVELAND  
VTD MT. ULLA  
VTD SCOTCH IRISH  
VTD STEELE  
VTD UNITY

#### County Yadkin NC

### District 78

#### County Chatham NC

VTD ALBRIGHT  
VTD BENNETT  
VTD BONLEE  
VTD EAST SILER CITY  
VTD GOLDSTON  
VTD HARPERS CROSSROADS  
VTD HICKORY MOUNTAIN  
VTD WEST SILER CITY

#### County Randolph NC

VTD ASHEBORO SOUTH  
VTD DEEP RIVER  
VTD GRANT  
VTD LIBERTY  
VTD PROVIDENCE  
VTD RAMSEUR  
VTD SOUTHEAST  
VTD SOUTHERN  
VTD SOUTHWEST  
VTD STALEY  
VTD UNION GROVE

### District 79

#### County Currituck NC

#### County Dare NC

#### County Hyde NC

#### County Pamlico NC

#### County Washington NC

VTD SCUPPERNONG  
VTD SKINNERSVILLE

### District 80

**Plan Components (Short)**

Optimized State House Map

**District 80**

**County Davidson NC**

VTD ABBOTTS CREEK 1 86A

VTD ABBOTTS CREEK 2 88

VTD ARCADIA 04

VTD GUMTREE 16

VTD LIBERTY 42

Block 061102:

3034 3036 3037 3040

Block 061903:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011

1012 1013 1024 1027 1028 1029 1033 1036 1037 1038 1039 1040

1041 1047 1048 2000 2001 2002 2003 2004 2013

Block 061904:

1000 1001 1011 1027

VTD MIDWAY 44

VTD NORTH DAVIDSON 46

VTD THOMASVILLE 1 60

VTD THOMASVILLE 10 76

VTD THOMASVILLE 2 62

VTD THOMASVILLE 3 64

VTD THOMASVILLE 4 66

VTD THOMASVILLE 5 68

VTD THOMASVILLE 7 70

VTD THOMASVILLE 8 72

VTD THOMASVILLE 9 74

VTD WALLBURG 80A

VTD WEST ARCADIA 84

**District 81**

**County Davidson NC**

VTD BOONE 06

VTD CENTRAL 08

VTD COTTON GROVE 10

VTD DENTON 12

VTD DUNBAR 30

VTD EASTSIDE 38

VTD EMMONS 14

VTD GRIMES 36

VTD HEALING SPRINGS 18

VTD HOLLY GROVE 20

VTD LEXINGTON 1 22

VTD LEXINGTON 2 24

VTD LEXINGTON 3 26

VTD LEXINGTON 4 28

VTD LIBERTY 42

Block 061902:

2015 2016 2018 2019 2020 2030 2031 2032 2033 2034 2035 2036

2037 2038 3000 3001 3002 3003 3004 3005 3006 3009 3010 3011

## Plan Components (Short)

Optimized State House Map

### District 81

#### County Davidson NC

VTD LIBERTY 42

Block 061902:

3012 3015

Block 061903:

1034	1035	1042	1043	1044	1045	1046	2005	2006	2007	2008	2009
2010	2011	2012	2014	2015	2016	2017	2018	2019	2020	2021	2022
2023											

VTD MUNICIPAL 40

VTD REEDS/YADKIN COLLEGE 48

VTD REEDY CREEK 50

VTD ROBBINS 32

VTD SILVER HILL 52

VTD SILVER VALLEY 54

VTD SOUTH DAVIDSON 56

VTD SOUTHMONT 58

VTD TYRO 78

VTD WELCOME 82

VTD WESLEY HEIGHTS 34

### District 82

#### County Cabarrus NC

VTD 02-01

VTD 02-06

VTD 04-01

VTD 04-03

VTD 04-08

VTD 04-12

VTD 04-13

VTD 05-00

VTD 06-00

VTD 07-00

VTD 08-00

VTD 09-00

VTD 11-02

VTD 12-03

VTD 12-04

VTD 12-05

VTD 12-06

VTD 12-08

VTD 12-10

VTD 12-11

VTD 12-13

### District 83

#### County Cabarrus NC

VTD 02-08

VTD 02-09

VTD 03-00

## Plan Components (Short)

Optimized State House Map

### District 83

#### County Cabarrus NC

VTD 04-09

VTD 04-11

#### County Rowan NC

VTD BLACKWELDER PARK

VTD BOSTIAN CROSS ROAD

VTD BOSTIAN SCHOOL

VTD BRADSHAW

VTD CHINA GROVE

VTD EAST ENOCHVILLE

VTD EAST KANNAPOLIS

VTD LANDIS

VTD ROCK GROVE

VTD WEST ENOCHVILLE

VTD WEST KANNAPOLIS

### District 84

#### County Iredell NC

VTD BARRINGER

Block 061201:

3035 3036 3037 3040 3041 3048

Block 061202:

2000 2001 2002 2030 2031 2032 2033 2034

Block 061301:

1001 1007 1020 1021 1022 1023 1024 1025 1028 1029 1030 1031

1032 1033 1034 1035 1036 1037 2010 2011 2012 2013

Block 061302:

2006

VTD BETHANY

VTD CHAMBERSBURG-A

VTD CHAMBERSBURG-B

VTD CONCORD

VTD COOL SPRINGS

VTD EAGLE MILLS

VTD NEW HOPE

VTD OLIN

VTD SHARPESBURG

VTD SHILOH-A

VTD SHILOH-B

VTD STATESVILLE 1

VTD STATESVILLE 2

VTD STATESVILLE 3

VTD STATESVILLE 4

VTD STATESVILLE 5

VTD STATESVILLE 6

VTD TURNERSBURG

VTD UNION GROVE

### District 85



**Plan Components (Short)**

Optimized State House Map

**District 85**

**County Avery NC**

**County McDowell NC**

VTD CROOKED CREEK

VTD DYSARTSVILLE

VTD GLENWOOD

Block 970902:

1000 1001 1002 1008

Block 970903:

1062 1063 1064

VTD HIGGINS

VTD MARION 1

VTD MARION 2

VTD MARION 3

VTD MARION 4

VTD MARION 5

VTD NEBO

VTD NORTH COVE

VTD OLD FORT 1

VTD OLD FORT 2

VTD PLEASANT GARDENS

VTD TURKEY COVE 17

VTD WEST MARION 7

**County Mitchell NC**

**County Yancey NC**

**District 86**

**County Burke NC**

**District 87**

**County Caldwell NC**

**County Watauga NC**

VTD BLOWING ROCK

Block 920703:

3038

Block 920800:

1004 1005 1012 1014 1016 1024 1025 1026 1028 1029 1033 1036

1037 1040 1041 1042 1043 1044 1045 1046 1047 1048 1049 1050

1051 1052 1053 1054 1055 1056 1057 1058 1059 1060 1061 1062

1063 1064 1065 1066 1067 1068 1069 1070 1071 1072 1073 1074

1075 1076 1077 1078 1079 1080 1081 1082 1083 1084 1085 1086

1087 1088 1102 1103 1104 1105 2000 2001 2002 2003 2004 2005

2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029

2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041

2042 2043 2044 2045 2046 2047 2048 2049 2050 2051 2052 2053

2054 2055 2056 2057 2058 2059 2060 2061 2062 2063 2064 2065

2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077

2078 2079 2080 2081 2082 2083 2084 2085 2086 2087

VTD BLUE RIDGE

**Plan Components (Short)**

Optimized State House Map

**District 87**

**County Watauga NC**

VTD BLUE RIDGE

Block 920800:

1031 1032 1034 1035 1038 1039 1089

**District 88**

**County Mecklenburg NC**

VTD 009

Block 000301:

1002 1003 1005 1006

Block 000302:

1001 1002 1003 2001 2002 2003 2004 2005

Block 000401:

1000 1001 1003 1004 1005 1007 1008

Block 003500:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011

1012 1017 1018 1019 2000 2001 2002 2003 2004 2005 2006 2007

2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019

2020 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031

VTD 010

VTD 011

Block 000102:

1002 1003 1006 1007 1008 1010 2000 2001 2002 2003 2004 2005

2006 2007 2008 2009 2010 2011 2012 2013 2014

Block 000402:

2000 2001 2002 2003 2004 2007 2008

Block 000501:

1000 1001 1002 1003 1004 1005 1007 2000 2001 2002 2003 2004

2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016

2017 2018 2019 2020

Block 000502:

1006 1007

Block 004101:

1000 1001 1002 1021 1022 1023

Block 004102:

2000 2001 2002 2003 2004 2022 2023 2024 2025 2026 2027 2028

2029 2030 2031 2032 2034

Block 004700:

1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030

1031

VTD 012

VTD 013

Block 000101:

1000 1001 1002 1003 1004 1005 1006 2003 2017 2018 2019 2020

2021

VTD 020

Block 003204:

3000 3001 3002 3003 3004 3005

**Plan Components (Short)**

**District 88**

**County Mecklenburg NC**

VTD 020

Block 003402:

1008	1009	1010	1011	1012	1013	1014	1015	2009	2010	2018	2019
------	------	------	------	------	------	------	------	------	------	------	------

VTD 021

VTD 022

VTD 023

VTD 024

VTD 031

VTD 037

Block 003110:

1000	1001	1002	1003	1004	1005	1006	1008	1009	1010	1011	1012
1013	1014	1015	1016	1017	1018	1022	1023	1024			

Block 003111:

3000	3001	3002	3003	3004	3005	3007	3008	3009	3010		
------	------	------	------	------	------	------	------	------	------	--	--

VTD 038

VTD 039

Block 003902:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	1017	1018	1019	2008	2014	2015	2016
4000	4001	4002	4003	4004	4005	4006	4007	4008	4009	4010	4011
4012	4013	4014	4015								

Block 003903:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1015	2000
2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
2013	2014	2023									

VTD 041

Block 004302:

2022

Block 004500:

1014	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
2011	2012	2013	2020	2028	2029						

VTD 050

Block 003102:

2002	2003	2005	2006	2007	2008	3000	3001	3002	3004	3005	
------	------	------	------	------	------	------	------	------	------	------	--

Block 003110:

1025	1026	1027	1030	1031	1039	1040	1041	1042			
------	------	------	------	------	------	------	------	------	--	--	--

VTD 051

VTD 052

VTD 053

Block 004000:

2002	2003	2004	2005	2006	2007	3000	3001	3002	3003	3004	3005
3006	3007	3008	3009	3010	3011	3012	3013	3014	3015	4000	4001
4002	4003	4004	4005	4006	4007	4008	4009	4014	4015	4027	4028
4029	4030	4031	4032	4033	4034	4035	4036	4047	4048	4049	4050
4051	4052	4053	4054	4055	4056	4057	4058				

Block 004306:

**Plan Components (Short)**

Optimized State House Map

**District 88**

**County Mecklenburg NC**

VTD 053

Block 004306:

1000

VTD 077

Block 003807:

2006 2008 2009 2010 2011 2012 2013 2014 2015

Block 003808:

2001

Block 005824:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1013

1014 1015 1016 1017 1018 1019

Block 005916:

2000 2001

VTD 098

**District 89**

**County Catawba NC**

VTD BALLS CREEK

VTD BLACKBURN

Block 011702:

2021 2025 2026 2033 2034

VTD CATAWBA

VTD CLAREMONT

VTD CONOVER EAST

VTD CONOVER WEST

Block 010203:

2008 2009 2023 2024 2025 2028 2029 2030 2031 2032 2033 2034

2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046

2047 2048 2049 2050 2051 2053 2054 2055 2056 2057 2058 2059

Block 010204:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011

1012 1013 1014 1015 1016 1017 1018 1019 1020 2000 2001 2002

2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026

2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038

2039 2040 2041 2042 2043 2044 2045 2046 2047 2048 2049 2050

2051 2052 2053 2054 2055 2056 2057 2058 2059 2060 2061 2063

2066 2067 2068 2070 2071 2072 2073 2074 2075 2076 2077 2078

2079 2080 2081 2082 2083 2084 3030 3031 3032 3033 3034 3035

3036 3037 3038 3039 3040 3041 3042 3043 3044 3045 3046 3047

3048 3049 3050 3051 3052 3053 3056 3057 3058 3059 3060 3061

3062 3063 3064 3065 3066 3067 3068 3069 3070 3071 3072 3073

3074 3075 3076 3078 3081 3082 3083 3084 3085

Block 011200:

1001 1002 1006 1007 1008

Block 011701:

1000

**Plan Components (Short)**

**District 89**

**County Catawba NC**

VTD EAST MAIDEN  
VTD EAST NEWTON  
VTD LAKE NORMAN  
VTD MAIDEN  
VTD MONOGRAM  
VTD MOUNT OLIVE  
VTD NORTH NEWTON  
VTD OXFORD  
VTD SHERRILLS FORD  
VTD SOUTH NEWTON  
VTD STARTOWN

Block 011701:

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
2012	2013	2014	2015	2027	2028	2029	2030	2031	2032	2033	2034
2035	2036	2037	2038	2039	2041	2042	3002	3003	3004	3005	3006
3007	3008	3009	3013	3014	3015	3016	3017	3018	3019	3020	3021
3022	3023	3024	3025	3026	3027	3028	3029	3030	3031	3032	3033
3034	3035										

Block 011702:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023
1024	1025	1026	1027	1028	1029	1030	1031	1032	1034	1035	1036
1037	1038	1039	1045	1046	1047	1048	1049	1050	1051	2000	2001
2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
2014	2015	2016	2017	2018	2019	2020	2023	2024	2027	2028	2029
2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067
2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079
2080	2081	2082	2083	2084	2085	2086	2098	2099	2100	2101	2102
2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114
2123	2126	2127	2128	2129	3012	3013	3026	3027	3028	3029	

VTD WEST NEWTON

**County Iredell NC**

VTD BARRINGER

Block 061201:

3049

Block 061202:

2003	2004	2005	2006	2013	2022	2023	2024	2025	2026	2027	2028
2029	2035	2036	2037	2038	2039	2040	2041	2042	2047	2048	2049
2053	2058	2059	3012	3013	3022	3023	3024	3025	3026	3027	3028
3029	3030	3031	3032	3033	3034	3046					

Block 061203:

1000	1001	1003	1004	1014							
------	------	------	------	------	--	--	--	--	--	--	--

Block 061302:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023

## Plan Components (Short)

Optimized State House Map

### District 89

#### County Iredell NC

VTD BARRINGER

Block 061302:

1024	1025	1026	1027	1028	1029	1030	1036	1037	1038	2004	2005
2007	2008	2009									

Block 061304:

2000

VTD FALLSTOWN

### District 90

#### County Surry NC

#### County Wilkes NC

VTD ANTIOCH

VTD EDWARDS 1

VTD EDWARDS 2

VTD EDWARDS 3

VTD NEW CASTLE

VTD SOMERS

VTD TRAPHILL 2

### District 91

#### County Forsyth NC

VTD BETHANIA MORAVIAN CHURCH

VTD KINGSWOOD UNITED METHODIST CHURCH

VTD MACEDONIA BAPTIST CHURCH

VTD MISSION HISPANA

VTD NEW HOPE UNITED METHODIST CHURCH

VTD NORTHWEST MIDDLE SCHOOL

VTD OLD TOWN BAPTIST CHURCH

VTD OLD TOWN RECREATION CTR

VTD PFAFFTOWN CHRISTIAN CHURCH

Block 002801:

3054

VTD RURAL HALL ELEMENTARY

VTD ST ANDREWS PRESBYTERIAN

VTD TOBACCOVILLE COMMUNITY CENTER

#### County Stokes NC

### District 92

#### County Mecklenburg NC

VTD 077

Block 003807:

2007

Block 005916:

2004	2006	2007	2008	2009	2010	2011	2012	2014	2016
------	------	------	------	------	------	------	------	------	------

VTD 078.1

VTD 122

Block 005929:

2000	2001	2002	2003	2004	2005
------	------	------	------	------	------

Block 005930:

**Plan Components (Short)**

Optimized State House Map

**District 92**

**County Mecklenburg NC**

VTD 122

Block 005930:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	1017	1018	1019				

Block 005931:

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
2012											

Block 005932:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1024
1025	1026	1027	1028								

Block 980200:

1017	1018	1022	1023	1024	1025	1026	1027	1028	1029	1030	1032
1033	1034	1035	1036	1037	1038	1040	1041	1042	1043	1044	1046
1048											

VTD 138

VTD 147

VTD 228

Block 005913:

2000	2001	2002	2003	2004	2005	2006	2007	3000	3001	3002	3003
3004	3005	3006	3007	3008	3009	3010	3011	3012	3013	3014	4000
4001	4002	4003	4004	4005							

Block 005915:

1000	1001	1002	1003	1004	1005	2000	2001	2002	2003	2004	2005
2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
2018	2019	2020	2021	2022	2023	2024					

Block 980200:

1000	1001	1002	1003	1004	1019	1020	1021	1031	1039		
------	------	------	------	------	------	------	------	------	------	--	--

VTD 229

VTD 230

Block 005913:

1000	1001	1002	1003	1004	1005	1006	1007	1008			
------	------	------	------	------	------	------	------	------	--	--	--

Block 005920:

1021	1022	1026	2041	2043							
------	------	------	------	------	--	--	--	--	--	--	--

Block 005921:

1000	1001	1021	1024	1030	1031	1033	1035	1036	1037	1038	1039
1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1052	1053
1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065
1066											

Block 005922:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	1017	1018	2000	2001	2002	2003	2004
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
2017	2018	2019	2020								

Block 005923:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
------	------	------	------	------	------	------	------	------	------	------	------

**Plan Components (Short)**

Optimized State House Map

**District 92**

**County Mecklenburg NC**

VTD 230

Block 005923:

1012	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022

Block 005928:

1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021
1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1036
1037	1042	1043	1046	1047	1048	1049	1050				

VTD 243

**District 93**

**County Alleghany NC**

**County Ashe NC**

**County Watauga NC**

VTD BALD MOUNTAIN

VTD BEAVER DAM

VTD BEECH MOUNTAIN

VTD BLOWING ROCK

Block 920601:

3013	3015	3024	3025	3027	3032	3034	3035	3036	3037		
------	------	------	------	------	------	------	------	------	------	--	--

Block 920602:

1025	1026	1027	1028	1029	1031						
------	------	------	------	------	------	--	--	--	--	--	--

Block 920703:

3040	3047	3048	3050	3051							
------	------	------	------	------	--	--	--	--	--	--	--

Block 920800:

1001	1002	1003	1006	1007	1008	1009	1011	1013	1015	1017	1018
1019	1020	1021	1022	1023							

Block 920900:

3009

VTD BLUE RIDGE

Block 920601:

3030	3031	3033									
------	------	------	--	--	--	--	--	--	--	--	--

Block 920702:

1056	2008	2013	2014	2017	2019	2020	2021	2022	2025	2026	2027
2028	2029	2030	2031	2032	2033	2034	2036	2037	2038	2039	2040
2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052

Block 920703:

1046	2016	2019	2020	3000	3001	3002	3003	3004	3005	3006	3007
3008	3012	3013	3014	3015	3016	3017	3018	3019	3020	3021	3022
3023	3024	3025	3026	3027	3028	3029	3030	3031	3032	3033	3034
3035	3036	3037	3039	3041	3042	3043	3044	3045	3046	3049	

Block 920800:

1000	1010	1027	1030	1090	1091	1092	1093	1094	1095	1096	1097
1098	1099	1100	1101	1106	1107	1108					

VTD BOONE 1

VTD BOONE 2

VTD BOONE 3



**Plan Components (Short)**

Optimized State House Map

**District 93**

**County Watauga NC**

VTD BRUSHY FORK  
VTD COVE CREEK  
VTD ELK  
VTD LAUREL CREEK  
VTD MEAT CAMP  
VTD NEW RIVER I  
VTD NEW RIVER II  
VTD NEW RIVER III  
VTD NORTH FORK  
VTD SHAWNEEHAW  
VTD STONY FORK  
VTD WATAUGA

**District 94**

**County Alexander NC**

**County Wilkes NC**

VTD BOOMER  
VTD BRUSHY MOUNTAIN  
VTD CRICKET  
VTD FAIRPLAINS  
VTD FERGUSON  
VTD MILLERS CREEK  
VTD MORAVIAN FALLS  
VTD MOUNT PLEASANT  
VTD MULBERRY  
VTD MULBERRY 1  
VTD NORTH WILKESBORO  
VTD REDDIES RIVER  
VTD ROCK CREEK 1  
VTD ROCK CREEK 2  
VTD TRAPHILL 1  
VTD UNION  
VTD WALNUT GROVE  
VTD WILKESBORO 1  
VTD WILKESBORO 2  
VTD WILKESBORO 3

**District 95**

**County Iredell NC**

VTD BARRINGER

Block 061302:

2002	2003	2010	2011	2012	2013	2014	2015	2016	2017	3009	3010
3011	3012	3013	3014	3015	3016	3017	3019	3020	3021	3022	3023
3024	3025	3026	3027	3028	3029	3030	3031	3032	3033	3034	3035
3036	3037	3038	3039	3040	3041	3042	3043	3044	3045		

Block 061303:

1000	1001	1002	1003	1015	1016	1018	1019	1020	1021	1022	1035
1036	1037	1038	1039	1040	1041	1043	1057	2000	2001	2002	2003

## Plan Components (Short)

### District 95

#### County Iredell NC

VTD BARRINGER

Block 061303:

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2027	2028
2048	2049	2066									

Block 061304:

2002

VTD CODDLE CREEK 1

VTD CODDLE CREEK 2

VTD CODDLE CREEK 3

VTD CODDLE CREEK 4

VTD DAVIDSON 1-A

VTD DAVIDSON 1-B

VTD DAVIDSON 2-A

VTD DAVIDSON 2-B

### District 96

#### County Catawba NC

VTD BANOAK

VTD BLACKBURN

Block 011702:

2022	2030	2031	2032	2035	2036	2037	2038	2039	2040	2041	2054
2055	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097
2115	2116	2117	2118	2119	2120	2121	2122	2124	2125	2130	

Block 011801:

2011	2013	2021	2022	2023							
------	------	------	------	------	--	--	--	--	--	--	--

Block 011802:

3000	3001	3002	3003	3004	3005	3006	3007	3008	3009	3010	3011
3012	3013	3014	3015	3016	3017	3018	3019	3020	3021	3022	3023
3024	3025	3026	3033	4000	4001	4002	4003	4004	4005	4006	4007
4008	4009	4010	4011	4012	4013	4014	4015	4016	4017	4018	4019
4020	4021	4022	4023	4024	4025	4026	4027	4028	4029	4030	4031
4032	4033	4034	4035	4036	4037	4038	4039	4040	4041	4042	4043
4044	4045	4047									

VTD BROOKFORD

VTD COLLEGE PARK

VTD CONOVER WEST

Block 010204:

2062	2064	2065	2069	3054	3055	3077	3079	3080			
------	------	------	------	------	------	------	------	------	--	--	--

VTD FALLING CREEK

VTD GREENMONT

VTD HIGHLAND

VTD KENWORTH

VTD LONGVIEW NORTH

VTD LONGVIEW SOUTH

VTD MOUNTAIN VIEW 1

VTD MOUNTAIN VIEW 2

## Plan Components (Short)

### District 96

#### County Catawba NC

VTD NORTHWEST  
VTD OAKLAND HEIGHTS  
VTD OAKWOOD  
VTD RIDGEVIEW  
VTD SANDY RIDGE  
VTD SPRINGS  
VTD ST STEPHENS 1  
VTD ST STEPHENS 2  
VTD STARTOWN  
Block 011701:  
2016 2017 2018  
VTD SWEETWATER  
VTD VIEWMONT 1  
VTD VIEWMONT 2

### District 97

#### County Lincoln NC

### District 98

#### County Mecklenburg NC

VTD 127  
VTD 133  
VTD 134  
Block 006212:  
2003 2004 2005 2006 2007 2008 2009 2010 2011 2015 2016 2017  
2019  
Block 006214:  
2007  
Block 006224:  
1003 1004 1014 1015 1016 1029 1079 1080 1081  
VTD 142  
Block 006209:  
2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020  
2021 3018 3019 3020 3021 3022 3023 3027 3028 3029 3030 3031  
3041 3042 3043 3044 3045 3046 3047 3048 3049 3050 3051 3058  
3059 3060 3061  
Block 006210:  
1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011  
1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023  
1024 1025 1026 1027 1028 1029  
Block 006211:  
1009  
Block 006219:  
1021  
VTD 143  
VTD 202  
VTD 206  
VTD 207

**Plan Components (Short)**

Optimized State House Map

**District 98**

**County Mecklenburg NC**

VTD 208

VTD 240

VTD 241

Block 006224:

1000 1001 1002 1005 1006 1007 1008 1009 1013

Block 006305:

1000 1001 1002 1003 1004 1005 1006 1064 1065 1066 1067 1068  
1069 1070 1071 1072 1073

Block 006306:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011  
1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023  
1024 1025 1026 1027 1028 1029 1030

Block 006307:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011  
1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023  
1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035  
1036 1037 1038 1039 1040 1041 1042 1043 1044 1045 1046 1047  
1048 1049 1050 1051 1052 1053 1054 1055 1056 1057 1058 1059  
1060 1061 1062 1063 1064 1065 1066 1067 1068 1069 1070 1071  
1072 1073 1074 1075 1076 1077 1078 1079 1080 1081 1082 1083  
1084 1085 1086 1087 1088 1089 1090 1091 1092 1093 1094 1095  
1096 1097 1098 1099 1100 2000 2001 2002 2008 2009 2010 2018  
2019 2020 2021 2022 2024 2025 2026

VTD 242

**District 99**

**County Mecklenburg NC**

VTD 003

VTD 004

VTD 083

Block 001916:

1000 1001

Block 001917:

1002 1003 1004 1009 2000 2001 2002 2003 2004 2005 2006 2007  
2008 2009

Block 005718:

1002

VTD 104

Block 001507:

1000 1004 2000 2001 2002 2003 2004 3000 3001 3002 3003 3004  
3005 3006 3007

Block 001510:

1004 1013

VTD 116

Block 001922:

1000 1002 2000 2002 2012 2013 2014

Block 005626:

**Plan Components (Short)**

Optimized State House Map

**District 99**

**County Mecklenburg NC**

VTD 116

Block 005626:

1014

VTD 123

VTD 124

Block 001508:

2019 2020 2021 2024

Block 001609:

1000 1001 1002 1003 1004 1007

Block 001922:

1001 1003 1004 1005 1006 1008 1009

Block 001925:

2000 2001 2002 2003 2004 2005 2006 2007 2008

Block 005626:

1015 1016

VTD 201

VTD 203

VTD 216

VTD 218

VTD 219

VTD 220

VTD 221

VTD 234

VTD 235

VTD 236

**District 100**

**County Mecklenburg NC**

VTD 006

Block 001918:

1001 1002 1006 1007 1008 1009 1010 3003 3004 3005

Block 001919:

2000 3000

VTD 034

Block 001914:

1001 1002 1003 1004

VTD 036

Block 002005:

1013 1014 1015 2000 2001 2002 2003 2004

Block 002006:

2009 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

VTD 062

VTD 063

VTD 064

VTD 065

VTD 066

Block 002006:

## Plan Components (Short)

### District 100

#### County Mecklenburg NC

VTD 066

Block 002006:

1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016
1017	1018	1019									

VTD 067

VTD 068

VTD 069

Block 003013:

2000

VTD 070

VTD 071

Block 002903:

2006

Block 002907:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009		
------	------	------	------	------	------	------	------	------	------	--	--

VTD 083

Block 001916:

1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1014
1015	1016	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009

Block 001917:

1001

VTD 085

VTD 094

VTD 095

VTD 096

Block 005811:

1000	1001	1003	1004	1015	1016	2000	2001	2002	2003	2004	2005
------	------	------	------	------	------	------	------	------	------	------	------

Block 005865:

1000

VTD 099

VTD 102

VTD 103

Block 003015:

1000	1001	1002	1003	1006	2000	2001	2011				
------	------	------	------	------	------	------	------	--	--	--	--

VTD 106

VTD 108

VTD 115

VTD 116

Block 001922:

2001	2003	2004	2005	2006	2007	2008	2009	2011			
------	------	------	------	------	------	------	------	------	--	--	--

VTD 117

VTD 119

VTD 124

Block 001922:

1007	1010	1011	1012	1013							
------	------	------	------	------	--	--	--	--	--	--	--

Block 001923:

**Plan Components (Short)**

Optimized State House Map

**District 100**

**County Mecklenburg NC**

VTD 124

Block 001923:

2000

VTD 125

VTD 130

**District 101**

**County Mecklenburg NC**

VTD 016

VTD 039

Block 003903:

1010	1011	1012	1013	1014	2015	2016	2017	2018	2019	2020	2021
2022											

Block 005920:

2029 2031

Block 005928:

1003

Block 980100:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	1035	1036	1037	1038	1039	1040	1041
1042	1043										

VTD 040

VTD 041

Block 004302:

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
2012											

Block 004400:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025
1026	1027	1028	1029	1030	1031	1032	1033	1035	1036	1037	3030
3031	3032	3033									

Block 006016:

1015	1016	2000	2001	2007	2008	2009	2010	2011	2012	2013	2014
2015	2021										

VTD 053

Block 004000:

4010	4011	4012	4013	4016	4017	4018	4019	4020	4021	4022	4023
4024	4025	4026	4037	4038	4039	4040	4041	4042	4043	4044	4045
4046											

Block 004303:

1021 1022

Block 004306:

1001	1002	1003	1004	1005	1006	2000	2001	2002	2003	2004	2005
2006	2007	2008									

Block 005919:

2000	2030	2031	2032	2033
------	------	------	------	------

VTD 079

**Plan Components (Short)**

Optimized State House Map

**District 101**

**County Mecklenburg NC**

VTD 080

VTD 081

VTD 089

VTD 150

VTD 200

VTD 209

Block 006103:

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
2012	2013										

VTD 210

Block 005406:

1002	1003	2004	2005								
------	------	------	------	--	--	--	--	--	--	--	--

VTD 211

Block 006105:

1032

VTD 222

VTD 223.1

VTD 224

VTD 230

Block 005921:

1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013
1014	1015	1016	1017	1018	1019	1020	1022	1023	1025	1026	1027
1028	1029	1032	1034	1050	1051	1067					

Block 005928:

1000	1001	1002	1004	1005	1006	1007	1008	1009			
------	------	------	------	------	------	------	------	------	--	--	--

**District 102**

**County Mecklenburg NC**

VTD 002

Block 002400:

1000	1001	1002	1003	1004	1005	1008	1010	1012	1013	1016	1017
1018											

Block 002500:

1010	1011	1012	1013	1017							
------	------	------	------	------	--	--	--	--	--	--	--

VTD 005

VTD 006

Block 001702:

4008	4009	4010									
------	------	------	--	--	--	--	--	--	--	--	--

Block 001918:

1000	1003	1004	1005	2000	2001	2002	2003	2004	2005	2006	2007
2008	3000	3001	3002								

VTD 009

Block 000302:

1000	2000										
------	------	--	--	--	--	--	--	--	--	--	--

VTD 011

Block 000503:

2000	2005	2007	2008	2009	2012	2013					
------	------	------	------	------	------	------	--	--	--	--	--



**Plan Components (Short)**

**District 102**

**County Mecklenburg NC**

VTD 011

Block 005200:

3031 3048

VTD 013

Block 000101:

2001 2002 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013  
2014 2015 2016 2022 2023 2024 2025

Block 000104:

1003 1004 1005 1006 1007 1008 1020 1021 1022 1023 1024 1025  
1026 1027 1028 1029 1030 1031 1032

Block 000503:

2010 2011 2015 2016 2017 2018 2019 2020

Block 000600:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011  
1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023  
1024 1025 1026 2000 2001 2002 2003 2004 2005 2006 2007 2008  
2009 2010 2011 2013 2014 2015 2017 3000 3001 3002 3003 3004  
3005 3006 3007 3008 3009 3010 3011 3012 3013 3014 3015 3016  
3017 3018 3019 3020 3021

Block 000700:

2003 2010 2011 2012 2013 2017 2018 2019 2020 2021 2022 2024  
2025 2026 2027 2028

Block 000800:

1032 1033 2000 2001 2002 2006 2007 2008

Block 002500:

2005 2006 2008 2009 2010

Block 005200:

3039 3040

Block 980300:

1000 1001 1002 1003 1004 1005

VTD 014

VTD 015

VTD 017

Block 001801:

1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012  
1013 2000 2001 2002 2003 2004 2005 2006 2007 2008

Block 001802:

1001

Block 002300:

1000 2003

VTD 027

Block 005200:

1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012  
1014 2001 2002 2003 2005 2006 2007 2008 2009 2010 2011 2012  
2013 2014 2015 2016 3000 3001 3002 3003 3004 3005 3006 3007  
3008 3010 3012 3013 3014 3016 3017 3018 3019 3020 3021 3022

**Plan Components (Short)**

Optimized State House Map

**District 102**

**County Mecklenburg NC**

VTD 027

Block 005200:

3023 3025 3028 3029 3030 3038 3042 3043 3044 3045 3046

Block 005301:

1000 1002 1003 1005 1006 1010 1011 1012 1013 1014 1022 1023  
1024 1025 1026 1027 1034

VTD 028

VTD 029

VTD 030

VTD 033

VTD 034

Block 001802:

1000 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012  
1013 1014 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009  
2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021  
2022 2023 2024 2025 2026 2027 2028 2029 2030

Block 001914:

1000 1005 1006

VTD 043

VTD 044

VTD 045

VTD 046

VTD 060

Block 001509:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011  
1012 2004 2005 2006 2007 2008 2010 2011 2012 2013 2014 2015  
2016

Block 005306:

2001 2008 2009

VTD 061

VTD 084

VTD 104

Block 001510:

1008 1009 1014 1015 1016 1017 1018 2000 2001 2002 2003 2004  
2005 2006 2007 2008 2009 2010

VTD 109

VTD 124

Block 001609:

1005 1006

VTD 132

Block 005306:

2006

**District 103**

**Plan Components (Short)**

Optimized State House Map

**District 103**

**County Mecklenburg NC**

VTD 069

Block 003013:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	1017	2001	2002	2003	2004	2005	2006
2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
2031											

VTD 090

VTD 091

VTD 096

Block 005811:

1002	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014
------	------	------	------	------	------	------	------	------	------	------

Block 005865:

1001	1007	1008	1009	1010	1016
------	------	------	------	------	------

VTD 100

VTD 103

Block 003015:

1004	1005	1007	2002	2003	2004	2005	2006	2007	2008	2009	2010
2012	2013	2014	2015	2016	3000	3001	3002	3003	3004		

VTD 112

VTD 113

VTD 118

VTD 121

VTD 131

VTD 136

VTD 137

VTD 215

VTD 217

VTD 226

Block 005815:

1007	1012	1013
------	------	------

Block 005852:

1000	1001	1010
------	------	------

VTD 227

VTD 232

Block 005816:

2000	2005	2006	2007
------	------	------	------

Block 005845:

2005	2006	2011
------	------	------

Block 005861:

2000	2002	2010
------	------	------

Block 005862:

1000	1001	1002	1004	1005	1006	1007	1008	1009	1010	1011	1012
1013	1014	1015	1016	1021							

VTD 233

**District 104**

**Plan Components (Short)**

Optimized State House Map

**District 104**

**County Mecklenburg NC**

VTD 001

VTD 002

Block 002400:

1006	1007	1009	1014	1015	2000	2001	2002	2003	2004	2005	2006
2007	2008	2009	2010	3000	3001	3002	3003	3004	3011	3012	3018
3019											

Block 002500:

1014	1015	1016	2017	2021	2022	2023	2024	2025	2027	2028	
------	------	------	------	------	------	------	------	------	------	------	--

Block 002600:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023
1024	1025	1026	1027	1028	1030	1031	1032				

VTD 007

VTD 008

VTD 009

Block 000301:

1000	1001	1004									
------	------	------	--	--	--	--	--	--	--	--	--

Block 002701:

3000	3006										
------	------	--	--	--	--	--	--	--	--	--	--

Block 003500:

1013	1014	1015	1016								
------	------	------	------	--	--	--	--	--	--	--	--

VTD 013

Block 000600:

2012	2016	2018									
------	------	------	--	--	--	--	--	--	--	--	--

Block 980300:

1006	1007	1008	1009								
------	------	------	------	--	--	--	--	--	--	--	--

VTD 017

Block 002300:

1001	1002	1003	1004	1005	1006	2000	2001	2002	2004	2005	2006
2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018

VTD 018

VTD 019

VTD 020

Block 002702:

1000	1001	1002	2001	2002	2003	2027					
------	------	------	------	------	------	------	--	--	--	--	--

Block 003402:

1000	1001	1002	1003	1004	1005	1006	1007	1016	1017	1018	1019
------	------	------	------	------	------	------	------	------	------	------	------

VTD 032

VTD 035

VTD 036

Block 002005:

1007	1008	1009	1010								
------	------	------	------	--	--	--	--	--	--	--	--

Block 002006:

2000	2001	2002	2003	2004	2005	2006	2007	2008	2010		
------	------	------	------	------	------	------	------	------	------	--	--

VTD 037

Block 003110:

## Plan Components (Short)

Optimized State House Map

### District 104

#### County Mecklenburg NC

VTD 037

Block 003110:

1019 1020 1021

Block 003111:

3006 3011 3012 3013 3014 3015 3016

VTD 047

VTD 048

VTD 049

VTD 050

Block 003102:

1004 1005 1015 2000 2001 2004 2012 2013 2019 2020

Block 003110:

1032 1033 1034 1035 1036 1037 1038

Block 003111:

2000 2001 2002 2003 2004 2005 2006 2007

VTD 057

VTD 058

VTD 059

VTD 066

Block 002006:

1000 1001 1002 1003 1004 1020 1021 1022 1023 1024

VTD 071

Block 002903:

2001 2002 2003 2004 2005 2007 2008 2009 2010 2011 2013 2014  
2015 2016 2017 2018

VTD 072

VTD 073

VTD 074

VTD 075

VTD 076

VTD 086

VTD 092

Block 003012:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 2000  
2001

VTD 093

Block 003020:

3004 3005 3006 3007 3008 3009

VTD 101

Block 003008:

1000 1001 1002 1004 1005 1006

VTD 110

VTD 111

VTD 114

Block 005828:

3000 3001 3002

**Plan Components (Short)**

Optimized State House Map

**District 104**

**County Mecklenburg NC**

VTD 120

Block 003108:

1000 1001 2002 2007 2011 2013

**District 105**

**County Mecklenburg NC**

VTD 069

Block 003013:

1018 1019 1020 1021 1022 1023 1024

VTD 077

Block 005824:

1011 1012 1020 1021 1022 1023 1024 1025 1027 1028 1029 1030

1031 1032 1033 1034 1037 1041

Block 005916:

2002 2003 2005 2013 2015

VTD 087

VTD 088

VTD 092

Block 003012:

2002 2003 2004 2005 2006 2007 2008 2009

VTD 093

Block 003008:

3000 3001 3002 3003 3004 3005 3006 3007 3008 3009 3010 3011

3012 3013 3014 3015

VTD 097

VTD 101

Block 003008:

1003 1007 1008 1009 1010 2000 2001 2002 2003 2004 2005 2006

2007 2008 2009 2010 2011 2012

VTD 114

Block 005828:

1000 1001 1002 1003 1004 1005 1006 2000 2001 2002 2003

Block 005829:

1001 1002 1003 1004 1010

VTD 120

Block 003108:

1002

Block 003109:

1000 1001 1002 1003 1004 1005 2000 2001

VTD 122

Block 980200:

1013 1014 1015 1016 1045

VTD 129

VTD 139.1

VTD 140

VTD 144

VTD 148

**Plan Components (Short)**

Optimized State House Map

**District 105**

**County Mecklenburg NC**

VTD 225

VTD 226

Block 005839:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	2000	2001	2002	2003	2004	2005	2006	2007
2008	2009										

Block 005852:

1002	1003	1004	1005	1006	1007	1008	1009	1011			
------	------	------	------	------	------	------	------	------	--	--	--

VTD 228

Block 980200:

1005	1006	1007	1008	1009	1010	1011	1012	1047	1049	1050	1051
1052	1053										

VTD 231

VTD 232

Block 005816:

2001	2002	2003	2004								
------	------	------	------	--	--	--	--	--	--	--	--

Block 005861:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
2001	2003	2004	2005	2006	2007	2008	2009	2011			

Block 005862:

1017	1018	1019	1020								
------	------	------	------	--	--	--	--	--	--	--	--

**District 106**

**County Mecklenburg NC**

VTD 027

Block 005301:

1001	2001	2002	2003	2004	2011	2012					
------	------	------	------	------	------	------	--	--	--	--	--

VTD 042

VTD 060

Block 001505:

1006	2026										
------	------	--	--	--	--	--	--	--	--	--	--

Block 001509:

2000	2002	2003	2009								
------	------	------	------	--	--	--	--	--	--	--	--

VTD 082

VTD 104

Block 001510:

1000	1001	1002	1003	1005	1006	1007	1010	1011	1012	1019	
------	------	------	------	------	------	------	------	------	------	------	--

VTD 105

VTD 126

Block 005536:

3004	3005	3006	3007	3008	3009	3010	3011	3012	3013	3014	3015
3016	3019	3023	3024	3025	3026	3027	3028	3029	3031	3032	3033
3034	3035	3036	3037	3038	3039	4028					

VTD 132

Block 001505:

1000	1001	1002	1003	1004	1005	2000	2001	2002	2003	2004	2005
2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017

**Plan Components (Short)**

**District 106**

**County Mecklenburg NC**

VTD 132

Block 001505:

2018	2019	2020	2021	2022	2023	2024	2025	2027	2028	2029	2030
2031											

Block 005306:

2007

VTD 141

VTD 149

VTD 204.1

VTD 205

VTD 212

Block 005531:

1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012
1013	1014	1015	1016	1017	1018	1019	2001	2002	2003	2004	2005
2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
2030	2031	2032	2033	2034	2035	2036	2037	2038	2039		

Block 005532:

1000	1001	1002	1003	1004	1005	1006	1007	2001	2002	2003	2004
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
2017	2018	2019	2020	2021							

Block 005534:

1000	1001	1002	1003	1004	1005	2000	2001	2002	2003	2004	2005
2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	3000
3001	3002	3005	3006	3007							

VTD 237

**District 107**

**County Mecklenburg NC**

VTD 107.1

VTD 126

Block 005535:

2002

Block 005536:

1002	1003	1004	1005	2000	2001	2002	2003	2004	2005	2006	2007
2008	2009	3000	3001	3003	3017	3018	3020	3021	3022	3030	3040
3041	3042	3043	3044	3045	4000	4001	4002	4005	4006	4021	4022
4027											

VTD 128

VTD 135

Block 005403:

1000

Block 005510:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	2000	2001	2002	2003	2004	2005	2006
2007	2008	2009	2010	2011	2012	2013	3000	3001	3002	3003	3004
3005	3006	3007	3008	3009	3010						



**Plan Components (Short)**

**District 107**

**County Mecklenburg NC**

VTD 135

Block 005511:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	2000	2001	2002	2003	2004	2005	2006	2007	2008
3000	3001	3002	3003	3004	3005	3006	3007				

Block 005512:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1012
2000	2001	2002	2003	2007							

Block 006109:

1000

VTD 145

VTD 146

VTD 151

VTD 211

Block 005508:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1017	1018	1019	1020	1021	1022	1023	1024
1025	1026	1027	1028								

Block 006112:

2001	2004	2012	2013	2014	2015	2016	2017	2018	2021	2022	
------	------	------	------	------	------	------	------	------	------	------	--

Block 006115:

2000	2001	2002	2003	2016	2017	2018					
------	------	------	------	------	------	------	--	--	--	--	--

VTD 212

Block 005519:

2000	2001	2002	2003	2004							
------	------	------	------	------	--	--	--	--	--	--	--

Block 005520:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	2000	2001	2002	2003	2004	2005	2006
2007	2008	2009	3000	3001	3002	3003	3004	3005	3006	3007	3008
3009	3010	3011	3012	3013	3014						

Block 005531:

1000	2000										
------	------	--	--	--	--	--	--	--	--	--	--

Block 005532:

2000

Block 005533:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1018	1019	1020	1021	1022			

Block 005534:

3003	3004										
------	------	--	--	--	--	--	--	--	--	--	--

VTD 214

VTD 238.1

VTD 239

VTD 241

Block 006305:

1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018
1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030

**Plan Components (Short)**

**District 107**

**County Mecklenburg NC**

VTD 241

Block 006305:

1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042
1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054
1055	1056	1057	1058	1059	1060	1061	1062	1063	1074	1075	1076
1077	1078	1079									

Block 006306:

1031	1032	1033									
------	------	------	--	--	--	--	--	--	--	--	--

Block 006307:

2003	2004	2005	2006	2007	2011	2012	2013	2014	2015	2016	2017
2023	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
2038	2039	2040	2041	2042	2043	2044	2045	2046			

**District 108**

**County Gaston NC**

VTD ALEXIS

VTD ASHBROOK

Block 032201:

2018	2019	2020	2021								
------	------	------	------	--	--	--	--	--	--	--	--

VTD BELMONT 1

VTD BELMONT 2

VTD BELMONT 3

VTD CATAWBA HEIGHTS

VTD CRAMERTON

VTD DALLAS 2

Block 030302:

2000	2003	2007	2008	2009	2010	2016	3004				
------	------	------	------	------	------	------	------	--	--	--	--

Block 030902:

2005	3000	3001	3005	3007	3016	3017	3019	3020	3021	3022	3023
3024											

VTD FLINT GROVES

VTD LOWELL

VTD LUCIA

VTD MCADENVILLE

VTD MOUNT HOLLY 1

VTD MOUNT HOLLY 2

VTD NEW HOPE

VTD RANLO

VTD SOUTH POINT

VTD STANLEY 1

VTD STANLEY 2

**District 109**

**County Gaston NC**

VTD ARMSTRONG

VTD ASHBROOK

Block 031303:

2012	2013	2014	2018	2019	2020	2023	2032	2033	2034		
------	------	------	------	------	------	------	------	------	------	--	--

Plan Components (Short)

Optimized State House Map

District 109

County Gaston NC

VTD ASHBROOK

Block 032201:

2014 2015 2016 2017 2028 2029 2034 2035 2036

Block 032505:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011  
1012 1013 1014 1015 1016

Block 032506:

1000 1001 1002 1003 1004 1005 1006 1007 1008

Block 032507:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011  
1012 1013 1014 1015

Block 032600:

2004 2005 2006 2007 2008 2009 3000 3001 3002 3003 3004 3005  
3006 3007 3008 3011 3012 3014 3015 3016 3017 3018 3019 4000  
4001 4007 4008 4009 4010 4011 4012 4013 4014 4015 4016 4020  
4021 4022 4023

VTD BESSEMER CITY 2

Block 031600:

4021 4022 4023 4024 4025 4026

Block 031703:

1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013  
1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1029 1030  
1031 1032 1033 1034 1035 1038 1039 1040 1041 1044 1045 1046  
2000 2001 2002

Block 031704:

1001

Block 031800:

4007 4008 4009 4017 4018 4019

Block 033100:

2009 2010

VTD CROWDERS MOUNTAIN

Block 031600:

1000

Block 031703:

1024 1025 1026 1027 1028 1036 1037 1042 1043 2003 2004 2005  
2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021  
2022 2023 2024 2025 2026 2028 2029 2030 2031 2034

Block 031704:

1000 1002 1003 1004 1005 1006 1012 1013 1014 1015 1016 1017

Block 031705:

1005 1006 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009  
2010 2011 2012 2013 2014 2017 2018 2019 2020 2021 2022 2023  
2025

Block 031706:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1016  
1017 1027 1028 1029 1030 1032 1033 1034 1035 1036 1037 1038

## Plan Components (Short)

Optimized State House Map

### District 109

#### County Gaston NC

VTD CROWDERS MOUNTAIN

Block 031706:

1039	1041	1042	2000	2001	2002	2003	2004	2005	2006	2007	2008
2009	2010	2011	2012	2014	2018	2019					

VTD FOREST HEIGHTS

VTD GARDNER PARK

VTD GASTON DAY

VTD GRIER

VTD MYRTLE

VTD PLEASANT RIDGE

VTD ROBINSON 1

VTD ROBINSON 2

VTD SHERWOOD

VTD SOUTH GASTONIA

VTD UNION

VTD VICTORY

VTD YORK CHESTER

### District 110

#### County Cleveland NC

VTD BETHWR

Block 950601:

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
3000	3001	3002	3003	3004	3005	3006	3009	3010	3011	3012	3013
3014	3015	3016	3017	3018	3019	3020	3021	3022	3023	3024	3025
3026	3027	3028	3029	3030	3031	3032	3033				

Block 950604:

2000	2001	2002
------	------	------

VTD GROVER

VTD KM N

VTD KM S

VTD OAKGRV

VTD S 5

Block 950701:

1000	1001	1002	1003	1004	1009	1011	1012	1013	3020	3021	3022
3023	3024										

Block 950800:

1006	1007	1008	1009	1011	1012	1013	1014	1015	1016	1017	1018
1019	1020	1021	1022	1023	1024	1025	1026	1028			

VTD WACO

#### County Gaston NC

VTD BESSEMER CITY 1

VTD BESSEMER CITY 2

Block 031600:

1002	1013	1014	1020	1021	1022	1023	2000	2001	2002	2003	2004
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028

## Plan Components (Short)

### District 110

#### County Gaston NC

##### VTD BESSEMER CITY 2

###### Block 031600:

2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	3000
3001	3002	3003	3004	3005	3006	3007	3008	3009	3010	3011	3012
3013	3014	3015	3016	3017	3018	3019	3020	3021	3022	3023	3024
3025	3026	3027	3028	3029	3030	3031	3032	3033	3034	3035	3036
3037	3038	3039	3040	3041	3042	3043	3044	3045	3046	3047	3048
3049	3050	3051	4001	4002	4003	4004	4005	4006	4007	4008	4009
4010	4011	4012	4013	4014	4015	4016	4017	4018	4027	4028	4035
4036											

###### Block 031703:

1000 1001

##### VTD CHERRYVILLE 1

##### VTD CHERRYVILLE 2

##### VTD CHERRYVILLE 3

##### VTD CROWDERS MOUNTAIN

###### Block 031600:

1001	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1015
1016	1017	1018	1019	1024	1025	1026	1027	1028	1029	1030	1031
1032	1033	1034									

###### Block 031706:

1011	1012	1013	1014	1015	1018	1019	1020	1021	1022	1023	1024
1025	1026	1031	1040								

##### VTD DALLAS 1

##### VTD DALLAS 2

###### Block 030301:

3035 3036 3037 3041

###### Block 030302:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	2001	2002	2004	2005	2006	3007	3008
3009	3010	3011	3012	3014	3015	3016	3017				

###### Block 030901:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023
1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035
2000	2001	2002	2003	2004	3000	3001					

###### Block 030902:

1000	1001	1002	1003	1004	1005	1006	2000	2001	2002	2003	2004
2006	2007	3002	3003	3004	3006	3008	3009	3010	3011	3012	3013
3014	3015	3018	3025	3026	3027	3028	3029	3030	3031	3032	3033
3034	3035	3036	3037	3038	3039	3040	3041	3042			

##### VTD HEALTH CENTER

##### VTD HIGH SHOALS

##### VTD HIGHLAND

##### VTD LANDERS CHAPEL

##### VTD TRYON

**Plan Components (Short)**

Optimized State House Map

**District 110**

**County Gaston NC**

VTD WOODHILL

**District 111**

**County Cleveland NC**

VTD BETHWR

Block 950601:

3007 3008

VTD BROAD RIVER

VTD CASAR

VTD FALSTN

VTD KINGST

VTD LATT

VTD LAWNDL

VTD MRB-YO

VTD MULLS

VTD POLKVL

VTD RIPPY

VTD S 5

Block 950701:

1005 1006 1007 1008 1010 1014 1015 1016 1017 1018 1019 1020

1021 1022 3000 3001 3002 3003 3004 3005 3006 3007 3008 3009

3010 3011 3012 3013 3014 3015 3016 3017 3018 3019 3025 3026

3027 3028 3029

Block 950800:

1027

VTD SHANGI

VTD Shelby 4

VTD Shelby Central

VTD Shelby South

**County Rutherford NC**

VTD BOSTIC-SUNSHINE

Block 960101:

1080 1088 1092 1093

Block 960102:

1005 1007 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020

1021 1023 1027 1028 1029 1031 1032 1033 1037 1038 1039 1040

1041 1042 1043 1044 1045 1049 1050

Block 960103:

1000 1001 1002 1004 1005 1006 1007 1008 1009 1010 1011 1012

1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024

1025 1028 1029 1030 1031 1036 1037 1038 1039 1042 1043 1049

1050

Block 960700:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011

1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023

1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035

1036 1037 1038 1039 1041 1042 1043 1047

**Plan Components (Short)**

Optimized State House Map

**District 111**

**County Rutherford NC**

VTD BOSTIC-SUNSHINE

Block 961001:

1004 1010 3000 3004

VTD CAROLEEN-CLIFFSIDE

VTD DUNCAN CREEK-GOLDEN VALLEY

VTD ELLENBORO

VTD FOREST CITY 2

Block 960103:

1044 2039

Block 960700:

2000 2006 2007 4007

Block 960900:

1003 1008

Block 961104:

1007 1008 1009 1010 1013 1014 1016

VTD HAYNES

VTD SANDY MUSH

Block 960900:

1004 1005 1006 1011 1012 1013 1014 1015 1016 1017 1018 1019

1020 1021 1022 1023 2000 2001 2002 2003 2004 2005 2006 2007

2008 2009 2010 2011 2012 2013 2014 2021 2022 3012 3018 3020

3033 3034 3036 3038 3050 3051 3052 3053 3057 3058 3059 3060

3061 3062 3063 3064 3066 3067 3068 3069 3071 3074

Block 961104:

1011 1012 1017 1018 1019 1020 1021 1050 1087

Block 961200:

2012

**District 112**

**County Mecklenburg NC**

VTD 011

Block 000102:

1000 1001 1004 1005 1009

Block 000103:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011

1012

Block 000104:

1000 1001 1002 1009 1010 1011 1012 1013 1014 1015 1016

Block 000501:

1006 1008

Block 000502:

1000 1001 1002 1003 1004 1005 1008 1009 1010 1011 1012

Block 000503:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 2001

2002 2003 2004 2006 2014

Block 005200:

3032

**Plan Components (Short)**

Optimized State House Map

**District 112**

**County Mecklenburg NC**

VTD 013

Block 000101:

2000

Block 000104:

1017 1018 1019

VTD 025

VTD 026

VTD 027

Block 005301:

1007 2000 2005 2006 2007 2008

VTD 041

Block 004400:

1012 1013 1034

Block 004500:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011

1012 1013 1015

VTD 054

VTD 055

VTD 056

VTD 134

Block 006210:

2026

Block 006212:

2012 2013 2014 2018 2020 2021 2022 2023

Block 006214:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011

1012 1013 1014 1015 2000 2001 2002 2003 2004 2005 2008 2009

2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

2022 2023 2024

Block 006221:

1013 1014 1015 1017 1018 1019 1020 1021 1022 1023 1024 1025

1034 1035 1036 1037 1038 1039 1040 1041 1042 1043 1044 1045

1046 1047 1055 1056 1057 1058 1059 1060 1061 1062 1063 1064

1065 1066 1068 1069 1070 1071 1072 1073 1074 1075 1076 1077

1079 1082

Block 006224:

1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028

1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 1040 1041

1042 1043 1044 1045 1046 1047 1048 1049 1050 1051 1052 1053

1054 1055 1056 1057 1058 1059 1060 1061 1062 1063 1064 1065

1066 1067 1068 1069 1070 1071 1072 1073 1074 1075 1076 1077

1078 1082 1083 1084 1085 1086 1087 1088 1089 1097 1099 1100

1101 1102 1103 1104 1106 1107 1109 1111

VTD 135

Block 005403:

2002 2003



Plan Components (Short)

Optimized State House Map

District 112

County Mecklenburg NC

VTD 135

Block 006109:

1001 1002

VTD 142

Block 006210:

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011  
2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023  
2024 2025 2027 2028 2029 2030 2031 2032

Block 006220:

1010 1011 1012 1013 1014 1015 1016 1017 1019 1020 1021 1022  
1023

Block 006221:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011  
1012 1016 1026 1027 1028 1029 1030 1031 1032 1033 1048 1049  
1050 1051 1052 1053 1054 1067 1078 1080 1081

Block 006222:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011  
1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023  
1024 1025 1026 1028 1029 1030 1031 1032 1033 1034 1035 2001  
2002

VTD 209

Block 006105:

1000 1001 1002 1003 1004 1005 1007 1033

Block 006222:

1027 2000 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012  
2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024  
2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036  
2037 2038 2039 2040 2041 2042 2043 2044 2045 2046 2047 2048  
2049 2050 2051 2052 2053 2054 2055 2056 2057 2058 2059 2060  
2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072  
2073 2074 2075 2076 2077

Block 006223:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011  
1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023  
1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035  
1036 1037 1038 1039 1040 1041 1042 1043 1044 1045 1046 1047  
1048 1049 1050 1051 1052 1053 1054 1055 1056 1057 1058 1059

Block 006224:

1094 1095 1096 1098 1105 1110

VTD 210

Block 005406:

1000 1001 2000 2001 2002 2003 2006 2007 2017

Block 006108:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011  
1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 2000 2001  
2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013

**Plan Components (Short)**

Optimized State House Map

**District 112**

**County Mecklenburg NC**

VTD 210

Block 006108:

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
2026											

Block 006109:

1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014
1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026
1027	1028	1029	1030	1031	1032	1033					

VTD 211

Block 006105:

1006	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018
1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030
1031											

Block 006112:

1000	1001	1002	1003	1004	1005	1006	1007	2000	2002	2003	2005
2006	2007	2008	2009	2010	2011	2019	2020	2023	2024	2025	2026
2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
2039											

Block 006113:

1000	1001	1002	1003	1004	1005	2000	2001	2002	2003	2004	2005
2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
2018	2019										

Block 006114:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	2000	2001	2002	2003	2004	2005	2006	2007	2008
2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
2021	2022	2023	2024	2025	2026						

Block 006115:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
2015	2019										

VTD 213

VTD 241

Block 006224:

1010	1011	1012	1090	1091	1092	1093	1108				
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**District 113**

**County Henderson NC**

VTD CRAB CREEK

VTD EAST FLAT ROCK

Block 931401:

1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023
1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035
1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047
1051	1052	2017	2018	2020	2022	2023	2024	2025	2026	2027	2028
2029	2030										

**Plan Components (Short)**

Optimized State House Map

**District 113**

**County Henderson NC**

VTD EAST FLAT ROCK

Block 931402:

2020 2021 2022 2023 2025 2026 2046 2047 2053 2054 2055

Block 931500:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1019 1020  
1024 1025 1026 1027 1037

Block 932000:

1038 1039 1040 1041 2000

VTD ETOWAH SOUTH

VTD ETOWAH VALLEY

VTD GREEN RIVER

VTD NORTH MILLS RIVER

Block 930701:

1000 1001 1002 1003 1004 1005 1006 1010 1011 1013 1014 1015  
1016 1017 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028  
1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 1040  
1041 1042 1043 1044 1045 1046 1047 1048 1049 1050 1051 1052  
1053 1054 1055 1056 1057 1058 1059 1060 1061 2000 2001 2002  
2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014  
2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026  
2027 2028 2029 3000 3001 3002 3003 3004 3005 3006 3007 3008  
3009 3010 3011 3012 3013 3014 3015 3016 3017 3018 3019 3020  
3021 3022 3023 3024 3025 3026 3027 3028 3029 3030 3031

Block 930702:

1015 2000 2001 2002 2003 2005 2006 2007 2012 2013 2014 2015  
2016 2017 2018 2054

Block 980100:

1000 1001 1002 1003 1004 1006

VTD RAVEN ROCK

VTD SOUTH MILLS RIVER

**County McDowell NC**

VTD GLENWOOD

Block 970902:

1003 1004 1005 1006 1007 1025 1026 1027 1028 1029 1030 1031  
1032 1033 2000 2001 2002 2003 2004 2005 2006 2008 2009 2010  
2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022  
2024 2025 2026 2028

Block 970903:

1057 1058 1060 1061 1065 1066 1068 1069 2015 2016 2017 2021  
2022 2026 2027 2028 2029 2030 2033 2048 2049 2050 2051 3000  
3001 3002 3003 3004 3005 3006 3007 3008 3009 3010 3011 3012  
3013 3014 3015 3016 3017 3018 3019 3020 3021 3022 3023 3024  
3025 3026 3027 3028 3029 3030 3031 3032 3033 3034 3035 3036  
3037 3038 3039 3040 3041 3042 3043 3044 3045 3046 3047 3048  
3049 3050

VTD MONTFORD COVE

**Plan Components (Short)**

Optimized State House Map

**District 113**

**County Polk NC**

**County Rutherford NC**

VTD BOSTIC-SUNSHINE

Block 960700:

1040 1044 1046

VTD CAMP CREEK-MT VERNON

VTD CHIMNEY ROCK

VTD DANIELTOWN-SULPHUR SPRINGS

VTD FOREST CITY 1

VTD FOREST CITY 2

Block 960700:

2001	2002	2003	2004	2005	2008	2009	2010	2011	2012	2013	2014
2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
2039	2040	2041	2042	2043	2044	2045					

Block 960800:

3000	3001	3002	3003	3004	3005	3006	3007	3008	3009	3010	3011
3012	3013	3014	3015	3016	3017	3018	3019	3020	3021	3022	3023
3024	3025	3026	4000	4001	4002	4003	4004	4005	4006	4007	4008
4009	4010	4011	4012	4013	4014	4015	4016	4017	4018	4019	4020
4021	4022	4023	4024	4025	4026	4027	4028	5000	5001	5002	5003
5004	5005	5006	5007	5008	5009	5010	5011	5012	5013	5014	5015
5016	5017	5018	5019	5020	5021	5022	5023	5024	5025	5026	5027
5028	5029	5030	5031	5032	5033	5034	5035	5036			

Block 960900:

1000	1001	1002	3039	3040	3041	3042	3043	3044	3045	3046	3048
3049											

Block 961001:

3002

Block 961104:

1002 1003 1004 1005

VTD GILKEY-MORGAN

VTD GREEN HILL

VTD RUTHERFORDTON 1

VTD RUTHERFORDTON 2

VTD SANDY MUSH

Block 960900:

1007	1009	1010	3000	3001	3002	3003	3004	3005	3006	3007	3008
3009	3010	3011	3013	3014	3015	3016	3017	3019	3021	3022	3023
3024	3025	3026	3027	3028	3029	3030	3031	3032	3035	3065	3070

VTD SPINDALE

VTD UNION

**District 114**

**County Buncombe NC**

VTD ASHEVILLE APOSTOLIC CHURCH

Block 001801:

1002 1009 1011 1016 1017 1025 1026 1027

## Plan Components (Short)

### District 114

#### County Buncombe NC

VTD BEAVERDAM COMMUNITY CENTER

VTD BETH ISRAEL SYNAGOGUE

VTD BLACK MOUNTAIN 1 - OWEN MIDDLE SCHOOL

Block 003002:

1002 1037 1038 1039 1042

Block 003103:

1029 1035 1037 1038 1041 1042 1063 1064 1065 1066 1069 1070  
1075

Block 003107:

1000 1001 1002 1003 1004 1005 1010 1025 2003 2004 2005 2006  
2007 2010 2011

Block 003108:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011  
1012 1013 1020 1021 1029 1030 1032 1033 1034 1040 1046

VTD BLACK MOUNTAIN 3 - LAKE TOMAHAWK

VTD BLACK MOUNTAIN 4 - CARVER COMMUNITY CENTER

VTD BLACK MOUNTAIN 5 - MONTREAT CTR WALKUP BLDG

VTD BLACK MOUNTAIN ELEMENTARY SCHOOL

VTD BLACK MOUNTAIN PRIMARY SCHOOL

VTD CHARLES C BELL SCHOOL

VTD COVENANT REFORMED PRESBYTERIAN

VTD EVERGREEN CHARTER SCHOOL

VTD FLAT CREEK - NORTH BUNCOMBE ELEMENTARY

VTD FRENCH BROAD FIRE DEPT

VTD HAW CREEK ELEMENTARY SCHOOL

VTD IRA B JONES SCHOOL AUDITORIUM

VTD IVY 1 - BARNARDSVILLE SCHOOL

VTD NORTH ASHEVILLE COMMUNITY CENTER

VTD NORTH BUNCOMBE - MIDDLE SCHOOL

VTD NORTH WINDY RIDGE SCHOOL

VTD REEMS CREEK FIRE DEPARTMENT

VTD RICEVILLE 1 - RICEVILLE COMMUNITY CENTER

VTD RICEVILLE 2 - GRASSY BRANCH BAPTIST

VTD ST EUGENES CHURCH

VTD ST MARKS LUTHERAN CHURCH

VTD SWANNANOA 2 - WILLIAMS ELEMENTARY

VTD SWANNANOA 3 - WWC - KITTRIDGE THEATRE

VTD TRINITY PRESBYTERIAN CHURCH

VTD WEAVERVILLE TOWN HALL

VTD WOODFIN COMMUNITY CENTER

VTD WOODLAND HILLS - BAPTIST CHURCH

### District 115

#### County Buncombe NC

VTD ASHEVILLE APOSTOLIC CHURCH

Block 000800:

1000 1001 1002 1003 1004 1005 1007 1008 1009 1010 1011 1012

**Plan Components (Short)**

**District 115**

**County Buncombe NC**

VTD ASHEVILLE APOSTOLIC CHURCH

Block 000800:

1013 1018 1019

Block 001801:

1019 1020 1021

VTD ASHEVILLE SENIOR OPPORTUNITY CENTER

VTD AVERYS CREEK COMMUNITY CENTER

VTD AVERYS CREEK ELEMENTARY SCHOOL

VTD BILTMORE FOREST TOWN HALL

VTD BLACK MOUNTAIN 1 - OWEN MIDDLE SCHOOL

Block 003002:

1040 2000 2001 2002 2003 2016 2017

Block 003103:

1024 1025 1032 1043 1044 1045 1046 1047 1048 1067 1068 1072  
1073

VTD BROAD RIVER COMMUNITY CENTER

VTD CANE CREEK MIDDLE SCHOOL

VTD COVENANT COMMUNITY CHURCH

VTD FAIRVIEW COMMUNITY CENTER

VTD FAIRVIEW VOLUNTEER FIRE DEPT

VTD FAITH TABERNACLE CHRISTIAN CENTER

VTD FIRST BAPTIST OF SWANNANOA

VTD KENILWORTH PRESBYTERIAN CHURCH

VTD LIMESTONE 2 - GLEN ARDEN SCHOOL

VTD LIMESTONE 3 - ARDEN FIRST BAPTIST

VTD LIMESTONE 4 - SKYLAND FIRE BISHOP SUBSTATION

VTD LOWER HOMINY 1 - OAK FOREST PRESBYTERIAN

Block 001200:

5026

Block 002305:

2019 2020 2021 2022 2023 2025 2026 2027

Block 002306:

2002 2008 2017 2018 2019 2020 2022 2023 2024 2025 2026 2027  
2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2042  
2043 2044 2045 2047 2050 2065

VTD LOWER HOMINY 3 - ARBORETUM MAIN BLDG ROOM 1

VTD LUTHERAN CHURCH OF THE NATIVITY

VTD MURPHY-OAKLEY COMMUNITY CENTER

VTD NEW HOPE PRESBYTERIAN

VTD REYNOLDS FIRE DEPARTMENT

VTD SHILOH COMMUNITY CENTER

VTD SKYLAND FIRE DEPARTMENT

VTD STEPHENS LEE COMMUNITY CENTER

VTD TC ROBERSON HIGH SCHOOL

VTD TRINITY OF FAIRVIEW CHURCH

VTD W C REID RECREATION CENTER

## Plan Components (Short)

### District 116

#### County Buncombe NC

VTD ASHEVILLE PRE-SCHOOL  
VTD ASHEVILLE SCHOOL ATHLETIC CENTER  
VTD CROSSROADS ASSEMBLY  
VTD ELIADA HOME - PAUL AMOS REC CENTER  
VTD ENKA MIDDLE SCHOOL  
VTD HALL FLETCHER SCHOOL  
VTD HAZEL 1 - EMMA ELEMENTARY SCHOOL  
VTD HAZEL 2 - JOHNSTON SCHOOL  
VTD HOMINY VALLEY ELEMENTARY  
VTD LEICESTER 1 - LEICESTER SCHOOL  
VTD LEICESTER 2 - COMMUNITY CENTER  
VTD LOWER HOMINY 1 - OAK FOREST PRESBYTERIAN

#### Block 001200:

5000 5001 5010 5011 5025

#### Block 002305:

1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011  
1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023  
1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035  
1036 1037 1038 1039 1040 1041 1042 1043 1044 1045 1046 2000  
2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2024

#### Block 002306:

1001 1008 1015 1016 1017 1018 1019 1020 1021 1022 1025 1026  
1027 1028 1029 1031 1032 1033 1034 2021

#### Block 002402:

1019 1020 1021 1022 1023 2005

#### Block 002506:

1023 1024

VTD MONTFORD COMMUNITY CENTER  
VTD SANDY MUSH COMMUNITY CENTER  
VTD UPPER HOMINY 1 - PISGAH ELEMENTARY  
VTD UPPER HOMINY 3 - POLE CREEK BAPTIST  
VTD VANCE ELEMENTARY SCHOOL  
VTD WEST ASHEVILLE CHURCH OF GOD  
VTD WEST ASHEVILLE LIBRARY  
VTD WEST BUNCOMBE 1 - WEST BUNCOMBE SCHOOL  
VTD WEST BUNCOMBE 2 - FIRE TRAIN CENTER

### District 117

#### County Henderson NC

VTD ARMORY  
VTD ATKINSON  
VTD BAT CAVE  
VTD BRICKTON  
VTD CLEAR CREEK  
VTD EAST FLAT ROCK

#### Block 931401:

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011

## Plan Components (Short)

Optimized State House Map

### District 117

#### County Henderson NC

VTD EAST FLAT ROCK

Block 931401:

2012	2013	2014	2015	2016	2019	2021
------	------	------	------	------	------	------

Block 931500:

1010	1012	1013	1018	1036
------	------	------	------	------

VTD EDNEYVILLE

VTD FLAT ROCK

VTD FLETCHER

VTD GRIMESDALE

VTD HENDERSONVILLE-1

VTD HENDERSONVILLE-2

VTD HENDERSONVILLE-3

VTD HOOPERS CREEK

VTD HORSE SHOE

VTD LAUREL PARK

VTD LONG JOHN MOUNTAIN

VTD MOORES GROVE

VTD NORTH BLUE RIDGE

VTD NORTH MILLS RIVER

Block 930701:

1007	1008	1009	1012	1018
------	------	------	------	------

VTD NORTHEAST

VTD NORTHWEST

VTD PARK RIDGE

VTD PISGAH VIEW

VTD RUGBY

VTD SOUTH BLUE RIDGE

VTD SOUTHEAST

VTD SOUTHWEST

### District 118

#### County Haywood NC

#### County Madison NC

### District 119

#### County Jackson NC

#### County Swain NC

#### County Transylvania NC

### District 120

#### County Cherokee NC

#### County Clay NC

#### County Graham NC

#### County Macon NC



STATE OF NORTH CAROLINA

COUNTY OF WAKE

NORTH CAROLINA LEAGUE OF  
CONSERVATION VOTERS, et al.,

Plaintiffs,

vs.

REPRESENTATIVE DESTIN HALL, in his  
official capacity as Chair of the House  
Standing Committee on Redistricting, et al.,

Defendants.

FILED

IN THE GENERAL COURT OF JUSTICE  
SUPERIOR COURT DIVISION

2021 DEC -2 P 12: 2 ACVS 015426

WAKE CO., C.S.C.

BY

*[Signature]*

**AFFIDAVIT OF SEAN P. TRENDE**

Now comes affiant Sean P. Trende, having been first duly cautioned and sworn, deposes and states as follows:

1. I am over the age of 18 and am competent to testify regarding the matters discussed below.
2. I currently reside at 1146 Elderberry Loop, Delaware, OH 43015. My e-mail is [trende.3@buckeyemail.osu.edu](mailto:trende.3@buckeyemail.osu.edu).
3. I have been retained in this matter by the Legislative Defendants, and am being compensated at \$400.00 per hour for my work in this case.
4. My *curriculum vitae* is attached to this report as Exhibit 1.

**EXPERT CREDENTIALS**

5. I am currently enrolled as a doctoral candidate in political science at The Ohio State University. I have completed all of my coursework and have passed comprehensive examinations in both methods and American Politics. My coursework for my Ph.D. and

M.A.S. included, among other things, classes on G.I.S. systems, spatial statistics, issues in contemporary redistricting, machine learning, non-parametric hypothesis tests and probability theory. I expect to receive my Ph.D. in May of 2021. My dissertation focuses on applications of spatial statistics to political questions.

6. I joined RealClearPolitics in January of 2009. I assumed a fulltime position with RealClearPolitics in March of 2010. My title is Senior Elections Analyst. RealClearPolitics is a company of around 40 employees, with offices in Washington D.C. It produces one of the most heavily trafficked political websites in the world, which serves as a one-stop shop for political analysis from all sides of the political spectrum and is recognized as a pioneer in the field of poll aggregation. It produces original content, including both data analysis and traditional reporting. It is routinely cited by the most influential voices in politics, including David Brooks of *The New York Times*, Brit Hume of *Fox News*, Michael Barone of *The Almanac of American Politics*, Paul Gigot of *The Wall Street Journal*, and Peter Beinart of *The Atlantic*.

7. My main responsibilities with RealClearPolitics consist of tracking, analyzing, and writing about elections. I collaborate in rating the competitiveness of Presidential, Senate, House, and gubernatorial races. As a part of carrying out these responsibilities, I have studied and written extensively about demographic trends in the country, exit poll data at the state and federal level, public opinion polling, and voter turnout and voting behavior.

8. In particular, understanding the way that districts are drawn and how geography and demographics interact is crucial to predicting United States House of Representatives races, so much of my time is dedicated to that task.

9. I am currently a Visiting Scholar at the American Enterprise Institute, where my publications focus on the demographic and coalitional aspects of American Politics. My first paper focused on the efficiency gap, a metric for measuring the fairness of redistricting plans.

10. I am the author of *The Lost Majority: Why the Future of Government is up For Grabs and Who Will Take It*. In this book, I explore realignment theory. It argues that realignments are a poor concept that should be abandoned. As part of this analysis, I conducted a thorough analysis of demographic and political trends beginning in the 1920s and continuing through the modern times, noting the fluidity and fragility of the coalitions built by the major political parties and their candidates.

11. I co-authored the 2014 *Almanac of American Politics*. The Almanac is considered the foundational text for understanding congressional districts and the representatives of those districts, as well as the dynamics in play behind the elections. PBS's Judy Woodruff described the book as "the oxygen of the political world," while NBC's Chuck Todd noted that "[r]eal political junkies get two *Almanacs*: one for the home and one for the office." My focus was researching the history of and writing descriptions for many of the newly-drawn districts, including tracing the history of how and why they were drawn the way that they were drawn.

12. I have spoken on these subjects before audiences from across the political spectrum, including at the Heritage Foundation, the American Enterprise Institute, the CATO Institute, the Bipartisan Policy Center, and the Brookings Institution. In 2012, I was invited to Brussels to speak about American elections to the European External Action Service, which is the European Union's diplomatic corps. I was selected by the United States Embassy in Sweden to discuss the 2016 elections to a series of audiences there, and was selected by the United

States Embassy in Spain to fulfil a similar mission in 2018. I was invited to present by the United States Embassy in Italy, but was unable to do so because of my teaching schedule.

13. In the winter of 2018, I taught American Politics and the Mass Media at Ohio Wesleyan University. I taught Introduction to American Politics at The Ohio State University for three semesters from Fall of 2018 to Fall of 2019. In the Springs of 2020 and 2021, I taught Political Participation and Voting Behavior at The Ohio State University. This course spent several weeks covering all facets of redistricting: How maps are drawn, debates over what constitutes a fair map, measures of redistricting quality, and similar topics.

14. It is my policy to appear on any major news outlet that invites me, barring scheduling conflicts. I have appeared on both Fox News and MSNBC to discuss electoral and demographic trends. I have been cited in major news publications, including *The New York Times*, *The Washington Post*, *The Los Angeles Times*, *The Wall Street Journal*, and *USA Today*.

15. I sit on the advisory panel for the “States of Change: Demographics and Democracy” project. This project is sponsored by the Hewlett Foundation and involves three premier think tanks: The Brookings Institution, the Bipartisan Policy Center, and the Center for American Progress. The group takes a detailed look at trends among eligible voters and the overall population, both nationally and in key states, to explain the impact of these changes on American politics, and to create population projections, which the Census Bureau abandoned in 1995. In 2018, I authored one of the lead papers for the project: “In the Long Run, We’re All Wrong,” available at <https://bipartisanpolicy.org/wp-content/uploads/2018/04/BPC-Democracy-States-of-Change-Demographics-April-2018.pdf>.

16. I previously authored an expert report in *Dickson v. Rucho*, No. 11-CVS-16896 (N.C. Super Ct., Wake County), which involved North Carolina’s 2012 General Assembly and

Senate maps. Although I was not called to testify, it is my understanding that my expert report was accepted without objection. I also authored an expert report in *Covington v. North Carolina*, Case No. 1:15-CV-00399 (M.D.N.C.), which involved almost identical challenges in a different forum. Due to what I understand to be a procedural quirk, where my largely identical report from *Dickson* had been inadvertently accepted by the plaintiffs into the record when they incorporated parts of the *Dickson* record into the case, I was not called to testify.

17. I authored two expert reports in *NAACP v. McCrory*, No. 1:13CV658 (M.D.N.C.), which involved challenges to multiple changes to North Carolina's voter laws, including the elimination of a law allowing for the counting of ballots cast in the wrong precinct. I was admitted as an expert witness and testified at trial. My testimony discussed the "effect" prong of the Voting Rights Act claim. I did not examine the issues relating to intent.

18. I authored reports in *NAACP v. Husted*, No. 2:14-cv-404 (S.D. Ohio), and *Ohio Democratic Party v. Husted*, Case 15-cv-01802 (S.D. Ohio), which dealt with challenges to various Ohio voting laws. I was admitted and testified at trial in the latter case (the former case settled). The judge in the latter case ultimately refused to consider one opinion, where I used an internet map-drawing tool to show precinct locations in the state. Though no challenge to the accuracy of the data was raised, the judge believed I should have done more work to check that the data behind the application was accurate.

19. I served as a consulting expert in *Lee v. Virginia Board of Elections*, No. 3:15-cv-357 (E.D. Va. 2016), a voter identification case. Although I would not normally disclose consulting expert work, I was asked by defense counsel to sit in the courtroom during the case and review testimony. I would therefore consider my work *de facto* disclosed.

20. I filed an expert report in *Mecinas v. Hobbs*, No. CV-19-05547-PHX-DJH (D. Ariz. 2020). That case involved a challenge to Arizona's ballot order statute. Although the judge ultimately did not rule on a motion in limine in rendering her decision, I was allowed to testify at the hearing.

21. I authored two expert reports in *Feldman v. Arizona*, No. CV-16-1065-PHX-DLR (D. Ariz.). Plaintiffs in that case challenged an Arizona law prohibiting the collection of voted ballots by third parties that were not family members or caregivers and the practice of most of the state's counties to require voters to vote in their assigned precinct. My reports and testimony were admitted. Part of my trial testimony was struck in that case for reasons unrelated to the merits of the opinion; counsel for the state elicited it while I was on the witness stand and it was struck after Plaintiffs were not able to provide a rebuttal to the new evidence.

22. I authored an expert report in *Smith v. Perrera*, No. 55 of 2019 (Belize). In that case I was appointed as the court's expert by the Supreme Court of Belize. In that case I was asked to identify international standards of democracy as they relate to malapportionment claims, to determine whether Belize's electoral divisions (similar to our congressional districts) conformed with those standards, and to draw alternative maps that would remedy any existing malapportionment.

23. I authored expert reports in *A. Philip Randolph Institute v. Smith*, No. 1:18-cv-00357-TSB (S.D. Ohio), *Whitford v. Nichol*, No. 15-cv-421-bbc (W.D. Wisc.), and *Common Cause v. Rucho*, NO. 1:16-CV-1026-WO-JEP (M.D.N.C.), which were efficiency gap-based redistricting cases filed in Ohio, Wisconsin and North Carolina.

24. I also authored an expert report in the cases of *Ohio Organizing Collaborative, et al v. Ohio Redistricting Commission, et al* (No. 2021-1210); *League of Women Voters of Ohio, et al v. Ohio Redistricting Commission, et al* (No. 2021-1192); *Bria Bennett, et al v. Ohio Redistricting Commission, et al* (No. 2021-1198). These cases are pending in original action before the Supreme Court of Ohio.

25. I currently serve as one of two special masters appointed by the Supreme Court of Virginia to redraw the districts that will elect the commonwealth's representatives to the House of Delegates, state Senate, and U.S. Congress.

### **SUMMARY OF WORK PERFORMED**

26. I certify that the images attached as Exhibit 2 are true and correct copies of images that I created and that I describe below.

27. To create these images, I first downloaded county-level shapefiles from the United States Census Bureau. Using R, a widely utilized statistical programming tool, I joined county-level vote totals for U.S. presidential races in 2012, 2016 and 2020.

28. Attached as Exhibit 2-A are maps I generated with counties colored red if the Republican candidate won that county, and blue if the Democratic candidate won that county.

29. I then centered these results on national popular vote results for the respective years, an accepted mechanism that is used to enable analysts to compare results that occur in differing electoral environments. *See, e.g.,* Bernard Fraga, "Candidates or Districts? Reevaluating the Role of Race in Voter Turnout," 60 *Am. Jnl. Pol. Sci.* 97, 115 (2016). Because the national popular vote reflected reasonably close Democratic wins in all four years, the effect of doing this computation is marginal.

30. Attached as Exhibit 2-B are maps I generated with counties colored red if the Republican candidate performed better in the county than they did nationally, and blue if the Republican candidate performed worse in the county than they did nationally. If the Republican candidate performed better in the county than they did nationally, I refer to that performance as “leaning” Republican.

31. As shown in Table 1 below, in 2012, the Republican presidential candidate won 70 of North Carolina’s 100 counties. In 2016, the Republican presidential candidate won 76 counties, and in 2020, the Republican presidential candidate won 75 counties.

32. As shown in Table 1 below, in 2012, the number of counties in North Carolina that leaned<sup>1</sup> Republican in the Presidential Election was 73 out of 100, in 2016 that figure was 77 out of 100, and in 2020 that figure was 80 out of 100.

**TABLE 1**

<b>Election Year</b>	<b># of N.C. Counties that voted Republican</b>	<b># of N.C. Counties that leaned Republican</b>
2012	70/100	73/100
2016	76/100	77/100
2020	75/100	80/100

---

<sup>1</sup> “Leaned” is as defined in ¶ 30.



Executed on December 1, 2021

DocuSigned by:

*Sean P. Trende*

D329B1A55F6D4B4...

Sean P. Trende

Sworn or affirmed before me and subscribed in the presence the 1st day of December, 2021, in

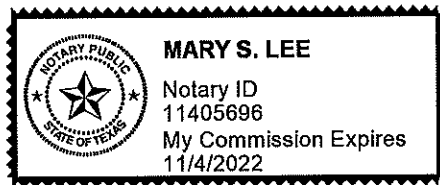
the state of Texas and County of Harris

DocuSigned by:

*Mary S. Lee*

2FAD7787555D439...

Notary Public



# **Exhibit 1**

**SEAN P. TRENDE**  
1146 Elderberry Loop  
Delaware, OH 43015  
strende@realclearpolitics.com

## **EDUCATION**

Ph.D., The Ohio State University, Political Science, expected 2022.

M.A.S. (Master of Applied Statistics), The Ohio State University, 2019.

J.D., Duke University School of Law, *cum laude*, 2001; Duke Law Journal, Research Editor.

M.A., Duke University, *cum laude*, Political Science, 2001. Thesis titled *The Making of an Ideological Court: Application of Non-parametric Scaling Techniques to Explain Supreme Court Voting Patterns from 1900-1941*, June 2001.

B.A., Yale University, with distinction, History and Political Science, 1995.

## **PROFESSIONAL EXPERIENCE**

Law Clerk, Hon. Deanell R. Tacha, U.S. Court of Appeals for the Tenth Circuit, 2001-02.

Associate, Kirkland & Ellis, LLP, Washington, DC, 2002-05.

Associate, Hunton & Williams, LLP, Richmond, Virginia, 2005-09.

Associate, David, Kamp & Frank, P.C., Newport News, Virginia, 2009-10.

Senior Elections Analyst, RealClearPolitics, 2009-present.

Columnist, Center for Politics Crystal Ball, 2014-17.

Gerald R. Ford Visiting Scholar, American Enterprise Institute, 2018-present.

## **BOOKS**

Larry J. Sabato, ed., *The Blue Wave*, Ch. 14 (2019).

Larry J. Sabato, ed., *Trumped: The 2016 Election that Broke all the Rules* (2017).

Larry J. Sabato, ed., *The Surge: 2014's Big GOP Win and What It Means for the Next Presidential Election*, Ch. 12 (2015).

Larry J. Sabato, ed., *Barack Obama and the New America*, Ch. 12 (2013).

Barone, Kraushaar, McCutcheon & Trende, *The Almanac of American Politics 2014* (2013).

*The Lost Majority: Why the Future of Government is up for Grabs – And Who Will Take It* (2012).

## **PREVIOUS EXPERT TESTIMONY**

*Dickson v. Rucho*, No. 11-CVS-16896 (N.C. Super. Ct., Wake County) (racial gerrymandering).

*Covington v. North Carolina*, No. 1:15-CV-00399 (M.D.N.C.) (racial gerrymandering).

*NAACP v. McCrory*, No. 1:13CV658 (M.D.N.C.) (early voting).

*NAACP v. Husted*, No. 2:14-cv-404 (S.D. Ohio) (early voting).

*Ohio Democratic Party v. Husted*, Case 15-cv-01802 (S.D. Ohio) (early voting).

*Lee v. Virginia Bd. of Elections*, No. 3:15-cv-357 (E.D. Va.) (early voting).

*Feldman v. Arizona*, No. CV-16-1065-PHX-DLR (D. Ariz.) (absentee voting).

*A. Philip Randolph Institute v. Smith*, No. 1:18-cv-00357-TSB (S.D. Ohio) (political gerrymandering).

*Whitford v. Nichol*, No. 15-cv-421-bbc (W.D. Wisc.) (political gerrymandering).

*Common Cause v. Rucho*, No. 1:16-CV-1026-WO-JEP (M.D.N.C.) (political gerrymandering).

*Mecinas v. Hobbs*, No. CV-19-05547-PHX-DJH (D. Ariz.) (ballot order effect).

*Fair Fight Action v. Raffensperger*, No. 1:18-cv-05391-SCJ (N.D. Ga.) (statistical analysis).

*Pascua Yaqui Tribe v. Rodriguez*, No. 4:20-CV-00432-TUC-JAS (D. Ariz.) (early voting).

## **COURT APPOINTMENTS**

Appointed as Voting Rights Act expert by Arizona Independent Redistricting Commission

Appointed redistricting expert by the Supreme Court of Belize in *Smith v. Perrera*, No. 55 of 2019 (one-person-one-vote).

## **INTERNATIONAL PRESENTATIONS AND EXPERIENCE**

Panel Discussion, European External Action Service, Brussels, Belgium, *Likely Outcomes of 2012 American Elections*.

Selected by U.S. Embassies in Sweden, Spain, and Italy to discuss 2016 and 2018 elections to think tanks and universities in area (declined Italy due to teaching responsibilities).

Selected by EEAS to discuss 2018 elections in private session with European Ambassadors.

## **TEACHING**

American Democracy and Mass Media, Ohio Wesleyan University, Spring 2018.

Introduction to American Politics, The Ohio State University, Autumn 2018, 2019, 2020, Spring 2018.

Political Participation and Voting Behavior, Spring 2020, Spring 2021.

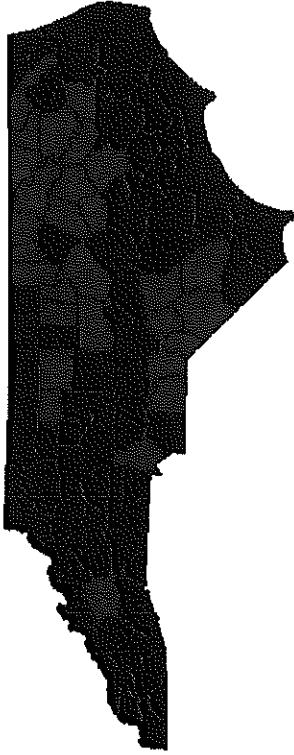
## **REAL CLEAR POLITICS COLUMNS**

Full archives available at [http://www.realclearpolitics.com/authors/sean\\_trende/](http://www.realclearpolitics.com/authors/sean_trende/)

# **Exhibit 2**

## Exhibit 2-A

Republican Wins and Losses, County-Level Two-Party Presidential Vote in NC, 2012



Republican Wins and Losses, County-Level Two-Party Presidential Vote in NC, 2016

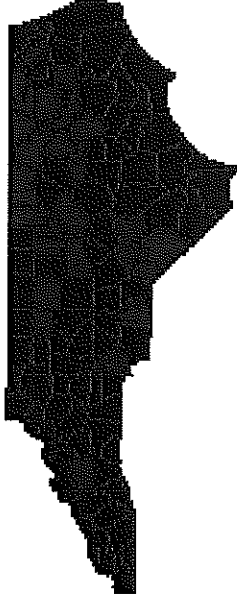


Republican Wins and Losses, County-Level Two-Party Presidential Vote in NC, 2020

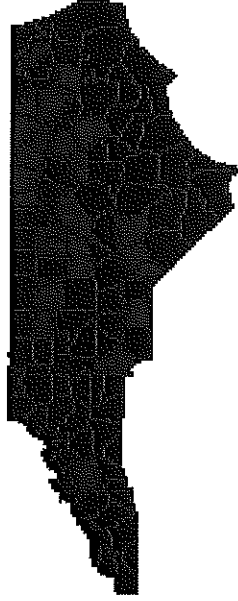


## Exhibit 2-B

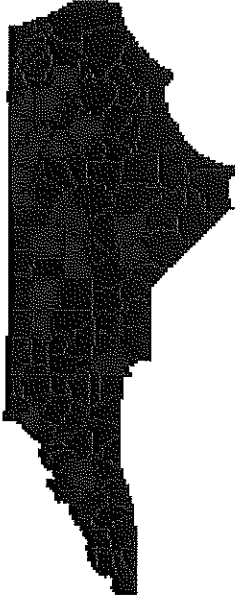
Republican Share of the Centered County-Level  
Two-Party Presidential Vote in NC, 2012



Republican Share of the Centered County-Level  
Two-Party Presidential Vote in NC, 2016



Republican Share of the Centered County-Level  
Two-Party Presidential Vote in NC, 2020





STATE OF NORTH CAROLINA  
COUNTY OF WAKE

IN THE GENERAL COURT OF JUSTICE  
SUPERIOR COURT DIVISION  
21 CVS 15426

NORTH CAROLINA LEAGUE OF  
CONSERVATION VOTERS, INC. et al.,

Plaintiffs,

v.

REPRESENTATIVE DESTIN HALL, in his  
official capacity as Chair of the House Standing  
Committee on Redistricting, et al.

Defendants.

**STATE BOARD DEFENDANTS'  
RESPONSE TO PLAINTIFFS' MOTION  
FOR PRELIMINARY INJUNCTION**

**NOW COME** Defendants the North Carolina State Board of Elections and its members (collectively, the “State Board” or “State Board Defendants”), by and through the undersigned counsel, to hereby submit this response to Plaintiffs’ motion for preliminary injunction.

**INTRODUCTION**

State Board Defendants take no position on the merits of Plaintiffs’ claims.

Rather, this response is provided to inform the Court and the parties of the State Board’s administrative considerations and concerns. Should the Court reach consideration of granting the requested relief, the State Board Defendants note that while such relief would impose a significant burden on the State Board’s and county boards’ administration of the upcoming elections, moving the election schedule as requested to allow time for redistricting issues to be decided would not be insurmountable or impossible if the considerations outlined below by the State Board regarding relevant limitations and deadlines are taken into account.

## FACTUAL BACKGROUND

### A. Current Election Schedule

On March 8, 2022, North Carolina is scheduled to hold its 2022 statewide primary election. *See* Affidavit of Karen Brinson Bell, ¶ 3. Contests on the ballot include the U.S. Senate and House of Representatives, the N.C. General Assembly, state judicial contests at all levels, district attorneys, county offices, and some municipal offices. *Id.* For the non-municipal contests, if no candidate reaches the vote share necessary to become the party nominee after the first primary (at least 30% of the vote plus one), a second primary may be held on April 26, or May 17 if a federal office is involved. *See* N.C.G.S. § 163-111. For some municipal contests, a second election will occur on the date of the second primary. Bell Aff., ¶3.

### B. State Board Implementation Considerations

In our state, the county boards of elections administer elections in each county, including, among other things, providing for the distribution of voting systems, ballots, and pollbooks, training elections officials, conducting absentee and in-person voting, and tabulation and canvassing of results. *Id.*, ¶4. The State Board is responsible for development and enhancement of our Statewide Elections Information Management System (“SEIMS”), which includes managing functions that assign voters to their relevant voting districts, a process known as “geocoding.” *Id.*

The geocoding process starts as soon as the State Board receives legislative district shapefiles, which include geographic data setting the boundaries for legislative districts. *Id.*, ¶ 5. The State Board’s staff then works with county board staff to use the shapefiles to update the voting jurisdictions that are assigned to particular addresses in SEIMS. *Id.* The State Board estimates that geocoding would likely take at least 21 days (including holidays and weekends)

for the districts at issue in the 2022 primary. *Id.*, ¶ 6.

Ballot preparation and proofing can begin only after geocoding is complete and candidate filing closes. *Id.*, ¶ 7. For the 2022 primary elections, candidate filing occurs between noon on December 6, 2021, and noon on December 17, 2021. *See* N.C.G.S. § 163-106.2(a). Generating and proofing ballots is complex and involves multiple technical systems and quality-control checkpoints that precede ballot printing and the coding of voting machines. *Id.* This includes proofing each ballot style for content and accuracy, ballot printing, and delivery of all ballot materials to county boards. *Id.* Based on prior experience, the State Board estimates that ballot preparation and proofing would likely take between 17 and 21 days (including holidays and weekends) for the 2022 primary, depending on the number of ballot styles to prepare, which largely depends on the degree of change to intra-county district lines, and the number of contested nominations. *Id.*

While not ideal, geocoding and candidate filing may occur concurrently. *Id.*, ¶ 8. However, geocoding and ballot preparation must occur consecutively. *Id.*, ¶ 9. Ballots cannot be prepared until the proper geographical boundaries for voting districts are set in SEIMS and the candidates are known after the candidate-filing period closes. *Id.* Therefore, the total time required for geocoding and ballot preparation is likely between 38 and 42 days (including holidays and weekends). *Id.* This work must be completed before the beginning of the absentee by mail voting period.

The State Board is required by statute to begin mailing absentee ballots 50 days prior to the primary election day or 45 days under limited exceptions pursuant to N.C.G.S. § 163-227.10(a). *Id.*, ¶ 10. The federal Uniformed and Overseas Citizens Absentee Voting Act (UOCAVA) requires mailing 45 days before a primary election, *see* 52 U.S.C. § 20302(a)(8)(A),

unless Executive Director Bell requests a waiver of this requirement based on a legal contest delaying the preparation of ballots (or another enumerated hardship), and that waiver is granted by the federal official designated to administer UOCAVA, *see id.* § 20302(g). Bell Aff., ¶ 10. As a result, the current deadline by which county boards must be prepared to begin distributing absentee ballots is January 14, 2022, or January 21, 2022 if the period is shortened as provided above. *Id.* In order to maintain the current deadlines for the March 8, 2022 primary, the State Board's assessment is that it must receive map shapefiles for geocoding and ballot preparation no later than December 3–7, 2021, or December 10–14, 2021, if the absentee mailing period is shortened. *Id.*, ¶ 11.

If the absentee mailing period were shortened, the State Board would then need to take into account the impact on preparations for in-person voting. Currently, in-person early voting is set to begin on February 17, 2022 for the 2022 primary. *Id.*, ¶ 12. Before in-person voting occurs, the State Board must work with county boards to prepare voting tabulation machines, and the county boards must conduct logic and accuracy testing of the equipment. *Id.*, ¶ 13. The State Board estimates that this would likely take the counties 14 days. *Id.* Then the State Board and county boards conduct a mock election day followed by two weeks to remedy any technical problems identified during the mock election. *Id.* Accordingly, regardless of when the absentee ballot distribution deadline falls, the State Board estimates it would require 29 days after ballots have been prepared in order for staff to prepare for in-person election voting. *Id.*, ¶ 14.

Finally, for reasons more thoroughly explained in the Affidavit of Executive Director Bell, the delay of any contest currently scheduled for the March 8, 2022 primary, would, as a practical matter, necessitate the delay of all contests scheduled for that date. *Id.*, ¶ 15-21. For instance, if only the contests subject to legislative redistricting were delayed, this would create a

different set of administrative requirements caused by blackout periods in which the geocoding process must be halted for 30 days while in-person voting is occurring and county boards canvass results in the other contests that do not involve redistricting. *Id.*, ¶¶ 16-17. In order to accommodate the second primary for the other contests allowed to proceed on March 8, 2022 (including certain municipal contests that are certain to occur), this would create a second blackout period further disrupting preparation for the delayed races. *Id.*, ¶ 17. This represents an interruption in geocoding of another 30 days, resulting in the work of geocoding and ballot preparation not being completed until approximately May 26-30, 2022, at the earliest. *Id.*

When the blackout periods are combined with the need to have absentee ballots prepared for distribution 50 days (or 45 if shortened) before the election date pursuant to N.C.G.S. § 163-227.10(a), the earliest that a separate primary could occur is 45 days later, which would result in a primary election day of Tuesday, July 12, 2022. *Id.*, ¶¶ 17-18.

The absentee distribution deadline is not the only consideration. One-stop early voting is required to begin 20 days before the primary election day under N.C.G.S. § 163-227.2(b). Accordingly, all of the administrative processes that must occur before in-person voting begins (geocoding, ballot preparation, burning media, preparing touch-screen ballots, logic and accuracy testing, mock election, and technical fix period, among other things), which are estimated by State Board staff to take between 67 and 71 days total, would need to occur between March 19, 2022, and 20 days before the date of the separate primary. Bell Aff., ¶19. A second primary in the unchallenged contests will cause this period to be extended by an additional 30 day delay caused by the second blackout period as described above. *Id.*, ¶¶ 16-17. Therefore, even putting aside absentee ballot distribution deadlines, and only accounting for the in-person voting timelines, the earliest that separate first primary for the challenged contests could occur is, again,

Tuesday, July 12, 2022. *Id.*, ¶ 19.

Such a late date for a first primary would make any second primary infeasible if triggered and requested under N.C.G.S. § 163-111. *Id.*, ¶ 20. If that occurs, a second primary under this scenario would occur on either August 30, 2022 or September 20, 2022 (*i.e.*, 7 or 10 weeks after the initial primary, depending on whether there was a federal contest involved) pursuant to N.C.G.S. § 163-111(e). *Id.* This would interfere with the August 19 to August 23 deadline to begin preparing ballots for the general election because absentee ballots must be mailed out for the general election on September 9, 2022 pursuant to N.C.G.S. § 163-227.10(a), and staff require 17-21 days to prepare those ballots. *Id.*

Separate primaries also incur more practical administrative challenges for counties, including added difficulty recruiting poll workers, securing voting locations, and associated costs. *Id.*, ¶ 21.

Thus, enjoining and delaying only the challenged primary contests would result in significantly greater administrative burden on the boards of election, could result in significant voter confusion, and could potentially lead to an administratively infeasible timeline in late summer. *Id.*, ¶ 22. In contrast, if all currently scheduled contests set for March 8, 2022 were moved to a later date, this would still raise significant administrative burdens, but it would be more feasible to implement. This is because geocoding of any new shapefiles can begin immediately upon receipt by the State Board, without blackout interruptions, and voters would not need to keep track of multiple primary dates for the 2022 elections. *Id.*

Under those circumstances, keeping in mind all of the estimates of time needed to prepare for the elections outlined above, and backtracking from the earliest relevant deadline for the general election—the ballot preparation deadline of August 19 to August 23—the State

Board staff's assessment is that the second primary would need to occur no later than Tuesday, July 26, 2022, and the first primary by no later than Tuesday, May 17, 2022. That, in turn, would require that the State Board be provided with any new shapefiles no later than February 14 to 18, 2022. *Id.*, ¶ 23, and Fn 3-6.

## LEGAL ARGUMENT

### Legal Standard

In considering a motion for preliminary injunction, the Court must “engage in a balancing process, weighing potential harm to the plaintiff if the injunction is not issued against the potential harm to the defendant[s] if injunctive relief is granted.” *Williams v. Greene*, 36 N.C. App. 80, 86, 243 S.E.2d 156, 160 (1978). “A preliminary injunction should not be granted if a serious question exists in respect of the defendant’s right to do what the plaintiffs seek to restrain and the granting thereof would work greater injury to the defendant than is reasonably necessary for the protection *Pendente lite* of the plaintiffs’ rights.” *Setzer v. Annas*, 286 N.C. 534, 540, 212 S.E.2d 154, 157–58 (1975).

### **I. Administrative Burdens, Considerations, and Important Deadlines.**

Should this Court choose to grant the relief requested by Plaintiffs, and delay the March 8, 2022 to a date in May of 2022, it would impose significant burdens on the State Board, but it would be administratively feasible so long as certain considerations and deadlines are set.

The affidavit of State Board Executive Director Karen Brinson Bell, which has been filed contemporaneously with the service of this brief, provides a detailed discussion of the relevant administrative processes that the State Board and county boards carry out in preparation for an election. It identifies the amount of time required to accomplish each process that occurs after the State Board receives map shapefiles, and before absentee ballots are distributed and in-person

voting can begin. *See* Bell Aff. ¶¶ 4-14. Certain time estimates are provided as ranges due to certain contingencies, as explained in the affidavit. *Id.* The affidavit further explains the administrative difficulties that would be triggered if a separate primary were ordered for only the races challenged in this action and why that is likely not administratively feasible. *Id.*, ¶¶ 15-21.

Rather than restate the contents of Ms. Bell's affidavit, which appear above in detail in the facts section of this response, State Defendants highlight the two primary issues most relevant to the Court's consideration of Plaintiffs' requested relief.

First, if the Court decides that any contests scheduled for the March 8, 2022 primary should be delayed, then all contests scheduled for that date should be delayed. Delaying a portion of the contests would result in significantly greater administrative burdens for the State Board, could create significant voter confusion, and could impact the deadlines required to carry out the general election in the fall of 2022. *Id.*, ¶ 22.

Second, if all races are delayed from the March 8, 2022 to latest date deemed practicable by the State Board, May 17, 2022, and new maps are ordered by this Court, then the new shapefiles must be received by the State Board no later than February 14-18, 2022 in order for them to be implemented ahead of that delayed primary. *Id.*, ¶ 23. It should be noted that the State Board's assessment is that these are dates of last resort that provide the maximum amount of time to resolve any redistricting issues the Court determines to address, before the burden would likely become administratively infeasible for the State Board to conduct orderly elections in 2022.

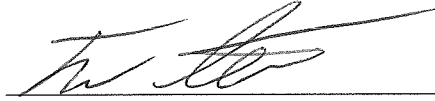


**CONCLUSION**

State Board Defendants ask that the Court consider the administrative issues above. State Board staff are available to answer any further questions from the Court regarding administrative considerations relevant to the Court's determination of the motion.

Respectfully submitted this 2<sup>nd</sup> day of December, 2021.

N.C. DEPARTMENT OF JUSTICE



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**CERTIFICATE OF SERVICE**

This is to certify that the undersigned has this day served the foregoing document in the above titled action upon all parties to this cause by via email and addressed as follows:

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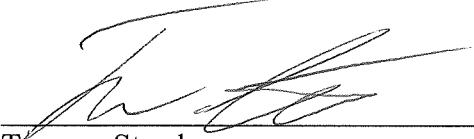
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*Counsel for Defendants Philip E. Berger,  
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Daniel, Paul Newton, and Destin Hall*

This the 2<sup>nd</sup> day of December, 2021.



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Terence Steed  
Special Deputy Attorney General

STATE OF NORTH CAROLINA

COUNTY OF WAKE

FILED

IN THE GENERAL COURT OF JUSTICE  
SUPERIOR COURT DIVISION  
21 CVS 15426

NORTH CAROLINA LEAGUE OF  
CONSERVATION VOTERS, INC. et al.,

Plaintiffs,

v.

REPRESENTATIVE DESTIN HALL, in his  
official capacity as Chair of the House Standing  
Committee on Redistricting, et al.

Defendants.

2021 DEC -2 P 1:03

WAKE CO. S.C.

BY 

**NOTICE OF FILING:**

**AFFIDAVIT OF  
KAREN BRINSON BELL**

**NOW COME** Defendants the North Carolina State Board of Elections and its members (collectively, the "State Board Defendants"), by and through the undersigned counsel, to hereby submit the attached Affidavit of Karen Brinson Bell, previously filed in the matter of *North Carolina State Conference of the NAACP, et al. v. Berger, et al.*, 21 CVS 14476, and filed here in support of State Board Defendants' Response to Plaintiffs' Motion for Preliminary Injunction. A copy of that Memorandum is being delivered to the Court via email.

Respectfully submitted this 2<sup>nd</sup> day of December, 2021.

N.C. DEPARTMENT OF JUSTICE



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**CERTIFICATE OF SERVICE**

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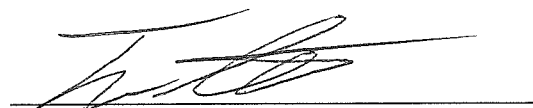
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Daniel, Paul Newton, and Destin Hall*

This the 2<sup>nd</sup> day of December, 2021.



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Terence Steed  
Special Deputy Attorney General

STATE OF NORTH CAROLINA  
WAKE COUNTY

IN THE GENERAL COURT OF JUSTICE  
SUPERIOR COURT DIVISION  
21 CVS 14476

NORTH CAROLINA STATE  
CONFERENCE OF NAACP, et al.,

Plaintiffs,

v.

PHILLIP E. BERGER, et al.,

Defendants.

**AFFIDAVIT OF  
KAREN BRINSON BELL**

I, Karen Brinson Bell, swear under penalty of perjury, that the following information is true to the best of my knowledge and state as follows:

1. I am over 18 years old, I am competent to give this affidavit, and have personal knowledge of the facts set forth in this affidavit. I have consulted with senior staff at the State Board in the preparation of this affidavit.

2. I currently serve as the Executive Director of the North Carolina State Board of Elections (the "State Board"). I became Executive Director of the State Board effective June 1, 2019. My statutory duties as Executive Director include staffing, administration, and execution of the State Board's decisions and orders. I am also the Chief State Elections Official for the State of North Carolina under the National Voter Registration Act of 1993 and N.C.G.S. § 163-27. As Executive Director, I am responsible for the administration of elections in the State of North Carolina. The State Board has supervisory responsibilities for the 100 county boards of elections, and as Executive Director, I provide guidance to the directors of the county boards.

3. On March 8, 2022, North Carolina is scheduled to hold its 2022 statewide primary election. Contests on the ballot include the U.S. Senate and House of Representatives, the N.C.



General Assembly, state judicial contests at all levels, district attorneys, and county offices. Additionally, voters in roughly a third of North Carolina's counties will have municipal contests on their ballot, due to special legislation delaying certain municipal contests due to delays in receiving U.S. Census data. *See* N.C. Sess. Law 2021-56. For the non-municipal contests, if no candidate reaches the vote share necessary to become the party nominee after the first primary (at least 30% of the vote plus one), a second primary may be held on April 26, or May 17 if a federal office is involved. *See* N.C.G.S. § 163-111. For municipal contests that use the primary-and-election or election-and-runoff methods of voting, the second municipal election will be held on April 26, unless a second primary is being held in a federal contest, in which case the municipal second election will also be held on May 17.<sup>1</sup>

4. In our state, the county boards of elections administer elections in each county, including, among other things, providing for the distribution of voting systems, ballots, and pollbooks, training elections officials, conducting absentee and in-person voting, and tabulation and canvassing of results. The State Board is responsible for development and enhancement of our Statewide Elections Information Management System ("SEIMS"), which includes managing functions that assign voters to their relevant voting districts, a process known as "geocoding." The State Board also supports the county boards and their vendors in the preparation and proofing of ballots.

5. For North Carolina electoral districts, the geocoding process starts when the State Board receives district shapefiles from the legislature, which include geographic data setting the boundaries for legislative districts. The State Board's staff then works with county board staff to

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<sup>1</sup> North Carolina municipalities conduct elections using one of four election methods: nonpartisan plurality, nonpartisan election and runoff, nonpartisan primary and election, and partisan primary and election. *See* N.C.G.S. §§ 163-291, -292, -293, -294.

use the shapefiles to update the voting jurisdictions that are assigned to particular addresses in SEIMS. This process then allows the State Board to work with county board staff and ballot-preparation vendors to prepare ballots. The State Board must perform an audit of the geocoding to ensure its accuracy before ballot preparation.

6. The amount of time required for geocoding generally corresponds with the number of district boundaries that are redrawn within the counties. In this case, most counties will experience changes to their districts following decennial redistricting—including state legislative, congressional, and local jurisdiction districts—and a significant number of those counties are likely to have newly drawn district boundaries within the counties' borders. Staff estimates that, given what we currently know, geocoding would likely take at least 21 days (including holidays and weekends) for the 2022 primary.

7. Ballot preparation and proofing can begin after geocoding is complete and candidate filing closes. For the 2022 primary elections, candidate filing occurs between noon on December 6, 2021, and noon on December 17, 2021. *See* N.C.G.S. § 163-106.2(a). The process of generating and proofing ballots is complex and involves multiple technical systems and quality-control checkpoints that precede ballot printing and the coding of voting machines. This includes proofing each ballot style for content and accuracy, ballot printing, and delivery of all ballot materials to county boards. Staff estimates that, given what we currently know, ballot preparation and proofing would likely take between 17 and 21 days (including holidays and weekends) for the 2022 primary, depending on the number of ballot styles to prepare, which largely depends on the degree of change to intracounty district lines, and the number of contested nominations.

8. Geocoding and candidate filing may occur concurrently, although that is not ideal

because the completion of geocoding permits candidates and county boards to verify if a candidate desiring to file for election lives in a particular district. It is possible, however, to check candidate eligibility while geocoding is still taking place.

9. In contrast, geocoding and ballot preparation must occur consecutively. Ballots cannot be prepared until the proper geographical boundaries for voting districts are set in SEIMS and the candidates are known after the candidate-filing period closes. Additionally, the end-of-year holidays could pose difficulties for available staff time for the State Board, county boards, and vendors. Therefore, the total time required for geocoding and ballot preparation is likely between 38 and 42 days (including holidays and weekends).

10. Under N.C.G.S. § 163-227.10(a), the State Board must begin mailing absentee ballots 50 days prior to the primary election day, unless the State Board authorizes a reduction to 45 days or there is “an appeal before the State Board or the courts not concluded, in which case the board shall provide the ballots as quickly as possible upon the conclusion of such an appeal.” The federal Uniformed and Overseas Citizens Absentee Voting Act (UOCAVA) requires that absentee ballots that include elections for federal office be made available by 45 days before a primary election, *see* 52 U.S.C. § 20302(a)(8)(A), unless I request a waiver of this requirement based on a legal contest delaying the preparation of ballots (or another enumerated hardship), and that waiver is granted by the federal official designated to administer UOCAVA, *see id.* § 20302(g). The state requesting a waiver must present a comprehensive plan that provides absentee UOCAVA voters sufficient time to receive and submit absentee ballots they have requested in time to be counted in the federal election.<sup>2</sup> Based on the current primary date of March 8, 2022, 50 days before the primary election falls on January 17, 2022; but because that

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<sup>2</sup> [https://www.fvap.gov/uploads/FVAP/EO/2012\\_waiver\\_guidance.pdf](https://www.fvap.gov/uploads/FVAP/EO/2012_waiver_guidance.pdf).

day is a holiday, the county boards must be prepared to begin distributing absentee ballots on the prior business day, which is January 14, 2022. The 45-day federal deadline falls on January 22, 2022 for the primary election; but because that day is a Saturday, in practice, the federal ballot distribution deadline is Friday, January 21, 2022.

11. In sum, the State Board would need to receive the shapefiles for geocoding and ballot preparation between now and 38 to 42 days before the deadline for distributing absentee ballots. Currently, that deadline is January 14, 2022, which means any new shapefiles must arrive between now and December 3–7, 2021. If that deadline were moved to January 21, 2022, new shapefiles would need to arrive between now and December 10–14, 2021.

12. If the deadlines for distributing absentee ballots were extended beyond what is required by UOCAVA, the State Board would also have to factor in additional administrative steps that must be prepared before in-person voting occurs. Currently, in-person early voting is set to begin on February 17, 2022 for the 2022 primary.

13. Before in-person voting occurs, the State Board must work with county boards to load data onto physical media cards that are placed in voting tabulation machines, a process called “burning media.” The media cards ensure that the tabulators anticipate the layout of ballots and properly attribute votes based on the ballot markings. The county boards must also conduct logic and accuracy testing to ensure that tabulation machines accurately read ballots and to correct any errors in coding. Staff estimates that burning media, preparing ballot marking devices and tabulators, and logic and accuracy testing would likely take the counties 14 days. After that process, the State Board works with the county boards to conduct a mock election, which takes one day, and generally affords two weeks thereafter to remedy any technical problems identified during the mock election. That two-week period could be reduced, but the

State Board generally believes that the two-week period fully insures against risks associated with technical problems that may be identified in the mock election.

14. Accordingly, regardless of when the absentee ballot distribution deadline falls, allowing 29 days after ballots have been prepared to prepare for in-person election voting is preferable. Under the current deadlines for distributing absentee ballots, which falls roughly a month before early voting begins, these processes can be accommodated. The time requirements for these processes would only become relevant if the absentee distribution deadline is shortened to less than what is currently required by statute.

15. If the Court were to order a separate primary for the challenged contests, a different set of administrative requirements would be triggered that could ultimately lead to disruption of the general election in the fall.

16. First, it is not technically possible to perform geocoding while in-person voting is occurring, and it is difficult to perform geocoding during the canvass period after the election. This is because making changes in SEIMS related to geocoding inhibits the actual voting process. County canvass takes place 10 days following an election. Generally, at that point, geocoding may begin, assuming no recount has been ordered. Accordingly, we recommend that geocoding for any delayed primary not begin any earlier than March 19, 2022. Relying on the aforementioned estimates, it would take between 38 and 42 days to geocode and prepare ballots for a separate primary. Candidate filing could occur before or simultaneous with geocoding.

17. However, if this Court chose to delay only the contests challenged by this action and allowed the other races to proceed on March 8, 2022 (judicial, prosecutorial, county, and municipal races), in order to accommodate a second primary or second municipal election for those races (see paragraph three above) on April 26 or May 17, the geocoding time period would

be interrupted as there will be a second blackout period for geocoding from April 7 to May 6 (if the election is April 26), or April 28 to May 27 (if the election is May 17). This represents an interruption in geocoding of 30 days, resulting in the work of geocoding and ballot preparation not being completed until approximately May 26-30, 2022, at the earliest. At that point, absentee ballots could be distributed pursuant to N.C.G.S. § 163-227.10(a).

18. Second, state law regarding the deadline for distributing absentee ballots would again require 50 days' time prior to the primary election day, unless the State Board reduced that time to 45 days or there is "an appeal before the State Board or the courts not concluded, in which case the board shall provide the ballots as quickly as possible upon the conclusion of such an appeal." N.C.G.S. § 163-227.10(a). The federal UOCAVA deadline would not apply if the primary did not involve federal offices. Therefore, accounting for absentee ballot distribution deadlines, the earliest that a separate primary could occur is 45 days later, which would result in a primary election day of Tuesday, July 12, 2022.

19. Third, one-stop early voting would have to begin 20 days before the primary election day under N.C.G.S. § 163-227.2(b). Accordingly, all of the administrative processes that must occur before in-person voting begins (geocoding, ballot preparation, burning media, preparing touch-screen ballots, logic and accuracy testing, mock election, and technical fix period, among other things), which are estimated to take between 67 and 71 days total, would need to occur between March 19, 2022, and 20 days before the date of the separate primary, with an additional 30 day delay caused by the blackout period around the second primary as described in paragraph 17 above. Therefore, even putting aside absentee ballot distribution deadlines and then accounting for in-person voting timelines, the earliest that separate primary could occur is, again, Tuesday, July 12, 2022.

20. Such a late date for a primary would make any second primary, if triggered and requested under N.C.G.S. § 163-111, infeasible. A second primary under this scenario would occur on either August 30, 2022 or September 20, 2022 (*i.e.*, 7 or 10 weeks after the initial primary, depending on whether there was a federal contest involved). This would interfere with the August 19 to August 23 deadline to begin preparing ballots for the general election. Absentee ballots must be mailed out for the general election on September 9, 2022 pursuant to N.C.G.S. § 163-227.10(a), and staff require 17-21 days to prepare those ballots ahead of that date as described in paragraph 7 above.

21. Fourth, there are additional administrative challenges that counties would face if a separate primary were held. Among these challenges would be recruiting poll workers and securing voting locations, along with the associated costs. Increasingly, county elections officials have found it necessary to spend more time recruiting early voting and election day poll workers, especially because of statutorily mandated early voting hours and technological advances in many counties that require elections workers to be familiar with computers. Additionally, a large portion of precinct voting locations in the state are housed in places of worship or in schools, with still others located in privately owned facilities. Identifying and securing appropriate precinct voting locations and one-stop early voting sites requires advance work by county board staff and coordination with the State Board.

22. In sum, enjoining and delaying only the challenged primary contests would result in significantly greater administrative burden on the boards of elections, could result in significant voter confusion, and could potentially lead to an administratively infeasible timeline in late summer. In contrast, if all currently scheduled contests set for March 8, 2022 were moved to a later date, this would still raise significant administrative burdens, but it would be possible to

implement as geocoding of any new shapefiles can begin immediately upon receipt by the State Board, without blackout interruptions, and voters would not need to keep track of multiple primary dates for the 2022 elections.

23. Under those circumstances, and backtracking from the earliest relevant deadline for the general election—the ballot preparation deadline of August 19 to August 23<sup>3</sup>—the second primary can occur no later than Tuesday, July 26, 2022,<sup>4</sup> and the first primary can occur no later than Tuesday, May 17, 2022,<sup>5</sup> which in turn requires that the State Board be provided with any new shapefiles no later than February 14 to 18, 2022.<sup>6</sup>

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<sup>3</sup> Absentee ballots must be mailed out for the general election on September 9, 2022 pursuant to N.C.G.S. § 163-227.10(a), and staff require 17-21 days to prepare those ballots ahead of that date as described in paragraph 7 above.

<sup>4</sup> 21 days are required by the State Board to complete statewide canvass and certify the election results, which must be completed prior to preparing ballots. This results in a date range of Friday, July 29 to Sunday, August 2, with Tuesday, July 26 being the nearest feasible day to hold the election.

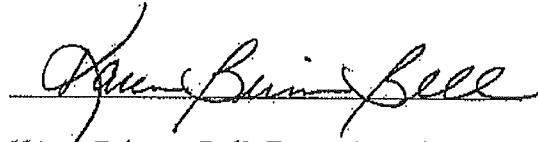
<sup>5</sup> The allowance of 10 weeks is required between the first and second primaries, pursuant to N.C.G.S. § 163-111(e).

<sup>6</sup> 38 to 42 days to geocode and prepare ballots plus the 50 days before the election when absentee ballots must be mailed.



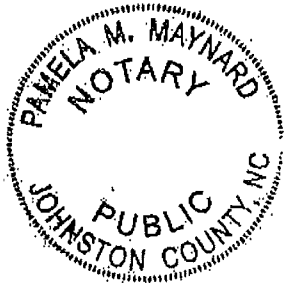
This concludes my affidavit.

This the 23<sup>rd</sup> day of November, 2021.



Karen Brinson Bell, Executive Director  
N.C. State Board of Elections

Sworn to and subscribed before me this 23<sup>rd</sup> day of November, 2021.



(Notary Public)

My commission expires: 11-2-23

No. \_\_\_\_\_

TENTH JUDICIAL DISTRICT

NORTH CAROLINA COURT OF APPEALS

\*\*\*\*\*

NORTH CAROLINA LEAGUE  
OF CONSERVATION VOTERS,  
INC.; HENRY M. MICHAUX, JR.,  
et al.,

Petitioners,

v.

REPRESENTATIVE DESTIN  
HALL, in his official capacity as  
Chair of the House Standing  
Committee on Redistricting, et  
al.,

Respondents.

From Wake County  
21 CVS 015426

\*\*\*\*\*

ADDENDUM TO PETITION FOR WRIT OF SUPERSEDEAS OR  
PROHIBITION AND MOTION FOR TEMPORARY STAY

\*\*\*\*\*

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2019 WL 4569584 (N.C.Super.) (Trial Order)  
Superior Court of North Carolina.  
Wake County

COMMON CAUSE, et al., Plaintiffs,

v.

Representative David R. LEWIS, in his official capacity as Senior Chairman  
of the House Select Committee on Redistricting, et al., Defendants.

No. 18 CVS 014001.

September 3, 2019.

**Judgment**

Paul C. Ridgeway, Judge.

Joseph N. Crosswhite, Judge.

Alma L. Hinton, Judge.

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\*1 The People of North Carolina have delegated, through the State's Constitution, the drawing of the State's legislative districts to the General Assembly. The delegation of this task, however, is not so unconstrained that legislative discretion is unfettered. Rather, the power entrusted by the People to the General Assembly to draw districts is constrained by other constitutional provisions that the People have also ordained. Some of these constitutional constraints are explicit—for example, the Whole County Provision of the Constitution limits a mapmaker's discretion to traverse county boundaries. But other constitutional constraints that limit the legislative process of map drawing are not explicit or limited in applicability only to map drawing—some constraints apply to all acts of the General Assembly, and indeed all acts of government. These principles include the obligation that our government provide all people with equal protection under law, that our government not restrict all peoples' rights of association and political expression, and that our government allow for free elections. Plaintiffs in this case challenge the legislative districts enacted by the General Assembly in 2017 and assert that the General Assembly has exceeded the map drawing discretion afforded to it by the People by creating maps that impermissibly infringe upon the equal protection, speech, association, and free election rights of citizens.

The People of North Carolina have also entrusted, through the State's Constitution, the task of reviewing acts of other branches of government to the judicial branch. While it is solely the province of the General Assembly to make law reflecting the policy choices of the People, it is the province—and indeed the duty—of the courts of our State through judicial review to ensure that enacted law comports with the State's Constitution. The Court cannot indiscriminately wield this power because the Court is also appropriately constrained by long-standing principles of law. Significantly, the Court must presume the constitutionality of acts of the General Assembly and must declare acts unconstitutional only when such a conclusion is so clear that no reasonable doubt can arise or the statute cannot be upheld on any ground.<sup>1</sup>

<sup>1</sup> “It is well settled in this State that the courts have the power, and it is their duty in proper cases, to declare an act of the General Assembly unconstitutional—but it must be plainly and clearly the case. If there is any reasonable doubt, it will be resolved in favor of the lawful exercise of their powers by the representatives of the people.” *City of Asheville v. State*, 369 N.C. 80, 87-88, 794 S.E.2d 759, 766 (2016) (quoting *Glenn v. Bd. of Educ.*, 210 N.C. 525, 529-30, 187 S.E. 781, 784 (1936)); *State ex rel. Martin v. Preston*, 325 N.C. 438, 449, 385 S.E.2d 473, 478 (1989).

The voters of this state, since 2011, have been subjected to a dizzying succession of litigation over North Carolina's legislative and Congressional districts in state and federal courts. Today marks the third time this trial court has entered judgment. Two times, the North Carolina Supreme Court has spoken. Eight times, the United States Supreme Court has ruled. Yet, as we near the end of the decade, and with another decennial census and round of redistricting legislation ahead, the litigation rages on with little clarity or consensus. The conclusions of this Court today reflect the unanimous and best efforts of the undersigned trial

judges—each hailing from different geographic regions and each with differing ideological and political outlooks—to apply core constitutional principles to this complex and divisive topic. We are aided by advances in data analytics that illuminate the evidence; we are aided by learned experts who inform our analysis; and, we are aided by skilled lawyers who have masterfully advanced the positions of their clients. But, at the end, we are guided, and must be guided, by what we conclude the North Carolina Constitution requires.

\*2 The issue before the Court is distilled to simply this: whether the constitutional rights of North Carolina citizens are infringed when the General Assembly, for the purpose of retaining power, draws district maps with a predominant intent to favor voters aligned with one political party at the expense of other voters, and in fact achieves results that manifest this intent and cannot be explained by other non-partisan considerations. In this case, as is set out in detail below, the Court finds as fact that Plaintiffs have met their burden of proof on several critical points. Plaintiffs have established that:

- the General Assembly, in enacting the 2017 legislative maps, had a partisan intent to create legislative districts that perpetuated a Republican-controlled General Assembly;
- the General Assembly deployed this intent with surgical precision to carefully craft maps that grouped many voters into districts predominantly based upon partisan criteria by packing and cracking Democratic voters to dilute their collective voting strength, thereby creating partisan gerrymandered legislative maps;
- the 2017 legislative maps throughout the state and on a district-by-district level, when compared on a district-by-district level to virtually all other possible maps that could be drawn with neutral, non-partisan criteria, are, in many instances, “extreme outliers” on a partisan scale to the advantage of the Republican party;
- partisan intent predominated over all other redistricting criteria resulting in extreme partisan gerrymandered legislative maps; and,
- the effect of these carefully crafted partisan maps is that, in all but the most unusual election scenarios, the Republican party will control a majority of both chambers of the General Assembly.

In other words, the Court finds that in many election environments, it is the carefully crafted maps, and not the will of the voters, that dictate the election outcomes in a significant number of legislative districts and, ultimately, the majority control of the General Assembly. Faced with these facts, as proven by the evidence, the Court must now say whether this conduct violates the constitutional guarantees afforded to all citizens—Democrats, Republicans, and others—of equal protection, the right to associate, to speak freely through voting, and to participate in free elections.

Recently, the United States Supreme Court, in *Rucho v. Common Cause*, 139 S. Ct. 2484 (2019), held that even where enacted maps – *i.e.*, North Carolina's 2016 Congressional Map – were “blatant examples of partisanship driving districting decisions,” challenges of partisan gerrymandering were “beyond the reach of the federal courts” because the federal Constitution provides no “constitutional directive or legal standard” to guide the courts. *Id.* at 2507-08. However, the Supreme Court added that “our conclusion does not condone excessive partisan gerrymandering” and does not “condemn complaints about redistricting to echo into a void.” *Id.* at 2507. Rather, the Supreme Court observed that provisions of “state constitutions can provide standards and guidance for state courts to apply.” *Id.* The case before this Court asserts only North Carolina constitutional challenges to the enacted legislative maps. Hence, this Court considers whether the North Carolina Constitution provides the “standards and guidance” necessary to address extreme partisan gerrymandering.

Of particular significance to this Court is Article I, § 10 of the North Carolina Constitution. This provision, originally enacted in 1776 and contained in the “Declaration of Rights” of our Constitution, simply states that “[a]ll elections shall be free.” The North Carolina Supreme Court has long and consistently held that “our government is founded on the will of the people,” that “their will is expressed by the ballot,” *People ex rel. Van Bokkelen v. Canady*, 73 N.C. 198, 220 (1875), and “the object of all elections is to ascertain, fairly and truthfully the will of the people,” *Hill v. Skinner*, 169 N.C. 405, 415, 86 S.E. 351, 356 (1915)

(quotation omitted). The Court has also held that it is a “compelling interest” of the state “in having fair, honest elections.” *State v. Petersilie*, 334 N.C. 169, 184, 432 S.E.2d 832, 840 (1993). This Court concludes, for these and other reasons more fully set out below, that the Free Elections Clause of the North Carolina Constitution guarantees that all elections must be conducted freely and honestly to ascertain, fairly and truthfully, the will of the People and that this is a fundamental right of North Carolina citizens, a compelling governmental interest, and a cornerstone of our democratic form of government.

\*3 Our understanding of the Free Elections Clause shapes the application of the Equal Protection Clause, N.C. Const. art. I, § 19, the Freedom of Speech Clause, *id.* at art. I, § 12, and the Freedom of Assembly Clause, *id.* at art. I, § 14, to instances of extreme partisan gerrymandering. In the context of the constitutional guarantee that elections must be conducted freely and honestly to ascertain, fairly and truthfully, the will of the People, these clauses provide significant constraints against governmental conduct that disfavors certain groups of voters or creates barriers to the free ascertainment and expression of the will of the People.

Six years ago, this three-judge panel observed, perhaps presciently, the competing principles that are at the heart of the case before it today: “Political losses and partisan disadvantage are not the proper subject for judicial review, and those whose power or influence is stripped away by shifting political winds cannot seek a remedy from courts of law, but they must find relief from courts of public opinion in future elections.” *Dickson v. Rucho*, No. 11 CVS 16896 (N.C. Super Ct. July 8, 2013). This, the Court believes, is as true today as it was then. It is not the province of the Court to pick political winners or losers. It is, however, most certainly the province of the Court to ensure that “future elections” in the “courts of public opinion” are ones that freely and truthfully express the will of the People. All elections shall be free—without that guarantee, there is no remedy or relief at all.

This Court is acutely aware that the process employed by the General Assembly in crafting the 2017 Enacted House and Senate maps is a process that has been used for decades—albeit in less precise and granular detail—by Democrats and Republicans alike. However, long standing, and even widespread, historical practices do not immunize governmental action from constitutional scrutiny. *See, e.g., Citizens United v. FEC*, 558 U.S. 310, 365, 130 S. Ct. 876, 913 (2010); *Reynolds v. Sims*, 377 U.S. 533, 582, 84 S. Ct. 1362, 1392 (1964) (holding that malapportionment of state legislative districts violates the Equal Protection Clause, notwithstanding that malapportionment was widespread in the Nineteenth and early Twentieth Centuries).

With this as our guide, this Court, in exercising its duty of reviewing acts of other branches of government to ensure that those governmental acts comport with the rights of North Carolina citizens guaranteed by the North Carolina Constitution, concludes that the 2017 Enacted House and Senate Maps are significantly tainted in that they unconstitutionally deprive every citizen of the right to elections for members of the General Assembly conducted freely and honestly to ascertain, fairly and truthfully, the will of the People. The Court bases this on the inescapable conclusion that the 2017 Enacted Maps, as drawn, do not permit voters to freely choose their representative, but rather representatives are choosing voters based upon sophisticated partisan sorting. It is not the free will of the People that is fairly ascertained through extreme partisan gerrymandering. Rather, it is the carefully crafted will of the map drawer that predominates. This Court further concludes that the 2017 Enacted Maps are tainted by an unconstitutional deprivation of all citizens’ rights to equal protection of law, freedom of speech, and freedom of assembly. These conclusions are more fully set out in the following Findings of Fact and Conclusions of Law.

## FINDINGS OF FACT

### A. Republicans Drew the 2017 Plans to Maximize Their Political Power

#### 1. Republican Mapmakers Drew the 2011 Plans

\*4 1. In the 2010 elections, as part of a national Republican effort to flip state legislative chambers in order to gain control of redistricting after the 2010 Census, Republicans won majorities in the North Carolina House of Representatives and the North Carolina Senate for the first time since 1870. PX587 ¶ 5; Tr. 867.

2. With their newfound control of both chambers of the General Assembly, Republican legislative leaders set out to redraw the boundaries of the State's legislative districts. In North Carolina, legislative redistricting is performed exclusively by the General Assembly. The Governor cannot veto redistricting bills. N.C. Const. art. II, § 22(5)(b),(c).

3. Legislative Defendant Representative David Lewis and Senator Robert Rucho oversaw the drawing of the 2011 state House and state Senate plans (the “2011 Plans”). PX587 ¶ 8 (Leg. Defs.’ Responses to Requests for Admission); Tr. 95:17-21 (Sen. Blue). They hired Dr. Thomas Hofeller to draw the plans. *Id.* ¶ 7; Tr. 95:8-9. Dr. Hofeller and his team drew the plans at the North Carolina Republican Party's headquarters in Raleigh using mapmaking software licensed by the North Carolina Republican Party. PX587 ¶¶ 10-11.

4. Legislative Defendants did not make Dr. Hofeller available to Democratic members of the General Assembly during the 2011 redistricting process, nor did Dr. Hofeller communicate with any Democratic members in developing the 2011 Plans. PX587 ¶¶ 12-13. No Democratic member of the General Assembly saw any part of any draft of the 2011 Plans before they were publicly released. *Id.* ¶ 14.

5. Legislative Defendants have stated in court filings that the 2011 Plans were “designed to ensure Republican majorities in the House and Senate.” PX575 at 55 (Defs.-Appellees’ Br. on Remand, *Dickson v. Rucho*, No. 201PA12-3, 2015 WL 4456364 (N.C. July 13, 2015)); *see id.* at 16 (“Political considerations played a significant role in the enacted [2011] plans.”). Legislative Defendants asserted that they were “perfectly free” to engage in constitutional partisan gerrymandering, and that they did so in constructing the 2011 Plans. PX574 at 60 (Defs.-Appellees’ Br., *Dickson v. Rucho*, No. 201PA12-2, 2013 WL 6710857 (N.C. Dec. 9, 2013)).

6. To “ensure Republican majorities in the House and Senate,” PX575 at 55, Legislative Defendants and Dr. Hofeller used prior election results to construct the district boundaries to advantage Republicans. PX587 ¶¶ 6, 17. “[T]he recommendation of Tom Hofeller” was to “create a master database that would contain all [statewide] NC elections from the past decade ... , each processed into a form that matches up with the 2010 VTD geography.” PX769 at 3 (Jan. 14, 2011 memorandum to Senator Rucho). Legislative Defendants obtained Census block-level election results from “all statewide election contests for each general election [from] 2004-2010.” PX760.

7. When reviewing the draft plans, all members of the General Assembly had access to a “Stat Pack” containing data on how the districts would perform using the results of prior statewide elections. Tr. 98:4-99:9 (Sen. Blue). Specifically, the Stat Pack showed the partisan vote share for each drafted district for each specific prior election. *Id.* Members of the General Assembly viewed the Stat Pack as containing “pretty reliable predictors of how [draft] districts would perform in the future based on how they performed in the past.” Tr. 99:6-9 (Sen. Blue).

\*5 8. In July 2011, the General Assembly enacted the 2011 Plans. N.C. Sess. Laws 2011-404 (House), 2011-402 (Senate). No Democrat voted for either plan, and only one Republican voted against them. PX587 ¶¶ 23-24.

9. In the 2012 elections, the parties’ vote shares for the House were nearly evenly split across the state, with Democrats receiving 48.4% of the two-party statewide vote. Joint Stipulation of Facts (“JSF”) ¶ 41. But Democrats won only 43 of 120 seats (36%). *Id.* ¶ 42. Republicans thus won a veto-proof majority in the state House—64% of the seats (77 of 120)—despite winning just a bare majority of the statewide vote. In the Senate, Democrats won nearly half of the statewide vote (48.8%) but won only 17 of 50 seats (34%). *Id.* ¶¶ 44-45.

10. In 2014, Republican candidates for the House won 54.4% of the statewide vote, and again won a super-majority of seats (74 of 120, or 61.6%). JSF ¶ 66. In the 2014 Senate elections, Republicans won 54.3% of statewide vote and 68% of the seats (34 of 50). *Id.* ¶ 66.



11. In 2016, Republicans again won 74 of 120 House seats, or 61.6%, this time with 52.6% of the statewide vote. *Id.* ¶ 66. In the 2016 Senate elections, Republicans won 55.9% of the statewide vote and 70% of the seats (35 of 50). *Id.* ¶ 66.

## 2. The *Covington* Court Struck Down Certain 2011 Districts as Unconstitutional Racial Gerrymanders

12. On May 19, 2015, a group of individual plaintiffs initiated a lawsuit—*Covington v. North Carolina*, No. 1:15-CV-00399 (M.D.N.C.)—against the State Board of Elections, Speaker Timothy Moore, President Pro Tempore Philip Berger, Chair of the Senate Redistricting Committee, Robert Rucho, and Chair of the House Redistricting Committee, David Lewis challenging 28 total House and Senate districts under the 2011 Plans as unconstitutional racial gerrymanders. This case was referenced at trial, the related briefs, and in these findings as the “*Covington* case” or “*Covington* litigation.”

13. On August 11, 2016, the federal district court ruled for the plaintiffs as to all of the challenged districts. *Covington v. North Carolina*, 316 F.R.D. 117 (M.D.N.C. 2016). The *Covington* court found that racial considerations rather than political considerations “played a primary role” with respect to the specific 28 “challenged districts” in *Covington*. 316 F.R.D. at 139. The *Covington* litigation did not involve any of the districts drawn in 2011 that are at issue in the present case.

14. Following appeal, on June 5, 2017, the U.S. Supreme Court summarily affirmed the district court's decision invalidating the 28 challenged districts as racial gerrymanders. 137 S. Ct. 2211 (mem.).

15. The district court subsequently ordered briefing on whether to order enactment of remedial maps under a timeline that would enable special elections in 2017. Ultimately, the court declined to order special elections in 2017 and instead allowed a longer timeline for the General Assembly to enact remedial plans. *Covington v. North Carolina*, 267 F. Supp. 3d 664 (M.D.N.C. 2017).

## 3. The General Assembly Enacted the 2017 Plans

16. On June 30, 2017, Senator Berger appointed 15 senators—10 Republicans and 5 Democrats—to the Senate Committee on Redistricting. PX587 ¶ 44. Senator Hise was appointed Chair. *Id.* Also on June 30, 2017, Representative Moore appointed 41 House members—28 Republicans and 13 Democrats—to the House Select Committee on Redistricting. PX629 at 4-5. Representative Lewis was appointed Senior Chair. PX587 ¶ 45.

\*6 17. On July 26, 2017, the Senate Redistricting Committee and the House Select Committee on Redistricting met jointly (“Redistricting Committee”) for organizational and informational purposes. *Covington v. North Carolina*, 1:15-cv-00399, ECF No. 184-7 at 3-4. At the meeting, Representative Lewis and Senator Hise stated that Republican leadership would again employ Dr. Hofeller to draw the new plans. PX601 at 23:3-6; see PX587 ¶¶ 46-47. When Democratic Senator Van Duyn asked whether Dr. Hofeller would “be available to Democrats and maybe even the Black Caucus to consult,” Representative Lewis answered “no.” PX601 at 22:24-23:6. Representative Lewis explained that, “with the approval of the Speaker and the President Pro Tem of the Senate,” “Dr. Hofeller is working as a consultant to the Chairs,” *i.e.*, as a consultant only to Legislative Defendants. *Id.* at 23:3-6; Tr. 101:6-18 (Sen. Blue).

18. In explaining the choice of Dr. Hofeller to draw the 2017 Plans, Representative Lewis stated that Dr. Hofeller was “very fluent in being able to help legislators translate their desires” into the district lines using “the [M]aptitude program.” PX590 at 36:17-19.

19. On August 4, 2017, at another joint meeting of the Redistricting Committees, Representative Lewis and Senator Hise advised Committee members that the *Covington* decision invalidating 28 districts on federal constitutional grounds had rendered a large number of additional districts invalid under the Whole County Provision of the North Carolina Constitution, and those districts would also have to be redrawn. PX602 at 2:14-11:23.

20. At the same August 4, 2017, meeting, the Redistricting Committees allowed 31 citizens to speak for two minutes each. PX602 at 28:3-68:23. All speakers urged the members to adopt fair maps free of partisan bias. *See id.*

21. At another joint meeting on August 10, 2017, the House and Senate Redistricting Committees voted on criteria to govern the creation of the new plans. PX603 at 4:23-5:5.

22. Representative Lewis proposed as one criterion, “election data[:] Political consideration[s] and election results data may be used in drawing up legislative districts in the 2017 House and Senate plans.” PX603 at 132:10-13. Representative Lewis provided no further explanation or justification for this proposed criterion, stating only: “I believe this is pretty self-explanatory, and I would urge members to adopt the criteria.” *Id.* at 132:13-15.

23. Democratic members pressed Representative Lewis for details on how Dr. Hofeller would use elections data and for what purpose. Democratic Senator Ben Clark asked: “You’re going to collect the political data. What specifically would the Committee do with it?” PX603 at 135:11-13. Representative Lewis answered that “the Committee could look at the political data as evidence to how, perhaps, votes have been cast in the past.” *Id.* at 135:15-17. When Senator Clark inquired why the Committees would consider election results if not to predict future election outcomes, Representative Lewis stated only that “the consideration of political data in terms of election results is an established districting criteria, and it’s one that I propose that this committee use in drawing the map.” *Id.* at 141:12-16.

24. Representative Lewis had also stated that Dr. Hofeller used ten specific prior statewide elections in drawing the 2017 Plans: the 2010 U.S. Senate election, the 2012 elections for President, Governor, and Lieutenant Governor, the 2014 U.S. Senate election, and the 2016 elections for President, U.S. Senate, Governor, Lieutenant Governor, and Attorney General. PX603 at 137:22-138:3.

25. The House and Senate Redistricting Committees adopted Representative Lewis’s “election data” criterion on a straight party-line vote. PX603 at 141-48.

26. Senator Clark proposed an amendment that would prohibit the General Assembly from seeking to maintain or establish a partisan advantage for any party in redrawing the plans. PX603 at 166:9-167:3. Representative Lewis opposed the amendment, stating he “would not advocate for [its] passage.” *Id.* at 167:10-11. The Redistricting Committees rejected Senator Clark’s proposal, again on a straight party-line vote. *Id.* at 168-74.

\*7 27. As explained in extensive detail below, Dr. Hofeller’s own files establish that he used prior elections results and partisanship formulas to draw district boundaries to maximize the number of seats that Republicans would win in the House and the Senate, and to ensure that Republicans would retain majorities in both chambers. PX123 at 48-76 (Chen Rebuttal Report); PX329 at 3-35 (Cooper Rebuttal Report); PX153, PX166; PX167; PX168; PX170; PX171; PX172; PX241; PX244; PX246; PX248; PX330; PX332; PX333; PX334; PX335; PX336; PX337; PX340; PX342; PX344; PX345; PX346; PX347; PX350; PX352; PX353; PX354; PX724; PX730; PX731; PX732; PX733; PX734; PX735; PX736; PX738; PX739; PX742; PX744; PX746; PX748; PX753; PX754; PX755; PX756.

28. As a further criterion, Representative Lewis proposed incumbency protection—namely that “reasonable efforts and political considerations may be used to avoid pairing incumbent members of the House or Senate with another incumbent in legislative districts drawn in 2017 House and Senate plans. The Committee may make reasonable efforts to ensure voters have a reasonable opportunity to elect non-paired incumbents of either party to a district in the 2017 House and Senate plans.” PX603 at 119:9-17. He clarified that the second sentence of this proposed criterion meant “simply” that “the map makers may take reasonable efforts not to pair incumbents unduly.” *Id.* at 122:16-18; *see* PX606 at 9:24-10:1 (Sen. Hise: “The Committee adopted criteria pledging to make reasonable efforts not to double-bunk incumbents.”).

29. The House and Senate Redistricting Committees adopted Representative Lewis's incumbency-protection criterion, once more on a straight-party line vote. PX603 at 125-32.

30. The Redistricting Committees also adopted as criteria, yet again on straight party-line votes, that they (1) would make “reasonable efforts” to “improve the compactness of the current districts,” PX603 at 24:24-25:2; (2) would make “reasonable efforts” to “split fewer precincts” than under the 2011 Plans, *id.* at 79:8-12; and (3) “may consider municipal boundaries” in drawing the new districts, *id.* at 66:15-16; *see id.* at 98-104, 112-19 (adopting criteria). Representative Lewis clarified that these criteria meant “trying to keep towns, cities and precincts whole where possible.” PX607 at 10:5-6; *see, e.g.*, PX603 at 66:22-23 (Rep. Lewis explaining that the Committees would “consider not dividing municipalities where possible”).

31. As a final criterion, Representative Lewis proposed prohibiting the consideration of racial data in drawing the new plans. PX603 at 148:11-15.

32. The full criteria adopted by the Committees for the 2017 Plans (the “Adopted Criteria”) read as follows:

*Equal Population.* The Committees shall use the 2010 federal decennial census data as the sole basis of population for drawing legislative districts in the 2017 House and Senate plans. The number of persons in each legislative district shall comply with the +/- 5 percent population deviation standard established by *Stephenson v. Bartlett*, 355 N.C. 354, 562 S.E. 2d 377 (2002).

*Contiguity.* Legislative districts shall be comprised of contiguous territory. Contiguity by water is sufficient.

*County Groupings and Traversals.* The Committees shall draw legislative districts within county groupings as required by *Stephenson v. Bartlett*, 355 N.C. 354, 562 S.E. 2d 377 (2002) (*Stephenson I*), *Stephenson v. Bartlett*, 357 N.C. 301, 582 S.E.2d 247 (2003) (*Stephenson II*), *Dickson v. Rucho*, 367 N.C. 542, 766 S.E.2d 238 (2014) (*Dickson I*) and *Dickson v. Rucho*, 368 N.C. 481, 781 S.E.2d 460 (2015) (*Dickson II*). Within county groupings, county lines shall not be traversed except as authorized by *Stephenson I*, *Stephenson II*, *Dickson I*, and *Dickson II*.

**\*8 Compactness.** The Committees shall make reasonable efforts to draw legislative districts in the 2017 House and Senate plans that improve the compactness of the current districts. In doing so, the Committees may use as a guide the minimum Reock (“dispersion”) and Polsby-Popper (“perimeter”) scores identified by Richard H. Pildes and Richard G. Neimi in *Expressive Harms*, “Bizarre Districts,” and *Voting Rights: Evaluating Election-District Appearances After Shaw v. Reno*, 92 Mich. L. Rev. 483 (1993).

*Fewer Split Precincts.* The Committees shall make reasonable efforts to draw legislative districts in the 2017 House and Senate plans that split fewer precincts than the current legislative redistricting plans.

*Municipal Boundaries.* The Committees may consider municipal boundaries when drawing legislative districts in the 2017 House and Senate plans.

*Incumbency Protection.* Reasonable efforts and political considerations may be used to avoid pairing incumbent members of the House or Senate with another incumbent in legislative districts drawn in the 2017 House and Senate plans. The Committees may make reasonable efforts to ensure voters have a reasonable opportunity to elect non-paired incumbents of either party to a district in the 2017 House and Senate plans.

*Election Data.* Political considerations and election results data may be used in the drawing of legislative districts in the 2017 House and Senate plans.

*No Consideration of Racial Data.* Data identifying the race of individuals or voters shall not be used in the drawing of legislative districts in the 2017 House and Senate plans.

PX587 ¶ 53; LDTX007.

33. On August 11, 2017, Representative Lewis and Senator Hise notified Dr. Hofeller of the criteria adopted by the redistricting committees and “directed him to utilize those criteria when drawing districts in the 2017 plans.” PX629 at 7. The criteria were also placed on legislative websites for the public to view and comment. *Covington v. North Carolina*, 1:15-cv-00399, ECF No. 184-9 at 193.

34. Dr. Hofeller drew the 2017 Plans under the direction of Legislative Defendants and without consultation with any Democratic members. PX587 ¶¶ 48-51, 55-56. Representative Lewis claimed that he “primarily ... directed how the [House] map was produced,” and that he, Dr. Hofeller, and Republican Representative Nelson Dollar were the only “three people” who had even “seen it prior to its public publication.” PX590 at 40:14-21. None of Legislative Defendants' meetings with Dr. Hofeller about the 2017 redistricting were public. PX587 ¶ 51. Legislative Defendants did not make Dr. Hofeller available to Democratic members during the 2017 redistricting process, nor did Dr. Hofeller communicate with any Democratic members in developing the 2017 Plans. PX587 ¶¶ 48-49; Tr. 126:16-18 (Sen. Blue). No Democratic member of the General Assembly saw any part of any draft of the 2017 Plans before they were publicly released. PX587 ¶ 50.

35. On August 19, 2017, the proposed 2017 House plan was released on the General Assembly website. PX629 at 7. The House Redistricting Committee made only minor adjustments to Dr. Hofeller's draft, swapping precincts between a few districts. PX605 at 16:2-17:16.

36. On August 20, 2017, the proposed 2017 Senate plan was released on the General Assembly website. PX629 at 7. At a Senate Redistricting Committee hearing on August 24, 2017, Senator Van Duyn asked Senator Hise how prior elections data had been used in drawing the proposed maps. PX606 at 26:4-6. Senator Hise replied that the mapmaker, Dr. Hofeller, “did make partisan considerations when drawing particular districts.” *Id.* at 26:9-10.

\*9 37. The Senate Redistricting Committee adopted only two minor amendments to the district boundaries drawn by Dr. Hofeller. One change, proposed by Senator Clark, moved a small population from Senate District 19 to District 21. PX606 at 49:20-52:9. The other change, proposed by Democratic Senator Daniel Blue, swapped a few precincts between Senate Districts 14 and 15, two heavily Democratic districts in Wake County. *Id.* at 52:19-53:19. Senator Blue's amendment passed by a unanimous vote. *Id.* at 67:13-19.

38. As in 2011, Stat Packs measuring the partisan performance of the draft districts under recent elections were made available to members of the Redistricting Committees. Tr. 113:17-115:15 (Sen. Blue). The Stat Packs, released on August 21, 2017, *see* PX629 at 7, contained information for each proposed district based on the ten statewide elections that Representative Lewis had claimed would be used in drawing the 2017 Plans. PX591; PX597.

39. Following the public release of the draft House and Senate maps, Legislative Defendants held public meetings on August 22, 2017, in Raleigh and at six satellite locations across the state. PX607 at 7:22-8:11, 9:1-3. Many citizens spoke at the meetings and expressed grave concerns about the draft maps. As Senator Blue testified, “overwhelmingly they were saying that they wanted districts drawn that were not partisan in nature.” Tr. 105:8-12.

40. On August 24, 2017, the Senate Redistricting Committee adopted the Senate plan drawn by Dr. Hofeller with the minor modifications discussed above. PX606 at 131:10-23. The next day, the House Redistricting Committee adopted Dr. Hofeller's proposed House plan, also with the minor modifications discussed above. PX605 at 120:2-125:25.

41. During a Floor Session Hearing on August 28, 2017, Representative Lewis proposed an amendment to modify several House districts in Wake County. PX590 at 30:13-32:2. The amendment passed on a straight party-line vote. *Id.* at 31:18-32:2.

42. On August 31, 2017, the General Assembly passed the House plan (designated HB 927) and the Senate plan (designated SB 691), with only a few minor modifications from the versions passed by the Committees. PX629 at 8-9; *see* PX627 (HB 927); PX628 (SB 691). No Democratic Senator voted in favor of either plan. PX587 ¶ 71. The lone Democratic member of the House who voted for the plans was Representative William Brisson, who switched to become a Republican several months later. *Id.*

43. The 2017 Plans altered 79 House districts and 35 Senate districts from the 2011 Plans. JSF ¶¶ 169-70.

#### **4. The *Covington* Special Master Redrew Several Districts That Remained Racially Gerrymandered**

44. On September 15, 2017, the *Covington* plaintiffs filed an objection to the 2017 draft plans, alleging that Senate Districts 21 and 28 and House Districts 57 and 21 were still racial gerrymanders. *Covington v. North Carolina*, 283 F. Supp. 3d 410, 429 (M.D.N.C. 2018). The *Covington* Court agreed. *Id.* at 429-42. The court further held that the General Assembly's changes to five House districts (36, 37, 40, 41, and 105) violated the North Carolina Constitution's prohibition on mid-decade redistricting. *Id.* at 443-45.

45. The court appointed Dr. Nathaniel Persily as a Special Master to assist in redrawing the districts for which the court had sustained the plaintiffs' objections. To cure the racially gerrymandered districts, the Special Master made adjustments to certain neighboring districts as well. *Covington*, ECF No. 220 at 46, 64. The court adopted the Special Master's recommended changes to all of these districts. 283 F. Supp. 3d at 458.

\*10 46. The Special Master also restored the districts that the court had found were redrawn in violation of the ban on mid-decade redistricting to the 2011 versions of those districts. *Covington*, 283 F. Supp. 3d at 456-58. The court adopted these changes as well. *Id.*

47. On June 28, 2018, the U.S. Supreme Court affirmed the district court's adoption of the Special Master's remedial plans for House Districts 21 and 57 (and the adjoining districts, 22, 59, 61, and 62) and Senate Districts 21 and 28 (and the adjoining districts, 19, 24, and 27). *North Carolina v. Covington*, 138 S. Ct. 2548, 2553-54 (2018). But the U.S. Supreme Court reversed the district court's adoption of the Special Master's plans for the districts allegedly enacted in violation of the mid-decade redistricting prohibition, holding that the court's remedial authority was limited to curing the racial gerrymanders and nothing more. *Id.* at 2554-55.

48. Ultimately, the Special Master's Final Report altered the following districts: Senate Districts 19, 21, 24, 27, 28; House Districts 21, 22, 57, 59, 61. LDTX159. The Special Master also reviewed the 2017 Enacted Plan and chose to keep the General Assembly's version of House Districts 58 and 60 in his recommended changes. *Id.*

49. Plaintiffs in this case do not challenge the following districts that were altered by the *Covington* Special Master: House Districts 21, 22, 57, 61, 62; Senate Districts 19, 21, 24, 28.

### **B. The 2017 Plans Were Designed Intentionally and Effectively to Maximize Republican Partisan Advantage on a Statewide Basis**

#### **1. Legislative Defendants Admitted That They Were Drawing the 2017 Plans for Partisan Gain**

50. At trial, there was little meaningful dispute that Legislative Defendants drew the 2017 Plans to advantage Republicans and reduce the effectiveness of Democratic votes.

51. The 2017 Adopted Criteria expressly provided for the use of "election data" in drawing the 2017 Plans. LDTX007. The Joint Select Committee on Redistricting considered results from 10 statewide elections, captured in Stat Packs available to legislators when they considered whether to adopt Dr. Hofeller's draft House and Senate plans. Tr. 113:17-115:15. The Stat

Packs demonstrated that, under those 10 statewide elections, Republicans would be expected to win between 72 and 82 seats in the House and between 31 and 35 seats in the Senate. PX591; PX597. In other words, Republicans would win a supermajority in both chambers of the General Assembly under each and every one of the 10 statewide elections used to evaluate the 2017 Plans (72 seats provides a supermajority in the House and 30 seats does in the Senate).

52. As Senator Blue testified, the election data used by Legislative Defendants—and in particular the performance of the proposed House and Senate plans under the range of 10 prior statewide elections—revealed that the plans were “designed specifically to preserve the supermajority” that the Republican Party had gained under the 2011 Plans. Tr. 115:19-22.

53. At the Senate Redistricting Committee hearing on August 24, 2017, Senator Hise confirmed that the mapmaker, Dr. Hofeller, “did make partisan considerations when drawing particular districts” in 2017. PX606 at 26:9-10. And as discussed above, Legislative Defendants stated in prior court filings that the districts drawn in 2011 were “designed to ensure Republican majorities in the House and Senate.” PX575 at 16, 55 (*Dickson v. Rucho*, No. 201PA12-3, 2015 WL 4456364 (N.C. July 13, 2015)).

## 2. Dr. Hofeller's Files Establish That the Predominant Goal Was to Maximize Republican Partisan Advantage

\*11 54. Files from Dr. Hofeller's storage devices provide direct evidence of Dr. Hofeller's predominant focus on maximizing Republican partisan advantage in creating the 2017 Plans. The Court specifically finds, based upon the direct and circumstantial evidence of record, that the partisan intent demonstrated in Dr. Hofeller's files, as detailed below, is attributable to Legislative Defendants inasmuch that Dr. Hofeller, at all relevant times, worked under the direction of, and in concert with, Legislative Defendants. *See, e.g.*, FOF § F.7.

55. Plaintiffs obtained this evidence through a subpoena to Dr. Hofeller's daughter. PX676; PX781 (S. Hofeller deposition). Plaintiffs issued the subpoena to Ms. Hofeller on February 13, 2019 and provided notice to all other parties the same day. PX676. After no party objected to the subpoena, on March 13, 2019, Ms. Hofeller produced 22 electronic storage devices that had belonged to her father and that her mother gave her after Dr. Hofeller's death. PX781 at 1-43. The Hofeller files admitted into evidence at trial all came from these storage devices. PX123 at 2, 39, 48 (Chen Rebuttal Report); PX329 at 3-4 (Cooper Rebuttal Report).<sup>2</sup>

<sup>2</sup> The Court at trial allowed the parties to admit expert reports as “corroborative evidence”—*i.e.*, as evidence that “tends to add weight or credibility” to the experts' testimony. *State v. Garcell*, 363 N.C. 10, 40, 678 S.E.2d 618, 637 (2009); *see* Tr. 537:8-538:7.

56. This Court granted Plaintiffs' pretrial motion *in limine* to admit the relevant files from Dr. Hofeller's storage devices, finding sufficient evidence of authenticity and chain of custody. As the Court suggested in its pretrial ruling, and now holds, these files are public records pursuant to N.C. Gen. Stat. § 120-133(a) and Dr. Hofeller's contract with the General Assembly to draw the 2017 Plans. PX641. The Court denied Legislative Defendants' motion *in limine* to exclude the Hofeller files based on purported misconduct by Plaintiffs or their counsel.

57. Dr. Hofeller maintained two folders related to the 2017 redistricting, titled “NC 2017 Redistricting” and “2017 Redistricting.” Tr. 449:20-450:5. Plaintiffs' expert Dr. Chen reviewed the entire contents of these two folders and found that, other than verifying that draft districts met the equal population and county grouping requirements, the files exhibited a consistent focus on partisan considerations. PX123 at 76 (Chen Rebuttal Report); Tr. 450:6-13. Among the hundreds of files in these two folders, there were a “few files” that report on VTD and county splits, “[b]ut beyond these few files,” these hundreds of files focused overwhelmingly on each party's expected vote share in the draft districts and on the identities and party affiliations of the incumbent members in each district. PX123 at 76 (Chen Rebuttal Report). The fact that these folders focused overwhelmingly on partisan considerations is persuasive evidence that partisan intent predominated in the drawing of the 2017 Plans.



**a. Dr. Hofeller's partisanship formulas**

58. The specific contents of the two folders confirm Dr. Hofeller's focus on Republican partisan advantage. In the folders, Dr. Hofeller had three partisanship formulas. First, as reflected in a Microsoft Word document titled "FORMULA FOR POLITICAL ANALYSIS OF LEGISLATIVE DISTRICTS," Dr. Hofeller used a formula that measured the average Republican vote share in each VTD across nine statewide elections from 2008 to 2014. Tr. 450:24-451:15; PX123 at 49-52 (Chen Rebuttal Report). These nine elections were different from the ten elections Representative Lewis claimed would be used. Tr. 451:20-452:6. Dr. Hofeller used this partisanship formula based on 2008-2014 elections to measure the partisanship of his draft districts through at least July 2017, Tr. 452:7-10, by which point he had already substantially completed drawing preliminary drafts for most of the final districts, FOF § F.7. Plaintiffs' Exhibit 153 is a screenshot of Dr. Hofeller's Microsoft Word document containing this partisanship formula:

**\*12 Dr. Hofeller's "FORMULA FOR POLITICAL ANALYSIS OF LEGISLATIVE DISTRICTS.doc"**

**FORMULA FOR POLITICAL ANALYSIS OF LEGISLATIVE DISTRICTS USING 2-PARTY VOTE**

(G08P\_RV+ G08G\_RV+ G08S\_RV+ G08K\_RV+ G12P\_RV+ G12G\_RV+ G12O\_RV\_ G10S\_RV+ G14S\_RV)/  
(G08P\_DV+ G08P\_RV+ G08G\_DV+ G08S\_DV+ G08S\_RV+ G08K\_DV+ G08K\_RV+ G12P\_DV+  
G12P\_RV+ G12G\_DV+ G12G\_RV+ G12O\_DV+ G12O\_RV+ G10S\_DV+ G10S\_RV+ G14S\_DV+ G14S\_RV)

2008	President
2008	Governor
2008	U.S. Senate
2008	insurance Commissioner
2010	U. S. Senate
2012	President
2012	Governor
2012	Commissioner of Labor
2014	U.S. Senate

59. Dr. Hofeller's second partisanship formula was based on the ten statewide elections from 2010-2016 that Representative Lewis claimed would be used in 2017. Tr. 452:12-453:21. Dr. Hofeller did not employ this formula, however, in the Excel worksheets where he analyzed the partisanship of his draft districts. Tr. 453:12-17.

60. Dr. Hofeller's final partisanship formula, titled "Off Year," was based on the results of statewide elections during non-Presidential election years, namely 2010 and 2014. Tr. 453:22-454:9; PX123 at 65 (Chen Rebuttal Report). It is apparent that Dr. Hofeller used this formula to evaluate how his districts might perform in non-Presidential years. Tr. 454:10-17.

61. Dr. Hofeller's "NC 2017 Redistricting" and "2017 Redistricting" folders contain numerous Microsoft Excel spreadsheets analyzing partisan considerations, using his partisanship formulas, for the draft House and Senate plans that he was developing and modifying from November 2016 through June 2017. *See* PX123 at 53-64 (Chen Rebuttal Report).

62. First, Dr. Hofeller placed a special focus on how many of his draft House and Senate districts had an average Republican vote share of 53% or higher using his partisanship formulas. For instance, in a spreadsheet last modified on November 26, 2016, analyzing a draft Senate plan, Dr. Hofeller wrote “23 Under 53%” at the bottom to indicate the number of draft districts for which Democrats had less than a 53% vote share and Republicans had a 53% or higher vote share. Tr. 456:14-20; PX248 at 2. In other words, as shown in Plaintiffs' Exhibit 248 below, Dr. Hofeller projected that 27 of the 50 districts in this draft Senate plan would have a Republican vote share at or above 53%.

**Dr. Hotelier's Draft Plan File: “Senate Minimum-Partisan-Members.xlsx” (November 26, 2016)**

**New 2016 Senate Plan**

Group Type	Dist	Avg R	Incumbent	Pty	Note	Old Ave R
New	1	52.70%	Cook	R		
Old	2	60.16%	Sanderson	R		
New	3	35.11%	Smith-Ingram	D		
New	4	37.39%	Horner	R		
New	5	45.94%	Davis	D		
Old	6	59.16%	Brown	R		
New	7	50.94%	Pate	R		
Old	8	54.69%	Rabon	R		
Old	9	53.05%	Lee	R		
New	10	55.32%	Jackson	R		
New	11	54.35%	Bryant	D		
New	12	56.83%	Rabin	R		
Old	13	41.09%	Britt	R		
Wake-Franklin	14	24.66%	Blue	D		
Wake-Franklin	15	52.45%	Alexander	R		
Wake-Franklin	16	40.50%	Chaudhuri	D		
Wake-Franklin	17	54.36%	Barringer	R		
Wake-Franklin	18	52.70%	Barefoot	R		
Cumberland	19	50.64%	Meredith	R		
New	20	27.50%	McKissick	D		



Cumberland	21	29.64%	Clark	D	
New	22	33.39%	Woodard	D	
Old	23	34.84%	Foushee	D	
New	24	56.91%	Gunn	R	
New	25	51.51%	McInnis	R	
New	26	59.18%	Berger	R	
New	27	58.05%	Wade	R	
New	28	23.67%	Robinson	D	
New	29	*13 50.90%	Tillman	R	
New	30	60.87%	Randleman, Ballard	R,R	#
New	31	64.87%	Brock, Krawiec	R,R	#
New	32	30.42%	Lowe	D	
Old	33	55.39%	Dunn	R	
New	34	66.29%	Vacant	R	#
Old	35	65.63%	Tucker	R	
Old	36	61.81%	Newton	R	
Mecklenburg	37	32.84%	Vacant	D	#
Mecklenburg	38	26.55%	Jackson	D	
Mecklenburg	39	63.97%	Bishop	R	
Mecklenburg	40	28.50%	Waddell	D	
Mecklenburg	41	49.66%	Ford, Tarte	D,R	#
Old	42	65.81%	Wells	R	
New	43	62.82%	Jarromgtpm	R	
New	44	62.81%	Curtis	R	
New	45	64.46%	Vacant	R	#
New	46	63.85%	Danniel	R	
Old	47	59.28%	Hise	R	
Old	48	58.81%	Edwards	R	

Old	49	40.90%	Van Duyn	D
Old	50	56.29%	Davis	R

Notes: # = Double Bunk or Vacant, ## = Partisan Mismatch

23 Under 53%

63. In subsequent June 2017 spreadsheets analyzing draft House and Senate plans, Dr. Hofeller color-coded the districts to differentiate between districts that had slightly-under and slightly-over a 53% expected Republican vote share. Dr. Hofeller shaded the “Avg R” column yellow for draft districts with an expected Republican vote share of 50-53%, and shaded cells in the column a peach color for districts with an expected Republican vote share of 53-55%. Tr. 460:6-461:8, 464:19-465:11; PX244; PX241; PX246; PX123 at 66 (Chen Rebuttal Report).

64. Dr. Hofeller stratified all of the Republican-leaning districts in his draft House and Senate plans using highly granular gradations. Tr. 461:1-8, 463:6-25, 465:16-466:20; PX241 at 3; PX244 at 2; PX246 at 3. As illustrated in Plaintiffs' Exhibits 244 below, Dr. Hofeller counted how many districts in each draft House and Senate plan had between a 50-53%, 53-55%, 55-60%, 60-65%, and 65%-100% expected Republican vote share. *Id.* In contrast, Dr. Hofeller did not analyze Democratic-leaning districts with such granularity. Whereas Dr. Hofeller analyzed the Republican-leaning districts in five different bands, he analyzed Democratic-leaning districts in just two bands of 0-45% Republican vote share and 45-50% Republican vote share. Tr. 466:1-20; PX241 at 3; PX244 at 2; PX246 at 3.

#### Dr. Hotelier's Draft Plan File: “NC Senate Minimum Partisan J-2” (June 13, 2017)

##### New 2016 Senate Plan

Group Type	Dist	Avg R	14 Sen %	Incumbent	Pty	Note	Old Ave R	11 ti 17
New	1	47.94%	52.31%	Cook	R		53.54%	-5.60%
Old	2	60.16%	63.13%	Sanderson	R		60.16%	0.00%
New	3	40.10%	43.10%	Smith-Ingram	D		34.18%	5.93%
New	4	37.39%	39.24%	Horner	R	##	31.88%	5.51%
New	5	45.94%	48.68%	Davis	D		36.80%	9.15%
Old	6	59.16%	64.83%	Brown	R		59.16%	0.00%
New	7	50.94%	53.60%	Pate	R		59.37%	-8.43%
Old	8	54.69%	56.14%	Rabon	R		54.69%	0.00%
Old	9	53.05%	51.05%	Lee	R		53.05%	0.00%
New	10	54.75%	57.91%	Jackson	R		57.13%	-2.38%

New	11	54.47%	56.42%	Bryant	D	##	57.61%	-3.13%
New	12	57.19%	58.83%	Rabin	R		57.19%	0.00%
Old	13	41.09%	47.12%	Britt	R	##	41.09%	0.00%
Wake-Franklin	14	25.37%	22.89%	Blue	D		25.54%	-0.17%
Wake-Franklin	15	53.04%	49.97%	Alexander			53.32%	-0.28%
Wake-Franklin	16	39.77%	35.22%	Chaudhuri	D		38.80%	0.97%
Wake-Franklin	17	54.36%	51.52%	Barringer	R		53.45%	0.91%
Wake-Franklin	18	52.57%	53.26%	Barefoot	R		52.76%	-0.19%
Cumberland	19	50.79%	53.27%	Meredith	R		49.30%	1.48%
New	20	20.93%	18.06%	McKissick	D		24.15%	-3.23%
Cumberland	21	29.52%	29.98%	Clark	D		30.53%	-1.01%
New	22	40.57%	39.77%	Woodard	D		37.71%	2.86%
Old	23	34.84%	31.50%	Foushee	D		34.84%	0.00%
New	24	56.91%	58.10%	Gunn	R		59.06%	-2.14%
New	25	51.51%	54.18%	McInnis	R		55.19%	-3.68%
New	26	59.18%	62.59%	*14 Berger	R		57.51%	1.67%
New	27	57.95%	56.89%	Wade	R		55.06%	2.90%
New	28	22.97%	22.18%	Robinson	D		18.65%	4.32%
New	29	60.90%	64.77%	Tillman	R		67.04%	-6.14%
New	30	60.87%	63.71%	Randleman,Ballard	R,R	#	66.15%	-5.28%
New	31	64.87%	65.07%	Brock, Krawiec	R,R	#	62.71%	2.16%
New	32	30.42%	29.53%	Lowe	D		31.20%	-0.78%
Old	33	65.39%	68.87%	Dunn	R		65.39%	0.00%
New	34	66.29%	67.96%	Vacant	R	#	63.53%	2.76%
Old	35	65.63%	65.84%	Tucker	R		65.36%	0.27%
Old	36	61.81%	60.28%	Newton	R		62.18%	-0.38%
Mecklenburg	37	31.35%	29.21%	Vacant	D	#	37.87%	-6.52%
Mecklenburg	38	28.06%	23.76%	Jackson	D		23.36%	4.70%

Mecklenburg	39	63.96%	59.63%	Bishop	R	61.93%	2.03%
Mecklenburg	40	29.05%	25.80%	Waddell	D	20.96%	8.09%
Mecklenburg	41	49.59%	45.44%	Ford, Tarte	D,R # ##	57.53%	-7.94%
Old	42	65.81%	67.05%	Wells	R	65.81%	0.00%
New	43	62.82%	63.14%	Jarromgtpm	R	62.82%	0.00%
New	44	62.81%	64.31%	Curtis	R	65.66%	-2.85%
New	45	64.46%	65.33%	Vacant	R #	61.05%	3.41%
New	46	63.85%	63.85%	Danniel	R	58.59%	5.26%
Old	47	59.28%	61.81%	Hise	R	59.28%	0.00%
Old	48	58.81%	58.70%	Edwards	R	58.81%	0.00%
Old	49	40.90%	38.15%	Van Duyn	D	40.90%	0.00%
Old	50	56.29%	58.76%	Davis	R	56.29%	0.00%

Pressure Points for GOP Incumbents:

1. Sen. Cook in District 1 (Northeast Coast) is now in a toss-up district
2. Sentors Randleman & Ballard are double-bunked in a strong GOP District 30 (Northwest of State).
3. Senators Brock & Krawiec are double-bunked in a strong GOP District 31 (Davie & Forsyth)
4. Senators Tate [R] & Ford [D] are double-bunked in a leaning-Dem. District 41 (N. Mecklenburg).
5. There are 2 strong GOP and 1 Strong Dem vacant districts (34, 37 and 45).
6. 34% (12) of Republican Incumbents do not have to run in a Special Election.
7. 12% (2) Democrats do not have to run in a Special Election.

Notes: # = Double Bunk or Vacant, ## = Partisan Mismatch

**Average Republican**

65-100	4	4
60-65	10	14
55-60	8	22

53-55	6	28
50-53	4	32
45-50	3	35
0-45	15	50
	50	
<b>2014 Republican Senate</b>		
65-100	7	7
60-65	9	16
55-60	9	25
53-55	4	29
50-53	3	32
45-50	4	36
0-45	14	50
	50	

65. The Court finds that Dr. Hofeller's granular sorting and analysis of Republican-leaning districts—and his particular emphasis on districts with an over-53% expected Republican vote share—provide substantial evidence of the partisan intent and effects of the 2017 plans. The evidence establishes that Dr. Hofeller drew the 2017 Plans very precisely to create as many “safe” Republican districts as possible, so that Republicans would maintain their supermajorities, or at least majorities even in a strong election year for Democrats. Tr. 456:21-457:25. For instance, Dr. Hofeller's June 13, 2017, spreadsheet above estimated that 28 of 50 draft Senate districts had an expected Republican vote share above 53%, PX244 at 2, and Dr. Hofeller's June 14, 2017 spreadsheet for a draft House map estimated that 74 of 120 districts in the draft House plan had an expected Republican vote share above 53%, PX246 at 3. The Court is persuaded that Dr. Hofeller drew the maps with an intent to preserve Republicans' control of the House and Senate.

66. As further evidence of partisan intent, using his partisanship formula, Dr. Hofeller calculated the difference in the Republican vote share between the new draft version of each district and the prior 2011 version of that district, showing precisely how his draft plans would alter the partisanship of each district. Tr. 459:8-460:5; PX241; PX244; PX246; PX248.

**\*15** 67. Dr. Hofeller's spreadsheets also highlighted in yellow many of North Carolina's largest and most-Democratic counties, such as Wake, Mecklenburg, Cumberland, Forsyth, and Guilford Counties. Tr. 461:9-462:2, 468:9-20; PX244; PX246. As Dr. Chen explained, the spreadsheets show Dr. Hofeller's specific focus on trying to “squeeze out” as many Republican-leaning districts as he could in these counties. *Id.*

68. For both his draft House and Senate plans, Dr. Hofeller analyzed what he described as “Pressure Points for GOP Incumbents.” Tr. 462:3-463:5, 467:7-468:8; PX244 at 2; PX246 at 2. He analyzed draft districts that could create concerns or vulnerabilities for Republican incumbents. *Id.* Dr. Chen did not find any comparable analysis by Dr. Hofeller of “pressure points” for Democratic incumbents. *Id.* Dr. Hofeller's spreadsheets contradict Legislative Defendants' contention at trial that the 2017 Plans sought

to place *all* incumbents in politically favorable districts. It is clear from Dr. Hofeller's files that the mapmaker predominantly focused on benefitting and electorally protecting Republican incumbents and not Democratic incumbents.

69. Dr. Hofeller's spreadsheets also reveal that he evaluated the partisanship of draft maps created by Campbell University Law students at an exercise by Common Cause. In 2017, Common Cause invited two Campbell Law students to draw new legislative maps without using political data. Bob Phillips, the Executive Director of Common Cause North Carolina, testified that the purpose of the exercise was to raise awareness and show how a nonpartisan redistricting process could occur. Tr. 53:17-54:14.

70. Emails introduced at trial reveal that, in late June 2017, an aide to Legislative Defendants asked the General Assembly's legislative services office for copies of the "block assignments files" for the simulated maps created by the Campbell Law students. PX757. Common Cause had the Campbell Law students create the maps using the General Assembly's public computer because it had Maptitude installed on it. Tr. 55:18-56:17. Within roughly a week, Dr. Hofeller had created Excel spreadsheets analyzing the partisanship of the Campbell Law students' simulated districts. Tr. 471:6-472:15; PX167; PX170; PX123 at 70-75 (Chen Rebuttal Report). In spreadsheets last modified on July 5 and 8, 2017, Dr. Hofeller scored every one of the Campbell Law students' House and Senate districts using his partisanship formula derived from the 2008-2014 statewide elections. *Id.* Dr. Hofeller then evaluated, for every district, whether Republicans could obtain a "Better Possible" district than the version the Campbell Law students had drawn, with Dr. Hofeller writing "No," "Yes," or "Little" for each district. Tr. 473:8-474:6; PX168; PX123 at 70-71 (Chen Rebuttal Report).

71. The final enacted 2017 House plan contains two county groupings, with four districts in total, that match the districts in those county groupings drawn by the Campbell Law students. Tr. 474:7-475:23; PX123 at 71. Those two groupings—Nash-Franklin and Granville-Person-Vance-Warren—are two small groupings for which there are a very limited number of ways to draw the groupings, and the Campbell Law students happened to draw these groupings in the way that is most favorable to Republicans. *Id.*

72. Dr. Chen thus concluded that Dr. Hofeller evaluated the partisanship of all of the Campbell Law students' districts and then included in the 2017 maps four districts for which the students happened to draw the districts in the way maximally favorable to Republicans. *Id.* The Court agrees with Dr. Chen's assessment, which went unrebutted by Legislative Defendants at trial.

#### **b. Dr. Hofeller's Maptitude files**

\*16 73. Dr. Hofeller's Maptitude files from his storage devices further demonstrate that partisanship considerations were "front and center" in his drafting of the relevant districts in both 2011 and 2017. Tr. 944:5-15, 968:4-5 (Dr. Cooper). The Maptitude files remove any doubt that Dr. Hofeller "was clearly working with partisan data on the same maps at the same time that he [was] drawing lines for our state," all to maximize Republican partisan advantage. Tr. 945:4-11.

74. As Dr. Cooper explained, the Maptitude files indicate that Dr. Hofeller used partisanship formulas, along with multiple color-coding systems to visually depict partisanship on his draft maps, in order to deliberately pack and crack Democratic voters into particular districts with precision. Tr. 939:1-940:12, 944:9-945:8; PX329 at 3-4 (Cooper Rebuttal Report).

75. In the "NC Senate J-24" Maptitude file last modified in July 2017, Dr. Hofeller calculated the Republican vote share for each North Carolina VTD based on his formula using nine statewide elections from 2008-2014. PX330; Tr. 939:9-940:2, 942:22-943:2; PX565. Dr. Hofeller then color-coded the VTDs on the "Map" window based on this partisanship formula, using more granular stratifications for competitive and Republican-leaning VTDs than for Democratic-leaning VTDs, just as he had done in his Excel spreadsheets assessing district-wide partisanship. Tr. 944:16-21. Dr. Hofeller used a "traffic light" color-coding scheme, in which he shaded Democratic-leaning VTDs pink and red, Republican-leaning VTDs green, and more competitive VTDs yellow. Tr. 940:23-941:4. Plaintiffs' Exhibit 335 below is one example of Dr. Hofeller's use of this color-coding scheme. As is apparent in the example below and discussed in more detail with respect to additional county groupings discussed below, Dr. Hofeller drew district boundaries based on this color-coded partisanship data with remarkable precision.

**Figure 6: Partisan Targeting in Senate Districts 31 and 32**

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76. Dr. Hofeller used the same partisanship formula in his Maptitude files containing draft 2017 House districts. Tr. 979:6-19; PX337; PX329 at 13 (Cooper Rebuttal Report). Dr. Hofeller also employed a color-coding system to visually represent the partisanship scores for each VTD in his 2017 House plan, but with the more familiar red coloring for Republican-leaning VTDs, blue for Democratic-leaning VTDs, and yellow and green for more competitive VTDs. Tr. 979:20-980:19; PX329 at 13 (Cooper Rebuttal Report). For example, Dr. Hofeller's Maptitude file labeled "NC House J-25," which he created on June 26, 2017, and last modified on August 7, 2017, depicted boundaries (in red) of House Districts 8, 9, and 12 in the Pitt-Lenoir House county grouping. Tr. 981:2-5; PX340; PX562. Plaintiffs' Exhibit 340 below shows that Dr. Hofeller used his color-coding system to pack the bluest VTDs in Pitt County into House District 8. Tr. 982:1-7, 983:5-984:7; PX340; PX329 at 16 (Cooper Rebuttal Report).

**Figure 11: Partisan Targeting in House Districts 8, 9, and 12**

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77. Dr. Hofeller similarly used a partisanship formula and color-coding scheme in drawing the districts at issue in this case enacted in 2011 and kept unchanged in 2017. Tr. 991:9-992:6, 994:4-996:11; PX347; PX350; PX352; PX329 at 23, 27, 30 (Cooper Rebuttal Report). For example, Dr. Hofeller's Maptitude file titled "NC House w New Raleigh - June 28," which was last modified on June 30, 2011, contained Dr. Hofeller's drafts of the 2011 House districts at issue in this case. Tr. 995:20-997:11; PX329 at 30-35; PX564. There, Dr. Hofeller scored the partisanship of each VTD using the results of the 2008 Presidential election and then colored each VTD based on those results, with Democratic-leaning VTDs shaded blue, Republican-leaning VTDs shaded red, and competitive VTDs shaded yellow and tan. *Id.* Plaintiffs' Exhibit 353 below is an example of Dr. Hofeller's use of this partisanship data to draw the 2011 House districts—in this example, to crack Democratic voters across House Districts 55, 68, and 69.

**Figure 25: Partisan Targeting in House Districts 55, 68, and 69**

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\*17 78. Legislative Defendants offered no additional files from Dr. Hofeller's storage devices to rebut Dr. Chen's and Dr. Cooper's analyses. They offered no plausible alternative explanation of Dr. Hofeller's intent as he drew the State's House and Senate districts in 2011 and 2017.

### **3. Plaintiffs' Experts Established that the Plans Are Extreme Partisan Gerrymanders Designed to Ensure Republican Control**

79. The analysis and conclusions of Plaintiffs' experts further establish that the 2017 Plans are extreme partisan outliers intentionally and carefully designed to maximize Republican advantage and to ensure Republican majorities in both chambers of the General Assembly. Three of Plaintiffs' experts—Drs. Chen, Mattingly, and Pegden—employed computer simulations to generate alternative House and Senate plans to serve as a baseline for comparison to each enacted plan. Even though these experts employed different methodologies, each expert found that the enacted plans are extreme outliers that could only have resulted from an intentional effort to secure Republican advantage on a statewide basis. Plaintiffs' fourth expert, Dr. Christopher Cooper, explained how this gerrymandering was carried out across the State. The Court gives great weight to the analysis and conclusions, to the extent set forth below, of each of Plaintiffs' experts individually, and the Court finds that the

consistent findings of each of these experts, using different methodologies, powerfully reinforce that the 2017 Plans are extreme, intentional, and effective partisan gerrymanders.

**a. Dr. Jowei Chen**

80. Plaintiffs' expert Jowei Chen, Ph.D., is an Associate Professor in the Department of Political Science at the University of Michigan, Ann Arbor. Tr. 237:6-9. Dr. Chen has extensive experience in redistricting matters. Tr. 238:2-239:3 (Dr. Chen). By the admission of Intervenor Defendants' own expert, Dr. Chen is one of the "foremost political science scholars on the question of political geography" and how it can impact the partisan composition of a legislative body. Tr. 2220:14-18 (Dr. Barber). Dr. Chen also helped pioneer the methodology of using computer simulations to evaluate the partisan bias of a redistricting plan, and he has published four peer-reviewed articles employing this approach since 2013. Tr. 240:1-241:2; PX2. The Court accepted Dr. Chen in this case as an expert in redistricting, political geography, and geographic information systems ("GIS"). Tr. 245:4-8.

81. Dr. Chen has presented expert testimony regarding his simulation methodology in numerous prior partisan gerrymandering lawsuits, and his analysis has been consistently credited and relied upon by the courts in these cases. Tr. 241:15-242:19; *see League of Women Voters v. Commonwealth*, 178 A.3d 737, 818 (Pa. 2018) (finding "Dr. Chen's expert testimony" to be "[p]erhaps the most compelling evidence" in invalidating Pennsylvania's congressional plan as an unconstitutional partisan gerrymander); *Raleigh Wake Citizens Ass'n v. Wake Cty. Bd. of Elecs.*, 827 F.3d 333, 344 (4th Cir. 2016) ("[T]he district court clearly and reversibly erred in rejecting Dr. Chen's expert testimony."); *League of Women Voters of Mich. v. Benson*, 373 F. Supp. 3d 867, 907 (E.D. Mich. 2019) ("[T]he Court has determined that Dr. Chen's data and expert findings are reliable."); *Common Cause v. Rucho*, 279 F. Supp. 3d 587, 666 (M.D.N.C.), *vacated on other grounds*, 138 S. Ct. 2679 (2018) ("Dr. Mattingly's and Dr. Chen's simulation analyses not only evidence the General Assembly's discriminatory intent, but also provide evidence of the 2016 Plan's discriminatory effects."); *City of Greensboro v. Guilford Cty. Bd. of Elecs.*, 251 F. Supp. 3d 935, 943 (M.D.N.C. 2017) (relying upon the "computer simulations by Dr. Jowei Chen" to find impermissible partisan intent).

**\*18** 82. Using his simulation methodology, Dr. Chen analyzed whether partisan intent predominated in the drawing of the 2017 Plans and subordinated the traditional nonpartisan districting principles of compactness and avoiding the splitting of municipalities and VTDs. Tr. 245:13-17, 248:6-18. Dr. Chen further analyzed the effects of the 2017 Plans on the number of Democratic-leaning House and Senate districts statewide. Tr. 247:6-10.

83. Based on his analysis, Dr. Chen concluded that partisan intent predominated over the traditional districting criteria in drawing the current House and Senate districts, that the Republican advantage under the 2017 Plans cannot be explained by North Carolina's political geography, and that the effect of the 2017 Plans is to produce fewer Democratic-leaning districts than would exist if the map-drawing process had followed traditional districting principles. Tr. 246:18-22, 247:12-18, 248:20-249:1; PX1 at 3-4 (Chen Report). With respect to the effects in particular, Dr. Chen found that the gap between the enacted 2017 Plans and the nonpartisan simulated plans in terms of Democratic-leaning districts gets wider in electoral environments more favorable to Democrats, and is widest around the point when Democrats would win majorities in the House or Senate under the simulated nonpartisan plans. Tr. 247:25-248:3, 296:7-24, 330:17-23. The Court gives great weight to Dr. Chen's findings and, to the extent set forth below, adopts his conclusions.

84. In what Dr. Chen described as his Simulation Set 1, Dr. Chen programmed his algorithm to follow the traditional districting principles embodied within the Adopted Criteria. Tr. 281:12-16. In addition to following the equal population and contiguity requirements, as well as conforming to the same county groupings and number of county aatraversals that exist under the 2017 Plans, Dr. Chen programmed his algorithm to prioritize the traditional districting principles set forth in the Adopted Criteria of compactness, avoiding splitting municipalities, and avoiding splitting VTDs. Tr. 251:18-259:10; PX1 at 10-18 (Chen report).

85. Dr. Chen explained that, other than the county traversals requirement, his algorithm did not attempt to "maximize or optimize" any one criterion. Tr. 262:24-263:3. Rather, the algorithm equally weighted the criteria of compactness, avoiding splitting municipalities, and avoiding splitting VTDs. Tr. 263:4-12. In creating districts within each county grouping, the



algorithm considered thousands of random iterations, measuring for each proposed iteration whether the change would make the districts in the grouping better or worse on net across these three criteria. Tr. 261:18-263:19. The algorithm accepted a change only if it would improve the districts across these three criteria on net. *Id.*

86. In his Simulation Set 1, Dr. Chen ran the algorithm 1,000 times for each House county grouping and 1,000 times for each Senate county grouping, producing 1,000 unique statewide maps for both the House and the Senate. Tr. 263:23-264:16.

87. Beginning with the House, Dr. Chen compared the 1,000 simulated plans in his House Simulation Set 1 to the enacted 2017 House plan along a number of measures. First, Dr. Chen compared the number of municipalities that the simulated and enacted plans split. The enacted House plan splits 79 municipalities. Tr. 266:22-269:15; PX1 at 38, 41 (Chen Report). The 1,000 plans in House Simulation Set 1 split a range of only 38 to 55 municipalities, with most splitting just 43 to 48 municipalities. *Id.* From this, Dr. Chen concluded with over 99.9% statistical certainty that the enacted House plan subordinates the traditional districting criterion of following municipal boundaries, and splits substantially more municipalities than would be split if the map-drawing process had prioritized, and not subordinated, this traditional districting principle. Tr. 269:21-270:4; PX1 at 38 (Chen Report).

\*19 88. Plaintiffs' Exhibit 15 depicts the number of municipalities split under the enacted plan and the 1,000 simulations in House Simulation Set 1:

**Figure 5:**

**House Simulation Set 1 (Following Only Non-Partisan Redistricting Criteria):**

**Split Municipalities in 2017 House Plan Versus 1,000 Simulated Plans**

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89. The Court finds that the enacted House plan subordinates to partisanship the traditional districting principle of avoiding the unnecessary splitting of municipalities. The Court finds that the current House plan splits substantially more municipalities than would be split if the map-drawing process had not subordinated to partisanship this traditional districting principle.

90. Dr. Chen also compared the number of VTDs split in the enacted 2017 House plan and the 1,000 simulations in House Simulation Set 1. Dr. Chen found that, while the simulated House plans split between 6 and 18 VTDs, the enacted House plan splits 48 VTDs, more than four times as many as the vast majority of the simulations. Tr. 270:6-271:3; PX1 at 38, 42 (Chen Report). From this, Dr. Chen concluded with over 99.9% statistical certainty that the enacted House plan subordinates the traditional districting criterion of following VTD boundaries, and splits far more VTDs than is reasonably necessary. Tr. 271:5-12.

91. Plaintiffs' Exhibit 16 depicts the number of VTDs split under the enacted House plan and the 1,000 simulations in House Simulation Set 1:

**Figure 6:**

**House Simulation Set 1 (Following Only Non-Partisan Redistricting Criteria):**

**Split VTDs in 2017 House Plan Versus 1,000 Simulated Plans**

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92. The Court finds that the enacted House plan subordinates to partisanship the traditional districting principle of avoiding the unnecessary splitting of VTDs. The Court finds that the current House plan splits substantially more VTDs than would be split if the map-drawing process had not subordinated to partisanship this traditional districting principle.

93. Dr. Chen found the enacted House plan is also less compact than all 1,000 of his simulations in House Simulation Set 1. Dr. Chen employed the measures of compactness set forth in the Adopted Criteria, known as Reock and Polsby-Popper scores. Tr. 271:16-273:15; PX1 at 38 (Chen Report). For both measures, a higher score indicates that a plan's districts are more compact. *Id.* Dr. Chen found that, as measured by both Reock and Polsby-Popper scores, the compactness of the enacted House plan is outside the range of scores produced by the 1,000 simulated House plans. *Id.* From this, Dr. Chen concluded with over 99% statistical certainty that the enacted House plan subordinates the traditional districting criterion of compactness, and that the current districts are less compact than they would be under a map-drawing process that prioritizes and follows the traditional districting criteria. Tr. 273:18-274:4.

94. Plaintiffs' Exhibit 14 depicts the compactness of the enacted House plan and the 1,000 simulations in House Simulation Set 1:

**Figure 4:**

**House Simulation Set 1 (Following Only Non-Partisan Redisricting Criteria):**

**Comparison of 2017 House Plan Versus 1,000 Simulated Plans on Compactness**

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95. The Court finds that the enacted House plan subordinates to partisanship the traditional districting principle of compactness. The Court finds that the current House districts are less compact than they would be under a map-drawing process that had not subordinated to partisanship this traditional districting criteria.

\*20 96. To compare the partisanship of his simulated plans to the enacted House and Senate plans, Dr. Chen used Census Block-level election results from recent statewide elections in North Carolina. Tr. 274:5-275:20; PX1 at 19-20 (Chen Report). For most of his analysis, Dr. Chen used the following ten statewide elections: 2010 U.S. Senate, 2012 U.S. President, 2012 Governor, 2012 Lieutenant Governor, 2014 U.S. Senate, 2016 U.S. President, 2016 U.S. Senate, 2016 Governor, 2016 Lieutenant Governor, and 2016 Attorney General. *Id.* Dr. Chen provided several reasons for his choice of these ten statewide elections.

97. First, Representative Lewis indicated at an August 10, 2017, hearing that these ten statewide elections would be the elections that the Joint Redistricting Committees would use to evaluate the 2017 Plans. Tr. 275:8-11; PX1 at 20 (Chen Report).

98. Second, Dr. Chen testified that it is well-accepted in academic literature and in redistricting practice that statewide elections, rather than legislative elections, provide the best basis for measuring the partisanship of a district and for comparing the partisanship of districts across alternative possible plans. Tr. 276:3-27:18; PX1 at 19-20 (Chen Report). Dr. Chen explained that legislative elections, such as state House and state Senate elections, do not provide a sound basis for measuring the partisanship of Census Blocks and districts because the results of legislative elections can be skewed by various factors. *Id.* For instance, if districts are gerrymandered or otherwise uncompetitive, the results of the legislative elections can be biased by the district boundaries in a way that they would not be under an alternative plan. *Id.* As Dr. Chen noted, the General Assembly did not have Dr. Hofeller use legislative elections to measure partisanship in drawing the 2017 Plans. Tr. 277:9-14.

99. Third, Dr. Chen testified he did not use party registration to measure the partisanship of districts because it is well-known in academic literature and in the redistricting community that party registration is not a reliable indicator of actual partisan voting behavior. Tr. 277:19-278:10. That is particularly true in southern states such as North Carolina, where many registered Democrats now consistently vote for Republicans. *Id.* As Dr. Chen again noted, Legislative Defendants did not have Dr. Hofeller use party registration to measure partisanship in drawing the 2017 Plans. Tr. 278:11-15.

100. The Court finds the use of statewide elections by Plaintiffs' experts to measure the partisanship of simulated and enacted districts is a reliable methodology.

101. To measure the partisanship of his simulated districts and the enacted districts, Dr. Chen determined the set of Census Blocks that comprise each district. Tr. 278:24-283:10; PX1 at 20-22 (Chen Report). Dr. Chen then aggregated the elections results from the ten 2010-2016 statewide elections for that set of Census Blocks. *Id.* In other words, Dr. Chen calculated the total votes cast for Democratic candidates in those ten 2010-2016 statewide elections across the relevant set of Census Blocks and the total votes cast for Republican candidates in that set of Census Blocks. *Id.* If there were more votes in aggregate for the Democratic candidates, Dr. Chen classified the district as a Democratic district, and if there were more votes for the Republican candidates, Dr. Chen classified the district as a Republican district. *Id.*

102. Using this measure of partisanship, Dr. Chen compared the number of Democratic districts under the enacted 2017 House plan and under the 1,000 simulated plans in his House Simulation Set 1. While the enacted House plan has 42 Democratic districts using the 2010-2016 statewide elections, not a single one of the 1,000 simulated plans produce so few Democratic districts. Tr. 285:15-287:8; PX1 at 29-30 (Chen Report). The vast majority of simulated plans produce 46 to 51 Democratic districts using the 2010-2016 statewide elections, with the two most common outcomes in the simulations being 46 or 47 Democratic districts—*i.e.*, four or five more Democratic districts than exist under the enacted House plan. *Id.* From these results, Dr. Chen concluded with over 99% statistical certainty that the current House plan is an extreme partisan outlier, and one that could not have occurred under a districting process that adhered to the traditional districting criteria. Tr. 287:2-8; PX1 at 29 (Chen Report).

\*21 103. Plaintiffs' Exhibit 9 depicts the distribution of Democratic seats under the enacted House plan and under the 1,000 simulations in Dr. Chen's House Simulation Set 1:

**Figure 2:**

**House Simulation Set 1 (Following Only Non-Partisan Redistricting Criteria):**

**Democratic-Favoring Districts in 2017 House Plan Versus 1,000 Simulated Plans**

**(Measured Using 2010-2016 Election Composite)**

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104. Dr. Chen explained that the number of Democratic districts estimated for his simulated plans is depressed by the fact that the 2010-2016 statewide elections he used were relatively favorable for Republicans. Tr. 284:1-285:12; PX1 at 29 (Chen Report). Three of the four elections cycles in this period—2010, 2014, and 2016—were favorable for Republicans nationally. *Id.* Consequently, the aggregate Democratic share of the two-party vote across the ten statewide elections in the 2010-2016 composite used by Dr. Chen was just 47.92%. *Id.*

105. Dr. Chen also measured the number of Democratic districts that would exist under his simulated plans and the enacted House plan under electoral environments that are more neutral or even favorable to Democrats. Tr. 287:15-22. First, Dr. Chen analyzed the number of Democratic districts using only the 2016 Attorney General election, which was a near tie. Tr. 287:19-289:14; PX1 at 29 (Chen Report). Using the 2016 Attorney General results, the enacted House plan produces 44 Democratic districts, while the 1,000 simulated House plans produce 48 to 55 Democratic districts, with the most common outcome being 52 Democratic districts. Tr. 287:24-289:14; PX119; PX1 at 29, 174, A1. The gap between the enacted House plan and the simulated plans therefore grows to eight Democratic seats in the most common outcome under the neutral electoral environment that was the 2016 Attorney General election. *Id.*

106. Dr. Chen also performed a “uniform swing” analysis to compare the enacted plan and the simulated plans under different electoral environments. Uniform swing analysis is a common technique used in academic literature and the redistricting community to measure how districts would perform under varying electoral conditions. Tr. 289:25-290:8. For his uniform swing analysis, Dr. Chen started with the Democratic vote share in every enacted and simulated district using the 2010-2016 statewide elections, and then increased or decreased the Democratic vote share uniformly in every district in 0.5% increments. Tr. 290:4-296:3.

107. Dr. Chen's uniform swing analysis revealed a “striking trend.” Tr. 296:7. As the uniform swing increases in the direction of more favorable Democratic performance, the gap between the number of Democratic districts under the enacted plan and the simulated plans grows more and more. Tr. 296:7-20. In other words, “in electoral environments that are more favorable to Democrats, the gap between the enacted plan and all of the computer-simulated plans is widened.” Tr. 296:18-20.

108. Plaintiffs' Exhibit 10 below depicts Dr. Chen's uniform swing analysis for House Simulation Set 1. The starting point is the row on the vertical axis for “47.92%,” which represents the statewide Democratic vote share under the ten 2010-2016 statewide elections. Tr. 290:23-296:3; PX1 at 31-33 (Chen Report). Each row above this point represents the results when increasing the Democratic vote share in every enacted and simulated district by increments of 0.5%. *Id.* The red stars in each row represent the number of Democratic districts under the enacted 2017 House plan, and the numbers to the right of each red star represent the number of simulations (out of 1,000) that produce the number of Democratic districts found on the horizontal axis below. *Id.* For instance, for the starting row of a 47.92% statewide Democratic vote share, the enacted plan (the red star) produces 42 Democratic districts, six simulated plans produce 43 Democratic districts, 48 simulated plans produce 44 Democratic districts, 172 simulated plans produce 45 Democratic districts, and so on. *Id.*

**Figure U1: Number of Democratic Districts Under Alternative Uniform Swings in House Simulation Set 1 Plans**

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\*22 109. Dr. Chen found that the gap between the enacted and simulated plans not only grew as the electoral environment became more favorable for Democrats, but the gap is “widest” at the point when Democrats would start winning a majority of House seats under the simulated plans. Tr. 296:20-297:21. Plaintiffs' Exhibit 11 (Figure U2) below depicts Dr. Chen's results for a uniform swing corresponding to a statewide Democratic vote share of 52.42%. In this scenario, the enacted House plan contains only 48 Democratic districts, but roughly one-third of the 1,000 simulations produce 60 or more Democratic districts, with a 60-60 tie being the second most common outcome. Tr. 298:2-299:7. Plaintiffs' Exhibit 12 (Figure U3) below depicts Dr. Chen's results for a uniform swing corresponding to a statewide Democratic vote share of 52.92%. In this scenario, there are 60 or more Democratic districts in nearly two-thirds of the simulations, and Democrats would win a majority (61 or more seats) in more than 40% of the simulations. Tr. 299:16-301:12. But Democrats would hold just 51 districts under the enacted House plan. *Id.*

**Figure U2:**

**Number of Democratic House Districts Measured Using the 2010-2016 Election Composite  
With a +4.5% Uniform Swing, Corresponding to a 52.42% Statewide Democratic Vote Share  
(House Simulation Set 1)**

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**Figure U3:**

**Number of Democratic House Districts Measured Using the 2010-2016 Election Composite  
With a +5% Uniform Swing, Corresponding to a 52.92% Statewide Democratic Vote Share**

**(House Simulation Set 1)**

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110. Dr. Chen analyzed the type of electoral environment that would produce 55 Democratic districts under the enacted House plan, which is the number of House districts that Democrats won in 2018. Tr. 301:16-302:14. Dr. Chen found that, in the type of electoral environment that would produce 55 Democratic districts under the enacted plan in his uniform swing analysis, Democrats would win *60 or more* House districts in over 99% of his simulated plans, and would win a majority of districts in over 98% of the simulated plans. *Id.*; PX10. In other words, while Democrats improved their seat share in 2018, they may well have won a majority had a nonpartisan plan been in place.

111. The Court finds Dr. Chen's uniform swing analysis to be substantial evidence of the intent and effects of Legislative Defendants' partisan gerrymander. The analysis establishes that the effects of the gerrymander are most extreme in electoral environments that are better for Democrats, specifically in electoral environments where Democrats could win a majority of House seats under a nonpartisan map. Dr. Chen's uniform swing analysis is persuasive evidence the enacted House plan was designed specifically to ensure that Democrats would not win a majority of House seats under any reasonably foreseeable electoral environment.

112. The Court further gives weight to Dr. Chen's overall conclusions from his House Simulation Set 1. Dr. Chen concluded with over 99% statistical certainty that partisanship predominated in the drawing of the enacted House plan and subordinated the traditional districting criteria of compactness, avoiding splitting municipalities, and avoiding splitting VTDs. Tr. 307:12-24. The Court adopts these conclusions and finds the current House districts, regardless of whether they were drawn in 2017 or 2011, subordinated these three traditional districting criteria in order to accomplish Legislative Defendants' predominant partisan goals.

113. In his House Simulation Set 2, Dr. Chen programmed his algorithm to add avoiding pairing incumbents as an additional criterion. Dr. Chen performed this analysis to determine whether a hypothetical, nonpartisan effort to avoid pairing the incumbents in place at the time each of the relevant districts was drawn could account for the extreme partisan bias and subordination of traditional districting principles that Dr. Chen found in his Simulation Set 1. Tr. 308:15-21. Dr. Chen programmed his algorithm in Simulation Set 2 to avoid pairing the maximum number of incumbents possible who were in office at the time of the relevant redistrictings, and to ensure that the very same incumbents who were not paired with another incumbent under the enacted plans were not paired in the simulations. Tr. 308:3-14, 310:21-311:16; PX1 at 43 (Chen Report).

**\*23** 114. The method by which Dr. Chen avoided pairing incumbents in Simulation Set 2 is consistent with the Adopted Criteria's incumbency protection provision. The Court gives no weight to Legislative Defendants' contention that the Adopted Criteria required incumbency protection beyond merely avoiding pairing incumbents; namely, that the Adopted Criteria required creating districts politically favorable to incumbents. As Representative Lewis stated, this criterion was interpreted as simply an intent to avoid pairing incumbents. *See* FOF ¶ 28. At the time of the 2017 redistricting, Republicans held supermajorities in both chambers of the General Assembly. Hence, seeking to enhance the reelection chances of every incumbent, Democrat and Republican alike, would have been a means of seeking to lock-in the Republican supermajorities. It would also have been particularly inappropriate to seek to preserve the “core” of the existing districts, as Legislative Defendants' expert Dr. Brunell suggested, since many of the existing districts had been found to constitute illegal racial gerrymanders.

115. In addition, the Court finds that Legislative Defendants did not seek to protect Democratic and Republican incumbents alike in a neutral manner. For example, in Buncombe County, the enacted plan paired two Democratic incumbents who were in office at the time these House districts were drawn in 2011, but Dr. Chen's algorithm was able to avoid pairing these two

Democratic incumbents in all 1,000 of his simulations. Tr. 312:14-313:9; PX1 at 45, 47 (Chen Report). Legislative Defendants thus unnecessarily paired these two Democratic incumbents in creating the Buncombe County House districts, ensuring that one of the two would not be reelected. *Id.* Dr. Hofeller's Excel files further show that, in 2017, Dr. Hofeller focused solely on concerns for Republican incumbents and not Democratic incumbents. FOF § B.2.a. Dr. Hofeller analyzed "Pressure Points for GOP Incumbents" in both the House and the Senate, but performed no similar analysis for Democratic incumbents. *Id.*

116. Based on his House Simulation Set 2 analysis, Dr. Chen found that a nonpartisan effort to avoid pairing incumbents cannot explain the extreme partisan bias of the enacted House plan or its subordination of traditional districting criteria. Dr. Chen found that the enacted House plan is an extreme outlier with respect to the number of Democratic districts it produces, the number of municipalities and VTDs it splits, and the compactness of its districts compared to the 1,000 simulated plans in House Simulation Set 2. Tr. 313:11-317:24; PX7; PX18; PX23; PX1 at 44-56 (Chen Report). The Court gives weight to Dr. Chen's findings in House Simulation Set 2 and finds that a nonpartisan effort to protect incumbents cannot explain the extreme partisan bias and subordination of traditional districting principles in the enacted House plan.

117. For the Senate, Dr. Chen ran two sets of 1,000 simulations just as he did for the House. Tr. 318:11-319:9. Dr. Chen's Senate Simulation Set 1 applied the same algorithm used for House Simulation Set 1, prioritizing and equally weighting the traditional districting principles within the Adopted Criteria of compactness and avoiding splitting municipalities and VTDs.<sup>3</sup> Dr. Chen ran his algorithm 1,000 times for each Senate county grouping, producing 1,000 unique statewide plans in Senate Simulation Set 1. Tr. 319:10-320:10.

<sup>3</sup> Dr. Chen used the same Senate county groupings that exist under the enacted Senate plan, minimized the number of county traversals, and applied the Adopted Criteria's equal population and contiguity requirements. Tr. 318:11-319:9.

118. With respect to municipal splits, Dr. Chen found the enacted Senate plan splits 25 municipalities, while the 1,000 simulated plans in Senate Simulation Set 1 split between just 8 and 12 municipalities. Tr. 320:12-321:9; PX1 at 69, 71 (Chen Report). From this, Dr. Chen concluded with over 99.9% statistical certainty that the enacted Senate plan subordinates the traditional districting criterion of following municipal boundaries, and splits far more municipalities than is reasonably necessary. Tr. 321:12-17.

\*<sup>24</sup> 119. Plaintiffs' Exhibit 34 depicts the number of municipalities split under the enacted Senate plan and the 1,000 simulations in Senate Simulation Set 1:

**Figure 17:**

**Senate Simulation Set 1 (Following Only Non-Partisan Redisricting Criteria):**

**Split Municipalities in 2017 Senate Plan Versus 1,000 Simulated Plans**

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120. The Court finds the enacted Senate plan subordinates to partisanship the traditional districting principle of avoiding the unnecessary splitting of municipalities. The Court finds the current Senate districts split substantially more municipalities than would be split if the map-drawing process had not subordinated to partisanship this traditional districting principle.

121. With respect to VTDs, Dr. Chen found the enacted Senate plan splits 5 VTDs, while his simulations split between 0 and 3 VTDs. Tr. 321:19-322:9; PX1 at 69, 72 (Chen Report). From this, Dr. Chen concluded with over 99.9% statistical certainty that the enacted Senate plan subordinates the traditional districting criterion of following VTD boundaries, and splits more VTDs than is reasonably necessary. Tr. 322:12-15.



122. Plaintiffs' Exhibit 35 depicts the number of VTDs split under the enacted Senate plan and the 1,000 simulations in Senate Simulation Set 1:

**Figure 18:**

**Senate Simulation Set 1 (Following Only Non-Partisan Redistricting Criteria):**

**Split VTDs in 2017 Senate Plan Versus 1,000 Simulated Plans**

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123. The Court finds the enacted Senate plan subordinates to partisanship the traditional districting principle of avoiding the unnecessary splitting of VTDs. The Court finds the current Senate districts split more VTDs than would be split if the map-drawing process had not subordinated to partisanship this traditional districting principle.

124. Dr. Chen found the enacted Senate plan is also less compact than all 1,000 of his Senate simulations. Using both the Reock and Polsby-Popper measures of compactness, all 1,000 simulated plans in Senate Simulation Set 1 are more compact than the enacted Senate plan. Tr. 322:17-324:3; PX1 at 67-69 (Chen Report). From this, Dr. Chen concluded with over 99% statistical certainty that the enacted Senate plan subordinates the traditional districting criterion of compactness, and that the current districts are less compact than they would be under a map-drawing process that prioritizes and follows the traditional districting criteria. Tr. 324:6-15.

125. Plaintiffs' Exhibit 33 depicts the compactness of the enacted Senate plan and the 1,000 simulations in Senate Simulation Set 1:

**Figure 16:**

**Senate Simulation Set 1 (Following Only Non-Partisan Redistricting Criteria):**

**Comparison of 2017 Senate Plan Versus 1,000 Simulated Plans on Compactness**

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126. The Court finds the enacted Senate plan subordinates to partisanship the traditional districting principle of compactness. The Court finds the current Senate districts are less compact than they would be under a map-drawing process that had not subordinated to partisanship this traditional districting criteria.

127. As with the House, Dr. Chen compared the partisanship of his simulated Senate plans to the partisanship of the enacted Senate plan using the same ten statewide elections from 2010-2016 that Representative Lewis stated would be used. Tr. 324:16-325:5.

**\*25** 128. Using the 2010-2016 statewide elections, Dr. Chen found that the enacted Senate plan produces 18 Democratic districts. Tr. 325:7-326:11; PX1 at 57, 60 (Chen Report). In contrast, none of the 1,000 simulated plans produce such an outcome. *Id.* The simulated Senate plans produce 19 to 21 Democratic districts using the 2010-2016 statewide elections, with the most common outcome in the simulations being 20 Democratic districts—*i.e.*, two more Democratic districts than exist under the enacted Senate plan. *Id.* From these results, Dr. Chen concluded with over 99% statistical certainty that the current Senate plan is an extreme partisan outlier, and one that could not have occurred under a districting process that adhered to the traditional districting criteria. Tr. 326:12-21; PX1 at 59 (Chen report).

129. Plaintiffs' Exhibit 28 depicts the distribution of Democratic seats under the enacted Senate plan and under the 1,000 simulations in Senate Simulation Set 1:

**Figure 14:**

**Senate Simulation Set 1 (Following Only Non-Partisan Redistricting Criteria):**

**Democratic-Favoring Districts in 2017 Senate Plan Versus 1,000 Simulated Plans**

**(Measured Using 2010-2016 Election Composite)**

130. Like he did for the House, Dr. Chen measured the number of Democratic districts that would exist under his simulated plans and the enacted plan under electoral environments that are more neutral or even favorable to Democrats. Dr. Chen again analyzed the number of Democratic districts when using just the 2016 Attorney General election, which was a near tie. Tr. 327:8-11; PX121; PX1 at 59, 61, A3 (Chen Report). Dr. Chen found that the enacted Senate plan produces 20 Democratic districts using the 2016 Attorney General results, while the 1,000 simulated Senate plans most commonly produce 23 Democratic districts under the 2016 Attorney General results. Tr. 328:1-13. The gap between the enacted Senate plan and the simulated plans therefore grows to three Democratic seats in the most common outcome under the neutral electoral environment of the 2016 Attorney General election. *Id.*

131. Dr. Chen also performed a uniform swing analysis to compare the enacted Senate plan to the simulated Senate plans under different electoral environments. Just as he did for the House, in his uniform swing analysis for the Senate, Dr. Chen started with the Democratic vote share in every enacted and simulated district using the 2010-2016 statewide elections and then increased or decreased the Democratic vote share uniformly in every district in 0.5% increments. Tr. 328:25-329:7.

132. Dr. Chen found the same trend in his uniform swing analysis of the Senate that he found for the House. Tr. 330:7-23. He found that as he increases the uniform swing in the more Democratic direction, the gap between the number of Democratic districts under the enacted Senate plan and the simulated plans grows. *Id.* And the gap again becomes widest around the points where Democrats would come close to gaining a majority or would actually gain a majority under the nonpartisan simulated plans. *Id.*

133. Plaintiffs' Exhibit 29 below depicts Dr. Chen's uniform swing analysis for the Senate. The red stars again reflect the number of Democratic districts under the enacted Senate plan and the numbers to the right of the red stars reflect the number of simulations (out of 1,000) that produce the number of Democratic districts listed on the horizontal axis.

**Figure U7: Number of Democratic Districts Under Alternative Uniform Swings in Senate Simulation Set 1 Plans**

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134. Plaintiffs' Exhibit 30 (Figure U8) below depicts Dr. Chen's Senate results for a uniform swing corresponding to a statewide Democratic vote share of 51.92%. The figure reveals that, in this scenario, the enacted Senate plan contains only 22 Democratic districts, but the vast majority of simulations would give Democrats a tie or an outright majority in the Senate. Tr. 331:2-332:23. Plaintiffs' Exhibit 31 (Figure U9) below depicts Dr. Chen's Senate results for a uniform swing corresponding to a statewide Democratic vote share of 52.42%. In this environment, Democrats would win half or more of the districts in over 95% of the simulations and would win an outright majority in over 62% of the simulations. Tr. 333:7-334:2. Yet, under the enacted Senate plan, Democrats would hold just 22 Senate districts in this scenario. *Id.*

**Figure U8:**



**Number of Democratic Senate Districts Measured Using the 2010-2016 Election Composite  
With a +4% Uniform Swing, Corresponding to a 51.92% Statewide Democratic Vote Share**

**(Senate Simulation Set 1)**

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**Figure U9:**

**Number of Democratic Senate Districts Measured Using the 2010-2016 Election Composite  
With a +4.5% Uniform Swing, Corresponding to a 52.42% Statewide Democratic Vote Share**

**(Senate Simulation Set 1)**

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\*26 135. Dr. Chen also analyzed the type of electoral environment that would produce 21 Democratic districts under the enacted plan, which is the number of Senate districts that Democrats won in 2018. Tr. 334:3-335:7. Dr. Chen found that, in the type of environment that would produce 21 Democratic districts under the enacted plan in his uniform swing analysis, Democrats would win *25 or more* Senate districts in the vast majority of simulations. *Id.*; PX29. In other words, while Democrats improved their seat share in 2018, they may well have won a majority had a nonpartisan plan been in place.

136. The Court again finds Dr. Chen's uniform swing analysis to be substantial evidence of the intent and effects of the partisan gerrymander. Dr. Chen's analysis establishes that the effects of the gerrymander are most extreme in electoral environments that are better for Democrats, and in particular in environments under which Democrats could win a majority of Senate seats under a nonpartisan map. Dr. Chen's uniform swing analysis is persuasive evidence that the enacted Senate plan was designed specifically to ensure that Democrats would not win a majority of Senate seats under any reasonably foreseeable electoral environment.

137. The Court further gives weight to Dr. Chen's overall conclusions from his Senate Simulation Set 1. Dr. Chen concluded with over 99% statistical certainty that partisanship predominated in the drawing of the enacted Senate plan and subordinated the traditional districting criteria of compactness, avoiding splitting municipalities, and avoiding splitting VTDs. Tr. 336:22-337:7. The Court adopts these conclusions and finds the current Senate districts, regardless of whether they were drawn in 2017 or 2011, subordinated these three traditional districting criteria in order to accomplish Legislative Defendants' predominant partisan goals.

138. Dr. Chen generated 1,000 more simulated plans in his Senate Simulation Set 2, adding the same incumbency criteria he used for the House. Dr. Chen found that a hypothetical, nonpartisan effort to avoid pairing the incumbents in place at the time each of the relevant districts was drawn could not explain the extreme partisan bias of the enacted Senate plan and its subordination of traditional districting principles. Tr. 341:18-342:8. Dr. Chen found the enacted Senate plan is an extreme outlier with respect to the number of Democratic districts it produces, the number of municipalities and VTDs it splits, and the compactness of its districts compared to the 1,000 simulated plans in Senate Simulation Set 2. Tr. 337:8-341:22, 26, 37, 42; PX1 at 73-85 (Chen Report). The Court gives weight to Dr. Chen's findings in Senate Simulation Set 2 and finds a nonpartisan effort to protect incumbents cannot explain the extreme partisan bias and subordination of traditional districting principles in the enacted Senate plan.

139. The Court also gives weight to and adopts Dr. Chen's conclusions that the partisan bias of the 2017 House and Senate Plans cannot be explained by North Carolina's political geography, meaning the geographic locations of Republican and Democratic voters. Tr. 307:3-11, 336:11-19. Political geography can create a natural advantage for Republicans in winning seats where, for example, Democratic voters are clustered in urban areas. Tr. 304:9-18; PX1 at 7-8 (Chen Report). But Dr. Chen designed his

simulations with the specific purpose of accounting for North Carolina's political geography and any other built-in advantages either party may have in redistricting. Tr. 304:19-305:19; *see* PX1 at 7-8 (Chen Report). The simulations build districts using the *same* Census geographies and population data that existed when the enacted plans were drawn; thus, the simulated plans capture any natural advantage one party may have had based on population patterns when the General Assembly passed the enacted plans. *Id.*

**\*27** 140. Dr. Chen found that Republicans may have a small degree of natural advantage in winning districts in both the House and Senate; Dr. Chen's analysis suggests that even under his nonpartisan plans, Democrats may win less than 50% of the seats when they win 50% of the votes. Tr. 305:21-307:2, 335:17-336:10; PX1 at 36, 66 (Chen Report). But Dr. Chen concluded, and the Court finds, that the enacted House and Senate plans are extreme partisan outliers compared to Dr. Chen's simulations that account for political geography and any other built-in advantages Republicans may have, and thus political geography and other built-in advantages cannot explain the enacted plans' extreme partisan bias. Tr. 307:3-11, 336:11-19.

141. The Court also rejects Legislative Defendants' critiques of the way in which Dr. Chen's simulation algorithm applied the traditional districting principles of compactness and avoiding splitting municipalities and precincts.

142. Dr. Chen's interpretation and application of the traditional districting principles is fully consistent with the guidance provided by Legislative Defendants at the time of the 2017 redistricting. At the first public hearing after the draft plans were unveiled, Representative Lewis explained the Adopted Criteria meant "trying to keep towns, cities and precincts whole where possible." PX607 at 10:5-6. Representative Lewis made similar statements at the committee hearing where the Adopted Criteria were proposed and debated; he asserted, for example, that the criterion regarding municipal splits "says that the map drawer may and rightfully should consider municipality boundaries when they can." PX603 at 67:16-18. Representative Lewis added that "municipality, precinct lines are things that are all community-of-interest-type things that we're going to seek to preserve." *Id.* at 77:12-14. Representative Lewis did not qualify in these statements that the Redistricting Committees would seek only to promote these traditional principles up to a point, or would seek to intentionally split some *minimum* number of municipalities and VTDs.

143. The Court further gives weight to Dr. Chen's testimony that his application of these criteria is consistent with generally accepted redistricting principles and practice. Dr. Chen testified that no jurisdiction in the country prefers to split a *higher* number of municipalities or VTDs or wants *less* compact districts. Tr. 603:2-605:21, 774:5-21. Nor does any jurisdiction seek to split some *minimum* number of municipalities or VTDs or impose a *cap* on how compact the districts should be. *Id.*

144. Legislative Defendants did not introduce persuasive evidence of nonpartisan reasons why the enacted plans split particular municipalities or VTDs or made particular districts less compact.

145. The Court also rejects any suggestion that Dr. Chen should not have applied these traditional districting criteria in simulating county groupings that were drawn in 2011 because these principles were not expressly stated as official criteria during the 2011 redistricting process. *See* Tr. 629:19-636:12. The principles of compactness and avoiding split municipalities and VTDs were traditional districting criteria since well before 2011. Tr. 776:8-777:8; *see, e.g., Stephenson v. Bartlett*, 355 N.C. 354, 371, 562 S.E.2d 377, 389 (2002). That the General Assembly did not list these traditional districting principles as official criteria in 2011 does not change the fact that Legislative Defendants subordinated these principles to partisan considerations in drawing the 2011 districts at issue in this case. *Id.* And the fact that the General Assembly reenacted these districts without change in 2017 does not mean these districts no longer subordinate traditional districting principles to partisan considerations. *Id.*

**\*28** 146. Dr. Chen's analysis demonstrates the current districts subordinate these nonpartisan traditional principles to partisan intent.

#### **b. Dr. Mattingly**

147. Jonathan Mattingly, Ph.D., is a North Carolina native, the chairman of the Duke University Mathematics Department, and the James B. Duke Professor of Mathematics at Duke University. Tr. 1080:7-20. He also is a professor in the Duke Statistics Department. *Id.* Dr. Mattingly was accepted as an expert in applied mathematics, probability, and statistical science. Tr. 1083:1-10.

148. Dr. Mattingly developed his method of evaluating partisan gerrymandering in his academic research. Tr. 1086:20-24. He has since created a project at Duke called “Quantifying Gerrymandering.” Tr. 1084:9-1085:4. In the one previous case in which Dr. Mattingly testified, a federal partisan gerrymandering case relating to North Carolina's congressional districts, the federal court credited Dr. Mattingly's testimony and concluded his analysis “provide[d] strong evidence” of partisan gerrymandering. *Rucho*, 279 F. Supp. 3d at 644. The court found his simulations “not only evidence[d] the General Assembly's discriminatory intent, but also provide[d] evidence of the 2016 Plan's discriminatory effects.” *Id.* at 666.

149. For this case, Dr. Mattingly generated a collection, or “ensemble,” of nonpartisan, alternative redistricting maps using the Markov chain Monte Carlo computer algorithm, which is a well-established algorithm dating back at least to the Manhattan Project. Tr. 1089:11-24; Tr. 1090:19-22. Dr. Mattingly generated approximately  $1.1 \times 10^{108}$  statewide maps in the House (of which  $6.6 \times 10^{86}$  were unique), and approximately  $3.7 \times 10^{93}$  statewide maps in the Senate (of which  $5.3 \times 10^{30}$  were unique). Tr. 1090:1-14; PX359 at 4. The number of maps that Dr. Mattingly generated is greater than the number of atoms in the known universe. Tr. 1090:12-14.

150. To generate the maps, Dr. Mattingly used all of the nonpartisan redistricting criteria identified by the General Assembly in its Adopted Criteria. The Markov chain Monte Carlo algorithm that Dr. Mattingly employed ensured that the collection of maps was a random and representative sample from the distribution of nonpartisan maps that adhere to North Carolina's political geography and nonpartisan redistricting criteria. Tr. 1094:5-1095:3. All of Dr. Mattingly's simulated maps followed North Carolina's Whole County Provision and split no counties that were kept whole under the enacted plans; he ensured population deviations were within the 5% threshold; he required contiguity; and he tuned his algorithm to ensure that the nonpartisan qualities of the simulated maps were similar to the nonpartisan qualities of the enacted map with respect to compactness and the number of counties, municipalities, and precincts split. Tr. 1091:3-1093:1; PX359 at 3-4. Dr. Mattingly did not try to optimize or maximize any particular criterion such as compactness; instead, he took a random, representative sample of the distribution of all maps that are comparable to the enacted maps in terms of compactness and municipal splits. Tr. 1091:3-23.

\*29 151. The Court finds that Dr. Mattingly's simulated maps provide a reliable and statistically accurate baseline against which to compare the 2017 Plans. Tr. 1089:11-24. Dr. Mattingly's collection of nonpartisan maps tracked all the nonpartisan criteria adopted by the Committees. By comparing Dr. Mattingly's simulated plans to the enacted plans, the Court can reliably assess whether the characteristics and partisan outcomes under the enacted plans could plausibly have resulted from a nonpartisan process or be explained by North Carolina's political geography. The Court can also reliably assess whether the enacted plans reflect extreme partisan gerrymanders. The partisan bias Dr. Mattingly identified by comparing the enacted plans to his nonpartisan ensemble of plans could not be explained by political geography or natural packing. Tr. 1095:9-1096:8. Moreover, Dr. Mattingly's analysis did not rest on any assumption about proportional representation. Tr. 1132:6-1133:5; Tr. 1103:24-1104:5.

152. After creating a representative sample of hundreds of trillions of nonpartisan maps, Dr. Mattingly used votes from 17 prior North Carolina statewide elections to compare the partisan performance and characteristics of the 2017 Plans to the simulated plans. Dr. Mattingly chose all major statewide elections from 2008-2016 that were available to him, and those 17 elections demonstrated a range of Democratic support and Republican support and a range of spatial structures and vote patterns. Tr. 1097:8-1098:8; PX487 at 5.

153. The elections Dr. Mattingly considered and their statewide Democratic vote share are listed in the table below (PX778 at 7; Tr. 1097:8-1098:8):

#### 17 Elections

#### Democratic Vote Share

AG08	61.06%
USS08	54.32%
CI08	53.57%
LG08	52.64%
CI12	51.81%
GV08	51.70%
AG16	50.20%
PR08	50.11%
GV16	50.04%
LG12	49.87%
USS14	49.16%
PR12	48.91%
PR16	48.02%
USS16	46.97%
LG16	46.58%
GV12	44.13%
USS10	43.98%

154. Dr. Mattingly concluded that the 2017 Plans displayed a “systematic, persistent bias toward the Republican Party, both on the statewide level and on the county cluster level.” Tr. 1087:22-25. He concluded that the enacted plans were “extreme partisan outlier[s]” when compared to maps that respect the political geography of North Carolina and are similar to the enacted plans in terms of the nonpartisan Adopted Criteria such as compactness and splitting municipalities. Tr. 1088:1-7. He concluded that the “extreme partisan bias” was durable and persisted across a broad range of possible voting patterns and election results. Tr. 1088:1-7. He concluded that the gerrymander was particularly effective at preventing Democrats from breaking the Republican supermajority in both chambers when they would expect to do so under a nonpartisan plan, and from breaking the Republican majority in both chambers when they would expect to do so under a nonpartisan plan. Tr. 1088:8-11. And Dr. Mattingly concluded that the probability that the General Assembly would have enacted the 2017 Plans without intentionally searching for such a biased plan was “astronomically small.” Tr. 1088:12-14, Tr. 1158:3-8. The Court gives great weight to those conclusions.

155. With respect to the Senate, Dr. Mattingly concluded that the enacted Senate plan shows a systematic bias toward the Republican Party. Tr. 1110:22-1111:3. In 15 of the 17 elections he considered, the enacted Senate plan produces an atypical bias toward the Republican Party with respect to the number of expected Democrat and Republican seats using the results of these prior statewide elections. Tr. 1116:2-12. The probability of seeing such a consistent pro-Republican bias across so many elections was 0.005%, Tr. 1116:18-21; PX487 at 23, meaning that the chance the General Assembly would have picked such a partisan map if it were not looking for it is five in a million, Tr. 1116:22-1117:2.

156. Dr. Mattingly concluded that the enacted Senate plan is an extreme outlier not just with respect to how consistently it favors Republicans, but with respect to the *amount* by which it favors Republicans. PX363 (Mattingly Report Figure 3). The enacted map caused Democrats to lose between 2 to 3 seats in the Senate in 13 of the 17 elections that Dr. Mattingly analyzed. *Id.* The Court finds this seat deviation to be significant. Tr. 1106:12-15.

\*30 157. Dr. Mattingly concluded that the 2017 Senate Plan's extreme partisan bias was responsible for creating firewalls protecting the Republican supermajority and majority in the Senate. He plotted the results of the statewide elections using the enacted Senate plan and his nonpartisan simulations (PX362). Tr. 1106:17-1110:4. He ordered the elections vertically from bottom (most Republican vote share) to top (most Democratic vote share), and then plotted the number of seats that Democrats would expect to receive under the nonpartisan plans using blue histograms. *Id.* Using nonpartisan maps, the Democratic seat count would be expected to fall in the tallest part of the blue histogram. Tr. 1108:7-24. Dr. Mattingly used purple dots to report how many seats Democrats would win in the Senate using the results of each statewide election under the enacted Senate plan. Tr. 1109:3-10. Dr. Mattingly then used three vertical dotted lines to represent the point at which Democrats would break the Republican supermajority, the Republican majority, or win a supermajority themselves. Tr. 1111:5-24.<sup>4</sup> If the enacted plan is a pro-Republican outlier, the purple dot is to the left of the blue histogram (meaning the enacted plan elects fewer Democratic seats). If a purple dot is to the left of the Republican supermajority or majority line, and the bulk of the blue histogram is to the right, that is an election in which the enacted plan protects the Republican supermajority or majority where Democrats would break the firewalls in a nonpartisan plan. Tr. 1111:5-1112:24.

<sup>4</sup> Dr. Mattingly plotted only 13 of the 17 elections he considered in PX362 for visual clarity reasons, Tr. 1115:1-12, but he provided all the data for all 17 elections in Figure 3 (PX363) and Table 3 of his report (PX417).

158. Plaintiffs' Exhibit 362 is reproduced below:

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159. Dr. Mattingly's analysis demonstrates that the enacted Senate plan creates two "firewalls," protecting Republican supermajorities and majorities which Democrats would break under a nonpartisan plan. Dr. Mattingly testified that, in elections where Democrats win enough votes that they would typically be expected to break the Republican supermajority under nonpartisan plans, the Republicans win the supermajority in the enacted plan. Tr. 1112:8-24. This is visually demonstrated by Plaintiffs' Exhibit 362, which shows that the Democratic seat count in the enacted plan consistently stays to the left of the supermajority line even as the Democratic vote share rises and the nonpartisan plans break through the Republican supermajority line. PX362. In many cases the enacted plan is completely outside the distribution of nonpartisan plans. Tr. 1112:8-24.

160. The results of the Attorney General 2016 election illustrate Dr. Mattingly's conclusion that the enacted map is an extreme, pro-Republican partisan gerrymander. Tr. 1114:9-11. This was a relatively even election where Democrats won 50.20% of the statewide vote, and in 99.999% of the nonpartisan maps, the Democrats broke the Republican supermajority. But, using the results of this election, the enacted map preserves the Republican supermajority. Tr. 1112:25-1114:11.

161. Overall, in 5 of the 17 elections that Dr. Mattingly considered, the Democrats would have almost certainly broken the Republican supermajority in the nonpartisan plans but failed to do so under the enacted plan (the 2012 Lieutenant Governor; 2016 President, 2008 President, 2016 Governor, and 2016 Attorney General elections). PX363; PX487 at 25 (Mattingly Rebuttal Report). In two others (the 2014 U.S. Senate and 2012 President elections), the Democrats would have had a chance of breaking the Republican supermajority in the nonpartisan plans, but never do in the enacted plan. PX362; PX417. In all seven of those elections where the Democrats would be expected to break the supermajority under nonpartisan plans, the enacted plan is an "extreme outlier." *See* PX363 (fifth column).

162. In elections where the Democrats won so many votes that the enacted Senate plan's Republican supermajority firewall breaks, Dr. Mattingly showed that the enacted Senate plan creates a second firewall preventing the Democrats from breaking the Republican majority. Tr. 1114:14-25. Using the results of the 2008 Commissioner of Insurance and 2008 Lieutenant Governor elections—both elections in which the Democrats won over 52.5% of the statewide vote—the enacted plan protects a Republican majority even where the overwhelming majority of nonpartisan plans would break its majority. *Id.*; PX362.

163. Dr. Mattingly found similar results for the House. Tr. 1087:22-25. Once again, in 15 of the 17 elections he considered, the enacted House Plan produced an atypical bias toward the Republican Party with respect to the number of Democrat and Republican seats. Tr. 1121:23-1122:5. The probability of seeing such a consistent pro-Republican bias across so many elections was 1.4%, Tr. 1122:6-13; PX359 at 11 (Mattingly Report), making it extremely unlikely that the General Assembly would have picked such a partisan map if it were not looking for it, Tr. 1122:14-17.

\*31 164. Dr. Mattingly concluded that the enacted House plan is an extreme outlier not just with respect to how consistently it favors the Republicans, but with respect to the *amount* by which it favors the Republicans. PX359 at 11 (“We never see any plans that favor the Republican Party to the same extent” in terms of seats); PX366 (Mattingly Report Figure 6). The House plan becomes a greater and greater pro-Republican outlier under elections that have more Democratic votes, and becomes an “incredibly extreme outlier” in such elections. Tr. 1120:4-11; Tr. 1119:14-20. The enacted map caused Democrats to lose between 2 and 11 seats in the House in 13 of the 17 elections that Dr. Mattingly analyzed. PX366. The Court finds this seat deviation to be significant.

165. Dr. Mattingly concluded that the enacted House plan's extreme partisan bias is responsible for creating firewalls protecting the Republican supermajority and majority in the House. Tr. 1120:15-1121:18. As with the Senate, Dr. Mattingly plotted the results of various statewide elections using the enacted House plan and his nonpartisan simulations in Figure 5 of his report (PX365). Tr. 1118:5-1120:14.

166. Plaintiffs' Exhibit 365 is reproduced below:

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167. As Dr. Mattingly testified, Plaintiff's Exhibit 365 illustrates how the enacted House plan becomes a greater and greater pro-Republican outlier as Democrats win more votes statewide, and how the enacted House plan creates firewalls protecting the Republican supermajority and majority which Democrats would break under a nonpartisan plan. Tr. 1120:4-1121:18. In the elections in the lower left of the figure where the Republicans have more statewide votes and have a supermajority even in the nonpartisan plans, the enacted plan is generally within the distribution of nonpartisan plans. PX365 (see, e.g., the 2016 Lieutenant Governor and 2016 U.S. Senate elections). Dr. Mattingly explained that this makes sense from the mapmaker's perspective, because the mapmaker would not design the map for environments where Republicans are assured a “commanding supermajority” no matter what. Tr. 1123:17-24.

168. Plaintiffs' Exhibit 365 shows that in elections where the Democrats begin to break the Republican supermajority in the nonpartisan plans, the enacted plan becomes an outlier and consistently protects the Republican supermajority. Tr. 1120:15-1121:8. Dr. Mattingly testified that the enacted map “has a firewall that retards the advance of the Democratic Party particularly when they're about to break through and break the Republican supermajority.” Tr. 1121:6-8.

169. Overall, in 4 of the 17 elections that Dr. Mattingly considered, the Democrats would have almost certainly broken the Republican supermajority in the nonpartisan plans but failed to do so under the enacted plan (2008 President, 2012 Lieutenant Governor, 2016 Attorney General, 2016 Governor). See PX366 (Mattingly Report Figure 6). By contrast, the enacted map never creates a Democratic supermajority in the House when one would not be expected under the nonpartisan ensemble. PX359 at 13-14.



170. In elections where the Democrats win so many votes that the enacted House plan's Republican supermajority firewall breaks, Dr. Mattingly showed that the enacted House plan creates a second firewall preventing the Democrats from breaking the Republican majority. Tr. 1119:14-20; Tr. 1121:9-18. Using the results of the 2008 U.S. Senate, 2008 Lieutenant Governor, or 2008 Commissioner of Insurance elections, where the Democrats virtually always have a majority in the collection of hundreds of trillions of nonpartisan plans and sometimes have a supermajority, the Democrats never win a majority under the enacted plan. Tr. 1121:11-18; PX365 (Mattingly Report Figure 5); PX359 at 13.

\*32 171. In a race like the 2008 U.S. Senate election—where the Democrats won 54.32% of the statewide vote—the enacted map is a particularly extreme pro-Republican outlier. Tr. 1121:11-18. Using that election, the Republicans win 11 more seats in the enacted House plan than they would expect to win under the nonpartisan collection of plans. PX366 (Mattingly Report Figure 6). In more than 40.1% of the plans in the nonpartisan collection, Democrats actually win a supermajority, but the Democrats do not even win a majority under the enacted plan. PX359 at 14; PX418 (Mattingly Report Table 4). By contrast, there were no historical elections under which the Republicans would have been expected to receive a majority under the nonpartisan House plans but would not receive a majority in the enacted House plan. PX359 at 13.

172. Dr. Mattingly also performed a uniform swing analysis that confirmed the enacted plan's persistent, durable, and extreme bias toward the Republican party. Tr. 1123:25-1131:5. Using six different historical elections ranging from very pro-Republican (e.g., 2012 Governor, where the Democrats won 44.13% of the statewide vote) to very pro-Democratic (e.g., 2008 U.S. Senate, where the Democrats won 54.32% of the statewide vote), Dr. Mattingly showed that the House plan's gerrymandered protection of the Republican supermajority and majority was highly robust over many different electoral structures and statewide vote fractions. Tr. 1127:15-18; Tr. 1129:5-1131:5; PX488 (Mattingly Rebuttal Report Figure 1). Each of the elections end up looking “remarkably the same” as the Democratic vote share increases; in all of the elections, the enacted map creates a firewall protecting the Republican supermajority and majority. Tr. 1129:11-1130:2; Tr. 1130:23-1131:5. Dr. Mattingly concluded on the basis of his uniform swing analysis that the House plan was “designed” to “consistently protect” the Republican supermajority and majority across all of the “very different” elections he studied, which contain many different “spatial vote patterns” and “historical voting patterns from the state of North Carolina.” Tr. 1130:23-1131:5.

173. In particular, under the nonpartisan maps, the Republicans do not win a supermajority when the Democratic statewide vote share rises above 50 percent, but in the enacted plan, the Republicans do. Tr. 1130:7-19. And the uniform swing analysis shows that the enacted plan becomes an especially extreme outlier whenever the Democrats would win a majority of seats under the ensemble of nonpartisan plans. Tr. 1128:12-1129:4; Tr. 1130:3-6. Dr. Mattingly's uniform swing analysis shows that the enacted map prevents Democrats from winning a majority of the seats in the House unless they have around 55% of the statewide vote. Tr. 1131:6-16. That is well more than the Democrats would need in a non-gerrymandered plan to win a majority of House seats. See PX488 (Mattingly Rebuttal Report Figure 1).

174. Plaintiffs' Exhibit 488 (Mattingly Rebuttal Report Figure 1) shows Dr. Mattingly's uniform swing analysis of the House plans:

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FIGURE 1. Purple dots show the enacted plan; the green dots show a plan in the ensemble. The dashed line at 60 seats shows the majority, and the dashed line at 48.5 seats shows the Republican supermajority threshold. The number of Democrats elected in the Senate which has a total of 120 seats.

175. Dr. Mattingly preferred to compare the enacted plan to nonpartisan plans election-by-election, because taking an average seat shift across a set of elections can obscure a gerrymander's effect in close elections where control of the Senate or House is at issue. Tr. 1214:8-13, 1216:16-19, 1216:22-1217:3. Even considering the average, however, Dr. Mattingly found that the enacted plan is an extreme pro-Republican outlier. Tr. 1216:4-12. Comparing the enacted Senate plan to the median Senate plan in the ensemble for each of the 17 elections, the enacted plan causes Democrats to lose on average 1.94 seats in the Senate

across all 17 elections. PX363. Not a single one of Dr. Mattingly's  $3.7 \times 10^{93}$  statewide maps in the Senate favors the Republican Party as much as the enacted plan under this metric. PX363 (bottom right image); PX487 at 23 (Mattingly Rebuttal Report). Similarly, comparing the enacted House plan to the median House plan in the ensemble for each of the 17 elections, the enacted plan causes Democrats to lose on average 3.35 seats in the House across all 17 elections. Not a single one of Dr. Mattingly's  $1.1 \times 10^{108}$  statewide maps in the House favors the Republican Party as much as the enacted plan under this metric. PX366 (bottom right image); PX359 at 11 (Mattingly Report) (noting that the average seat difference in favor of the Republicans across all 17 elections is "greater than all plans in the ensemble").

**\*33** 176. Dr. Mattingly's separate analysis of the structure of the enacted House and Senate plans provided further confirmation that both plans are extreme partisan gerrymanders, even putting aside the effect on seat count in any particular election. He demonstrated that the General Assembly cracked and packed Democratic voters for partisan gain across the House and the Senate plans, with a particular focus on cracking Democratic voters out of the middle seats that determine supermajority and majority control of both Chambers.

177. Dr. Mattingly ordered the 120 districts in the House in his ensemble of nonpartisan plans from lowest to highest based on the Democratic vote fraction in each district. He did this for each of the 17 statewide elections he analyzed. Tr. 1159:4-15; PX483.

178. Below is an example of Dr. Mattingly's structural analysis of the 120 districts in the House using the votes from the 2016 Attorney General's Election. See PX483 at 13; PX778 at 33 (Mattingly PowerPoint presentation).

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179. The purple dots in the ranked-ordered box plots from Plaintiffs' Exhibit 483 represent the Democratic vote fraction in the enacted plan for each district ordered from least to most Democratic; the boxes represent the Democratic vote fraction across Dr. Mattingly's ensemble of nonpartisan plans. Tr. 1159:4-1162:1. The key in the top left-hand corner shows the statewide election and the Democratic statewide vote fraction in that election.

180. Dr. Mattingly explained that in the 40 seats in the middle—between the 40th most Democratic seat and the 80th most Democratic seat—the Democratic vote fraction in the enacted plan is far below the boxes representing the nonpartisan plans. Tr. 1162:7-25. Those "are the seats that determine who has a supermajority and who has the majority," and they are the "critical seats for the structure of the House." Tr. 1162:19-25. But in the most Democratic districts, beginning around the 99th least Democratic seat, the Democratic vote fraction is much higher in the enacted plan. Tr. 1162:7-12. In other words, across the map, Democrats have been cracked out of the districts that determine control of the House and packed into districts they would win anyway. Tr. 1162:7-25. In the 2016 Attorney General election, this structural gap between the Democratic vote share in the enacted plan and the nonpartisan plans in the critical districts means that the Republicans kept the supermajority even though they would have lost it under the ensemble of nonpartisan plans. Tr. 1163:3-25.

181. An examination of the districts between the 40th least Democratic district and the 80th least Democratic district in the House using the 2016 Attorney General election further demonstrates the cracking of Democratic voters in these critical seats. (PX485 at 13; PX778 at 34):

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182. Dr. Mattingly testified that the large gap between the Democratic vote fraction in the enacted plan and in the ensemble at the 72-seat marker is the structural feature of the House map that is responsible for the firewall protecting the Republican supermajority. Tr. 1164:1-9.

183. Dr. Mattingly's ranked-ordered box plot using the results of the 2012 Presidential election revealed that same structural anomaly (PX485 at 11; PX778 at 35):



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184. Using the results of the 2012 Presidential election, Dr. Mattingly testified that again the enacted map shows a “huge depletion of Democratic voters” in these districts that matter for supermajority and majority control. Tr. 1164:17-1165:7; PX485 at 11. Dr. Mattingly explained that, although the Presidential 2012 election was a fairly Republican election where the Republicans would win a House majority even under the nonpartisan plans, the significant deviation in the Democratic vote fraction in the seats that matter most will have a “dramatic effect” in elections where the Democrats get more votes statewide. Tr. 1166:1-17.

\*34 185. Plaintiffs' Exhibit 484 contains Dr. Mattingly's ranked-ordered box plots for the Senate. Dr. Mattingly ordered all 50 Senate districts in his ensemble from lowest to highest based on the Democratic vote fraction in each district. He did this for each of the 17 statewide elections he analyzed. PX484. Below is an example of Dr. Mattingly's structural analysis of the 50 Senate districts using the 2016 Lieutenant Governor election. PX484 at 15; PX778 at 40.

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186. The ranked-ordered box plot using the 2016 Lieutenant Governor results demonstrates the same significant suppression of Democratic votes in the enacted plan in the districts that matter most—the 25th most Democratic district, which determines who wins the majority in the Senate, and the 29th least Democratic district, which the Democrats need to win to break the supermajority. Tr. 1175:12-24; PX484 at 15. Dr. Mattingly testified that the gap between the enacted plan and the ensemble around the 25th and 29th/30th district shows that the enacted plan is an “extreme outlier.” Tr. 1176:5-9. In turn, in the most Democratic districts, the enacted plan has significantly more Democrats than in the nonpartisan ensemble, PX484 at 15—representing packing of Democrats into these districts. Tr. 1175:4-9.

187. As noted, Dr. Mattingly performed this same structural analysis of the House and Senate enacted plans using all 17 of his statewide elections. PX483, PX484. He testified that all 34 of his ranked-ordered box plots overwhelmingly show the same gaps between the enacted plan and the ensemble in the Democratic vote fraction in the seats that matter most in the Senate and the House, and overwhelmingly show the firewalls protecting the Republican supermajorities and majorities. Tr. 1176:10-23. Dr. Mattingly testified that it would “almost be impossible to build this structure” in the absence of an intentional choice to do so. Tr. 1176:24-1177:2. The Court gives great weight to this conclusion.

188. In his report, Dr. Mattingly conducted a statistical analysis to quantify the statewide cracking and packing of Democratic voters in the House and Senate plans that the ranked-ordered box plots from Plaintiffs' Exhibits 483 and 484 visually illustrate. That analysis confirms to a high degree of statistical significance that the structure of the enacted plans reflects extreme bias in favor of the Republicans that will persist in election after election.

189. Specifically, in the House, Dr. Mattingly analyzed the 48th to the 72nd least Democratic districts (again, the range that determines majority and supermajority control). PX359 at 13 (Mattingly Report). Dr. Mattingly found that in 15 of the 17 elections, there is less than a 0.0005% chance of finding a plan in the ensemble that had fewer Democratic votes across those districts than did the enacted plan. *Id.*; PX359 at 13. In the remaining 2 elections, there was less than a 0.02% and 0.3% chance of finding a plan in the ensemble with as much cracking of Democrats out of the middle districts as the enacted plan. *Id.*

190. Dr. Mattingly's statewide quantification of the Senate showed the same extreme cracking of Democrats out of the districts that determine majority and supermajority control. For the Senate, Dr. Mattingly considered the 20th to 30th least Democratic districts. PX359 at 9. He found that in 14 of the 17 statewide elections, there is less than a 0.0005% chance of finding an ensemble plan with fewer Democratic votes across those districts than the enacted plan. *Id.* In two other elections, the enacted plan was still an extreme outlier, at the 0.1% level. *Id.*

\*35 191. Dr. Mattingly also created video animations of his uniform swing analysis using six different elections in both the House and Senate. PX772 (video animations). In the videos, the blue histograms represent the distribution of seats using Dr. Mattingly's nonpartisan plans; the “enacted” marker represents the enacted plan, and the three vertical lines represent the Republican supermajority, Republican majority, and Democratic supermajority lines. *Id.* Dr. Mattingly played two of the videos for the Court, representing uniform swing analysis in the House using the results of the 2012 Presidential election and 2016 Lieutenant Governor election. Tr. 1168:4-8, 1169:17-1172:15; PX778 at 37, 38 (PowerPoint slides); PX772 (video animations). The 2012 Presidential election video showed that the enacted plan started out looking fairly typical of the ensemble of nonpartisan plans; that is the video starts with a 45% Democratic vote share where Republicans retain the supermajority under the nonpartisan plans as well. Tr. 1169:17-25. As the Democratic vote fraction increases, the blue histograms representing the nonpartisan plans shifts to the right and the number of seats that Democrats win increase. Tr. 1169:25-1170:9. But the enacted plan begins to lag “dramatically” behind the nonpartisan plans. Tr. 1170:6-13. In particular, at the Republican supermajority and majority lines, the enacted plan “sticks” on the Republican side of the line even as the blue histogram representing the nonpartisan plans move completely past those lines. Tr. 1171:8-21. The gerrymander is sometimes so effective that it retains a Republican supermajority in the enacted plan even where the Democrats win a majority in the nonpartisan plans. Tr. 1172:6-10.

192. Dr. Mattingly's video animation of a uniform swing analysis of the 2016 Lieutenant Governor election showed the same thing, Tr. 1172:17-1174:20, as do Dr. Mattingly's four remaining videos, PX772.

193. The Court finds that these video animations provide significant evidence confirming Dr. Mattingly's conclusions that the enacted House and Senate maps exhibit extreme partisan bias and create partisan firewalls protecting the Republican supermajority and majority. The Court finds that Dr. Mattingly's uniform swing videos are also significant evidence that the gerrymanders cause the enacted House and Senate maps to be largely nonresponsive to the actual votes cast in North Carolina's elections. Moreover, as Dr. Mattingly explained, the ranked-ordered box plots that he created using all 17 statewide elections showing the systematic suppression of Democratic vote fractions in the districts that matter most for the House and Senate demonstrate—without any need to conduct uniform swing analysis—that the enacted plan will be nonresponsive to the votes actually cast in North Carolina elections. Tr. 1174:25-1176:9.

194. Dr. Mattingly's findings regarding the firewall to protect the Republican majorities in the General Assembly are significantly similar to Dr. Chen's findings. Dr. Chen, like Dr. Mattingly, found that the gap between the number of Democratic districts under the enacted plans and under his simulated plans gets wider in electoral environments that are better for Democrats, and are at their widest around the point where Democrats would win a majority of seats in the House or Senate in his simulated plans. The independent findings of Drs. Chen and Mattingly strengthen and reinforce the conclusion that Legislative Defendants drew the enacted House and Senate plans with the specific goal of making it extremely difficult, if not impossible, for Democrats to take control of either chamber of the General Assembly.

195. Dr. Mattingly's county-grouping analysis, discussed in greater detail below, also allowed him to draw statistically significant conclusions about the intent of the mapmaker in creating the statewide Senate and House plans. Tr. 1157:24-1158:8. In particular, he explained that the design of each county grouping in the House and Senate plans represented an independent choice by the mapmaker, because “how you redistrict one county cluster does not affect how you redistrict the next one since you can't cross county cluster lines.” Tr. 1157:17-23. Dr. Mattingly found that numerous county groupings in the House and Senate were extreme pro-Republican partisan outliers at the 100% or 99% level. PX778 at 29-30. He testified that the probability that the extreme partisan bias in the enacted maps was unintentional was “astronomically small,” because the chance of making so many independent choices “with such extreme bias” in one map was “astronomically small if you are not looking for it.” Tr. 1158:3-8.

196. Dr. Mattingly conducted a secondary analysis in which he only considered plans that preserved incumbents “to the same extent, or better, than they are preserved” in the enacted plan in each grouping. PX359 at 81. Dr. Mattingly found that accounting for the effects of incumbency did not change his conclusion that the enacted plans are extreme pro-Republican gerrymanders. Tr. 1093:21-1094:3. Defendants failed to offer evidence sufficient to rebut Dr. Mattingly's conclusion that the enacted plan's extreme bias could not be explained by a nonpartisan effort to avoid pairing incumbents.

\*36 197. Dr. Mattingly performed extensive robustness checks establishing that his results were insensitive to the choices he made and criteria he used to generate the distribution of nonpartisan plans. Among other things: Dr. Mattingly went through every district in every grouping he analyzed to confirm that the compactness and municipal splits in the ensemble tracked those qualities in the enacted plan. PX359 at 57-80 (Mattingly Report). He performed a secondary analysis considering only plans that were equal to or better than the enacted plan along the dimension of compactness and municipal splits and found that it did not affect his results. PX359 at 82; PX468, 472-473. He created different collections of nonpartisan maps using six different sets of weights for compactness and other nonpartisan criteria and confirmed that changing the weights did not change the results. PX487 at 11 (Mattingly Rebuttal Report). And when Defendants' experts raised various speculative critiques in their reports—asking whether changing one criterion or another would make a difference—Dr. Mattingly performed a follow-up analysis in his rebuttal report confirming that it did not. *Id.* at 6-11.

198. The Court finds that none of Legislative Defendants' objections to Dr. Mattingly's analysis calls into question its persuasive value. The fact that, in a few individual elections, the enacted plan is not an extreme outlier relative to the ensemble of plans in terms of seat count alone does not undermine Dr. Mattingly's conclusion that the enacted plans are extreme partisan gerrymanders designed to protect Republican supermajorities and majorities. Tr. 1117:9-11 (Senate); Tr. 1122:18-1123:24 (House). First, Dr. Mattingly explained that the underlying structure of the enacted plans reflected a trade-off. To crack Democrats out of districts where it matters, the mapmaker had to pack Democrats into other districts. Tr. 1123:5-24. Under certain circumstances—*i.e.*, in Republican wave elections—the packing of Democratic voters in the enacted plan causes Republicans to lose districts that they would have won in nonpartisan plans that did not pack Democratic voters into these districts. But such an electoral environment is one in which Republicans would already win a commanding supermajority. *Id.* As Dr. Mattingly explained, someone gerrymandering a map would happily hold the supermajority or the majority in elections where their control is at risk, even if the cost is a few less seats in elections where they will always have a commanding supermajority anyway. *Id.*

199. The 2012 Governor election—a highly Republican election where the Republicans win a supermajority in Dr. Mattingly's nonpartisan plans—provides an example. When Dr. Mattingly conducted a uniform swing analysis using the 2012 Governor election, the enacted map became an “extreme outlier in favor of the Republican Party” as the statewide vote swings to the Democrats and the Democrats approached the point where they would break the Republican supermajority and majority under his nonpartisan plans. Tr. 1126:7-1127:9; PX488. Although the 2012 Governor election may not appear to be a partisan outlier for the Republicans, Dr. Mattingly testified that in fact “it is.” Tr. 1127:19-1128:11.

200. During Dr. Mattingly's cross examination, Legislative Defendants suggested that he should have included other purportedly nonpartisan criteria in his simulated plans beyond the ones listed in the adopted criteria. The Court, however, gives no weight to Legislative Defendants' suggestions that secret and undisclosed nonpartisan agreements between “representatives of different political parties” might explain the partisan bias that Dr. Mattingly identified. *E.g.*, Tr. 1204:11-14. The Court also gives no weight to the suggestion that Dr. Mattingly should have accounted for “communities of interest” in a manner other than by avoiding splitting counties, cities, and towns, *see, e.g.*, Tr. 1192:19-1193:4, considering Legislative Defendants expressly declined to include “communities of interest” as a criterion for the 2017 Plans. Tr. 1223:8-1224:1; *see* PX603 at 67:14-25 (Rep. Lewis stating that “communities of interest” is not a “criteria that we have proposed” because the Committee “couldn't find a concise definition”); *id.* at 73:16-20 (Rep. Lewis stating that he opposed listing “communities of interest” as a criteria because “municipalities are defined and understood” but the Committee couldn't “agree[]” on what a community of interest was beyond that); *id.* at 77:3-25 (Rep. Lewis again rejecting the use of “communities of interest”); *id.* at 106:10-11 (Rep. Lewis stating that “I don't believe [communities of interest] belongs in this criteria”).

\*37 201. When asked by interrogatory to “identify and describe all criteria that were considered or used in drawing or revising districting boundaries for the 2017 Plans,” Legislative Defendants made a binding concession that the only “criteria used to draw the 2017 plans is the criteria adopted by the Redistricting Committees.” PX579 at 13. As such, the Court gives little

credence to Legislative Defendants' critique that Plaintiffs' experts failed to include criteria not in the Adopted Criteria, or a claim that other considerations purportedly explain the contours of the 2017 Plans.

**c. Dr. Pegden**

202. Wesley Pegden, Ph.D., is an Associate Professor in the Department of Mathematical Sciences at Carnegie Mellon University, and testified as an expert in probability. Tr. 1294:19-21, 1302:6-12; PX509. Dr. Pegden has published numerous papers on discrete mathematics and probability in high-impact, peer-reviewed journals, and has been awarded multiple prestigious grants, fellowships, and awards. Tr. 1295:4-20; PX509. He has been appointed by the Governor of Pennsylvania to that state's Redistricting Reform Commission. Tr. 1301:24-1302:5.

203. Dr. Pegden's academic work on redistricting involves Markov chains. A Markov chain is “a random walk around some abstract space.” Tr. 1295:23-1296:1. For example, if a person walks around a city, and whenever she reaches an intersection, she chooses which way to turn at random, her position over time “would evolve as a Markov chain.” Tr. 1296:5-7. In the context of redistricting, one can imagine taking a random walk “over the space of maps.” Tr. 1296:8-14.

204. In 2017, before Dr. Pegden had ever served as an expert in redistricting litigation, he published a peer-reviewed article (PX510) entitled “Assessing Significance in a Markov Chain Without Mixing” in the Proceedings of the National Academy of Sciences—a top-ranked, science-wide journal. Tr. 1295:13-17, 1296:24-1297:1. This article provides a new way to demonstrate that a given object is an outlier compared to a set of possibilities. Tr. 1297:2-7.

205. Dr. Pegden explained that there are three ways to show that a given object is an outlier. The first, most basic way is simply to examine every single member of the entire set of possibilities, and then determine whether the object in question is different than all or most of those possibilities. The second form of outlier analysis is to take a random sample from the set of possibilities, and then compare the object in question to that sample. This type of analysis is the basis of most modern statistics, and is the form of outlier analysis used by Drs. Chen and Mattingly in generating nonpartisan simulated plans and comparing the enacted plans to those random nonpartisan plans. Tr. 1297:10-1298:11, 1309:10-18.

206. The third form of outlier analysis, developed by Dr. Pegden and his co-authors, is a kind of “sensitivity analysis” that begins with the object in question, uses a Markov chain to make a series of small, random changes to the object, and then compares the objects generated by making the small changes to the original object. Tr. 1298:16-1299:4. Dr. Pegden's article illustrates this methodology using a redistricting plan. Tr. 1299:8-18. The article demonstrates that, by using an existing plan as a starting point and then making small random changes to the district boundaries, one can prove the extent to which the existing plan is an outlier compared to all possible maps meeting certain criteria. Dr. Pegden's article proves mathematical theorems showing that this approach can establish a redistricting plan's outlier status in a way that is “completely statistically rigorously grounded in mathematics.” Tr. 1299:1-4.

**\*38** 207. In mid-2018, before this case was filed, Dr. Pegden began working on a new article entitled “Practical Tests for Significance in Markov Chains.” Tr. 1300:8-1301:4; PX511. This article further develops this new, third form of outlier analysis with new, more powerful statistical tools. Tr. 1301:5-12. Though unpublished, this second article has been vetted by the mathematical community, including through detailed presentations Dr. Pegden gave at the Duke Statistical and Applied Mathematical Sciences Institute and the Harvard Center for Mathematical Sciences and Applications. Tr. 1300:13-23.

208. In this case, Dr. Pegden used this new, third form of outlier analysis to evaluate whether and to what extent the 2017 Plans were drawn with the intentional and extreme use of partisan considerations. Tr. 1302:24-1303:1. To do so, using a computer program, Dr. Pegden began with the enacted plans, made a sequence of small random changes to the maps while respecting certain nonpartisan constraints, and then evaluated the partisan characteristics of the resulting comparison maps. Tr. 1304:1-1306:21. As explained in further detail below, Dr. Pegden found that the enacted House and Senate plans are more favorable to Republicans than 99.999% of the comparison maps his algorithm generated by making small random

changes to the enacted plans. Tr. 1304:14-18, 1342:10-18, 1344:18-1345:3; PX515; PX519. And based on these results, Dr. Pegden's theorems prove that the enacted House and Senate maps are more carefully crafted to favor Republicans than at least 99.999% of all possible maps of North Carolina satisfying the nonpartisan constraints imposed in his algorithm. Tr. 1342:13-25, 1344:18-1345:7; PX515; PX519.

209. Dr. Pegden's analysis proceeded in several steps. He began with the enacted House or Senate map. His computer program then randomly selected a geographic unit on the boundary line between two districts and attempted to move or “swap” the unit from the district it is in into the neighboring district. Tr. 1309:19-24, 1311:1-5; PX508 at 9 (Pegden Report).

210. Dr. Pegden's method uses two different geographic units, VTDs and geounits. Tr. 1309:25-1310:2; PX508 at 9 (Pegden Report). His method uses VTDs when analyzing enacted maps that split few or no VTDs. Such maps include the enacted Senate map and the Senate county groupings Dr. Pegden analyzed. Tr. 1310:3-6; PX508 at 9 (Pegden Report). When analyzing enacted maps that split many VTDs—including the enacted House map and certain House county groupings Dr. Pegden analyzed—Dr. Pegden's method uses a sub-VTD geographic unit known as a “geounit.” Tr. 1310:3-11; PX508 at 9 (Pegden Report). Created by a computer program, geounits are compact collections of census blocks that lie entirely within one VTD and one district, containing roughly 500-1000 people. There are roughly six or seven geounits per VTD. Tr. 1310:12-25; PX508 at 9 (Pegden Report).

211. When attempting to swap a randomly selected VTD or geounit from one district to another, Dr. Pegden allowed the swap to occur only if certain constraints were satisfied. Tr. 1311:1-8; PX508 at 7-8 (Pegden Report). These constraints were based on the 2017 Adopted Criteria, and were designed to ensure that the comparison maps generated by Dr. Pegden's algorithm are “good, reasonable comparisons to the enacted map.” Tr. 1311:9-12, 1317:25-1318:25. The constraints that Dr. Pegden imposed included contiguity, population deviation, compact districts, county preservation, municipality preservation, precinct preservation, and incumbency protection. Tr. 1311:13-1317:10; PX508 at 7-8 (Pegden Report). Dr. Pegden also froze boundary lines redrawn by the Special Master in 2017. Tr. 1319:1-22.

\*39 212. Dr. Pegden applied these constraints in a conservative way, so as to “accept choices the mapmaker made.” Tr. 1312:19-22. For example, with respect to population deviation, while the 2017 enacted criteria allows districts to vary between plus-or-minus 5% from the ideal district population, the actual enacted House map does not use all of that range, and instead varies between plus 5% to minus 4.97% from ideal. Dr. Pegden accepted that choice by the mapmaker and required all of his comparison maps to fall within that slightly narrower range. Tr. 1312:1-22; PX508 at 8 (Pegden Report). Similarly, with respect to county preservation, Dr. Pegden's algorithm not only respected North Carolina's county groupings, capped the number of county traversals, and preserved the same number of counties as in the enacted map—his algorithm also preserved whole the very same counties preserved whole in the enacted plan. Tr. 1314:9-1315:3. Likewise, with respect to municipality preservation, Dr. Pegden's algorithm not only preserved the same number of municipalities preserved in the enacted map, but also preserved the very same municipalities, and preserved them within the very same districts as in the enacted plan. Tr. 1315:4-19.

213. Dr. Pegden's conservative application of these constraints “ties [his] comparisons very strongly to the enacted map itself.” Tr. 1315:22-24. This makes it all the more remarkable that the enacted maps are such outliers in his analysis, even against this very similar comparison set. Tr. 1315:24-1316:2, 1331:6-10.

214. Dr. Pegden also constrained the compactness of his comparison maps. In his main analysis, Dr. Pegden required that the average compactness score for each comparison map not exceed the corresponding average for the enacted plan, with an error of up to 5%. Tr. 1312:23-1313:5; PX508 at 8 (Pegden Report). Dr. Pegden also ran robustness checks using several other compactness constraints—a 10% error, a 0% error, and a completely different measure based on total district perimeter—and found that altering the compactness constraint did not affect his results. Tr. 1313:6-1314:8; PX508 at 32-34 (Pegden Report).



215. For some county groupings, because of Dr. Pegden's conservative application of his constraints, it was impossible for his algorithm to find a swap that satisfied all of the constraints. Tr. 1319:25-1320:10. When this occurred, Dr. Pegden ran a modification of his algorithm allowing multiple swaps in one step. Tr. 1320:11-25; PX508 at 9-10 (Pegden Report).

216. For some county groupings, even with multi-move swaps, Dr. Pegden's algorithm still was unable to generate any comparison maps—or only a very small number—meeting all of his constraints. Where this occurred, Dr. Pegden was unable to draw any conclusions about the county groupings in question. Tr. 1321:1-16. Dr. Pegden, however, credibly explained that this does not mean that the maps in those groupings were *not* drawn with the intentional use of partisanship. For example, partisan considerations could have predominated in choosing which municipalities to preserve whole in which districts, a choice Dr. Pegden's comparison maps took as a given. Tr. 1321:17-25, 1349:11-1350:4; PX508 at 10-11 (Pegden Report).

217. Once Dr. Pegden's algorithm made a swap satisfying his constraints, his algorithm evaluated the partisan characteristics of the comparison map that resulted from the swap. Tr. 1322:1-6. For his main analysis, Dr. Pegden used data from the 2016 Attorney General race to analyze the whole House and Senate maps, the subset of House and Senate districts redrawn in 2017, and any House or Senate county grouping last changed in 2017. Dr. Pegden then used data from the 2008 Commissioner of Insurance race to analyze the subset of House and Senate districts last changed in 2011, as well as any House or Senate county grouping last changed in 2011. Dr. Pegden used these particular elections because they were reasonably close, statewide, down-ballot elections that were available to the General Assembly at the relevant times. Tr. 1322:7-24. Dr. Pegden explained that the “point of [his] analysis is really to get at the intent of the legislature,” to “understand the decisions they made with information available to them at the time.” Tr. 1322:25-1323:3.

**\*40** 218. Dr. Pegden also re-ran his analysis using four additional elections—the 2016 Governor election, the 2014 U.S. Senate election, the 2012 Presidential election, and the 2012 Lieutenant Governor election. Tr. 1323:4-12; PX508 at 35-36 (Pegden report). Using these different historical elections did not alter Dr. Pegden's conclusions. Tr. 1323:13-15.

219. To evaluate the partisan characteristics of each comparison map, Dr. Pegden's algorithm calculates the number of seats Republican candidates would win, on average, if a random uniform swing were repeatedly applied to the historical voting data being used. This metric captures how a given comparison map would perform over a range of electoral environments centered around the base election being used (i.e., the 2016 Attorney General's election for Dr. Pegden's primary analysis). Tr. 1324:8-1326:20.

220. Dr. Pegden also re-ran his analysis using a different partisan metric, which measures the Republican vote share in the 61st-most Republican House district, or the 26th-most Republican Senate district. This metric captures, for a given comparison map, how comfortably Republicans would win the seat that would give them the majority in the relevant chamber of the General Assembly. Put differently, this metric captures how large of a Democratic wave election the Republican House or Senate majority could withstand. Tr. 1326:21-1327:20.

221. In his rebuttal report, in response to certain criticisms by Legislative Defendants' experts, Dr. Pegden also re-ran his analysis yet again, this time using a third partisanship metric. In this analysis, Dr. Pegden's algorithm simply measured the number of seats Republicans would have won in an election precisely mirroring the 2016 Attorney General election, without any uniform swing or rank-ordering of districts by Republican vote share. Tr. 1327:21-1328:10.

222. Dr. Pegden's analysis is statistically robust across three different partisanship metrics, none of which altered his conclusions. Tr. 1326:21-1327:15.

223. Dr. Pegden's algorithm repeats the foregoing steps billions or trillions of times in sequence. The algorithm begins with the enacted map, makes a small random change complying with certain constraints, and uses historical voting data to evaluate the partisan characteristics of the resulting map. The algorithm then repeats those steps, each time using the comparison map generated by the previous change as the starting point. By repeating this process many times, Dr. Pegden's algorithm generates

a large number of comparison maps in sequence, each map differing from the previous map only by one small random change. Tr. 1328:22-1329:12.

224. Each sequence of billions or trillions of small changes in Dr. Pegden's analysis is one “run.” His algorithm performs multiple runs for each map being analyzed, with each run beginning with the enacted plan as the starting point. Dr. Pegden ran his algorithm with a sufficient number of steps and runs in order to generate results that are statistically significant but capable of being replicated within a reasonable time. Tr. 1329:3-22.

225. The comparison maps generated by Dr. Pegden's algorithm are not intended to provide a baseline for what neutral, nonpartisan maps of the North Carolina House or Senate should look like. Instead, Dr. Pegden's comparison maps are intended to be similar to the enacted map in question with respect to each map's relevant nonpartisan characteristics, in order to assess how carefully created the enacted plan is to maximize partisan advantage. Tr. 1308:4-12, 1309:10-18, 1329:23-1330:6, 1362:23-1363:6, 1369:25-1370:4.

**\*41** 226. Dr. Pegden performed two levels of analysis on the comparison maps generated by his algorithm. Dr. Pegden's first-level analysis simply “report[s] what happened” in each run when his algorithm made random swaps to the enacted plan's district boundaries. Tr. 1332:8-16. For the enacted House and Senate maps, Dr. Pegden reports that—in every run—the enacted map was more favorable to Republicans than 99.999% of the comparison maps generated by his algorithm making small random changes to the district boundaries. PX515; PX519.

227. Dr. Pegden's first-level analysis provides clear, intuitive evidence that the 2017 Plans were meticulously crafted for Republican partisan advantage.

228. Dr. Pegden provided a stark illustration from his first-level analysis of how precisely the enacted plans are drawn to maximize partisan advantage. Dr. Pegden explained that, in his runs for the Wake-Franklin county grouping in the Senate, after “the first fraction of a second,” his algorithm “never again” encountered a “single comparison map as advantageous to the Republican Party as the enacted plan itself.” Tr. 1308:15-1309:7.

229. Dr. Pegden's second-level analysis provides mathematically precise calculations of how “carefully crafted” the 2017 Plans are—that is, how precisely the district boundaries align with partisan voting patterns so as to advantage Republicans—when compared not just to the comparison maps generated in each run of his algorithm, but to *all possible maps of North Carolina* that satisfy his constraints. Tr. 1332:24-1335:20. In other words, Dr. Pegden is able to determine—to a mathematical certainty—the extent to which the enacted plan is an outlier relative to every single other possible House or Senate map of North Carolina that could exist meeting the contiguity, equal population, compactness, political subdivision, and Special Master constraints that his algorithm applies. For the enacted House and Senate maps, Dr. Pegden reports that under this second-level analysis the enacted map is more carefully crafted for Republican partisan advantage than at least 99.999% of all possible maps of North Carolina satisfying his constraints. PX515; PX519.

230. The results of Dr. Pegden's second-level analyses follow from his theorems, which have been validated by other mathematicians. Tr. 1337:9-18. And the results of Dr. Pegden's second-level analyses are intuitive. In effect, Dr. Pegden's analysis shows that the 2017 Plans not only are quite advantageous to Republicans, but also are surrounded in the space of maps by a plethora of other maps that are *less* advantageous to Republicans. It is simply not possible, even in principle, for a typical map of North Carolina (or any other state) to be favorable to Republicans and be surrounded by maps that are less favorable. The only explanation is that the map drawer intentionally crafted the district boundaries to maximize partisan advantage. Tr. 1337:9-1340:8; *see* PX508 at 7 (“In other words, it is mathematically impossible for any state, with any political geography of voting preferences and any choice of districting criteria, to have the property that a significant fraction of the possible districtings of the state satisfying the chosen districting criteria appear carefully crafted.”)

231. For both the House and the Senate, Dr. Pegden performed three different analyses. First, using voting data from the 2016 Attorney General election, Dr. Pegden analyzed the entire House and Senate maps. Second, again using voting data from the 2016 Attorney General election, Dr. Pegden analyzed only the districts that were redrawn in 2017, while freezing the districts that were last changed in 2011. Third, using voting data from the 2008 Commissioner of Insurance election, Dr. Pegden analyzed only the districts that were last changed in 2011, while freezing the districts that were redrawn in 2017. Tr. 1340:14-1341:15.

\*42 232. Dr. Pegden's statewide analyses conclusively show that the pertinent districts drawn in 2011, the districts drawn in 2017, and the maps as a whole were all drawn with the intentional and extreme use of partisan considerations. The following demonstrative chart summarizes Dr. Pegden's statewide results:

Map Analyzed	First-level Analysis (% of algorithm maps less partisan than enacted map)	Second-level Analysis (% of all maps less carefully crafted than enacted map)
<i>House</i>		
Whole state	99.99984%	99.9991%
2017 districts only	99.9982%	99.99%
2011 districts only	99.9999988%	99.999993%
<i>Senate</i>		
Whole state	99.99999983%	99.999999%
2017 districts only	99.99999975%	99.9999985%
2011 districts only	99.9995%	99.997%

Sources: Plaintiffs' Exhibits 515-517, 519-521

PX904; *see also* PX515-517, 519-521; Tr. 1341:18-1346:16.

233. These results cannot be explained by North Carolina's political geography. Dr. Pegden's algorithm compares the enacted map to other maps of North Carolina, with the very same political geography. And Dr. Pegden's theorems do not depend on any aspect of North Carolina's political geography—the theorems are mathematically valid for any state with any political geography. Indeed, Dr. Pegden's theorems are mathematically valid not just for redistricting plans, but for any abstract space on which one could imagine taking a random walk using a Markov chain. Tr. 1333:14-24, 1401:9-1402:5.

234. The results of Dr. Pegden's statewide analyses also conclusively show that it is possible for a North Carolina map drawer to make intentional and extreme use of partisan considerations even within the Whole County Provision and the other constraints set forth in the 2017 Adopted Criteria. All of Dr. Pegden's comparison maps respect the Whole County Provision and the other constraints set forth in the 2017 Adopted Criteria. And in his algorithm, Dr. Pegden applied those constraints in a very conservative way that respects the choices made by the map drawer with respect to compactness and the divisions and preservation of particular counties and municipalities. Even within those tight constraints, there were many different maps for a map drawer to choose from, and the enacted maps demonstrate that the map drawer intentionally chose maps that were more carefully crafted for Republican partisan advantage than at least 99.999% of all possible alternatives. Tr. 1402:15-1403:8; PX515; PX519.

235. The Court gives great weight to Dr. Pegden's testimony, analysis, and conclusions.



**d. Dr. Cooper**

236. Christopher A. Cooper, Ph.D., has resided in North Carolina for 17 years and is the Robert Lee Madison Distinguished Professor and Department Head of Political Science and Public Affairs at Western Carolina University. Tr. 848:18-849:7. Dr. Cooper was accepted as an expert in political science with a specialty in the political geography and political history of North Carolina. Tr. 861:21-862:5.

237. As Dr. Cooper explained, North Carolina is a “purple state” that, on the whole, is politically moderate. Tr. 862:21-22. In statewide elections, which are not susceptible to gerrymandering, Democratic candidates perform as well as Republican candidates. Tr. 859:14-18, 864:1-8, 865:5-18. Dr. Cooper's analysis demonstrated that North Carolina is a “two-party” state where Democrats can compete and succeed with respect to U.S. Presidential elections, Tr. 863:2-864:8; PX255; PX253 at 5-6 (Cooper Report), and elections for North Carolina's Council of State, Tr. 864:21-865:18; PX256; PX253 at 6-7 (Cooper Report).

\*43 238. Dr. Cooper also analyzed the aggregate vote share of Democratic and Republican candidates in General Assembly elections since 2012, finding that Democrats received close to or over 50% of the vote in each election. Tr. 865:23-866:16; PX257. But over the same period, Republicans controlled the North Carolina General Assembly, winning supermajorities in both chambers from 2012-2016 and majorities in 2018. Tr. 866:24-868:12; PX259. Despite winning close to or more than 50% of the statewide vote in General Assembly elections since 2012, Democrats have “never approached” a roughly corresponding percentage of seats, a sign of “gross disproportionality.” Tr. 868:4-12; PX257; PX259; PX264; PX253 at 8, 11 (Cooper Report).

**Percent of Republican Two-Party Vote Share in NCGA Elections 2012-2018**

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**Percentage of Seats Held by Democrats in the NCGA 2001-2018**

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239. Dr. Cooper also used the results of the 2018 elections to show how, under the enacted House and Senate plans, Democratic votes translate to seats far less efficiently than Republican votes. Consistent with the packing and cracking of Democratic voters, when Democrats win seats in the House and Senate, they win by large margins, meaning that many votes tend to be “wasted.” Republicans win by significantly narrower margins. Tr. 869:23-871:3; PX262; PX263; PX253 at 14-16 (Cooper Report).

**NC State Senate Election Margins 2018**

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**NC State House Election Margins 2018**

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240. The Court finds Dr. Cooper's analysis of the 2018 elections to be persuasive and consistent with Plaintiffs' experts' findings regarding the packing and cracking of Democratic voters within individual county groupings, described below.

**C. The 2017 Plans Were Designed Intentionally and Effectively to Maximize  
Republican Partisan Advantage Within Specific County Groupings**

241. Each of Plaintiffs' four experts analyzed seven county groupings in the Senate and 16 county groupings in the House. Plaintiffs' experts concluded that partisan gerrymandering and bias in these groupings was responsible for the extreme partisan bias that they found in their statewide analysis of the House and Senate. Tr. 1134:1-5 (Dr. Mattingly).

## **1. Senate County Groupings**

### ***a. Mecklenburg***

242. The Mecklenburg Senate county grouping contains Senate Districts 37, 38, 39, 40, and 41. The Court gives weight to the analysis of Plaintiffs' experts and finds that this county grouping is an extreme partisan gerrymander.

243. For each House and Senate county grouping that Plaintiffs' experts analyzed, Dr. Cooper produced a map showing the district boundaries within the grouping and the partisanship of every VTD within the grouping using the results of the 2016 Attorney General election. In each map, darker red shading indicates a larger Republican vote share in the VTD, darker blue shading indicates a larger Democratic vote share in the VTD, and lighter colors indicate VTDs that were closer to evenly split in Democratic and Republican vote shares.

### **244. Plaintiffs' Exhibit 285 is Dr. Cooper's map for this county grouping:**

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245. As Dr. Cooper explained, the mapmaker packed Democratic voters into Senate Districts 37, 38, and 40 to make Senate Districts 39 and 41 as favorable for Republicans as possible. Tr. 901:16-20; PX253 at 47 (Cooper Report).

246. Senate District 41 stretches from the farthest northern boundaries of Mecklenburg County all the way to the farthest south, traversing two narrow passageways. One passageway is so narrow that the district's contiguity is maintained only by the Martin Marietta Arrowood Quarry, which is less than a mile wide. Tr. 902:22-903:4; PX287; PX253 at 48 (Cooper Report). The Court is persuaded that the clear intent of this elongated district is to connect the Republican areas north of Charlotte with the Republican-leaning areas in the southern tip of Charlotte. Tr. 902:5-8.

\*44 247. Senate District 39 contains the Republican-leaning VTDs in the southern portion of Charlotte, which resemble a “pizza slice” in Dr. Cooper's maps. Tr. 901:11-15, 902:7-10; PX285; PX286. Those Republican VTDs in Charlotte are grouped with the Republican-leaning areas in the south of Mecklenburg County, outside of Charlotte, so that Senate District 39 is more favorable to Republicans. Tr. 901:18-20; PX253 at 47.

248. Dr. Cooper also illustrated the packing and cracking of Democratic voters in this grouping by focusing just on the division of Charlotte. As illustrated in Plaintiffs' Exhibit 286 below, the enacted plan places Charlotte's most Democratic VTDs in Senate Districts 37, 38, and 40, while placing all of Charlotte's Republican-leaning VTDs in Senate Districts 39 and 41. Tr. 902:1-9; PX253 at 47 (Cooper Report). As Dr. Cooper explained, with large municipalities such as Charlotte, the mapmaker's partisan intent is not apparent from the mere fact that a municipality is split, but rather from “where do those municipal splits take place and what are the partisan effects.” Tr. 900:12-21; *see* Tr. 877:24-25. In the Mecklenburg Senate county grouping, the Court is persuaded the mapmaker split Charlotte strictly along partisan lines for partisan gain.

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249. Legislative Defendants' expert Dr. Johnson offered alternative explanations for the configuration of this grouping. While Dr. Johnson admitted that he had no personal knowledge as to why Dr. Hofeller or the General Assembly drew the districts this way, Tr. 1972:18-1973:6, Dr. Johnson stated that Senate District 41 was “drawn to capture as much of” the Charlotte suburbs as

possible into a single district, Tr. 1844:11-12, and that Senate 39 similarly reflected an effort to “unite[] the southern suburbs” of Charlotte, LDTX289 at 4; Tr. 1845:4-9.

250. The Court rejects Dr. Johnson's explanations as it appears to be purely speculative, and in any event his speculation does not withstand minimal scrutiny. Rather than seeking to create a “suburban” district, Senate District 41 stretches to Mecklenburg County's southern tip in order to pick up areas of the City of Charlotte itself, and specifically Republican-leaning VTDs in Charlotte. Tr. 1972:7-1974:15. In so doing, Senate District 41 *avoids* suburban areas north of Charlotte, with those suburbs packed into Senate District 38 instead because they are Democratic-leaning. *Id.* Similarly, Senate District 39 cuts into the heart of Charlotte, taking all of Charlotte's most Republican-leaning areas, while avoiding suburbs in southeast Mecklenburg County. Tr. 1975:5-1976:14. The Court finds Dr. Johnson's speculative alternative explanations for the configuration of the Mecklenburg Senate county grouping not credible.

251. Dr. Johnson also opined at trial that the enacted plan version of this county grouping is not the most favorable possible configuration of this grouping for Republicans. Dr. Johnson created an alternative version of this grouping that he asserted would be even more favorable for Republicans. Tr. 1840:17-1841:19. However, Dr. Johnson's alternative map suffered from a critical error: it paired the two Republican incumbents who were in office at the time of the 2017 redistricting. Tr. 1977:2-1978:7. Clearly, the most favorable possible configuration of this grouping for Republicans would not pair the only two Republican incumbents together, and Dr. Johnson conceded that he did not analyze whether the enacted plan represents the most favorable possible configuration of this grouping possible that would not have paired those two Republican incumbents. *Id.*

\*45 252. The simulations of Plaintiffs' other experts confirm and independently establish that this county grouping is an extreme partisan gerrymander.

253. Dr. Chen analyzed individual county groupings by comparing the most Democratic district in the grouping under the enacted plan with the most Democratic district in the grouping under the simulated plans, comparing the second most Democratic district in the grouping under the enacted plan with the second most Democratic district in the grouping under the simulated plans, and so on.

254. Using this methodology, Dr. Chen found that the Mecklenburg Senate county grouping has four districts in the enacted plan that are extreme partisan outliers. PX098; *see* Tr. 377:8-14. Dr. Chen found that Senate Districts 39 and 41 have a lower Democratic vote share than their corresponding districts in all 1,000 of his simulated plans of this grouping, and that Senate Districts 37 and 40 have a higher Democratic vote share than 99.99% and 100% than their corresponding districts in his simulations. Dr. Chen's findings show the packing of Democratic voters into certain districts in this grouping and the cracking of Democratic voters in Senate Districts 39 and 41, in an effort to create two districts as favorable for Republicans as possible. The Court gives weight to Dr. Chen's findings for this county grouping, which are reflected in Plaintiffs' Exhibit 98 below:<sup>5</sup>

<sup>5</sup> Unless otherwise noted, Dr. Chen's results for individual House and Senate county groupings were materially the same for his Simulation Set 2 as for his Simulation Set 1. Tr. 349:12-18.

#### Figure 78: Senate Simulation Set 1:

##### Democratic Vote Share of the Enacted and Computer-Simulated Districts Within the Mecklenburg County Grouping

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255. Dr. Mattingly analyzed individual county groupings by plotting the Democratic vote fraction in each district in the grouping, ordered from least to most Democratic. He conducted this analysis for the enacted plan (represented by a black dot in his county-grouping-level figures) and for his ensemble of nonpartisan plans (represented by the blue histograms), using six prior statewide elections. Tr. 1134:14-1138:6. If the black dot representing the enacted plan is above the dotted black line at 50%, the Democrats

win that district under the enacted plan. Tr. 1135:23-1136:6. If all or the bulk of the blue histogram representing the ensemble is above the dotted black line at 50%, the Democrats would expect to win that district under the ensemble. Tr. 1137:8-1138:6. Dr. Mattingly labeled the historical election whose statewide vote counts he was using in the upper left corner of the plots. Black dots that are at the bottom of the corresponding blue histogram represent districts that Democrats have been cracked out of, because the enacted plan has many fewer Democrats than would be expected in the nonpartisan plans; black dots that are at the top of the corresponding blue histogram represent districts that Democrats have been packed into. Tr. 1138:14-1139:4.

256. Plaintiffs' Exhibit 370 shows Dr. Mattingly's analysis of the Mecklenburg Senate county grouping:

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257. As the figure above shows, Democrats were cracked out of the two most Republican districts in this grouping, and packed into heavily Democratic districts. In the enacted plan, there is a significant jump in Democratic vote share between: (i) the two least Democratic districts (Senate Districts 39 and 41), and (ii) the three most Democratic districts (Senate Districts 40, 37, and 38). PX370; PX 359 at 16 (Mattingly Report). Dr. Mattingly testified that the jump signifies intentional gerrymandering—he called it “signature gerrymandering”—and means that elections in the grouping will be nonresponsive to the votes cast. Tr. 1139:19-21; *see* 1146:13-21; *see* PX 359 at 14-15 (Mattingly Report). As the figure above shows, the gerrymander cost Democrats one or two seats in certain electoral environments, because the black dots for Senate Districts 39 and 41 often fall below the 50% line while the blue histograms often rise above it. Tr. 1142:22-1143:1.

\*46 258. Dr. Mattingly mathematically quantified the “jump”—*i.e.*, the cracking and packing in this grouping—using all 17 statewide elections he studied. Specifically, Dr. Mattingly calculated the average Democratic vote share in the two least Democratic districts and the average Democratic vote share in the three most Democratic districts, for both the enacted plans and his ensemble plans. PX 359 at 16 (Mattingly Report). He found that the two least Democratic districts in the enacted plan had fewer Democratic voters than 100% of the comparable districts in the nonpartisan ensemble, while the three most Democratic districts in the enacted plan had more average Democratic votes than 100% of the comparable Democratic districts in the nonpartisan ensemble, meaning that *not a single plan* in his nonpartisan ensemble showed as much of a jump—*i.e.*, as much cracking and packing—as the enacted plan. Tr. 1143:2-20. Dr. Mattingly concluded that the Mecklenburg Senate grouping is an extreme pro-Republican partisan gerrymander, Tr. 1143:21-24, and the Court gives weight to his conclusion.

259. Dr. Pegden found that the Mecklenburg Senate county grouping constitutes an extreme partisan gerrymander. In his first level analysis, Dr. Pegden found that the enacted plan's version of this grouping is more favorable to Republicans than 99.9985% of the maps that his algorithm encountered by making small changes to the district boundaries. In his second level analysis, Dr. Pegden found that this grouping is more carefully crafted to favor Republicans than at least 99.995% of all possible districtings of this county grouping that satisfy the criteria Dr. Pegden used. Tr. 1356:25; PX540. The Court gives weight to Dr. Pegden's analysis and conclusions.

260. The Court finds that the analyses of Plaintiffs' experts independently and together demonstrate that this county grouping is an extreme and intentional partisan gerrymander.

#### **b. Franklin-Wake**

261. The Franklin and Wake Senate county grouping contains Senate Districts 14, 15, 16, 17, and 18. The Court gives weight to the analysis of Plaintiffs' experts and finds that this county grouping is an extreme partisan gerrymander.

262. Plaintiffs' Exhibit 276 is Dr. Cooper's map for this county grouping:

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263. As Dr. Cooper testified and is clear from a visual inspection, this grouping packs Democratic voters into Senate Districts 14, 15, and 16 in order to make Senate Districts 17 and 18 as favorable for Republicans as possible. Tr. 892:11-13; PX253 at 36 (Cooper Report).

264. Senate District 18 includes Franklin County and the only Republican-leaning VTDs within Raleigh, near the center of the city. Tr. 892:13-23; PX278; PX253 at 37-38 (Cooper Report).

265. As with Charlotte, the fact that Raleigh is split is not itself revealing, but how and “where Raleigh is split” illustrates the partisan intent behind the districts in this grouping. Tr. 893:16-894:21; PX253 at 37-38. Plaintiffs' Exhibit 278, reproduced below, shows how the mapmaker put the most Democratic VTDs in Raleigh in Senate Districts 14, 15, and 16, and put all of Raleigh's moderate and Republican-leaning VTDs in Senate District 18. *Id.*

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266. Senate District 17 includes all of the Republican VTDs in southern Wake County while carefully avoiding heavily Democratic areas. PX276; PX253 at 36 (Cooper Report).

267. The Court does not give weight to any nonpartisan explanation Legislative Defendants offered with respect to the boundaries of Senate Districts 17 and 18. At trial, Legislative Defendants focused on an amendment that Democratic Senator Daniel Blue introduced that altered this grouping, but that amendment did *not* affect the contours of Senate Districts 17 and 18. Senator Blue testified that he was told by Republican leadership that he could not change the boundaries of Senate Districts 17 and 18, but instead could only shift population between the heavily Democratic districts in this grouping. Tr. 155:20-156:15. Senator Blue's amendment did just that, as it only shifted population between Senate Districts 14 and 15, both of which had been packed with Democratic voters. Tr. 150:5-8; PX619. Senator Blue's amendment did not result in, and cannot explain, the composition of Senate Districts 17 and 18 and their extreme partisan outlier status.

**\*47** 268. The simulations of Plaintiffs' other experts confirm and independently establish that this county grouping is an extreme partisan gerrymander.

269. Dr. Chen found that this county grouping contains three districts that are extreme partisan outliers. Tr. 381:2-18. Senate District 14 has a higher Democratic vote share than its corresponding district in all of the simulations, while Senate Districts 17 and 18 have lower Democratic vote shares than their corresponding districts in all of the simulations. *Id.*; PX97. Dr. Chen's findings show the packing of Democratic voters into districts in this grouping in an effort to create two districts (Senate Districts 17 and 18) that are as favorable for Republicans as possible. The Court gives weight to Dr. Chen's analysis and findings for this county grouping, which are reflected in Plaintiffs' Exhibit 97 below.

**Figure 77: Senate Simulation Set 1:**

**Democratic Vote Share of the Enacted and Computer-Simulated Districts Within the Franklin-Wake County Grouping**

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270. Plaintiffs' Exhibit 372 shows Dr. Mattingly's analysis of this grouping:

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271. Dr. Mattingly's analysis shows that Democrats were cracked out of the two least Democratic districts in this grouping (Districts 17 and 18), and packed into heavily Democratic districts. PX372; Tr. 1145:2-7. In the enacted plan, there is a significant jump between the Democratic vote share in the least two Democrats districts and the three most Democratic districts. PX372.

Dr. Mattingly found that not a single plan in his ensemble showed as much of a jump between these sets of districts as the enacted plan, Tr. 1145:11-14, and concluded that this grouping showed more pro-Republican advantage than 100% of the maps in his ensemble. Tr. 1153:24-1154:4. As the figure above shows, the gerrymander causes Democrats to lose two seats in this grouping in many electoral environments, because the black dots for Senate Districts 17 and 18 fall below the 50% line while the blue histograms often rise above it. *See* Tr. 1142:22-1143:1. Dr. Mattingly concluded that the Wake-Franklin Senate grouping is an extreme pro-Republican partisan gerrymander, Tr. 1153:17-23, and the Court gives weight to his conclusion.

272. Dr. Pegden found that this grouping constitutes an extreme partisan gerrymander. In his first level analysis, Dr. Pegden found that the enacted plan's version of this grouping is more favorable to Republicans than 99.99999995% of the maps that his algorithm encountered by making small changes to the district boundaries. Tr. 1356:23-24; PX539. In his second level analysis, Dr. Pegden found that this grouping is more carefully crafted to favor Republicans than at least 99.99999985% of all possible districtings of this county grouping that satisfy the criteria Dr. Pegden used. *Id.* Dr. Pegden also testified that the changes made by Senator Blue to the boundaries between Senate Districts 14 and 15 cannot explain his results for this county grouping. *See* Tr. 1352:2-1354:22. The Court gives weight to Dr. Pegden's analysis and conclusions.

273. The analyses of Plaintiffs' experts independently and together demonstrate that this county grouping is an extreme partisan gerrymander.

### ***c. Nash-Johnston-Harnett-Lee-Sampson-Duplin***

**\*48** 274. The Nash-Johnston-Harnett-Lee-Sampson-Duplin Senate county grouping contains Senate Districts 10, 11, and 12. The Court gives weight to the analysis of Plaintiffs' experts and finds that this county grouping is an extreme partisan gerrymander.

275. Plaintiffs' Exhibit 274 is Dr. Cooper's map of this county grouping:

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

276. Dr. Cooper explained how the district boundaries connect the most Republican VTDs in Johnston County with the Democratic stronghold of Rocky Mount in Senate District 11, ensuring that those Rocky Mount Democratic voters are separated from the moderate and Democratic-leaning VTDs in Johnston County, diluting the voting strength of these various Democratic voters. Tr. 890:4-891:17; PX253 at 33 (Cooper Report). Dr. Hofeller's Maptitude files further illustrate this intentional cracking of Democratic voters. Dr. Hofeller's file, below in Plaintiffs' Exhibit 332, reveals how he drew these districts with "remarkable precision" by "building a fence" around the moderate and Democratic-leaning VTDs in central Johnston County—shaded yellow and red in the image below—making sure to keep these VTDs in Senate District 10 separate from Rocky Mount's voters in Senate District 11. Tr. 968:12-969:8.

### **Figure 3: Partisan Targeting in Senate Districts 10, 11, and 12**

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

277. Dr. Hofeller's Microsoft Excel files provide evidence that Dr. Hofeller placed special attention on this country grouping and its partisan composition. In a file titled "Johnston Senate Switch," Dr. Hofeller compared two alternative drafts of this county grouping and the expected Republican performance of the three districts in this grouping under each of the two alternatives. Tr. 469:5-470:3; PX166; PX123 at 68-69 (Chen Rebuttal Report). The file analyzed no information other than partisanship considerations, demonstrating Dr. Hofeller's predominant partisan intent in constructing the districts in this grouping. *Id.*

278. The Court does not give weight to any nonpartisan explanation Legislative Defendants offered with respect to the boundaries of these districts.



279. The simulations of Plaintiffs' other experts confirm and independently establish that this county grouping was gerrymandered to favor Republicans.

280. Dr. Chen found that all three districts in this county grouping are extreme partisan outliers. Tr. 375:14-25. Senate District 11 has a lower Democratic vote share than its corresponding district in all the simulations, while Senate Districts 10 and 12 have a higher Democratic vote share than their corresponding districts in all the simulations. PX96. Dr. Chen's findings demonstrate the cracking of Democratic voters across all three districts in this grouping to ensure that all three districts are safe Republican seats. The most Democratic district in this grouping would be far more competitive or even Democratic-leaning under a nonpartisan plan, particular in electoral environments that are more neutral or favorable for Democrats than the 2010-2016 statewide elections. Tr. 376:1-8. The Court gives weight to Dr. Chen's analysis and findings for this county grouping, which are reflected in Plaintiffs' Exhibit 96 below:

**Figure 76: Senate Simulation Set 1:**

**Democratic Vote Share of the Enacted and Computer-Simulated Districts  
Within the Duplin-Harnett-Johnston-Lee-Nash-Sampson County Grouping**

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

\*49 281. Plaintiffs' Exhibit 382 shows Dr. Mattingly's analysis of this grouping:

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

282. Dr. Mattingly concluded that this grouping reflects a pro-Republican partisan bias, Tr. 1154:20-1155:1, and the Court gives weight to Dr. Mattingly's conclusion. Dr. Mattingly's analysis shows that, in this grouping, the number of Democrats in the districts was flattened or squeezed to advantage the Republicans. PX778 at 29; Tr. 1154:20-22. Squeezing represents pure cracking, Tr. 1150:22-1151:2. Here, Democrats were cracked out of the most Democratic district and placed in the two least Democratic districts where their presence would not affect the results. When Dr. Mattingly mathematically quantified the cracking in this grouping using all 17 statewide elections, he found that the least two Democratic districts in the enacted plan had more Democratic voters than 77.21% of the comparable districts in the nonpartisan ensemble. Although Dr. Mattingly did not label this grouping an "outlier" because he used a 90% threshold, he explained that the pro-Republican bias evidence in this grouping still contributed to the extreme pro-Republican bias he found statewide. Tr. 1151:21-1153:2, 1154:23-1155:1. Because the lines in each county grouping are independent of each other, if the mapmaker time after time makes choices that systematically bias each grouping to one party, that effect accumulates across the map. Tr. 1151:21-1153:2.

283. Moreover, while Dr. Mattingly's "jump" analysis evaluated the districts in this grouping using all 17 statewide elections, analyzing the most Democratic district in this grouping based on the more recent elections depicted in the figure above reveals the intent and effects of the gerrymander. Dr. Mattingly's figure shows that the most Democratic district in this grouping under the enacted plan, which is Senate District 11 in most of the elections shown, has less Democrats than the most Democratic district in almost all of his simulations under these more recent six statewide elections. PX382.

284. Dr. Pegden found evidence that this county grouping is an extreme partisan gerrymander. Due to Dr. Pegden's conservative methodology, his algorithm was only able to generate 18 comparison maps for this Senate county grouping. Tr. 1355:5-23; PX542. Of those 18 maps, Dr. Pegden found that the enacted map for this county grouping is more favorable to Republicans than every single one. Tr. 1356:3-8. The Court gives weight to Dr. Pegden's analysis and conclusions.

285. The analyses of Plaintiffs' experts independently and together demonstrate that this county grouping is an extreme partisan gerrymander.

**d. Guilford-Alamance-Randolph**

286. The Guilford-Alamance-Randolph Senate county grouping contains Senate Districts 24, 26, 27, and 28.

287. Plaintiffs' Exhibit 281 is Dr. Cooper's map for this county grouping:

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

288. For this county grouping, the *Covington* court tasked the Special Master with redrawing Senate District 28 because the General Assembly's enacted version of Senate District 28 did not cure the racial gerrymander. 2017 WL 11049096, at \*1-2 (M.D.N.C. Nov. 1, 2017). In redrawing Senate District 28, the Special Master also made changes to Senate District 24. *See* LDTX159 at 19; *Covington*, ECF No. 220 at 34. Plaintiffs do not challenge Senate Districts 24 and 28 in this case and do not seek relief with respect to them.

\*50 289. Unlike Senate Districts 24 and 28, the Special Master did *not* make any changes to the General Assembly's enacted version of Senate District 26. *See Covington*, ECF No. 220 at 34 (“2017 Enacted Senate District 26 remains untouched”); Tr. 378:9-16. The Special Master made certain changes to Senate District 27 in carrying out his assignment to redraw Senate District 28, but in so doing, the Special Master did not alter any part of the border between Senate Districts 27 and 26. *See* Chen Demonstrative D6 at 3; LDTX159 at 19. According to estimates presented at trial by Legislative Defendants' expert Dr. Johnson, of the current population of Senate District 27, 77% of the population was put into the district by the General Assembly under the enacted 2017 Senate plan.

290. In drawing Senate District 26, the mapmaker cracked Democratic voters in Guilford County, placing the Democratic stronghold of High Point in Senate District 26 and separating these voters from Democratic voters in the Greensboro suburbs. Tr. 895:15-896:25; PX254 at 42-43 (Cooper Report). This has the effect of “washing out” the influence of High Point's Democratic voters, who are joined with the heavily Republican Randolph County in a safe Republican district (Senate District 26), preventing them from influencing the competitive Senate District 27 and thereby making Senate District 27 more favorable for Republicans. *Id.*

291. Dr. Hofeller's Maptitude files confirm that he was using VTD-level partisanship data in constructing the districts in this and other county groupings. Tr. 971:16-18; 975:2-5. For example, Dr. Hofeller drew the boundaries of Senate District 26 to grab only the most Democratic VTDs on the border of Randolph County. Tr. 975:10-13, 974:19-975:5. The partisan implications of which are illustrated by Dr. Hofeller's draft map, which is Plaintiffs' Exhibit 334:

**Figure 5: Partisan Targeting in Senate Districts 24, 26, 27, and 28**

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

292. The Court does not give weight to any nonpartisan explanation Legislative Defendants offered with respect to the decision to place High Point's most-Democratic VTDs in Senate District 26.

293. The simulations of Plaintiffs' other experts confirm and independently establish that Senate Districts 26 and 27 are extreme partisan gerrymanders.

294. Drs. Chen, Mattingly, and Pegden all froze Senate Districts 24 and 28 in this grouping. Tr. 378:17-379:19; PX359 at 23 (Mattingly Report); PX508 at 30 (Pegden Report).

295. Dr. Chen explained in un rebutted testimony that his simulations of the Alamance-Guilford-Randolph House county grouping did not make any changes to the portion of Senate District 27 added by the *Covington* Special Master, and instead



altered only the southwest portion of Senate District 27 that borders Senate District 26. Tr. 773:8-22; Chen Demonstrative D6 at 4, 5; PX1 at 18-19 (Chen Report). The Court finds that because Dr. Chen's simulations altered only portions of Senate District 27 drawn by the mapmaker, and did not touch the portions of the district added by the Special Master, the mapmaker necessarily is responsible for the extreme partisan bias that Dr. Chen finds for Senate District 27.

296. Dr. Chen found that both districts in this county grouping that he did not freeze are extreme partisan outliers. Senate District 26 has a higher Democratic vote shares than its corresponding district in all of the simulations, while Senate District 27 has a lower Democratic vote share than its corresponding district in all of the simulations. Tr. 380:1-18; PX94. Dr. Chen's findings show the mapmaker's intentional placing of High Point's Democratic voters into Senate District 26 to make Senate District 27 as favorable for Republicans as possible. The Court gives weight to Dr. Chen's findings and analysis for this grouping, which are reflected in Plaintiffs' Exhibit 94 below:

**Figure 74: Senate Simulation Set 1:**

**Democratic Vote Share of the Enacted and Computer-Simulated  
Districts Within the Alamance-Guilford-Randolph County Grouping**

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

\*51 297. Plaintiffs' Exhibit 380 shows Dr. Mattingly's analysis of the Guilford-Alamance-Randolph Senate county grouping:

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298. Setting aside the frozen districts, Dr. Mattingly's analysis shows that Democrats were cracked between the grouping's two remaining districts—an example of what Dr. Mattingly called flattening or squeezing. PX380; PX778 at 29; PX359 at 23. Not a single plan in Dr. Mattingly's nonpartisan ensemble showed as much cracking of Democratic voters in the grouping as was present in the enacted plan, PX359 at 23, and thus the grouping has more pro-Republican advantage than 100% of the maps in his nonpartisan ensemble. Tr. 1153:24-1154:4. Dr. Mattingly concluded that this grouping is an extreme pro-Republican partisan gerrymander, Tr. 1153:17-23; PX778 at 29; PX359 at 23, and the Court gives weight to this conclusion.

299. Dr. Pegden found that this Senate county grouping constitutes an extreme partisan gerrymander. In his first level analysis, Dr. Pegden found that the enacted plan's version of this grouping is more favorable to Republicans than 99.95% of the maps that his algorithm encountered by making small changes to the district boundaries. In his second level analysis, Dr. Pegden found that this grouping is more carefully crafted to favor Republicans than at least 99.85% of all possible districtings of this grouping that satisfy the criteria Dr. Pegden used. Tr. 1357:1; PX543. The Court gives weight to Dr. Pegden's analysis and conclusions.

300. The analyses of Plaintiffs' experts independently and together demonstrate that Senate Districts 26 and 27 are extreme partisan gerrymanders.

***e. Davie-Forsyth***

301. The Davie-Forsyth Senate county grouping contains Senate Districts 31 and 32. The Court gives weight to the analysis of Plaintiffs' experts and finds that this county grouping is an extreme partisan gerrymander.

302. Plaintiffs' Exhibit 282 is Dr. Cooper's map for this county grouping:

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303. Dr. Cooper explained what is apparent from the above map: the mapmaker packed Democratic voters into Senate District 32, thereby ensuring that Senate District 31 would be a safe Republican district. Tr. 897:9-24; PX253 at 44 (Cooper Report).

304. This packing occurred not only at the grouping-level, but within Winston-Salem. The map packs all of Winston-Salem's most Democratic VTDs into Senate District 32, and puts almost all of the city's Republican-leaning VTDs in Senate District 31. Tr. 898:1-16; PX283; PX253 at 44 (Cooper Report). As shown in Plaintiffs' Exhibit 283 below, Senate District 31 wraps around Winston-Salem to avoid the Democratic-leaning VTDs in the city, while taking in the Republican-leaning VTDs on the western, northern, and eastern sides of the city:

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305. Dr. Hofeller's Mapitude files confirm his predominant partisan intent in drawing this grouping. The district boundaries are drawn "almost perfectly" so that the green areas on the map, which reflect Republican VTDs, are all placed in Senate District 31. Tr. 976:24-977:4; PX335; PX329 at 11 (Cooper Rebuttal Report). The "bite mark" on the west side of Winston-Salem, where Republican-leaning VTDs were carved out of Senate District 32, is evident on Dr. Hofeller's draft map of these districts, which is Plaintiffs' Exhibit 335:

**Figure 6: Partisan Targeting in Senate Districts 31 and 32**

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

\*52 306. The Court does not give weight to any nonpartisan explanation Legislative Defendants offered with respect to the boundaries of these districts.

307. The simulations of Plaintiffs' other experts confirm and independently establish that the Davie-Forsyth county grouping is an extreme partisan gerrymander.

308. Dr. Chen found that both districts in this grouping are extreme partisan outliers. Tr. 373:18-374:12. Senate District 32 has a far higher Democratic vote share than its corresponding district in all of the simulations, while Senate District 31 has a far lower Democratic vote share than its corresponding district in all of the simulations. PX95. Dr. Chen's findings demonstrate the packing of Democratic voters into Senate District 32 in order to make Senate District 31 a safe Republican seat. As Dr. Chen explained, the less Democratic district in this grouping would be far more competitive for Democrats under a nonpartisan plan, particularly in electoral environment that are more neutral or favorable for Democrats than the 2010-2016 statewide elections. Tr. 374:13-23. The Court gives weight to Dr. Chen's analysis and findings for this county grouping, which are reflected in Plaintiffs' Exhibit 95 below:

**Figure 75: Senate Simulation Set 1:**

**Democratic Vote Share of the Enacted and Computer-Simulated Districts Within the Davie-Forsyth County Grouping**

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

309. Plaintiffs' Exhibit 374 shows Dr. Mattingly's analysis of this county grouping:

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

310. Dr. Mattingly's analysis shows that Democrats were cracked out of the most Republican district in this county grouping, and packed into the most Democratic district. PX374; PX778 at 29. Dr. Mattingly found that not a single plan in his nonpartisan ensemble showed as much packing of Democratic voters in the Davie-Forsyth Senate grouping as was present in the enacted plan, PX359 at 18, and thus the grouping has a more pro-Republican advantage than 100% of the maps in his nonpartisan

ensemble, Tr. 1153:24-1154:4. Dr. Mattingly concluded that this grouping is an extreme pro-Republican partisan gerrymander, Tr. 1153:17-23; PX778 at 29; PX359 at 18, and the Court gives weight to his conclusion.

311. Dr. Pegden found that this county grouping constitutes an extreme partisan gerrymander. In his first level analysis, Dr. Pegden found that the enacted plan's version of the grouping is more favorable to Republicans than 99.993% of the maps that his algorithm encountered by making small changes to the district boundaries. In his second level analysis, Dr. Pegden found that the grouping is more carefully crafted to favor Republicans than at least 99.98% of all possible districtings of this county grouping that satisfy the criteria Dr. Pegden used. Tr. 1356:25; PX538. The Court gives weight to Dr. Pegden's analysis and conclusions.

312. The analyses of Plaintiffs' experts independently and together demonstrate that this county grouping is an extreme partisan gerrymander.

#### ***f. Bladen-Pender-New Hanover-Brunswick***

313. The Bladen-Pender-New Hanover-Brunswick Senate county grouping, drawn in 2011 and left unchanged in 2017, contains Senate Districts 8 and 9. The Court gives weight to the analysis of Plaintiffs' experts and finds that this county grouping is an extreme partisan gerrymander.

**\*53** 314. Plaintiffs' Exhibit 272 is Dr. Cooper's map of this county grouping:

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

315. In this grouping, the population of New Hanover County is slightly too large to fit into one Senate district, and thus the mapmaker had to place a small portion of New Hanover in Senate District 8. Tr. 887:8-9. The mapmaker chose to take heavily Democratic VTDs in Wilmington, separating them from the rest of Wilmington (which is in Senate District 9) and grouping them instead with heavily Republican areas in Bladen, Pender, and Brunswick counties. Tr. 887:5-888:8; PX253 at 29-31 (Cooper Report). As Dr. Cooper explained, the clear intent and effect of this decision was to waste the votes of the Democratic voters in these Wilmington VTDs, placing them in a heavily Republican district (Senate District 8) and removing them from a highly competitive district (Senate District 9) where their votes could make a difference. *Id.* Plaintiffs' Exhibit 273 provides a zoomed-in view of the cracking of the Democratic voters in these two VTDs, which has come to be known as the "Wilmington Notch":

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

316. Dr. Cooper credibly testified that the enacted plan is the most maximally favorable construction of the grouping possible for Republicans. Tr. 887:24-25. This grouping illustrates Dr. Cooper's conclusion about all of the groupings he analyzed: "whenever there's discretion to be exercised, that discretion tended to go in favor of one party, in this case the Republican Party, and against the other party, in this case the Democrat party." Tr. 889:22-25.

317. The Court does not give weight to any nonpartisan explanation Legislative Defendants offered with respect to the boundaries of these districts. While they noted that some portion of New Hanover County must be placed in Senate District 9 for equal population purposes, Legislative Defendants failed to rebut the fact that alternative ways to draw the grouping would not split municipalities in the manner that the enacted plan does. Over 97% of Dr. Mattingly's simulations of this county grouping do not split Wilmington. PX429.

318. The simulations of Plaintiffs' other experts confirm that the Bladen-Brunswick-New Hanover-Pender Senate county grouping is an outlier.

319. Because this county grouping was drawn in 2011 and remained unchanged in 2017, in analyzing this individual county grouping, Dr. Chen used the statewide elections from 2004 to 2010 that the General Assembly used during the 2011 redistricting

process, rather than the 2010-2016 statewide elections. Tr. 366:8-367:1, 382:23-383:11; PX720. Dr. Chen used these 2004-2010 statewide elections because, to assess the question of partisan intent, he wanted to use the same elections data that the mapmaker had available and was considering when it drew this grouping in 2011. Tr. 367:2-23; PX1 at 21-24 (Chen Report).

320. Dr. Chen found that both districts in this county grouping are extreme partisan outliers. Tr. 384:2-386:19. Senate District 9 has a lower Democratic vote share than all of its corresponding districts in all of the simulations, while Senate District 8 has a higher Democratic vote share than all of its corresponding districts in all of the simulations. *Id.*; PX100. Dr. Chen's analysis demonstrates that the moving of Democratic voters in the Wilmington Notch into Senate District 8 made Senate District 9 as favorable for Republicans as possible. The Court gives weight to Dr. Chen's findings for this county grouping, which are reflected in Plaintiffs' Exhibit 100 below:

**Figure 80: Senate Simulation Set 1:**

**Democratic Vote Share of the Enacted and Computer-Simulated Districts  
Within the Bladen-Brunswick-New Hanover-Pender County Grouping**

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

\*54 321. Dr. Mattingly similarly concluded that the Bladen-Pender-New Hanover-Brunswick Senate grouping was “certainly an outlier” but when on to state that “there were some features of [the Bladen] district that meant that the type of analysis that [he] had initially chosen was not as illuminating in that district. So [he] couldn't say something is conclusive.” Tr. 1154:11-16. When he mathematically quantified cracking in the Bladen grouping across all 17 statewide elections, he found that the most Democratic district in the Bladen grouping had fewer Democrats than in 92.46% of plans in the nonpartisan ensemble. PX359 at 19-20 (Mattingly Report); PX778 at 29.<sup>6</sup>

<sup>6</sup> Dr. Pegden was unable to generate any comparison districtings of this county grouping due to his conservative methodology. Tr. 1357:12-23; PX544. As Dr. Pegden testified, the fact that his algorithm does not generate any comparison districtings for a given county grouping does *not* mean that the mapmaker did not make extreme and intentional use of partisan considerations in that county grouping. *See* Tr. 1321:17-25, 1349:11-1350:4.

322. The Court finds that the analyses of Plaintiffs' experts independently and together demonstrate that this county grouping is an extreme and intentional partisan gerrymander.

***g. Buncombe-Henderson-Transylvania***

323. The Buncombe-Henderson-Transylvania Senate county grouping, drawn in 2011 and left unchanged in 2017, contains Senate Districts 48 and 49. The Court gives weight to the analysis of Plaintiffs' experts and finds that this county grouping is an extreme partisan gerrymander.

324. Plaintiffs' Exhibit 288 is Dr. Cooper's map of this county grouping:

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

325. Dr. Cooper explained how these district boundaries combine the heavily Democratic VTDs in Asheville with Democratic VTDs in Black Mountain, packing those Democratic voters to create a safe Democratic district in Senate District 49, allowing Senate District 48 to comfortably favor Republicans. Tr. 903:23-904:13; PX253 at 50 (Cooper Report).

326. The Court does not give weight to any nonpartisan explanation Legislative Defendants offered with respect to the boundaries of these districts.

327. The simulations of Plaintiffs' other experts confirm and independently establish that this county grouping is an extreme partisan gerrymander.

328. Dr. Chen found that both districts in this county grouping are extreme partisan outliers. Tr. 383:12-19.<sup>7</sup> Senate District 49 has a higher Democratic vote share than its corresponding district in nearly all of the simulations, while Senate District 48 has a lower Democratic vote share than its corresponding district in nearly all of the simulations. PX99. Dr. Chen's findings demonstrate the packing of Democratic voters into Senate District 49 to make Senate District 48 a safe Republican seat. The Court gives weight to Dr. Chen's analysis and findings for this county grouping, which are reflected in Plaintiffs' Exhibit 99 below:

<sup>7</sup> Because this county grouping was drawn in 2011, Dr. Chen used the 2004 to 2010 statewide elections to analyze this county grouping. Tr. 383:16-22; PX99.

### **Figure 79: Senate Simulation Set 1:**

#### **Democratic Vote Share of the Enacted and Computer-Simulated Districts Within the Buncombe-Henderson-Transylvania County Grouping**

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

329. Plaintiffs' Exhibit 378 shows Dr. Mattingly's analysis of the Buncombe-Transylvania-Henderson Senate county grouping:

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

330. Dr. Mattingly's analysis shows that Democrats were cracked out of Senate District 48 and packed into Senate District 49. PX378; PX778 at 29; Tr. 1153:7-1154:9. Dr. Mattingly found that the least Democratic district in the enacted plan has fewer Democratic votes than in 95.44% of the plans in his ensemble, meaning that the grouping showed more pro-Republican partisan advantage than 95.44% of the nonpartisan plans. PX778 at 29; PX359 at 21-22. Dr. Mattingly concluded that this grouping reflects a pro-Republican partisan gerrymander, Tr. 1154:6-10; PX778 at 29; PX359 at 21-22, and the Court gives weight to his conclusion.

**\*55** 331. Dr. Pegden found that this county grouping constitutes an extreme partisan gerrymander. In his first level analysis, Dr. Pegden found that the enacted plan's version of the grouping is more favorable to Republicans than 99.8% of the maps that his algorithm encountered by making small changes to the district boundaries. In his second level analysis, Dr. Pegden found that the grouping is more carefully crafted to favor Republicans than at least 99.4% of all possible districtings of this county grouping that satisfy the criteria Dr. Pegden used. Tr. 1357:2; PX541. The Court gives weight to Dr. Pegden's analysis and conclusions.

332. The analyses of Plaintiffs' experts independently and together demonstrate that this county grouping is an extreme partisan gerrymander.

## **2. House County Groupings**

### **a. Robeson-Columbus-Pender**

333. The Robeson-Columbus-Pender House county grouping contains House Districts 16, 46, and 47. The Court gives weight to the analysis of Plaintiffs' experts and finds that this county grouping is an extreme partisan gerrymander.

334. Plaintiffs' Exhibit 301 is Dr. Cooper's map of this county grouping:

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

335. Dr. Cooper explained that House District 47 packs as “many ... Democratic voters as possible” into that district, including in Lumberton and the area around UNC Pembroke. The packing of Democrats in House District 47 makes House Districts 16 and 46 more favorable to Republicans. Tr. 912:19-913:3; PX253 at 70 (Cooper Report).

336. Dr. Hofeller's Maptitude files confirm he “had full knowledge of the partisan effects of drawing those lines exactly where they were drawn, essentially drawing a fence between districts 47 and 46 ... between Democratic and Republican voters.” Tr. 985:15-19; PX342; PX329 at 18 (Cooper Rebuttal Report). In the files for his draft House plan, Dr. Hofeller shaded more Democratic VTDs darker blue, more Republican VTDs red and orange, and moderate VTDs green and yellow. Tr. 979:20-980:19. As shown in Plaintiffs' Exhibit 342, Dr. Hofeller placed all of the Republican-leaning VTD near Lumberton (shaded orange and red) on the right side of the red line, in House District 46, rather than in House District 47:

**Figure 13: Partisan Targeting in House Districts 16, 46, and 47**

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

337. The Court does not give weight to any nonpartisan explanation Legislative Defendants offered with respect to the boundaries of the districts in this county groupings.

338. The simulations of Plaintiffs' other experts independently establish that the Columbus-Pender-Robeson county grouping is an extreme partisan gerrymander.

339. Dr. Chen found that all three House districts in this county are extreme partisan outliers. Dr. Chen found that House District 47 has a higher Democratic vote share than the corresponding districts in all of Dr. Chen's simulated plans. Tr. 346:4-347:14. Dr. Chen found that House District 46 has a lower Democratic vote share than the corresponding districts across all of Dr. Chen's simulations, while House District 16 has a higher Democratic vote share than the corresponding districts in all of Dr. Chen's simulations. Tr. 347:16-348:7. Dr. Chen's findings demonstrate the packing of Democratic voters into House District 47 and the cracking of Democratic voters across House Districts 16 and 46. Dr. Chen finds that, as a result of this packing and cracking, almost all of his simulations would produce two Democratic-leaning districts in this county grouping, while the enacted House plan produces just one such district in this grouping. Tr. 348:8-23. The Court gives weight to Dr. Chen's analysis and findings for this county grouping, which are reflected in Plaintiffs' Exhibit 47 below:

**Figure 27: House Simulation Set 1:**

**Democratic Vote Share of the Enacted and Computer-Simulated Districts Within the Columbus-Pender-Robeson County Grouping**

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

\*56 340. Plaintiffs' Exhibit 388 shows Dr. Mattingly's analysis of the Columbus-Pender-Robeson House county grouping:

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

341. Dr. Mattingly's analysis shows that Democrats were cracked in the two least Democratic districts in this grouping (Districts 16 and 46) and packed into the most Democratic district (District 47). PX388; PX359 at 28; PX778 at 30. There is a significant jump between the number of Democratic votes in the two least and the most Democratic districts in the enacted plan. *Id.* Dr. Mattingly found that the two least Democratic districts in the enacted plan have fewer Democratic voters than 97.98% of the comparable districts in the nonpartisan ensemble. *Id.* As the figure above shows, the gerrymander causes Democrats to lose a



seat in this grouping in certain electoral environments. Dr. Mattingly concluded that this grouping reflects a clear pro-Republican partisan gerrymander, PX778 at 30; Tr. 1155:17-21; PX359 at 28, and the Court gives weight to Dr. Mattingly's conclusion.

342. Dr. Pegden found that this county grouping constitutes an extreme partisan gerrymander. In his first level analysis, Dr. Pegden found that the enacted plan's version of this grouping is more favorable to Republicans than 98.7% of the maps that his algorithm encountered by making small changes to the district boundaries. In his second level analysis, Dr. Pegden found that this grouping is more carefully crafted to favor Republicans than at least 96% of all possible districtings of this county grouping that satisfy the criteria Dr. Pegden used. Tr. 1351:8; PX526. The Court gives weight to Dr. Pegden's analysis and conclusions.

343. The Court finds that the analyses of Plaintiffs' experts independently and together demonstrate that this county grouping is an extreme partisan gerrymander.

#### **b. Cumberland**

344. The Cumberland House county grouping contains House Districts 42, 43, 44, and 45. The Court gives weight to the analysis of Plaintiffs' experts and finds that this county grouping is an extreme partisan gerrymander.

345. Plaintiffs' Exhibit 305 is Dr. Cooper's map of this county grouping:

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346. Dr. Cooper described how House District 45 has a “backwards C-shape” that is “a very clear attempt to connect these Republican leaning [VTDs] all together and avoid ... the Democratic leaning VTDs.” Tr. 917:7-14. In such a way, the district boundaries make House District 45 more favorable for Republicans, while packing the Democratic-leaning VTDs in the Fayetteville area into House Districts 42 and 43. Tr. 917:14-16; PX253 at 76 (Cooper Report).

347. The district boundaries in this grouping, shown below in Plaintiffs' Exhibit 306, divide Fayetteville between all four districts in a way that does not correspond to Fayetteville's boundaries of or any other municipality. Tr. 917:23-918:5; PX253 at 76 (Cooper Report).

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348. The Court does not give weight to any nonpartisan explanation Legislative Defendants offered with respect to the boundaries of these districts.

349. The simulations of Plaintiffs' other experts independently establish that the Cumberland county grouping is an extreme partisan gerrymander.

**\*57** 350. Dr. Chen found that this county grouping contains three districts that are extreme partisan outliers. Dr. Chen found that House Districts 42 and 43 have a higher Democratic vote shares than their corresponding districts in all or almost all of Dr. Chen's simulated plans, while House District 45 has a much lower Democratic vote share than the corresponding district in all of the simulations. Tr. 350:2-12. Dr. Chen's findings demonstrate the packing of Democratic voters into House Districts 42 and 43 in order to make House District 45 as favorable for Republicans as possible. Indeed, the least Democratic district in this grouping would be very competitive or even Democratic-leaning in Dr. Chen's simulations. The Court gives weight to Dr. Chen's findings for this county grouping, which are reflected in Plaintiffs' Exhibit 48 below:

#### **Figure 28: House Simulation Set 1:**

**Democratic Vote Share of the Enacted and Computer-Simulated Districts Within the Cumberland County Grouping**

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351. Plaintiffs' Exhibit 390 shows Dr. Mattingly's analysis of the Cumberland House county grouping:

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352. Dr. Mattingly's analysis shows that the least Democratic district (District 45) show cracking of Democrats, while the two most Democratic districts (District 43 and 42) show extreme packing of Democrats, in comparison to the nonpartisan plans. PX390; PX778 at 30; PX359 at 29. He found that the two most Democratic districts in the enacted plan have more Democratic votes than 99.79% of the comparable Democratic districts in the nonpartisan ensemble. *Id.* As the figure above shows, the gerrymander causes Democrats to lose a seat in this grouping in certain electoral environments, because the black dot in House District 45 always falls below the 50% line while the blue histogram often rises above it. Dr. Mattingly concluded that the Cumberland House grouping is an extreme pro-Republican partisan gerrymander, Tr. 1155:5-16; PX778 at 30; PX359 at 29; PX390, and the Court gives weight to Dr. Mattingly's conclusion.

353. Dr. Pegden found that this grouping constitutes an extreme partisan gerrymander. In his first level analysis, Dr. Pegden found that the enacted plan's version of this grouping is more favorable to Republicans than 98.3% of the maps that his algorithm encountered by making small changes to the district boundaries. In his second level analysis, Dr. Pegden found that this grouping is more carefully crafted to favor Republicans than at least 95% of all possible districtings of this county grouping that satisfy the criteria Dr. Pegden used. Tr. 1351:9; PX529. The Court gives weight to Dr. Pegden's analysis and conclusions.

354. The Court finds that the analyses of Plaintiffs' experts independently and together demonstrate that this county grouping is an extreme partisan gerrymander.

***c. Person-Granville-Vance-Warren***

355. The Person-Granville-Vance-Warren House county grouping contains House Districts 2 and 32.

356. Plaintiffs' Exhibit 289 is Dr. Cooper's map of this county grouping:

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

357. Several of Plaintiffs' experts testified that there are only a limited number of possible ways to draw this county grouping. Tr. 359:4-360:2 (Dr. Chen), 905:17-19 (Dr. Cooper); 1156:25-1157:16 (Dr. Mattingly). Because of the Whole County Provision, the only differences between the alternative ways to draw this grouping involve which of Granville County's few VTDs are placed in each of the two districts. *See id.*

358. This county grouping is one of two drawn by Campbell Law students and ultimately adopted by Dr. Hofeller. Tr. 474:7-475:23; PX123 at 71. The evidence from Dr. Hofeller's files suggests that Dr. Hofeller intentionally chose to include this configuration because it most favored Republicans, to the detriment of Democratic voters. *See* Tr. 905:21-906:8.

359. However, because of the limited possible configurations for this county grouping, and the limited statistical evidence that could be generated by Plaintiffs' experts, the Court does not find that this grouping, or the districts contained therein, constitute an extreme partisan gerrymander. *See* PX051 (Dr. Chen Figure 31 showing Democratic vote share of each district well below his extreme partisan outlier threshold); Tr. 1156:25-1157:16 (Dr. Mattingly found very few possible unique maps for this grouping that satisfied his criteria); Tr. 1349:11-1350:4; PX536 (Dr. Pegden was unable to generate any comparison districtings of this House county grouping due to his conservative methodology).



\*58 360. The Court, though, does find that this county grouping does reflect a clear pro-Republican partisan tilt that can contribute to the extreme pro-Republican bias statewide.

**d. *Franklin-Nash***

361. The Franklin-Nash House county grouping contains House Districts 7 and 25. The Court gives weight to the analysis of Plaintiffs' experts and finds that this county grouping is an extreme partisan gerrymander.

362. Plaintiffs' Exhibit 293 is Dr. Cooper's map of this county grouping:

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363. These district boundaries avoid grouping the more Democratic-leaning and competitive VTDs on Nash County's western border in House District 7, instead stretching House District 7 into the southeast corner of Nash County to grab the heavily Republican VTDs there. The placement of this district boundary made House District 7 more favorable to Republicans. As Dr. Cooper explained, if the mapmaker had included "any other VTD" in House District 7 from Nash County, House District 7 would have been less favorable to Republican candidates. Tr. 907:4-13; PX253 at 59 (Cooper Report).

364. The Court gives little weight to any nonpartisan explanation Legislative Defendants offered with respect to the boundaries of these districts. They noted that the enacted version of this county grouping matches the draft drawn by the Campbell Law students, but the mapmaker adopted these districts because they were maximally favorable for Republicans, FOF § B.2.a., and as the simulations of Plaintiffs' experts Dr. Chen and Dr. Mattingly confirm and independently establish, the Nash-Franklin House county grouping is indeed an extreme partisan gerrymander.

365. Dr. Chen found that both districts in county grouping are extreme partisan outliers. Dr. Chen found that House District 25 has a higher Democratic vote share than its corresponding district in all of Dr. Chen's simulated plans, while House District 7 has a lower Democratic vote share than the corresponding district in all of the simulations. Tr. 356:8-17. Dr. Chen's findings demonstrate the packing of Democratic voters into House Districts 25 in order to make House District 7 a safe Republican seat. In Dr. Chen's simulations, the less Democratic district in this grouping would be more competitive for Democrats, particularly in a more favorable electoral environment for them than the 2010-2016 statewide elections. Tr. 356:18-357:1. The Court gives weight to Dr. Chen's analysis and findings for this county grouping, which are reflected in Plaintiffs' Exhibit 50 below:

**Figure 30: House Simulation Set 1:**

**Democratic Vote Share of the Enacted and Computer-Simulated Districts Within the Franklin-Nash County Grouping**

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366. Plaintiffs' Exhibit 402 shows Dr. Mattingly's analysis of the Nash-Franklin House county grouping:

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367. Dr. Mattingly concluded that the most Democratic district shows extreme packing of Democrats, while the most Republican district shows extreme cracking of Democrats, in comparison to the nonpartisan plans. Tr. 1149:2-9. He found that the least Democratic district in the enacted plan has fewer Democratic voters than 95.58% of the comparable districts in the nonpartisan ensemble, demonstrating packing. PX778 at 30; PX359 at 36-37. As the figure above shows, the gerrymander could cause the Democrats to lose a seat in this grouping in certain electoral environments, because the black dot for House District 7 falls

below the 50% line while the blue histogram sometimes rises above it or gets very close. Dr. Mattingly concluded that the Nash-Franklin House grouping is a pro-Republican partisan gerrymander, PX778 at 30; Tr. 1155:17-21; PX359 at 36-37, and the Court gives weight to Dr. Mattingly's conclusion.<sup>8</sup>

<sup>8</sup> Dr. Pegden was unable to generate any comparison districtings of this House county grouping due to his conservative methodology. Tr. 1351:22-1352:10; PX537.

\*59 368. The Court finds that the analyses of Plaintiffs' experts independently and together demonstrate that this county grouping is an extreme partisan gerrymander.

#### *e. Pitt-Lenoir*

369. The Pitt-Lenoir House county grouping contains House Districts 8, 9, and 12. The Court gives weight to the analysis of Plaintiffs' experts and finds that this county grouping is an extreme partisan gerrymander.

370. Plaintiffs' Exhibit 294 is Dr. Cooper's map of this county grouping:

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371. The districts in this county grouping split Greenville between all three House districts and even bisect East Carolina University's campus. The district lines pack the most Democratic-leaning VTDs in Greenville into House District 8, while placing all but one of the Republican-leaning VTDs into House District 9. Tr. 908:3-8, 909:23-910:8; PX253 at 61 (Cooper Report). Plaintiffs' Exhibit 295 below shows the municipalities within this county grouping and how the districts split Greenville. Tr. 908:16-23.

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372. The Maptitude files from Dr. Hofeller's hard drive confirm he used VTD-level partisanship data with "surgical precision" to construct the districts in this grouping. Tr. 983:5-984:7; PX340; PX329 at 16 (Cooper Rebuttal Report). Dr. Hofeller's Maptitude file, reproduced below in Plaintiffs' Exhibit 340, demonstrates how Dr. Hofeller meticulously packed all of Greenville's bluest VTDs into House District 8 (on the left side of the red line), in order to make House Districts 9 and 12 favorable for Republicans.

#### **Figure 11: Partisan Targeting in House Districts 8, 9, and 12**

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373. The Court does not give weight to any nonpartisan explanation Legislative Defendants offered with respect to the boundaries of the districts in this county grouping.

374. The simulations of Plaintiffs' other experts independently establish that the Lenoir-Pitt county grouping is an extreme partisan gerrymander.

375. Dr. Chen found that House District 8 has a higher Democratic vote shares than its corresponding districts in all Dr. Chen's simulated plans, while House District 9 has a lower Democratic vote share than the corresponding district in all of the simulations. PX52; Tr. 360:16-22. Dr. Chen further found that the remaining district in this grouping, House District 12, is less Democratic than over 81% of the corresponding districts across Dr. Chen's simulations. *Id.* Dr. Chen's findings demonstrate the packing of Democratic voters into House District 8 and the cracking of Democratic voters in House Districts 9 and, to some extent, 12. The Court gives weight to Dr. Chen's analysis and findings for this county grouping, which are reflected in Plaintiffs' Exhibit 52 below:

**Figure 32: House Simulation Set 1:****Democratic Vote Share of the Enacted and Computer-Simulated Districts Within the Lenoir-Pitt County Grouping**

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376. Plaintiffs' Exhibit 408 shows Dr. Mattingly's analysis of this grouping:

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377. Dr. Mattingly concluded that the two most Republican districts show extreme cracking of Democrats, while the most Democratic shows extreme packing of Democrats, as evidence by the “jump” between these sets of districts. PX408; PX778 at 30; PX359 at 41. Dr. Mattingly found that the two least Democratic districts in the enacted plan have fewer Democratic voters than 99.98% of the comparable districts in the nonpartisan ensemble, while the most Democratic district in the enacted plan has more Democratic votes than 99.95% of the comparable Democratic districts in the ensemble. PX778 at 30; PX359 at 43. As the figure above shows, the gerrymander causes the Democrats to lose one or possibly two seats in this grouping in certain electoral environment, because the black dot in House Districts 9 and 12 often falls below the 50% line while the blue histograms rise above it. Dr. Mattingly concluded that the Pitt-Lenoir House grouping is an extreme pro-Republican partisan gerrymander, Tr. 1155:5-16; PX778 at 30; PX359 at 41; PX408, and the Court gives weight to Dr. Mattingly's conclusion.

\*60 378. Dr. Pegden found that this grouping constitutes an extreme partisan gerrymander. In his first level analysis, Dr. Pegden found that the enacted plan's version of this grouping is more favorable to Republicans than 99.97% of the maps that his algorithm encountered by making small changes to the district boundaries. In his second level analysis, Dr. Pegden found that this grouping is more carefully crafted to favor Republicans than at least 99.91% of all possible districtings of this county grouping that satisfy the criteria Dr. Pegden used. Tr. 1351:6; PX532. The Court gives weight to Dr. Pegden's analysis and conclusions.

379. The Court finds that the analyses of Plaintiffs' experts independently and together demonstrate that this county grouping is an extreme partisan gerrymander.

#### **f. Guilford**

380. The Guilford House county groupings contains House Districts 57, 58, 59, 60, 61, and 62. The Court gives weight to the analysis of Plaintiffs' experts and finds that this county grouping is an extreme partisan gerrymander.

381. This grouping contains several districts that were altered by the *Covington* Special Master. The *Covington* court tasked the Special Master with redrawing House District 57 after the court found that the enacted House plan did not cure the racial gerrymander of the district. *Covington*, 2017 WL 11049096, at \*1-2. In directing the Special Master to redraw House District 57, the court further directed that “the redrawn lines shall also ensure that the unconstitutional racial gerrymanders in 2011 Enacted House Districts 58 and 60 are cured.” *Id.* at \*2. The *Covington* court did *not* direct the Special Master to redraw House District 59, and did not even mention House District 59 in its order.

382. Consistent with the court's guidance, the Special Master redrew House District 57, and in so doing, also made substantial changes to House District 61 and 62. Tr. 351:14-25; *see* LDTX 159 at 27-29 (Special Master's Recommend Plan). In redrawing these three districts, the Special Master also made what he described as “minor changes” to House District 59 to equalize population. *Covington*, ECF No. 220 at 46. The Special Master explained that he altered House District 59 “only a little.” LDTX 159 at 28. Specifically, the Special Master moved one precinct from the enacted District 59 into the Special Master's District 57, and added “two additional precincts” to the northwest corner of House District 59 to equalize population. *Covington*, ECF No.

220 at 46; *see* Chen Demonstrative D5 at 3; Tr. 352:1-21. According to estimates presented at trial by Legislative Defendants' expert Dr. Johnson, of the current population of House District 59, 92% of the population was put into the district by the General Assembly under the enacted House plan. LDTX314; Tr. 1978:19-22. The Special Master did not make any changes at all to House Districts 58 and 60. Plaintiffs do not bring allegations, and do not seek relief, with respect to the three House districts that the Special Master substantially redrew, House Districts 57, 61, and 62.

383. Plaintiffs' Exhibit 310 is Dr. Cooper's map for this grouping:

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384. The mapmaker packed Democratic voters into House Districts 58 and 60 to make House District 59 favorable to Republicans. Tr. 923:3-23; PX253 at 82 (Cooper Report). House District 58 has “boot-like appendages” to grab Democratic VTDs and ensure these voters could not make House District 59 competitive or Democratic-leaning. *Id.*

385. The Maptitude files from Dr. Hofeller's hard drive confirm Dr. Hofeller drew this grouping with extreme partisan intent. Tr. 986:13-987:9. Specifically, Dr. Hofeller drew the boundaries of House Districts 58, 59, and 60 “almost like a fence” “separating [Republican voters] from the Democratic voters” in the southern portion of Guilford County. Tr. 987:20-988:5; PX344; PX329 at 20 (Cooper Rebuttal Report). Plaintiffs' Exhibit 344 depicts the Dr. Hofeller's Maptitude file showing the Guilford grouping.

#### **Figure 15: Partisan Targeting in House Districts 58, 59, and 60**

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\*61 386. The Court does not give weight to any nonpartisan explanation Legislative Defendants offered with respect to the boundaries the mapmaker drew for House Districts 58, 59, and 60.

387. The simulations of Plaintiffs' other experts independently establish that the Guilford county grouping is an extreme partisan gerrymander.

388. Drs. Chen, Mattingly, and Pegden all froze three districts in this grouping that were substantially redrawn by the *Covington* Special Master: House Districts 57, 61, and 62. Tr. 352:24-353:3; PX359 at 33 (Mattingly Report); PX508 at 19 (Pegden Report).

389. Dr. Chen explained in un rebutted testimony that his simulations of the Guilford House grouping did not make any changes to the portion of House District 59 added by the Special Master. Tr. 770:12-771:12; Chen Demonstrative D5 at 4. The Court finds that because Dr. Chen's simulations altered only portions of House District 59 drawn by the mapmaker, and did not touch the very small portions of the district added by the Special Master, the mapmaker necessarily is responsible for the extreme partisan bias that Dr. Chen finds for House District 59.

390. Dr. Chen found that all three districts in the Guilford grouping that he did not freeze are extreme partisan outliers. He found that House Districts 58 and 60 have higher Democratic vote shares than their corresponding districts in all of Dr. Chen's simulations, while House District 59 has a much lower Democratic vote share than the corresponding district in all of the simulations. Tr. 353:17-21; PX45. Dr. Chen's findings demonstrate the packing of Democratic voters into House Districts 58 and 60 to make House District 59 favorable for Republicans. Indeed, the least Democratic district in this grouping would be competitive or Democratic-leaning in Dr. Chen's simulations, whereas House District 59 under the enacted plan is much less favorable for Democrats using the 2010-2016 statewide elections. The Court gives weight to Dr. Chen's findings for this county grouping, which are reflected in Plaintiffs' Exhibit 45 below.

#### **Figure 25: House Simulation Set 1:**

**Democratic Vote Share of the Enacted and Computer-Simulated Districts Within the Guilford County Grouping**

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391. Plaintiffs' Exhibit 398 shows Dr. Mattingly's analysis of the Guilford grouping:

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392. Setting aside the frozen districts, Dr. Mattingly concluded that the least Democratic district (House District 59) shows extreme cracking of Democrats, while the remaining two districts (House Districts 58 and 60) shows extreme packing of Democrats, in comparison to the nonpartisan plans. PX398; PX778 at 30; PX359 at 33-34. Dr. Mattingly found that House 59 has fewer Democratic voters than 99.89% of the comparable districts in the nonpartisan ensemble, while House Districts 58 and 60 have more average Democratic votes than 99.86% of the comparable Democratic districts in the nonpartisan ensemble. PX778 at 30; PX359 at 33-34; PX398. As the figure above shows, the gerrymander could cause the Democrats to lose a seat in this grouping in certain electoral environments, because the black dot for House District 59 falls below the 50% line while the blue histogram sometimes rises above it or gets very close. Dr. Mattingly concluded that the Guilford House grouping is an extreme pro-Republican partisan gerrymander, Tr. 1155:5-16; PX778 at 30; PX359 at 33-34; PX398, and the Court gives weight to Dr. Mattingly's conclusion.

\*62 393. Dr. Pegden found that this grouping constitutes an extreme partisan gerrymander. In his first level analysis, Dr. Pegden found that the enacted plan's version of this grouping is more favorable to Republicans than 93.9% of the maps that his algorithm encountered by making small changes to the district boundaries. In his second level analysis, Dr. Pegden found that this grouping is more carefully crafted to favor Republicans than at least 82% of all possible districtings of this county grouping that satisfy the criteria Dr. Pegden used. Tr. 1351:10; PX527. The Court gives weight to Dr. Pegden's analysis and conclusions.

394. The Court finds that the analyses of Plaintiffs' experts independently and together demonstrate that this county grouping is an extreme partisan gerrymander.

***g. Davie-Rowan-Cabarrus-Stanly-Montgomery-Richmond***

395. The Davie-Rowan-Cabarrus-Stanly-Montgomery-Richmond House county grouping contains House Districts 66, 67, 76, 77, 82, and 83. The Court gives weight to the analysis of Plaintiffs' experts and finds that significant portions of this county grouping are an extreme partisan gerrymander.

396. Plaintiffs' Exhibit 314 is Dr. Cooper's map for this county grouping:

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397. This county grouping cracks Democratic voters across its districts. In particular, Dr. Cooper explained how the mapmaker “maximize[d] partisan advantage” by splitting municipalities in “critical ways” that crack Democratic voters. Tr. 926:18-24. The cities of Kannapolis and Concord are both split across House Districts 82 and 83, cracking the Democratic voters across these districts to dilute their voting power. Tr. 926:23-927:24; PX253 at 87-88 (Cooper Report). The Democratic voters from both of these cities are kept separate from the Democratic voters in Salisbury, which is placed in House District 76. *Id.* Plaintiffs Exhibit 315 depicts the splitting and treatment of these municipalities (Concord is shaded green, Kannapolis is pink, and Salisbury is yellow).

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398. The Court does not give weight to any nonpartisan explanation Legislative Defendants offered with respect to the boundaries of these districts.

399. Dr. Chen found that, in his House Simulation Set 1, one of the districts in this grouping, House District 83, is an extreme partisan outlier, as it has a lower Democratic vote than its corresponding district in nearly all of the simulations. Tr. 363:6-12; PX46. Dr. Chen further found, however, that this grouping has three districts (House Districts 76, 82, and 83) that are partisan outliers in his House Simulation Set 2 that avoided pairing the incumbents in office in 2017. Tr. 363:14-364:10; PX70. Dr. Chen's findings demonstrate the cracking of Democratic voters across the districts in this grouping, particularly given Legislative Defendants' representations that the General Assembly sought to avoid pairing incumbents in 2017. *See* Tr. 364:11-22. The Court gives weight to Dr. Chen's findings for this county grouping, which are reflected in Plaintiffs' Exhibit 70 below.

**Figure 50: House Simulation Set 2:**

**Democratic Vote Share of the Enacted and Computer-Simulated Districts Within  
the Cabarrus-Davie-Montgomery-Richmond-Rowan-Stanly County Grouping**

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

400. Plaintiffs' Exhibit 392 shows Dr. Mattingly's analysis of this grouping:

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401. When Dr. Mattingly mathematically quantified cracking in this grouping across all 17 statewide elections, he found that the four most Democratic districts in the Davie grouping had more Democrats than in 97.38% of plans in the nonpartisan ensemble. PX359 at 30; PX778 at 30; PX392.<sup>9</sup> Dr. Mattingly concluded that this grouping reflects an “anomalous structure,” Tr. 1156:1-16, and the Court gives weight to that conclusion.

<sup>9</sup> Dr. Pegden's conservative methodology resulted in comparison maps that are very similar to the enacted plan for this grouping. Tr. 1351:17-1352:10. In particular, Dr. Pegden's conservative choice to allow his algorithm to split the same municipalities that are split under the enacted plan results in his comparison maps frequently splitting the Democratic strongholds of Kannapolis and Concord. PX535; PX508 at 24 (Pegden Report).

**\*63** 402. The Court finds that the analyses of Plaintiffs' experts independently and together demonstrate that significant portions of this county grouping are an extreme partisan gerrymander that was drawn to dilute the votes of Democratic voters and maximize the number of Republican districts in this grouping.

***h. Yadkin-Forsyth***

403. The Yadkin-Forsyth House County grouping contains House Districts 71, 72, 73, 74, and 75. The Court gives weight to the analysis of Plaintiffs' experts and finds that this county grouping is an extreme partisan gerrymander.

404. Plaintiffs' Exhibit 316 is Dr. Cooper's map for this county grouping:

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

405. Legislative Defendants packed Democratic voters into House Districts 71 and 72. Tr. 928:20-21; PX253 at 90 (Cooper Report). Legislative Defendants then cracked the remaining Democratic voters in this grouping across the remaining districts, where those Democratic voters' influence is washed out by heavily Republican VTDs. House District 73 includes all of Republican-leaning Yadkin County and just two Democratic-leaning VTDs on the west side of Winston-Salem, ensuring that



it will be a safe Republican district. House Districts 74 and 75 include Democratic-leaning VTDs on the northern and southern sides of Winston-Salem, respectively, but both of those districts wrap around the city to include Republican-dominated VTDs on either side of Forsyth County. Indeed, in order to join Republican VTDs, House District 75 traverses an extremely narrow passageway on the border of Forsyth County. Tr. 928:5-21; PX253 at 90-91 (Cooper Report).

406. The Maptitude files from Dr. Hofeller's hard drive illustrate the "anatomy of this gerrymander." Tr. 988:17-989:4; PX345; PX329 at 21 (Cooper Rebuttal Report). They show Dr. Hofeller's intentional packing of all of the most Democratic VTDs in Forsyth County into House Districts 71 and 72, while putting all of the moderate and Republican-leaning VTDs (shaded tan, yellow, light green, and red) into House Districts 73, 74, and 75. *Id.* Plaintiffs' Exhibit 345 shows Dr. Hofeller's Maptitude file containing this county grouping:

**Figure 16: Partisan Targeting in House Districts 71 72, 73, 74, and 75**

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407. The Court does not give weight to any nonpartisan explanation Legislative Defendants offered with respect to the boundaries of these districts.

408. The simulations of Plaintiffs' other experts independently establish that the Forsyth-Yadkin county grouping is an extreme partisan gerrymander.

409. Dr. Chen found that, in his House Simulation Set 1, two of the districts in this grouping (House Districts 71 and 75) are extreme partisan outliers above the 95% level, and another two districts in the grouping (House Districts 72 and 74) have higher or lower Democratic vote shares than over 80% of their corresponding districts. Tr. 354:1-20; PX49. Dr. Chen further found, however, that all four of these districts are extreme partisan outliers in his House Simulation Set 2 that avoided pairing the incumbents in office in 2017. Tr. 355:1-18. In Simulation Set 2, House Districts 71 and 72 have higher Democratic vote shares than nearly all of their corresponding districts in the simulations, while House Districts 74 and 75 have lower Democratic vote shares than nearly all of their corresponding districts in the simulations. *Id.* Dr. Chen's findings demonstrate the packing of Democratic voters into House Districts 71 and 72 and the cracking of Democratic voters in the remaining districts in this grouping, particularly given Legislative Defendants' representations that the General Assembly sought to avoid pairing incumbents in 2017. *See* Tr. 355:19-356:4. The Court gives weight to Dr. Chen's findings for this county grouping, which are reflected in Plaintiffs' Exhibit 67 below.

**Figure 47: House Simulation Set 2:**

**Democratic Vote Share of the Enacted and Computer-Simulated Districts Within the Forsyth-Yadkin County Grouping**

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\*64 410. Plaintiffs' Exhibit 414 shows Dr. Mattingly's analysis of this grouping:

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411. Dr. Mattingly concluded that the three least Democratic districts show extreme cracking of Democrats while the two most Democratic districts shows extreme packing of Democrats, as evidenced by the significant jump between these sets of districts. Tr. 1144:3-9. Dr. Mattingly's analysis showed that the three least Democratic districts in the enacted plan had fewer average Democratic votes than 99.46% of the comparable districts in the nonpartisan ensemble, while the two most Democratic districts in the enacted plan had more average Democratic votes than 99.84% of the comparable Democratic districts in the nonpartisan

ensemble. PX778 at 30; PX359 at 44. As the figure above shows, the gerrymander causes the Democrats to lose one, possibly two, seats in this grouping in certain electoral environments, because the black dots for House District 74 and 75 always below the 50% line while the blue histograms sometimes rise above it. Tr. 1144:6-9. Dr. Mattingly concluded that the Yadkin-Forsyth grouping is an extreme pro-Republican partisan gerrymander, Tr. 1144:13-16, and the Court gives weight to his conclusion.

412. Dr. Pegden found that this grouping constitutes an extreme partisan gerrymander. In his first level analysis, Dr. Pegden found that the enacted plan's version of this grouping is more favorable to Republicans than 99.7% of the maps that his algorithm encountered by making small changes to the district boundaries. In his second level analysis, Dr. Pegden found that this grouping is more carefully crafted to favor Republicans than at least 99.1% of all possible districtings of this county grouping that satisfy the criteria Dr. Pegden used. Tr. 1351:7; PX530. The Court gives weight to Dr. Pegden's analysis and conclusions.

413. The Court finds that the analyses of Plaintiffs' experts independently and together demonstrate that this county grouping is an extreme partisan gerrymander.

#### *i. Mecklenburg*

414. The Mecklenburg House County grouping contains House Districts 88, 92, 98, 99, 100, 101, 102, 103, 104, 105, 106, and 107. The Court gives weight to the analysis of Plaintiffs' experts and finds that this county grouping is an extreme partisan gerrymander.

415. Plaintiffs' Exhibit 319 is Dr. Cooper's map for this county grouping:

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416. Dr. Cooper detailed how House Districts 88, 92, and 101 pack Democratic voters on the western side of Mecklenburg County while House Districts 99, 100, 102, and 106 pack Democratic voters on the eastern and central portions of the county. There is not a single Republican-leaning VTD included in any of these packed House Districts. Tr. 930:13-24; PX253 at 93 (Cooper Report).

417. House Districts 103, 104, and 105, meanwhile, include all of the Republican-leaning VTDs on the southern side of Mecklenburg County, allowing those districts to be “as competitive as possible for Republicans.” Tr. 930:25-931:7; PX253 at 93 (Cooper Report).

418. House District 98, on the northern boundary of Mecklenburg County, includes almost all Republican-leaning VTDs, avoiding the Democrat-heavy VTDs that are packed into House Districts 106 and 107. Tr. 931:7; PX253 at 93 (Cooper Report).

\*65 419. As depicted in Plaintiffs' Exhibit 320, these district boundaries split Charlotte between 11 House Districts but manage to place every Republican-leaning VTD within the city—the “red pizza” slice—into House Districts 103, 104, and 105. Tr. 932:1-17; PX320; PX253 at 93 (Cooper Report).

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420. Dr. Hofeller's Maptitude files confirm he drew the districts in this grouping to maximize partisan gain. The “pizza slice” that contains the Republican-leaning VTDs within Charlotte is evident in Dr. Hofeller's color-coded draft map, which groups those Republican-leaning VTDs into three House Districts and packs almost all of the Democratic VTDs into other districts. Tr. 990:4-21; PX329 at 22 (Cooper Rebuttal Report). Plaintiffs' Exhibit 346 shows Dr. Hofeller's Maptitude files containing this county grouping:



**Figure 17: Partisan Targeting in House Districts 88, 92, 98, 99, 101, 102, 103, 104, 105, 106, and 107.**

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421. The Court does not give weight to any nonpartisan explanation Legislative Defendants offered with respect to the boundaries of these districts.

422. The simulations of Plaintiffs' other experts independently establish that the Mecklenburg county grouping is an extreme partisan gerrymander.

423. Dr. Chen found that this county grouping contains six districts that are extreme partisan outliers above the 95% outlier level, and another three districts that are outliers above the 90% level. Tr. 361:20-22; PX53. The enacted plan packs Democratic voters into a number of districts in order to create four districts—House Districts 98, 103, 104, and 105—that are less Democratic than all of nearly of their corresponding districts in Dr. Chen's simulations. PX53. Dr. Chen's findings demonstrate the packing and cracking of Democratic voters in this grouping. The Court gives weight to Dr. Chen's analysis and findings for this county grouping, which is reflected in Plaintiffs' Exhibit 53 below.

**Figure 33: House Simulation Set 1:**

#### **Democratic Vote Share of the Enacted and Computer-Simulated Districts Within the Mecklenburg County Grouping**

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424. As Dr. Chen explained at trial, the fact that Democrats won House Districts 98, 103, 104, and 105 by small or extremely small margins in 2018 does not contradict his findings. Tr. 362:2-363:2; *see* JSF ¶¶ 125, 132-35. Rather, Dr. Chen's simulations suggest that Democrats very likely would have won each of these districts by larger margins if not for the gerrymander. *Id.* Moreover, Dr. Hofeller's own assessment of these districts demonstrates that he believed these districts to be Republican-leaning, and that it took the Democratic wave of 2018 to squeak out wins in them. Dr. Hofeller estimated that House District 98 would have a 62.76% Republican vote share and he characterized it as a “strong Rep. district in Mecklenburg.” PX246 at 3. Dr. Hofeller similarly estimated that House Districts 103, 104, and 105 would have 62% to 64% Republican vote shares. *Id.* Dr. Hofeller's spreadsheets evidence the partisan intent behind the creation of these districts and the strong possibility that Democratic could lose them in the next election under the current district lines intended to produce that result.

425. Plaintiffs' Exhibit 400 shows Dr. Mattingly's analysis of this grouping:

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426. Dr. Mattingly concluded that the four most Republican districts showed extreme cracking of Democrats while the next four districts showed extreme packing of Democrats, as evidenced by the significant jump between these sets of districts. Tr. 1138:7-1139:4. Dr. Mattingly found that the least four Democratic districts in the enacted plan had fewer average Democratic votes than 99.9% of the comparable districts in the nonpartisan ensemble, while the eight most Democratic districts in the enacted plan had more average Democratic votes than 99.5% of the comparable Democratic districts in the nonpartisan ensemble. Tr. 1141:8-25; PX778 at 30; PX359 at 34-35. As the figure above shows, the gerrymander causes the Democrats to lose up to three, possibly four, seats in this grouping in certain electoral environments, because the black dots for House Districts 98, 103, 104, and 105 often fall below the 50% line while the blue histograms rise above it. Tr. 1140:12-1140:25. Dr. Mattingly concluded that this grouping is an extreme pro-Republican partisan gerrymander, Tr. 1142:1-4, and the Court gives weight to his conclusion.

\*66 427. Like Dr. Chen, Dr. Mattingly explained that the fact that Democrats won all the seats in the Mecklenburg grouping in the 2018 election does not undermine his conclusion that the grouping is an extreme pro-Republican partisan gerrymander.

Tr. 1142:5-14. That the Democrats did well in one election and were able to prevail over the gerrymander does not change the fact that the grouping provides an extreme and atypical structural advantage to the Republicans that could cause the Democrats to lose seats in the next election. Tr. 1142:10-17.

428. Dr. Pegden found that this county grouping constitutes an extreme partisan gerrymander. In his first level analysis, Dr. Pegden found that the enacted plan's version of this grouping is more favorable to Republicans than 99.994% of the maps that his algorithm encountered by making small changes to the district boundaries. In his second level analysis, Dr. Pegden found that this grouping is more carefully crafted to favor Republicans than at least 99.98% of all possible districtings of this county grouping that satisfy the criteria Dr. Pegden used. Tr. 1351:5-6; PX531. The Court gives weight to Dr. Pegden's analysis and conclusions.

429. The Court finds that the analyses of Plaintiffs' experts independently and together demonstrate that this county grouping is an extreme partisan gerrymander.

### j. Wake

430. The Wake House county grouping contains House Districts 11, 33, 34, 35, 36, 37, 38, 39, 40, 41, and 49.<sup>10</sup>

<sup>10</sup> Plaintiffs presented evidence at trial that the enacted 2017 version of the Wake House county grouping was a partisan gerrymander, but Plaintiffs presented no evidence regarding this grouping as revised pursuant to this Court's ruling in *North Carolina State Conference of NAACP Branches, et al. v. David Lewis, et al.* Plaintiffs do not seek a remedy for the current, revised version of this grouping. However, the analysis and findings of Plaintiffs' experts with respect to the 2017 version of this county grouping is evidence of Legislative Defendants' intentional and systematic gerrymandering across the State during the 2017 redistricting.

431. Plaintiffs' Exhibit 297 is Dr. Cooper's map for this county grouping:

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432. The 2017 versions of House Districts 11, 33, 38, and 49 packed Democratic voters to allow House Districts 35, 36, 37, and 40, on the north and south sides of Wake County to be more favorable to Republicans. Tr. 911:15-912:16; PX253 at 65 (Cooper Report).

433. The Court does not give weight to any nonpartisan explanation Legislative Defendants offered with respect to the boundaries of these 2017 districts.

434. The simulations of Plaintiffs' other experts independently establish that the 2017 enacted House plan version of the Wake grouping was an extreme partisan gerrymander.

435. Dr. Chen found that the 2017 version of this county grouping contained three districts that were extreme partisan outliers above the 95% outlier level. Tr. 365:15-366:1; PX54. The Court gives weight to Dr. Chen's analysis and findings for this county grouping.

436. Dr. Mattingly's analysis showed that the four most Republican districts in the 2017 version of this grouping show extreme cracking of Democrats, while the next four districts show extreme packing of Democrats, in comparison to the nonpartisan plans. PX412; PX778 at 30; PX359 at 43. His analysis showed that the least Democratic districts in the enacted plan had fewer Democratic voters than 99.98% of the comparable districts in the nonpartisan ensemble, while the most Democratic districts in the enacted plan had more average Democratic votes than 99.99% of the comparable Democratic districts in the ensemble. PX778 at 30; PX359 at 43; PX412. The Court gives weight to Dr. Mattingly's analysis and conclusions for this grouping.

\*67 437. Dr. Pegden found that the 2017 version of this grouping constituted an extreme partisan gerrymander. In his first level analysis, Dr. Pegden found that the enacted plan's version of this grouping is more favorable to Republicans than 99.9997% of the maps that his algorithm encountered by making small changes to the district boundaries. In his second level analysis, Dr. Pegden found that this grouping is more carefully crafted to favor Republicans than at least 99.9991% of all possible districtings of this county grouping that satisfy the criteria Dr. Pegden used. Tr. 1351:4; PX533. The Court gives weight to Dr. Pegden's analysis and conclusions.

438. The Court finds that the analyses of Plaintiffs' experts independently and together demonstrate that the 2017 version of this county grouping was an extreme partisan gerrymander. While Plaintiffs do not challenge any individual House districts in Wake County as currently drawn, the Court gives weight to the findings and conclusions of Plaintiffs' experts in regard to the consistency of the partisan intent throughout the statewide map.

#### ***k. New Hanover-Brunswick***

439. The New Hanover-Brunswick House county grouping, drawn in 2011 and left unchanged in 2017, contains House Districts 17, 18, 19, and 20. The Court gives weight to the analysis of Plaintiffs' experts and finds that this county grouping is an extreme partisan gerrymander.

440. Plaintiffs' Exhibit 302 is Dr. Cooper's map of this county grouping:

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441. As Dr. Cooper testified, House District 18 packs the most Democratic-leaning VTDs in this grouping into that district, thereby making House Districts 17, 19, and 20 more favorable to Republicans. Tr. 913:17-914:7; PX253 at 72 (Cooper Report).

442. Wilmington is split between House Districts 18, 19, and 20, with the most Democratic-leaning VTDs in that city packed into House District 18 and the Republican-leaning VTDs placed in the two adjacent districts. In order to accomplish the packing of voters in House District 18, the district boundaries split Wilmington and the UNC Wilmington campus. Tr. 914:13-20; PX253 at 73 (Cooper Report); PX303. By dividing the campus in this manner, the district boundaries enable House District 20 to connect to Republican-leaning VTDs in the Wilmington area, creating a boot-like appendage in the southwest portion of House District 20. PX253 at 75 (Cooper Report); Tr. 916:12-21. Plaintiffs' Exhibit 303 show which portions of Wilmington are placed into each of the three districts:

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443. The Court does not give weight to any nonpartisan explanation Legislative Defendants offered with respect to the boundaries of these districts.

444. The simulations of Plaintiffs' other experts independently establish that the Brunswick-New Hanover county grouping is an extreme partisan gerrymander.

445. Dr. Chen found that this county grouping contains three districts that are extreme partisan outliers. Tr. 369:3-7.<sup>11</sup> House District 18 has a higher Democratic vote share than its corresponding district in all the simulations, while House Districts 17 and 19 have lower Democratic vote shares than their corresponding districts in all or nearly all of the simulations. Dr. Chen's findings demonstrate the packing of Democratic voters in House District 18 and the cracking of Democratic voters across the other districts. The vast majority of Dr. Chen's simulations would produce up to two additional districts in this grouping that are competitive or even Democratic-leaning, compared to the enacted plan. PX57. The Court gives weight to Dr. Chen's analysis and findings for this grouping, which are reflected in Plaintiffs' Exhibit 57 below:

11 For all House county groupings drawn in 2011 and unchanged in 2017, Dr. Chen used the 2004 to 2010 statewide elections to analyze these county groupings.

**Figure 37: House Simulation Set 1:**

**Democratic Vote Share of the Enacted and Computer-Simulated Districts Within the Brunswick-New Hanover County Grouping**

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\*68 446. Plaintiffs' Exhibit 404 shows Dr. Mattingly's analysis of this grouping:

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447. Dr. Mattingly concluded that the most Democratic district shows extreme packing of Democrats, while the three least Democratic districts show extreme cracking of Democrats, as evidenced by the significant jump between these sets of districts. Tr. 1145:17-1146:12. Dr. Mattingly found that the most Democratic district in the enacted plan had more Democratic voters than 92.01% of the comparable districts in the nonpartisan ensemble. PX778 at 30; PX359 at 38. As the figure above shows, the enacted map causes the Democrats to lose one seat in this grouping in certain electoral environments, because the black dot in the second most Democratic district always falls below the 50% line while the blue histograms often rise above it. Tr. 1146:5-9. Dr. Mattingly concluded that the New Hanover-Brunswick House grouping reflected a pro-Republican partisan gerrymander, Tr. 1146:22-1147:2, and the Court gives weight to his conclusion.

448. Dr. Pegden found that this county grouping constitutes an extreme partisan gerrymander. In his first level analysis, Dr. Pegden found that the enacted plan's version of this grouping is more favorable to Republicans than 99.97% of the maps that his algorithm encountered by making small changes to the district boundaries. In his second level analysis, Dr. Pegden found that this grouping is more carefully crafted to favor Republicans than at least 99.91% of all possible districtings of this county grouping that satisfy the criteria Dr. Pegden used. Tr. 1351:6-7; PX524. The Court gives weight to Dr. Pegden's analysis and conclusions.

449. The Court finds that the analyses of Plaintiffs' experts independently and together demonstrate that this county grouping is an extreme partisan gerrymander.

**I. Duplin-Onslow**

450. The Duplin-Onslow House county grouping, drawn in 2011 and left unchanged in 2017, contains House Districts 4, 14, and 15. The Court gives weight to the analysis of Plaintiffs' experts and finds that this county grouping is an extreme partisan gerrymander.

451. Plaintiffs' Exhibit 291 is Dr. Cooper's map for this county grouping:

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452. Legislative Defendants split Jacksonville across House Districts 14 and 15, pairing the Democratic-leaning "shark's tooth" in Jacksonville with heavily Republican-leaning VTDs in House District 15. Tr. 906:10-23; PX253 at 53-57 (Cooper Report). The map also ensures that none of Jacksonville's voters are joined with the Democratic-leaning and moderate VTDs in Duplin County, in House District 4. *Id.* The map cracks Democratic voters across all three districts in this grouping, ensuring that House District 14 "becomes Republican and [House District 4] also stays safely Republican." *Id.*

453. The Court does not give weight to any nonpartisan explanation Legislative Defendants offered with respect to the boundaries of these districts.

454. The simulations of Plaintiffs' other experts independently establish that the Duplin-Onslow county grouping is an extreme partisan gerrymander.

455. Dr. Chen found that all three districts in this grouping are extreme partisan outliers. Tr. 370:16-371:1. House Districts 4 and 14 have lower Democratic vote shares than their corresponding districts in nearly all the simulations, while House District 15 has a higher Democratic vote share than its corresponding district in nearly all the simulations. PX60. Dr. Chen's findings demonstrate the cracking of Democratic voters across the three districts. The vast majority of Dr. Chen's simulations would produce two districts that are more competitive using the 2004-2010 statewide elections compared to the enacted plan. PX60. The Court gives weight to Dr. Chen's analysis and findings for this county grouping, reflected in Plaintiffs' Exhibit 60:

**Figure 40: House Simulation Set 1:**

**Democratic Vote Share of the Enacted and Computer-Simulated Districts Within the Duplin-Onslow County Grouping**

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\*69 456. Plaintiffs' Exhibit 394 shows Dr. Mattingly's analysis of this grouping:

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457. This grouping is another example of what Dr. Mattingly called “squeezing” or “flattening,” where Democrats are cracked across all of the districts in the grouping. *See* Tr. 1149:19-1150:2; Tr. 1150:22-1151:2. Dr. Mattingly's analysis showed that the two most Democratic districts in the enacted plan had fewer Democratic voters than 92.4% of the comparable districts in the nonpartisan ensemble, meaning that the Duplin-Onslow House grouping showed clear cracking of Democratic voters. PX778 at 30; PX359 at 31. As the figure above shows, the gerrymander could cause the Democrats to lose at least one seat in certain electoral environments. Dr. Mattingly concluded that this grouping reflects a clear pro-Republican partisan gerrymander, Tr. 1155:17-21, PX778 at 30, and the Court gives weight to Dr. Mattingly's conclusion.

458. Dr. Pegden found that this grouping constitutes an extreme partisan gerrymander. In his first level analysis, Dr. Pegden found that the enacted plan's version of this grouping is more favorable to Republicans than 98% of the maps that his algorithm encountered by making small changes to the district boundaries. In his second level analysis, Dr. Pegden found that this grouping is more carefully crafted to favor Republicans than at least 94% of all possible districtings of this county grouping that satisfy the criteria Dr. Pegden used. Tr. 1351:9; PX528. The Court gives weight to Dr. Pegden's analysis and conclusions.

459. The Court finds that the analyses of all Plaintiffs' experts independently and together demonstrate that this county grouping is an extreme partisan gerrymander.

**m. Anson-Union**

460. The Anson-Union county grouping, drawn in 2011 and left unchanged in 2017, contains House Districts 55, 68, and 69. The Court gives weight to the analysis of Plaintiffs' experts and finds that this county grouping is an extreme partisan gerrymander.

461. Plaintiffs' Exhibit 307 is Dr. Cooper's map for this county grouping:

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462. Dr. Cooper detailed how this county grouping cracks the Democratic voters in Monroe between two districts (House Districts 68 and 69), and then ensures that none of these voters are joined with the Democratic voters in Anson County (in House District 55). The map thus dilutes the voting power of the Democratic voters in this grouping, ensuring that House Districts 68 and 69 are reliable Republican districts. Tr. 919:3-16; PX253 at 79-80 (Cooper Report). Plaintiffs' Exhibit 308 illustrates the cracking of Monroe (which is colored pink).

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463. The Court does not give weight to any nonpartisan explanation Legislative Defendants offered with respect to the boundaries of these districts.

464. Dr. Hofeller's Maptitude files confirm his intentional use of partisanship data to crack Democratic voters. The relevant Maptitude file, which was last modified in June 2011 and is depicted in Plaintiffs' Exhibit 353 below, shows Dr. Hofeller's use of the 2008 Presidential election results to separate Democratic VTDs across the three districts in this grouping. Tr. 995:20-998:7; PX329 at 31 (Cooper Rebuttal Report).

**Figure 25: Partisan Targeting in House Districts 55, 68, and 69**

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\*70 465. The simulations of Plaintiffs' other experts independently establish that this county grouping is an extreme partisan gerrymander.

466. Dr. Chen found that all three districts in this county grouping are extreme partisan outliers. Tr. 368:7-15. House District 55 has a lower Democratic vote share than its corresponding district in nearly all of the simulations, while House Districts 68 and 69 have higher Democratic vote shares than their corresponding districts in nearly all of the simulations. Dr. Chen's findings demonstrate the cracking of Democratic voters across the three districts in this grouping. In the vast majority of Dr. Chen's simulations, this county grouping would produce a district that is Democratic-leaning using the 2004-2010 statewide elections. PX56. The Court gives weight to Dr. Chen's analysis and findings for this county grouping, which are reflected in Plaintiffs' Exhibit 56 below:

**Figure 36: House Simulation Set 1:**

**Democratic Vote Share of the Enacted and Computer-Simulated Districts Within the Anson-Union County Grouping**

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467. Plaintiffs' Exhibit 410 shows Dr. Mattingly's analysis of this grouping:

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468. This grouping is another example of what Dr. Mattingly called "squeezing" or "flattening," where the Democrats are cracked across all of the districts in the grouping. *See* Tr. 1149:19-1150:2; Tr. 1150:22-1151:2. Dr. Mattingly's analysis showed that the two most Democratic districts in the enacted plan had fewer Democratic voters than 100% of the comparable districts in the nonpartisan ensemble, meaning that not a single plan in his nonpartisan ensemble showed as much cracking of Democratic voters in this grouping as the enacted plan. PX778 at 30; PX359 at 42. As the figure above shows, the gerrymander causes the Democrats to lose one seat in certain electoral environment, as the black dot for House District 55 is always below the dotted



line but the blue histogram often rises above it. Dr. Mattingly concluded that the Anson-Union House grouping reflected an extreme pro-Republican partisan gerrymander, Tr. 1155:8-16, PX778 at 30, and the Court gives weight to his conclusion.

469. Dr. Pegden found that this grouping constitutes an extreme partisan gerrymander. In his first level analysis, Dr. Pegden found that the enacted plan's version of this grouping is more favorable to Republicans than 98.5% of the maps that his algorithm encountered by making small changes to the district boundaries. In his second level analysis, Dr. Pegden found that this grouping is more carefully crafted to favor Republicans than at least 95.5% of all possible districtings of this county grouping that satisfy the criteria Dr. Pegden used. Tr. 1351:8-9; PX523. The Court gives weight to Dr. Pegden's analysis and conclusions.

470. The Court finds that the analyses of Plaintiffs' experts independently and together demonstrate that this county grouping is an extreme partisan gerrymander.

#### ***n. Alamance***

471. The Alamance House county grouping, drawn in 2011 and left unchanged in 2017, contains House Districts 63 and 64. The Court gives weight to the analysis of Plaintiffs' experts and finds that this county grouping is an extreme partisan gerrymander.

\*71 472. Plaintiffs' Exhibit 311 is Dr. Cooper's map for this county grouping:

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473. Dr. Cooper described how House District 63 takes the shape of a “duck's head” in the Burlington area, cracking the Democratic voters in and around Burlington between House Districts 63 and 64 to reduce those voters' influence. Tr. 924:3-25; PX253 at 84 (Cooper Report). And the map carefully places Burlington's Republican-leaning-VTDs (in the “duck's head”) in House Districts 63, helping to ensure that House District 63 will consistently elect a Republicans. Plaintiffs' Exhibit 312 depicts the division of Burlington (shaded green):

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474. Dr. Hofeller's Maptitude files confirm the partisan intent and “partisan consequences” of cracking Democratic voters in this grouping. Tr. 998:18-19. In particular, Dr. Hofeller's draft map for House Districts 63 and 64 (which was last modified in June 2011 while this district was being drawn) demonstrates how the “duck's head” portion put Burlington's most moderate and Republican-leaning VTDs (shaded tan and light green) in House District 63, while Burlington's bluest VTDs were grouped with heavily Republican areas in northern and southern Alamance County. Tr. 998:9-25; PX354; PX329 at 32 (Cooper Rebuttal Report). Plaintiffs' Exhibit 354 shows Dr. Hofeller's Maptitude file containing the Alamance grouping.

#### **Figure 26: Partisan Targeting in House Districts 63 and 64**

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475. Election results demonstrate that the gerrymandering of this grouping has been highly effective. Although Intervenor Defendants presented testimony claiming that “candidate quality” resulted in the Democratic loss in one of the districts in 2018 (Tr. 2245:9-2246:25), in fact, Republicans have won both districts in this grouping in all four elections since the districts were drawn in 2011, across a range of candidates. JSF at Ex. 2; Tr. 2253:15-2256:10.

476. The Court does not give weight to any nonpartisan explanation Legislative Defendants offered with respect to the boundaries of the districts in this county groupings.

477. The simulations of Plaintiffs' other experts independently establish that the Alamance county grouping is an extreme partisan gerrymander.

478. In his House Simulation Set 1, Dr. Chen found that House District 63 has a lower Democratic vote than its corresponding district in over 77% of the simulations while House District 64 has a higher Democratic vote share than its corresponding district in over 74.5% of the simulations. Tr. 371:10-372:6; PX55. More importantly, Dr. Chen found that both districts in this county grouping are extreme partisan outliers in House Simulation Set 2 that avoids pairing the incumbents in office at the time this grouping was drawn. Tr. 372:8-373:5; PX76. Dr. Chen thus concluded with over 99% statistical certainty that the districts in this grouping are extreme partisan outliers if the mapmaker was trying to protect incumbents in drawing the districts in the grouping. Tr. 372:23-373:5. Indeed, across the vast majority of 2,000 simulations in House Simulation Sets 1 and 2, this county grouping would produce a Democratic-leaning district in the simulations, whereas it does not in the enacted plan. PX55; PX76. The Court gives weight to Dr. Chen's analysis and findings for this county grouping, which are reflected in Plaintiffs' Exhibit 76 below:

**Figure 56: House Simulation Set 2:**

**Democratic Vote Share of the Enacted and Computer-Simulated Districts Within the Alamance County Grouping**

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\*72 479. Plaintiffs' Exhibit 384 shows Dr. Mattingly's analysis of this grouping:

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480. This grouping reflects what Dr. Mattingly called “squeezing” or “flattening,” where Democratic districts are cracked across all of the districts. Tr. 1149:19-1151:2. Dr. Mattingly found that this grouping reflected more cracking of Democratic voters than 77% of the comparable districts in the nonpartisan ensemble. Tr. 1151:10-17; PX778 at 30; PX359 at 26. Although Dr. Mattingly did not label this grouping an “outlier” because he used a 90% threshold, he testified that the pro-Republican bias in the grouping still contributed to the extreme pro-Republican bias he found statewide. Tr. 1151:21-1153:2, Tr. 1154:23-1155:1. What's more, the pro-Republican tilt has a significant effect; as the figure above shows, the gerrymander causes the Democrats to lose one seat in this grouping in many electoral environments. Tr. 1151:3-9. Dr. Mattingly concluded that the Alamance House grouping reflected a clear pro-Republican partisan tilt, Tr. 1151:24-1153:2; PX778 at 30, and the Court gives weight to his conclusion.

481. Dr. Pegden found that this grouping constitutes an extreme partisan gerrymander. In his first level analysis, Dr. Pegden found that the enacted plan's version of this grouping is more favorable to Republicans than 99.9998% of the maps that his algorithm encountered by making small changes to the district boundaries. In his second level analysis, Dr. Pegden found that this grouping is more carefully crafted to favor Republicans than at least 99.996% of all possible districtings of this county grouping that satisfy the criteria Dr. Pegden used. Tr. 1351:5; PX522. The Court gives weight to Dr. Pegden's analysis and conclusions.

482. The Court finds that the analyses of Plaintiffs' experts independently and together demonstrate that this county grouping is an extreme partisan gerrymander.

***o. Cleveland-Gaston***

483. The Cleveland-Gaston House county grouping, drawn in 2011 and left unchanged in 2017, contains House Districts 108, 109, 110, and 111. The Court gives weight to the analysis of Plaintiffs' experts and finds that this county grouping is an extreme partisan gerrymander.

484. Plaintiffs' Exhibit 323 is Dr. Cooper's map for this county grouping:



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485. As Dr. Cooper testified, this grouping is a textbook example of cracking. The Democratic voters in Gastonia are cracked across House Districts 108, 109, and 110, and the Democratic voters in Shelby across House Districts 110 and 111. Tr. 932:23-934:10; PX253 at 97-98 (Cooper Report). Plaintiffs' Exhibit 325 illustrates the splitting of these municipalities:

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486. The Court does not give weight to any nonpartisan explanation Legislative Defendants offered with respect to the boundaries of these districts.

487. The simulations of Plaintiffs' other experts independently establish that the Cleveland-Gaston county grouping is an extreme partisan gerrymander.

488. Dr. Chen found that this county grouping contains three districts that are extreme partisan outliers. Tr. 370:5-13. House Districts 109 and 111 have lower Democratic vote shares than their corresponding district in all or nearly all of the simulations, while House District 108 has a higher Democratic vote shares than its corresponding district in all of the simulations. PX59. Dr. Chen's findings demonstrate the cracking of Democratic voters across the districts in this county grouping. The Court gives weight to Dr. Chen's analysis and findings for this county grouping, which are reflected in Plaintiffs' Exhibit 59 below.

**Figure 39: House Simulation Set 1:**

**Democratic Vote Share of the Enacted and Computer-Simulated  
Districts Within the Cleveland-Gaston County Grouping**

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\*73 489. Plaintiffs' Exhibit 396 shows Dr. Mattingly's analysis of this grouping:

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490. This grouping reflects what Dr. Mattingly called “squeezing” or “flattening,” where Democratic voters are cracked across all of the districts. *See* Tr. 1149:19-1150:2; Tr. 1150:22-1151:2. Dr. Mattingly found that this grouping reflected more cracking of Democratic voters than 82.86% of the comparable districts in the nonpartisan ensemble. PX778 at 30; PX359 at 32. Although he did not label this grouping an “outlier” because he used a 90% threshold, he testified that the pro-Republican bias in the Gaston-Cleveland still contributed to the extreme pro-Republican bias he found statewide. *See* Tr. 1151:21-1156:21. Moreover, as the figure above shows, the gerrymander could cause Democrats to lose at least one seat in certain electoral environments. Dr. Mattingly concluded that the Gaston-Cleveland grouping reflects a clear pro-Republican partisan tilt that can contribute to the extreme pro-Republican bias statewide, Tr. 1156:17-24, PX778 at 30, and the Court gives weight to his conclusion.

491. Dr. Pegden's conservative methodology resulted in comparison maps that are very similar to the enacted plan for this grouping. Tr. 1351:17-1352:10.

492. The Court finds that the analyses of Plaintiffs' experts independently and together demonstrate that this county grouping is an extreme partisan gerrymander.

*p. Buncombe*

493. The Buncombe House county grouping, drawn in 2011 and left unchanged in 2017, contains House Districts 114, 115, and 116. The Court gives weight to the analysis of Plaintiffs' experts and finds that this county grouping is an extreme partisan gerrymander.

494. Plaintiffs' Exhibit 326 is Dr. Cooper's map for this county grouping:

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495. The mapmaker packed the most Democratic VTDs in and around Asheville into House District 114, in an effort to make House Districts 115 and 116 as competitive for Republicans as possible. Tr. 934:17-935:1; PX253 at 100 (Cooper Report).

496. The Court does not give weight to any nonpartisan explanation Legislative Defendants offered with respect to the boundaries of these districts.

497. The simulations of Plaintiffs' other experts independently establish that the Buncombe county grouping is an extreme partisan gerrymander.

498. Dr. Chen found that all three districts in this county grouping are extreme partisan outliers. Tr. 369:22-370:1. House District 114 has a higher Democratic vote share than its corresponding district in all the simulations, while House Districts 115 and 116 have lower Democratic vote shares than their corresponding districts in all the simulations. Dr. Chen's findings demonstrate the packing of Democratic voters into House District 114 to make House Districts 115 and 116 as competitive for Republicans as possible. PX58. The Court gives weight to Dr. Chen's analysis and findings for this grouping, which are reflected in Plaintiffs' Exhibit 58:

**Figure 38: House Simulation Set 1:**

**Democratic Vote Share of the Enacted and Computer-Simulated Districts Within the Buncombe County Grouping**

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499. Plaintiffs' Exhibit 386 shows Dr. Mattingly's analysis of this grouping:

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\*74 500. Dr. Mattingly's analysis shows that Democrats were cracked out of the two least Democratic districts in this grouping and packed into the most Democratic district. PX778 at 30; PX359 at 27; PX386. The two least Democratic districts in the enacted plan had fewer Democratic voters than 85.45% of the comparable districts in the nonpartisan ensemble. PX778 at 30; PX359 at 27; PX386. Although Dr. Mattingly did not label this grouping an "outlier" because he used a 90% threshold, he explained that the pro-Republican bias still contributed to the extreme pro-Republican bias he found statewide. *See* Tr. 1151:21-1156:24. As the figure above shows, the gerrymandering could cause Democrats to lose one or two districts in certain electoral environments. Dr. Mattingly concluded that the Buncombe House grouping reflected a pro-Republican partisan bias, Tr. 1156:17-21, and the Court gives weight to his conclusion.

501. Dr. Pegden found that this grouping constitutes an extreme partisan gerrymander. In his first level analysis, Dr. Pegden found that the enacted plan's version of this grouping is more favorable to Republicans than 99.9997% of the maps that his algorithm encountered by making small changes to the district boundaries. In his second level analysis, Dr. Pegden found that this grouping is more carefully crafted to favor Republicans than at least 99.999% of all possible districtings of this county grouping that satisfy the criteria Dr. Pegden used. Tr. 1351:4-5; PX525. The Court gives weight to Dr. Pegden's analysis and conclusions.

502. The Court finds that the analyses of Plaintiffs' experts independently and together demonstrate that this county grouping is an extreme partisan gerrymander.

#### **D. The 2017 Plans Protected the Republican Majorities in the 2018 Elections**

503. In the 2018 House elections, Republican candidates won a minority—48.8%— of the two-party statewide vote, but still won 65 of 120 seats (54%). JSF ¶¶ 68-69. Democrats thus broke the Republican supermajority, but not the majority. *Id.*; Tr. 163:21-164:19 (Rep. Meyer).

504. In the 2018 Senate elections, Republican candidates won a minority— 49.5%—of the two-party statewide vote, but still won 29 of 50 seats (58%). JSF ¶¶ 142-43; Tr. 117:5-19 (Sen. Blue). Democrats broke the Republican supermajority by a single seat, after narrowly prevailing in Senate Districts 9 and 27 by margins of 0.1% and 0.5%. *Id.*

505. Democrats were unable to win majorities in either chamber despite strong efforts to fuel voter enthusiasm, recruit candidates, and fundraise, and despite favorable political conditions nationally and in North Carolina. Tr. 76:5-11 (Phillips); Tr. 118:19-21, 124:9-13 (Sen. Blue); Tr. 163:21-164:5 (Rep. Meyer); Tr. 1269:4-14, 1283:15-1284:1 (Goodwin). Democrats raised and spent more money than Republicans in the 2018 cycle, running the most well-funded campaign operation in the history of North Carolina. Tr. 117:20-117:25, 124:20-24 (Sen. Blue); Tr. 163:21-164:5, 171:3-6 (Rep. Meyer); Tr. 1284:11-17 (Goodwin).

506. Consistent with the findings of Drs. Chen and Mattingly, Senator Blue testified that, under the current Senate plan, Democrats would have needed to win over 55% of the statewide vote to win a majority of seats in the Senate. Tr. 119:19-120:4.

#### **E. The 2017 Plans Harm the Organizational and Individual Plaintiffs**

##### **1. The 2017 Plans Harm the North Carolina Democratic Party**

507. Elections, voting, and redistricting are central to the mission and purposes of Plaintiff the North Carolina Democratic Party (the “NCDP”). The NCDP is “an association of like-minded individuals”—“predominantly registered Democrats”—“who support and also help develop policies that they agree on.” Tr. 1264:1-6 (Goodwin). As the NCDP's chair, Mr. Goodwin testified, the “basic purpose” of the NCDP is to “encourage like-minded folks to come together, to help recruit candidates and to support candidates who favor those policies and favor the development of policies that Democrats support.” Tr. 1265:2-5. The NCDP “persuade[s] voters to support the nominees of the Democratic Party during the general election.” Tr. 1265:7-9. The Court gives weight to Mr. Goodwin's testimony regarding the NCDP's mission and purposes.

\*75 508. The Court gives further weight to Mr. Goodwin's testimony that district lines significantly affect the NCDP's ability to fulfill its mission and purposes. To achieve its purposes, the NCDP must “have good candidates that we recruit and that we support”; it needs “enthusiasm for the party and its candidates and its message and mission”; and it needs “the appropriate financial resources to get a message [out]” and to fund all “the things that are involved with elections.” Tr. 1264:15-21. All of those things are affected by district boundaries. Tr. 1265:22-24. For that reason, to “accomplish [NCDP's] mission,” it is “vital” that the NCDP have “fair, nondiscriminatory district lines for the candidates that run in districts across the State.” *Id.*

509. The current district lines have harmed the NCDP and will continue to do so. The lines drawn in 2011 “had a tremendously negative impact on the ability of the North Carolina Democratic Party to achieve the purposes for which it exists.” Tr. 1266:9-16. Under the 2011 districts, “it was more difficult to recruit candidates, it was more difficult to raise the funds necessar[ilys], [and] enthusiasm was down tremendously because of ... unfair [i]districts.” *Id.*

510. Upon enactment of the 2017 Plans, the NCDP “knew it was still going to be a difficult, difficult race because of ... [the] district lines.” Tr. 1267:11-13. Because of the 2017 Plans, the NCDP “had to expend extraordinary amounts of time and resources and the like in a way that, in a set of fair maps across the State, [it] wouldn't have had to do.” Tr. 1270:10-14; *see* Tr.

1284:18-22. The NCDP had to spend more money than it would have under nonpartisan maps, both statewide and in individual districts. For example, in House District 103 in Mecklenburg County, “to make that election competitive,” Democrats had to recruit the daughter of former Governor Jim Hunt and “her election had to be financed at a level that no previous House election had ever been financed in the history of state elections,” with Democrats spending over a million dollars in support of Ms. Hunt. Tr. 189:17-190:23 (Rep. Meyer). Even then, Ms. Hunt won the election by fewer than 100 votes. *Id.* The simulations of Drs. Chen and Mattingly each establish that, under nonpartisan maps, House District 103 in Mecklenburg County would be more favorable for Democrats than it is under the current House plan, FOF § C.2.i., meaning that Democrats would not need to devote as many resources to this district and would be able to spend those resources in other districts across the State instead. The Court finds that the NCDP has established that the current districts have injured the NCDP as an organization by requiring it to spend and divert more financial resources than it would have under nonpartisan maps, both statewide and in individual districts

511. The Court finds that the current districts have injured the NCDP in other ways. As Mr. Goodwin testified, “notwithstanding the tremendous[,] palpable level of enthusiasm” for Democratic candidates nationwide and in North Carolina in 2018, “notwithstanding raising the most funds ever raised for a mid-term election for the [D]emocratic [P]arty,” and “notwithstanding the fact that ... there was a [D]emocratic [G]overnor and [a] unique partnership” with the Governor, the NCDP’s “efforts and enthusiasm and ... money did not translate into seats.” Tr. 1268:16-1269:3. “[D]espite everyone going [the NCDP’s] way, the lines were drawn in such a way that [the NCDP] could not breach that seawall that protected the [R]epublican majority.” Tr. 1268:13-15.

512. The Court finds that the current districts will also continue to injure the NCDP in the 2020 elections absent judicial relief. The NCDP will continue to need to spend and divert financial resources as a result of the gerrymanders, and it will continue to be extremely unlikely that Democratic candidates will be able to win majorities in either chamber of the General Assembly under the current districts. Moreover, although the NCDP was able to recruit a candidate in every district the favorable national environment that existed for Democrats in 2018 recruitment is more difficult under partisan plans. As Mr. Goodwin explained, unfair districts make it “more difficult to recruit candidates.” Tr. 1266:12-13.

**\*76** 513. In addition to harming the NCDP itself, the enacted plans also have harmed the NCDP’s members, and continue to do so. The NCDP’s members include every registered Democratic voter in North Carolina. Tr. 1269:8-17. There are “well over two million registered Democrats in North Carolina.” Tr. 1269:10-11. “There are registered Democrats in every precinct in the State, every House District, [and] every Senate District.” Tr. 1269:15-20. The NCDP thus has members in every House and Senate district at issue in this case, and those members are harmed by the enacted plans. The gerrymanders dilute the voting power of the NCDP’s members by intentionally making it more difficult for some Democratic voters to elect candidates of their choice and making it extremely difficult for Democratic voters statewide to obtain Democratic majorities in the General Assembly. *See* FOF § E.3.

514. The NCDP’s “support scores” do not undermine the harms that the 2017 Plans cause the NCDP and its members. As Democratic Representative Graig Meyer testified, “support scores” are purchased scores that are assigned to all registered voters based on “a combination of consumer data as well as geographic and other factors that give you a sense of the likelihood someone is going to support a Democratic candidate.” Tr. 164:22-165:12. These scores are made available by the NCDP to Democratic candidates’ campaigns, Tr. 1270:24-1271:19 (Goodwin), which then, in their discretion, may use them “to determine which voters [they] should target for paid communications, such as digital or mail, or for individual communications, such as canvassing and knocking on voters’ doors,” Tr. 164:23-165:2 (Rep. Meyer). Even then, Democratic campaigns “almost always use [support scores] in conjunction with other measures, such as a turnout score, which tells you how likely someone is to actually vote.” Tr. 165:13-15.

515. Several of Legislative Defendants’ Exhibits purportedly show—based on support scores that are aggregated on a district-by-district basis—that Democratic candidates should be competitive, and in fact could win, in a comfortable majority of House and Senate districts under the 2017 Plans. *See* LDTX 145-147, 278; *see* Tr. 2072:21-2074:22 (Dr. Hood).

516. The Court gives little weight to Defendants' arguments related to aggregated district-level support scores. Neither the NCDP nor any Democratic campaign or candidate “ever use[s] ... aggregated support scores for any purpose,” Tr. 1271:20-24 (Goodwin), and they do not use them “to determine the electability of a district,” Tr. 194:1-2 (Rep. Meyer). Support scores are “not reliable in the aggregate,” Tr. 167:5-6 (Rep. Meyer), and “[a]ggregated support scores wouldn't be all that helpful because individual support scores can be misleading,” Tr. 165:24-166:1 (Rep. Meyer). “They're imprecise measures, and then if you aggregate imprecise measures like that they tend to get less and less precise in the aggregate.” Tr. 166:7-9 (Rep. Meyer). Moreover, the aggregated support scores include all *registered* voters in a district, not likely or actual voters, which tends to overstate Democratic support. Tr. 2091:6-2092:14 (Dr. Hood). Rather than use aggregated support scores, the NCDP uses other metrics to assess a district's competitiveness, such as the “Democratic Performance Index” (DPI) or the results of specific recent statewide elections. Tr. 1272:3-11 (Goodwin); Tr. 177:3-11 (Rep. Meyer).

517. Additionally, Legislative Defendants' expert Dr. Hood, who presented an analysis based on the aggregated support scores, conceded that he is not aware of anyone who has ever “used those scores to make predictions” of how a district will perform in an election. Tr. 2092:3-24. Nor did Dr. Hood present any analysis to substantiate any claim that aggregated support scores are accurate predictors of a district's competitiveness, and Representative Meyer credibly explained that they are not. Representative Meyer gave several examples where the district-level aggregated support scores differ considerably from actual election results, demonstrating why the NCDP and Democratic campaigns “don't use support scores to determine electability of a district.” Tr. 194:1-2; *see* Tr. 193:17-196:12.

\*77 518. Defendants presented no persuasive evidence that Democrats have a realistic possibility of winning majorities in the General Assembly under the metrics that are used to assess a district's likely performance, such as the DPI and prior statewide elections results.

519. The total number of registered Democrats in particular districts likewise does not undermine the harm the enacted plans cause the NCDP and its members. Legislative Defendants' Exhibit 280 purportedly indicates that Democrats and unaffiliated voters, when combined together, hold a registration advantage over Republicans in all Senate districts and all House districts but one. *See* Tr. 1279:25-1281:15 (Goodwin). The Court gives little weight to Legislative Defendants' arguments based on statewide party registration numbers.

520. As Mr. Goodwin explained, Legislative Defendants' Exhibit 280 presents “an extreme hypothetical assuming that everyone who's registered for his or her respective party actually vote and vote only based on their party registration, and assuming that unaffiliateds all vote for the Democratic candidate. That is not going to happen.” Tr. 1281:21:25. The notion that Democrats could win 169 of 170 total seats in the General Assembly is not credible.

521. As Dr. Chen further explained, party registration has been “studied in the academic literature[,] and it's well known that in a lot of different Southern states, including in some parts of North Carolina, party registration is not necessarily a reliable indicator of one's actual partisan voting habits.” Tr. 277:22-278:1. For example, “there are conservative Democrats, or what we call blue dog democrats sometimes, who in the past used to vote Democratic and have, for the last couple of decades, switched over to voting Republican, but their party registration may still remain as Democrats.” Tr. 278:3-10.

522. The Court finds that party registration is not a reliable indicator of the competitiveness of any individual district or of the enacted plans as a whole.

## 2. The 2017 Plans Harm Common Cause

523. Redistricting is central to the mission and purposes of Plaintiff Common Cause. Bob Phillips—Executive Director of Common Cause's local chapter, Common Cause North Carolina—testified that Common Cause advocates for “[s]trengthening democracy” and “for more open, honest and accountable government.” Tr. 40:23-41:1, 41:10-16, 42:13-17. And “there is nothing ... that's really more significant, consequential in a legislative session than redistricting.” Tr. 42:23-25. Redistricting

“really locks in ... everything” “for the next decade,” including “who gets elected and what the power share will be” and “[u]ltimately what kind of laws and policies are going to be emphasized and then [] will not be, what will be ignored.” Tr. 42:25-43:4. The Court gives weight to Mr. Phillips's testimony.

524. Common Cause has long advocated to end partisan gerrymandering in North Carolina. Tr. 43:10-52:20. The 2017 Plans harm Common Cause as an organization by substantially impeding this longtime goal because, as Mr. Phillips testified, majorities in the General Assembly, as the beneficiaries of gerrymandered plans, are unlikely to adopt meaningful redistricting reform. Tr. 52:1-20.

525. The enacted plans also harm Common Cause by impeding its mission and objectives in other ways. As Mr. Phillips explained, “[o]ne of the central missions to Common Cause is to help citizens understand that they do have an obligation and that they can hold their elects accountable. How do you do that when so many—90 percent of our legislative seats are preordained ... ?” Tr. 48:8-12. When “we already know [on] the filing date, basically, who is going to win,” it is “hard to get citizens, voters[,] to participate, to think that their vote really matters.” Tr. 48:25-49:3.

**\*78** 526. In addition to Common Cause itself, the enacted plans also harm Common Cause's members. Common Cause has 25,000 members across North Carolina, including in the districts at issue here. *See* Tr. 41:17-42:12; PX644 (listing Common Cause members by district). The enacted plans harm Common Cause's members in the same ways they harm the NCDP's members and the individual voter-plaintiffs in this case.

### 3. The 2017 Plans Harm the Individual Plaintiffs

527. The Individual Plaintiffs are thirty-seven individual North Carolina voters who prefer Democratic candidates and have consistently voted for Democratic candidates running for the North Carolina General Assembly. *See* PX678-714.

528. The evidence demonstrates that the 2017 Plans disadvantage the Individual Plaintiffs and other Democratic voters across North Carolina. Two of the Individual Plaintiffs testified live at trial, and the remaining 35 testified through affidavits. PX678-714.<sup>12</sup>

<sup>12</sup> *See, however*, COL § I.C., wherein the Court concludes that nine Individual Plaintiffs lack sufficient standing.

529. Plaintiff Derrick Miller testified live at trial. Dr. Miller, a professor of German at the University of North Carolina Wilmington, resides in Senate District 8 in the “Wilmington Notch.” Tr. 202:11-14. Dr. Miller testified that by splitting off this small portion of Wilmington where he lives, the General Assembly has “made it impossible for [him] and [his] Democratic neighbors to elect a Democrat, a candidate of our choice, in Senate District 8.” Tr. 205:9-19. In 2018, the Republican candidate won Senate District 8 with around 60% of the vote. Tr. 204:3-4. As a fifth-generation North Carolinian, Dr. Miller cares deeply about issues such as public education and preserving North Carolina's natural resources, and he believes that “Democrats much more reliably and [a] Democratic majority much more reliably would protect those resources, the educational resources and the natural resources of our state.” Tr. 206:8-12.

530. Dr. Miller also lives in House District 18, Tr. 204:5-7, where the General Assembly packed Democrats in Wilmington and Leland into a single, reliably Democratic district, PX302. Dr. Miller testified that while such packing does assure him a Democratic representative in House District 18, “it does so at the expense of multiple safe districts for Republicans along the ... neighboring districts,” Tr. 205:9-19, making it more likely that the Republicans would gain control of the General Assembly.

531. The other Individual Plaintiff who testified at trial, Joshua Brown, is a locksmith apprentice from High Point who resides in Senate District 26. Tr. 830:7-12. As shown in Plaintiffs' Exhibit 281, the General Assembly split off the most heavily Democratic area of Guilford County where Mr. Brown lives and appended it to conservative Randolph County:



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532. Mr. Brown testified that by drawing his Senate District in this manner, the General Assembly “clearly dilute[d] the ability of Democrats to even attempt to run a fair race.” Tr. 833:19-21. Like Dr. Miller, Mr. Brown cares about a number of issues before the General Assembly, including a living wage, the environment, and Medicaid expansion. Tr. 834:5-6. Mr. Brown’s mother was recently hospitalized, and he believes that she would not be facing certain health issues if North Carolina had approved the Medicaid expansion. Tr. 834:15-835:3. He believes that the Republican Party in the General Assembly today has “opposing” stances on these issues that he cares about. Tr. 835:4-7.

\*79 533. Mr. Brown also lives in House District 60, where Democrats such as Mr. Brown are packed to create an overwhelmingly Democratic district. *See* Tr. 833:25-834:2; PX310. Mr. Brown testified that by packing Democrats in this manner, the General Assembly “reduced the odds of surrounding districts electing a Democrat,” Tr. 833:25-834:2, making it more difficult for Democrats to gain control of the General Assembly.

534. The affidavits submitted by the remaining thirty-five Individual Plaintiffs establish that each of these Individual Plaintiffs (i) has voted for the Democratic candidate running for the North Carolina General Assembly in each year that such an election was held since at least 2011, (ii) has a preference for electing Democratic legislators and a majority-Democratic General Assembly, and (iii) believes that if the Democratic Party made up a majority of the members in the General Assembly, the policies proposed and enacted would more closely represent the Plaintiff’s personal and political views. PX678-713.

535. Plaintiffs’ expert Dr. Chen quantified the effects of the gerrymander on the partisan composition of the districts in which each Individual Plaintiff resides. For each of his 4,000 simulations (2,000 in the House and 2,000 in the Senate), Dr. Chen determined the House or Senate district in which each Individual Plaintiff would live based on that Plaintiff’s residential address. Tr. 387:14-388:6; PX1 at 167-68 (Chen Report). Dr. Chen then compared the Democratic vote share of the districts in which a particular Plaintiff would live under his simulations to the Democratic vote share of the Plaintiff’s districts under the enacted plans. *Id.*

536. Plaintiffs’ Exhibit 238 (reproduced below) shows Dr. Chen’s results for his House Simulation Set 1. In each row, the red star represents the Democratic vote share in the Individual Plaintiff’s House district under the enacted plan using the ten 2010-2016 statewide elections, while the gray circles represent the Democratic vote share of that Plaintiff’s district under each of the 1,000 simulated plans in House Simulation Set 1. Tr. 388:14-389:12. For instance, the figure shows that Rebecca Johnson’s House district in the enacted plan has a roughly 40% Democratic vote share using the 2010-2016 statewide elections, but Ms. Johnson would live in a House district with a higher Democratic vote share in 99% of the simulations, with most of the simulations putting her in a district with an over 50% Democratic vote share. Tr. 390:6-391:20.

**Figure 54:**

**House Simulation Set 1**

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537. Dr. Chen found that the following Plaintiffs live in House districts that are extreme partisan outliers compared to their districts in House Simulation Set 1: Vinod Thomas, Paula Ann Chapman, Kristin Parker, Julie Ann Frey, Jackson Thomas Dunn Jr., Rebecca Johnson, Lily Nicole Quick, Joshua Perry Brown, Dwight Jordan, David Dwight Brown, Electa E. Person, Donald Allan Rumph, Amy Claire Oseroff, Lesley Brook Wischmann, Derrick Miller, Carlton E. Campbell Sr., Rosalyn Sloan, Mark S. Peters, Joseph Thomas Gates, Stephen Douglas McGrigor, and Rebecca Harper. Tr. 393:9-17. Dr. Chen further found that Plaintiff Leon Schaller lives in a district that is a 68.1% outlier in House Simulation Set 1, but a 100% outlier in House Simulation Set 2. Tr. 394:2-10; *see* PX239.

538. Plaintiffs' Exhibit 117 shows the same analysis for the Senate, comparing the Democratic vote share in certain Individual Plaintiffs' districts under the enacted Senate plan to their districts under Dr. Chen's Senate Simulation Set 1.

**Figure 97:**

**Senate Simulation Set 1**

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\*80 539. Dr. Chen found that the following Plaintiffs live in Senate districts that are outliers or extreme partisan outliers compared to their districts in his Senate simulations: Vinod Thomas, Paula Anna Chapman, Pamela Morton, Kristin Parker, Jackson Tomas Dunn, Jr., Rebecca Johnson, Dwight Jordan, David Dwight Brown, Karen Sue Holbrook, James Mackin Nesbit, George David Gauck, Derrick Miller, Mark S. Peters, Joseph Thomas Gates, William Service, Stephen Douglas McGrigor, Rebecca Harper, Nancy Bradley, Aaron Wolff, and Kathleen Barnes. Tr. 395:7-22. Dr. Chen found that the same Plaintiffs lived in districts that are outliers under his Senate Simulation Set 2. Tr. 396:1-7; PX118.

540. Plaintiffs' expert Dr. Cooper further demonstrated how the 2017 Plans, as a whole, disadvantage the Individual Plaintiffs. As Dr. Cooper explained, under the 2017 Plans, Democrats cannot translate their votes into seats as efficiently as Republicans. Tr. 870:11-14.

541. One of Legislative Defendants' experts, Dr. Brunell, also testified about the ways in which partisan gerrymandering harms individual voters. Dr. Brunell testified that "the responsiveness of a legislator to the voters in the voter's district is critical to democratic representation." Tr. 23531:3-6. He testified that a change in the party representing a given district generates "a huge difference" in the policies for which the representative will vote. Tr. 2354:20-23. He also testified that partisan gerrymandering is a problem in modern redistricting because it "can distort how voter preferences get translated into public policy." Tr. 2355:7-9.

**F. Defendants Offered No Meaningful Defense of the 2017 Plans**

**1. No Witness Denied That the Plans Are Intentional and Effective Partisan Gerrymanders**

542. Defendants did not persuasively rebut Plaintiffs' extensive direct evidence that the 2017 Plans were drawn with the predominant purpose of maximizing Republican advantage.

543. Defendants presented unpersuasive evidence to rebut evidence that the Hofeller files show that Dr. Hofeller primarily focused on maximizing partisan advantage. Defendants did not identify any file showing that Dr. Hofeller was motivated by anything other than partisanship in drawing the enacted House and Senate plans. Defendants identified no file, for example, showing that Dr. Hofeller at any point during the 2011 and 2017 redistricting processes considered "communities of interest," *cf.* Tr. 1059:3-1060:5, or sought to preserve the "cores" of existing districts, *cf.* Tr. 1212:20-24, or drew or altered any district to avoid splitting a municipality or VTD or to make the district more compact, or constructed any district as a "product of the nuance of legislative negotiation," *cf.* Tr. 1204:2-1206:4.

544. Defendants' experts did not persuasively contest that the plans sought to ensure Republican control of the legislature. Defendants' experts offered no methodology to attempt to evaluate whether the enacted plans were (or were not) extreme partisan gerrymanders. None offered an opinion on that question. Rather, as explained below, Defendants' experts offered theories of why the analyses by Plaintiffs' experts was somehow incomplete or unreliable. The Court gives little weight to these criticisms.

**2. Defendants' Criticisms of Plaintiffs' Experts Were Not Persuasive**



**a. Dr. Thornton**

545. Legislative Defendants offered expert testimony from Dr. Janet Thornton to criticize the analyses and conclusions of Plaintiffs' simulation experts, Drs. Chen, Mattingly, and Pegden. Tr. 1618:10-13; LDTX 286 at 4 (Thornton report). Dr. Thornton offered three main critiques of Plaintiffs' experts: (a) Dr. Pegden's and Dr. Mattingly's conclusions supposedly were skewed by the particular statewide elections they used to measure the partisan lean of their simulated plans versus the enacted plans, LDTX 286 at 6-10; (b) their simulations purportedly deviated in various ways from the 2017 Adopted Criteria, *id.* at 10-19; and (c) their simulations supposedly are not statistically significantly different from the enacted plans in terms of the number of Democratic-leaning districts, *id.* at 20-29. *See* Tr. 1622:5-1623:11. But Dr. Thornton's testimony was not persuasive, her analysis is unreliable, and her opinions are given little weight.

\*81 546. Dr. Thornton has a masters and a doctorate in economics from Florida State University. Tr. 1571:6-11. She has a bachelor's degree in economic and political science from the University of Central Florida. *Id.*

547. Dr. Thornton is currently a managing director at Berkeley Research Group and has worked as an economist and applied statistician for 35 years. Tr. 1571:15-1572:3. Dr. Thornton has prepared statistical analysis in voting cases, limited, however, to analysis of statistical differences in voter participation rates by race and minority status. Tr. 1574:3-21.

548. Dr. Thornton has taught statistics and quantitative methods for the business school at Florida State University. Tr. 1573:12-15; LDTX 286 at 39.

549. Dr. Thornton is a member of the American Economic 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. Tr. 1573:16-1574:2.

550. Dr. Thornton was accepted by the Court as an expert in the fields of economic and applied statistical analysis. Tr. 1578:7-17. She has been qualified as an expert in other cases regarding these subjects. Tr. 1576:12-1577:13. Dr. Thornton has never been excluded from testifying. *Id.*

551. Dr. Thornton has no academic experience involving gerrymandering and instead specializes in expert witness testimony and other consulting-type work in various areas, including employment, insurance, and credit decisions. Tr. 1619:19-1620:20, 1621:2-17; LDTX 286 at App'x A (Thornton CV). Dr. Thornton has no degree in mathematics, no degree in statistics, and only an undergraduate degree in political science. Tr. 1620:21-1621:1. She purported to critique the work of Plaintiffs' simulations experts, each of whom is a full-time academic with years of academic experience in using computer simulations to evaluate partisan gerrymandering. Tr. 1618:14-1619:18.

552. In her report and testimony in this case, Dr. Thornton offered no methodology for determining whether a particular redistricting plan is or is not a partisan gerrymander, or whether a particular plan is or is not the product of extreme partisan considerations. Tr. 1621:18-25. Nor did Dr. Thornton offer any opinion as to whether the enacted plans were drawn as partisan gerrymanders to benefit Republicans. When asked whether she was offering such an opinion, Dr. Thornton responded, "I have no way of knowing." Tr. 1622:1-4.

**(i) Criticisms Concerning Choice of Statewide Elections**

553. Dr. Thornton's criticisms of the specific statewide elections used by Drs. Pegden and Mattingly suffered from critical flaws.

554. Dr. Thornton stated in her report that Dr. Pegden "considered" only "two elections" in his analysis. LDTX 286 at 10; *see id.* 8-11; Tr. 1626:9-16. However, Dr. Pegden used six prior election results—two discussed in the body of his report, and four more

summarized in an appendix. PX508 at 11, 34-37 (Pegden Report). Dr. Thornton corrected this mistake only after Dr. Pegden's rebuttal report pointed it out and she was confronted with it at deposition. Tr. 1627:22-1628:4. At trial, Dr. Thornton presented a revised version of a table from her report, in which she (without acknowledging the change during her direct testimony) had added asterisks showing that Dr. Pegden in fact used six prior elections. Tr. 1626:17-1627:3; *compare* LDTX 286 at 7 (tbl. 1) *with* LDTX 302 (Thornton Demonstrative 1). Dr. Thornton's apparent oversight of the number of elections used in Dr. Pegden's analysis led to her to conclude that "Dr. Pegden's choice of elections influence[d] his conclusions." Tr. 1604:21-1605:7; *see* Tr. 1591:20-1592:10 (presenting LDTX 91, a chart purported to show the average Democratic vote share of the elections "included by each expert," but using just the 2016 Attorney General and 2008 Commissioner of Insurance for Dr. Pegden).

**\*82** 555. On cross examination, Dr. Thornton did not dispute that, when Dr. Pegden tested his results using the four additional elections summarized in his appendix, he found that it did not change his results. Tr. 1628:17-1629:4. Dr. Thornton did not test Dr. Pegden's results using other prior elections. Tr. 1629:7-25.

556. Dr. Thornton criticized Dr. Mattingly for using a different and broader set of statewide elections than the 10 elections identified by Representative Lewis, and she specifically criticized Dr. Mattingly's use of several 2008 elections. Tr. 1686:10-22; LDTX 286 at 8. However, Dr. Hofeller likewise used 2008 elections—including many of the same ones as Dr. Mattingly—in the partisanship formula Dr. Hofeller used to draw the 2017 Plans. *Compare* PX153 (Hofeller partisanship formula) *with* PX359 at 4 (Mattingly Report). When asked whether she knew this fact, Dr. Thornton responded that she "do[es]n't know one way or the other," is "not aware of anything regarding Dr. Hofeller," and did not investigate what elections the mapmaker himself used in drawing the 2017 Plans. Tr. 1686:23-1689:5.

557. In any event, Dr. Thornton's critique of Dr. Mattingly's use of election results, and her analysis of various "averages" across the different elections he used, misses the point of his analysis. Dr. Mattingly analyzed, on an election-by-election basis, how the partisan bias of the enacted plan relative to the ensemble varies in different electoral environments.

### *(ii) Criticisms Concerning Use of the Adopted Criteria*

558. Dr. Thornton's assertion that Plaintiffs' simulation experts deviated from the Adopted Criteria also suffers from critical flaws. Additionally, Dr. Thornton failed to show that any of her criticisms would have made any difference to Plaintiffs' experts' conclusions.

559. Dr. Thornton stated in her report that "[a] review of Dr. Pegden's simulation code suggests that in reality, he did not actually apply a compactness criterion." LDTX 286 at 33. However, Dr. Pegden did apply a compactness criterion. PX508 at 8, 34 (Pegden Report); Tr. 1358:11-24 (Dr. Pegden). As Dr. Pegden explained in his rebuttal report, if he had not applied a compactness criterion, his simulated plans would have looked completely different—dramatically less compact. PX551 at 17-19 (Pegden Rebuttal Report); Tr. 1358:25-1360:1 (Dr. Pegden). When asked about this mistake on cross examination, Dr. Thornton testified that "in retrospect" she "should have written it in a different way." Tr. 1623:12-25.

560. While Dr. Thornton criticized Dr. Pegden for not specifically applying a Reock compactness threshold, she did no work to assess whether adding such a threshold would change Dr. Pegden's simulations or results. Tr. 1624:23-1626:3. Nor did she do any work to test whether adding a Reock threshold would change Dr. Pegden's conclusion that the enacted plans are extreme outliers carefully crafted to favor Republicans. Tr. 1626:4-8. The Adopted Criteria state that the 2017 Plans should "improve the compactness" over the 2011 Plans, and when asked whether Dr. Pegden's simulated plans "are, in fact, an improvement in terms of compactness over the districting in the 2011 map," Dr. Thornton responded, "I don't know." Tr. 1625:13-18. Dr. Thornton did no work to figure it out. Tr. 1625:19-1626:3.

**\*83** 561. Dr. Thornton testified that Dr. Pegden did not "make any adjustment for incumbency." Tr. 1604:8-9. This is incorrect. Dr. Pegden included as a criterion in all of his simulations avoiding pairing the incumbents who were in office at the time the districts were drawn. PX508 at 8 (listing "Incumbency protection" as criterion).

562. Dr. Thornton also suggested that Dr. Pegden could not draw valid conclusions about the 2017 Plans without reaching “equilibrium” in his Markov Chain—without comparing the 2017 Plans to the entire universe of potential House and Senate districtings. Tr. 1631:2-11. In this regard, Dr. Thornton analogized Dr. Pegden’s analysis to looking for a lost key in a bedroom without considering that the key might be somewhere else in the house. But as Dr. Pegden explained, the purpose of his approach and the accompanying mathematical theorems he has proved is that they allow for drawing statistically significant conclusions about how the enacted plans compare to the universe of all possible plans meeting the relevant criteria without achieving “equilibrium,” *i.e.*, without needing to generate a representative sample of the universe of possible maps. PX551 at 2 (Pegden Rebuttal Report); Tr. 1360:2-1361:21. Dr. Thornton acknowledged that she has no expertise in proving mathematical theorems, nor did she offer any opinion that Dr. Pegden’s theorems are wrong. Tr. 1631:12-1632:9.

563. Dr. Thornton stated in her report that Dr. Mattingly “did not consider incumbency protection as defined in the 2017 enacted map criteria.” LDTX 286 at 19. Dr. Thornton repeated this assertion in her direct testimony, stating that Dr. Mattingly did not “control, in any respect, for incumbency protection.” Tr. 1610:20-22. This is false. Dr. Mattingly added incumbency protection as a criterion in checking the robustness of his results, and he concluded that it did not change his results. PX359 at 81-85; Tr. 1093:15-1094:4.

564. On cross examination, Dr. Thornton said that Dr. Mattingly may not have considered incumbency protection “simultaneously” “[w]ith respect to all the other factors, as I recall.” Tr. 1633:14-24. This too is incorrect. Dr. Mattingly added incumbency protection as a criterion in conjunction with the criteria used to generate his primary ensemble, and he ran a separate analysis that “consider[ed] the joint effect of both ensuring incumbents are preserved and requiring more stringent redistricting criteria” with respect to the traditional districting criteria. PX359 at 81-82.

565. Dr. Thornton criticized Dr. Mattingly for using only Polsby-Popper compactness scores, and not Reock scores. Tr. 1633:25-1634:3. But she did no work to determine whether the Reock scores for his simulated plans were too low, or whether applying a Reock threshold would change his results. Tr. 1634:4-21. In his rebuttal report, Dr. Mattingly calculated Reock scores for all of his simulated districts, and he reported that there was not a single district in any of his simulated Senate plans with a Reock score less than or equal to 0.15—the threshold referenced in the Adopted Criteria. PX487 at 8-9. There were very few such districts in his simulated House plans—only 1 out of 550,000 simulated Wake districts, and 7 out of 486,588 Mecklenburg districts. PX487 at 8; Tr. 1634:22-161635:14. Dr. Mattingly concluded that removing those districts would not change his results, *id.*, and Dr. Thornton did no work of her own to determine whether he was wrong, Tr. 1635:15-25.

**\*84** 566. Dr. Thornton criticized Dr. Pegden’s and Dr. Mattingly’s weighting of the various criteria they applied to create their simulated plans. LDTX 286 at 17-18; Tr. 1636:13-24. But Dr. Thornton acknowledged that she did not know whether the legislature “did weighting” at all, or how it may have done so. Tr. 1636:25-1637:13. She did not suggest any better way than Dr. Mattingly’s approach to weighting the various criteria. Tr. 1637:14-25. She did not rerun Dr. Mattingly’s computer code using any different weighting system to determine if using a different weighting system could have affected Dr. Mattingly’s conclusions. Tr. 1638:1-6. In his rebuttal report, Dr. Mattingly tried six different ways of weighting the various criteria, and he concluded that none changed his results. PX487 at 10-11. When asked about this analysis on cross examination, Dr. Thornton merely said, “I don’t recall.” Tr. 1638:7-14.

567. Dr. Thornton testified that Dr. Chen’s use of a “T score” meant that his simulations did not follow the Adopted Criteria regarding compactness, avoiding splitting municipalities, and avoiding splitting VTDs. Tr. 1599:18-1600:3. Dr. Thornton suggested that Dr. Chen restricted his algorithm to only accept plans below a particular T Score, Tr. 1597:25-1598:19, and she asserted in her report that “[a] t-score evaluation was not among the actual criteria” in the Adopted Criteria, LDTX286 at 15. Dr. Thornton testified that, if Dr. Chen “changed the value of the T scores,” used a “value other than 1.75” in the T score, or “added a random element,” his results would have been entirely different. Tr. 1597:25-1598:19.

568. Dr. Thornton's testimony misapprehends Dr. Chen's algorithm. Dr. Chen's "T score" does not impose a numerical threshold that restricts the maps the algorithm generates. Rather, the T score is just a way of equally weighting and jointly tracking the three traditional districting criteria of compactness, avoiding municipal splits, and avoiding VTD splits. For any given county grouping, the algorithm randomly draws an initial set of districts, and then proposes a random change to the border between a random pair of adjoining districts. Tr. 261:23-262:16. If the border change would, on net, improve the districting of the grouping across the three criteria of compactness, avoiding municipal splits, and avoiding VTD splits, the algorithm accepts the change. *Id.* But if the change would make the districting worse off, on net, with respect to these criteria, the algorithm rejects the change. *Id.* The T score is merely a way of giving the three criteria equal weight and then tracking whether a proposed random change improves the districting across these criteria. Tr. 263:4-8 The algorithm considers thousands of these random changes, one at a time in an iterative fashion, in drawing districts within a given grouping. Tr. 261:18-262:23.

569. Dr. Thornton is thus incorrect that Dr. Chen's algorithm lacks a "random element." Tr. 1598:7-8. She misapprehends the T score's function in suggesting that raising or lowering the "T score value" would be less "restrictive." Tr. 1598:5-10. The T score's sole purpose is to equally weight the three criteria of compactness, avoiding split municipalities, and avoiding split VTDs. Dr. Thornton does not dispute that Dr. Chen's T score accurately gives equal weight to these three criteria.

570. Moreover, while Dr. Thornton asserted that Dr. Chen may not have found the enacted plans to be statistical outliers if he had used "different T scores," Tr. 1598:20-1599:13, Dr. Thornton offered no proof or analysis to substantiate this claim, Tr. 1645:14-1647:15.

571. Dr. Thornton also criticized Dr. Chen's approach to incumbency protection in his Simulation Set 2. Tr. 1638:15-1639:8. She acknowledged that Dr. Chen's Simulation Set 2 successfully avoided pairing incumbents, but she asserted that Dr. Chen failed to comply with the second sentence of the Adopted Criteria's incumbency protection criterion, which provided that "the committees may make reasonable efforts to ensure voters have a reasonable opportunity to elect non-paired incumbents." Tr. 1610:23-1611:3. Dr. Thornton claimed that this sentence meant the Committees should make efforts "to allow for incumbents to win" by placing them in politically favorable districts, LDTX286 at 16, and that "it would have been interesting" if Dr. Chen had applied "some sort of weighting" to carry this out, Tr. 1639:12-1640:3. Dr. Thornton's interpretation is contrary to the contemporaneous explanation of this sentence by Representative Lewis, who stated at an August 10, 2017 hearing that the sentence "is simply saying that mapmakers may take reasonable efforts to not pair incumbents unduly." PX603 at 122:4-18; Tr. 1640:16-1641:12. That direction matches Dr. Chen's approach to incumbency protection.

\*85 572. Dr. Thornton did not analyze whether any of the supposed deviations made any difference to the experts' conclusions. On cross examination, Dr. Thornton was asked whether, "for every single criticism you've leveled, there's no instance in which you took any of plaintiffs' experts' code, substituted whatever you thought was an improved criteria, ran the code with the improved criteria and showed us that it made a difference to their work; isn't it true in your report there's no place that you did that?" Tr. 1647:3-13. Dr. Thornton responded that, "given the time, [she] did not have sufficient time to do so." Tr. 1647:14-15.

### *(iii) Criticisms Concerning Statistical Significance*

573. Dr. Thornton opined that the enacted plans are "not statistically significantly different from the simulated maps with respect to the number of Democratic districts." LDTX286 at 21 (capitalization omitted). Dr. Thornton wrote in her report that she compared "the enacted plan's number of Democratic districts and the number predicted by the simulated maps," and "determined the number of standard deviations associated with the difference between the enacted plan and simulated number of Democratic districts." LDTX286 at 24. However, Dr. Thornton did not use the actual results of Plaintiffs' experts' "simulated plans," or the actual "standard deviation" of the simulated plans.

574. Instead, Dr. Thornton created her own distribution of the predicted number of Democratic seats won under a nonpartisan plan, using a "binomial distribution." She then calculated the "standard deviation" of her own distribution, and used that standard deviation to assess statistical significance. *See* PX551 at 10 (Pegden Rebuttal Report). Dr. Thornton used this binomial

distribution methodology as the foundation for her criticisms of all three of Plaintiffs' simulation experts. LDTX286 at 22; Tr. 1685:9-22.

575. Contrary to Dr. Thornton's approach, the distribution of districting maps is not a binomial distribution, and thus it is inappropriate to use a binomial distribution in the redistricting context. When confronted with the flaws in using a binomial distribution in the redistricting context, Dr. Thornton's responses were not persuasive. The Court gives her testimony concerning statistical significance little weight.

576. It is undisputed that a binomial distribution applies only when two conditions are met: (1) each trial (in this case, each House or Senate district) is independent of one another; (2) each trial has the exact same percentage chance of producing a particular outcome (in this case, that a Democrat wins the district). Tr. 1669:4-8, 1676:1-5 (Dr. Thornton); Tr. 1378:24-1382:2 (Dr. Pegden); PX551 at 10 (Pegden Rebuttal Report); PX487 at 11-12 (Mattingly Rebuttal Report); PX123 at 171-72 (Chen Rebuttal Report). Thus, the classic example of the binomial distribution is a coin flip, because the likelihood of landing on heads on any flip of a coin is independent of the result of every other flip, and the percent chance of landing on heads is the same in each flip (50%). Tr. 1669:11-1670:5.

577. By applying a binomial-distribution methodology, Dr. Thornton assumed that district elections, like coin flips, are independent of each other, and also that Democrats have the same chance—specifically, a roughly 40% chance—of winning each and every district House or Senate district, no matter where in North Carolina the district is located. Tr. 1670:6-1671:2 (Dr. Thornton); *see* Tr. 1381:15-1382:2 (Dr. Pegden); PX551 at 10 (Pegden Rebuttal Report); PX487 at 11-12 (Mattingly Rebuttal Report); PX123 at 171-72 (Chen Rebuttal Report).

**\*86** 578. Both assumptions are incorrect in the redistricting context. First, unlike a coin flip, each House (or Senate) district is not independent of one another. Tr. 1379:22-1381:10 (Dr. Pegden); PX551 at 10 (Pegden Rebuttal Report). In a given county grouping, if a particular set of Democratic voters is placed in one district, then those voters cannot be put in any other district in the grouping. *Id.* The partisan makeup of the districts are thus intertwined and not independent of one another; increasing the number of Democratic voters in a particular district necessarily decreases the number of Democratic voters in neighboring districts. *Id.*

579. The second assumption underlying Dr. Thornton's binomial distribution—that Democrats have the exact same percentage chance of winning each House (or Senate) seat—is contrary to reality. Dr. Thornton assumes, for example, that Democrats have the same percentage chance of winning a House district in Wake County as in Caldwell County. Tr. 1381:15-1382:2 (Dr. Pegden); *see* PX487 at 11-12 (Mattingly Rebuttal Report); *see* PX123 at 171-72 (Chen Rebuttal Report). This is not the case.

580. The following example illustrates these flaws in Dr. Thornton's analysis. In the Alamance County House grouping, there are two districts of roughly equal population. Assuming, as a hypothetical, that Republicans will win 60% of the total vote across the County in a particular election, it is mathematically impossible for Democrats to win *both* districts in the election. Tr. 1673:14-19. But under Dr. Thornton's binomial-distribution methodology, Democrats will win both districts 16% of the time—because she assumes that Democrats have an equal and independent 40% of winning each of the two districts. Tr. 1671:10-17; *see also* Tr. 1379:1-1381:10 (Dr. Pegden). When asked about this on cross examination, Dr. Thornton repeatedly asserted that she did not “understand” the illustration. Tr. 1671:3-1673:13.

581. Dr. Thornton's binomial-distribution methodology was recently rejected by a federal court in a partisan gerrymandering case in Ohio. There, as here, Dr. Thornton used a binomial distribution in her expert analysis on behalf of the Republican legislative defendants, and the three-judge federal district court rejected her analysis. The court stated: “Dr. Thornton also performed her own analysis using a binomial distribution, but we do not give any weight to that analysis.” *Ohio A. Philip Randolph Inst. v. Householder*, 373 F. Supp. 3d 978, 1056 (S.D. Ohio 2019); *see* Tr. 1673:20-1674:20. The court explained that Dr. Thornton's binomial-distribution analysis “incorporates yet another faulty assumption that each district has a 51% chance of being won by a Republican because Republicans won 51% of the congressional vote across the State; this assumption does



not comport with basic understandings of congressional elections, i.e., that although some districts may be competitive (a 51% Republican to 49% Democrat district), other districts lean heavily in favor of one party or the other.” *Ohio A. Philip Randolph Inst.*, 373 F. Supp. 3d at 1056; see Tr. 1677:23-1678:15.

582. While Dr. Thornton claimed that her use of a binomial distribution here is different from the Ohio case, Tr. 1677:19-22, the Court disagrees and finds that Dr. Thornton's methodology here suffers from the same flaws identified by the federal court in the Ohio case. Assuming that districts are independent, and that Democrats have a roughly 40% chance of winning every House and Senate district, does not comport with basic understandings and reality of North Carolina House and Senate elections. Dr. Thornton could not identify literature or precedent supporting the use of a binomial distribution in a redistricting context. Tr. 1680:6-14.

\*87 583. Dr. Thornton's use of a binomial distribution skewed her statistical significance analysis. Due to the independence and equal probability assumptions, the binomial produces a much wider distribution of the number of possible districts Democrats could win in the House or the Senate than the actual distribution produced by each expert's simulations. That wider distribution in turn results in Dr. Thornton estimating much larger standard deviations than the actual standard deviations of each expert's simulated plans, allowing Dr. Thornton to claim that the enacted plan is less than two standard deviations from each expert's average simulation and therefore purportedly not a statistically significant outlier. LDTX286 at 9-13. For instance, in Dr. Chen's House Simulation Set 1, his simulated maps produce a range of results from 43 Democratic districts to 51 Democratic districts, with 90 percent of those results between 45 and 48 Democratic districts, whereas the enacted 2017 House plan produces only 42 Democratic districts—an extreme outlier, completely off the distribution. PX234; Tr. 1647:16-1648:16. The actual standard deviation of Dr. Chen's House Simulation Set 1 is 1.36 seats, and the enacted plan is more than three standard deviations from the average simulated plan. *Id.* But Dr. Thornton's unsubstantiated binomial distribution suggests that Democrats could win as few as 30 districts and as many as 63, and has a standard deviation of 5.34 seats. PX123 at 170-76.

584. Similarly, Dr. Thornton's binomial distribution is completely different from the actual distribution of simulated plans she created using a modification of Dr. Pegden's computer code. For the House, while the simulations generated between 46 and 50 Democratic seats, Dr. Thornton's binomial distribution generated between 35 and 60 Democratic seats and a much larger standard deviation. Plaintiffs' Exhibit 554, a figure from Dr. Pegden's rebuttal report, depicts these dramatic differences:

**Figure 1.3: The binomial distribution is not a reasonable approximation of the map distribution (House)**

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

The gray bars again show the distribution of Dr. Thorton's simulated House plans, with respect to seat counts using the 2016 AG race. Dr. Thornton's statistical significance analysis based on the binomial test would require random House maps to be distributed instead as the blue bars, which plot the binomial distribution used by Dr. Thornton's test.

585. Dr. Thornton's binomial distribution likewise is completely different from the actual distribution of simulated plans created by Dr. Mattingly. PX495. When Dr. Mattingly used the “actual distribution” of his results to calculate statistical significance as opposed to Dr. Thornton's “grossly inaccurate seat distribution,” he found that the enacted maps are “well outside two or three standard deviations” and are “extreme outliers.” PX487 at 11-12.

586. Dr. Thornton made other significant methodological errors in her analysis of statistical significance. For instance, in modifying Dr. Pegden's computer code to generate simulated plans of her own, Dr. Thornton used the wrong command and froze every single district drawn in 2011 and left unchanged in 2017. Tr. 1363:7-1364:8 (Dr. Pegden); PX551 at 6 (Pegden Rebuttal Report). Dr. Thornton's suggestion that she intended to freeze the 2011 districts, Tr. 1666:16-21, is not credible, given that her report nowhere mentions this decision and in fact claims that it is analyzing the entire enacted map—all 120 House districts and all 50 Senate districts. LDTX286 at 75 (tbl. 3).

587. Dr. Thornton's freezing errors ran in both directions. In her report, Dr. Thornton presented a graph purporting to show differences in Democratic vote share between the enacted plans' districts and the districts she drew using her modified version of Dr. Pegden's code. The evident goal of these charts—titled “Comparison of the Enacted Plan and the Average Across Dr. Pegden's Simulations for Each *Non-Frozen* House [and Senate] District”—was to suggest that the vote shares in the enacted districts were not markedly different from those in the nonpartisan simulations. LDTX286 at 28-29 (emphasis added). But Dr. Thornton's charts included many districts that *were* frozen on account of the Whole County Provision, which misleadingly suggested a high degree of similarity between the enacted plan and the simulations. Tr. 1680:24-1684:9. Dr. Pegden pointed out a number of other problems with this chart—*e.g.*, using thick lines, stretching the data out over an unnecessarily long vertical axis, and needlessly connecting the data points using lines, all which served to obscure the significant gaps in vote share between the enacted and simulated districts. Tr. 1391:6-1395:19.

**\*88** 588. Setting aside the flaws in her analysis, Dr. Thornton's results show a statistically significant difference between the enacted 2017 Plans and the simulated plans she created using a modification of Dr. Pegden's code. As shown in Dr. Pegden's rebuttal report, only 0.001% of Dr. Thornton's simulated plans are as Republican-favorable as the enacted House plan, and only 0.182% of Dr. Thornton's simulated plans are as Republican-favorable as the enacted Senate plan. PX551 at 8-9 (Pegden Rebuttal Report); Tr. 1369:4-1371:18.

589. Thus, even including errors, Dr. Thornton's results were still consistent with the conclusions of Plaintiffs' experts. Tr. 1400:10-21 (Dr. Pegden).

#### **b. Dr. Brunell**

590. Legislative Defendants offered expert testimony from Dr. Thomas Brunell, who was asked to read and respond to the reports of Drs. Pegden, Cooper, Mattingly and Chen. Tr. 2276:19-20. Dr. Brunell is a tenured political science professor at the University of Texas, Dallas. For over 20 years, Dr. Brunell has taught, lectured and published on representational and redistricting issues. LDTX292. Dr. Brunell was accepted by the Court as an expert on redistricting and political science. Tr. 2275:4-12. Dr. Brunell offered no opinion on whether the 2017 Plans are partisan gerrymanders. Tr. 2316:10-12.

591. The Court finds Dr. Brunell's opinions were unpersuasive, sometimes inconsistent with prior testimony he has given, and gives them little weight.

592. Dr. Brunell testified that Plaintiffs' experts have not shown “what is too much politics in this political process.” Tr. 2306:24-2307:2. However, this critique contradicts Dr. Brunell's own expert analysis and conclusions in a prior case. In 2011, Dr. Brunell opined as an expert witness for the Nevada Republican Party that state legislative maps were excessive partisan gerrymanders—based on an analysis less robust than the analyses of Plaintiffs' experts here. Tr. 2337:5-2338:23. Using two statewide elections, Dr. Brunell conducted a uniform swing analysis and concluded that the maps at issue gave Democrats 60% of the seats when Democrats won only 50% of the votes statewide. Tr. 2340:16-2345:5. Dr. Brunell concluded exclusively on the basis of that analysis that the maps were “unfair” and showed “heavy pro-Democratic bias”—“clearly a pattern of partisan bias, *i.e.*, gerrymandering.” Tr. 2342:4-2345:11. Dr. Brunell further opined, based solely on his uniform swing analysis and the disconnect between Democrats winning 60% of the seats with only 50% of the statewide vote, that he could be “absolutely conclusive” that the maps were not just partisan gerrymanders, but a “leading candidate for gerrymander of the decade.” Tr. 2345:12-2346:15.

593. In this case, Dr. Brunell conceded that Plaintiffs' experts' analyses—using both uniform swing analysis and actual results of prior statewide elections—demonstrated that when Republicans get 50% of the votes in either chamber of the General Assembly, they win at least 60% of the seats. Tr. 2346:16-2350:2. Thus, under Dr. Brunell's own approach, the Court could find, in his own words, a “heavy pro-[Republican] bias” and “clearly a pattern of partisan bias *i.e.*, gerrymandering.” Tr. 2350:3-8.

594. The Court also rejects Dr. Brunell's testimony that simulation methods for evaluating partisan gerrymandering have not been sufficiently vetted by academics and courts. Tr. 2292:15-2293:23. Dr. Brunell testified on direct examination that he was unaware of any peer-reviewed political science papers that provide a "basis" for "using [simulations] as an evaluation for partisanship." Tr. 2293:11-17. He testified that a 2013 paper by Dr. Chen and Dr. Jonathan Rodden "uses simulations, I think," "[b]ut in terms of using it as an evaluation for partisanship, I don't think there have been any such publications yet." Tr. 2293:11-17. Dr. Brunell later acknowledged that the 2013 Chen and Rodden paper was in fact a peer-reviewed political science paper that "uses simulation techniques to measure partisanship." Tr. 2307:19-2308:5; *see* PX1 at 179. He also acknowledged that he was unfamiliar with three other peer-reviewed political science papers by Dr. Chen published between 2015 and 2017 that use computer simulations to evaluate partisan gerrymandering. Tr. 2308:10-2309:9; PX1 at 180. Dr. Brunell was also unaware that Dr. Pegden's paper on using simulations to measure gerrymandering, published in the Proceedings of the National Academy of Sciences, was peer reviewed by a political scientist. Tr. 2309:12-22; *see* Tr. 1413:7-16.

\*89 595. Dr. Brunell was also unfamiliar with court decisions approving the use of simulations to measure partisanship. He testified on direct that "we've only just started to see [simulations] used in law suits," Tr. 2292:24-2293:1, that simulations therefore "may not be ready for prime time yet," Tr. 2292:22-24, and that he himself did not learn about the simulation method until 2017 or 2018, Tr. 2293:7-10. However, as he acknowledged, multiple courts have credited simulations by Drs. Chen, Mattingly, and Pegden as a method of establishing whether a particular map is a partisan gerrymander. Tr. 2310:8-2312:1. Dr. Brunell was "unaware" that the Fourth Circuit credited Dr. Chen's simulations in a 2016 decision, in a gerrymandering case filed in 2013. Tr. 2311:4-2312:1; *see Raleigh Wake Citizens Ass'n v. Wake Cty. Bd. of Elections*, 827 F.3d 333 (4th Cir. 2016). The court rejected the criticism Dr. Brunell makes here, namely that Dr. Chen's simulations "ignor[ed] partisanship." Tr. 2311:17-20; *see Raleigh Wake*, 827 F.3d at 344.

596. The Court rejects Dr. Brunell's testimony that simulated maps are only useful if the algorithm draws "partisan districts" as opposed to "nonpartisan districts." Tr. 2277:13-20; 2280:4-16. Dr. Brunell acknowledged that the 2017 Plans were drawn for partisan gain, but argued that simulations can tell if an enacted map is an "extreme partisan outlier" only if the simulations include some level of partisanship. LDTX291 at 3; Tr. 2277:13-20; 2280:4-16. Dr. Brunell's criticisms miss the point. Dr. Mattingly's and Dr. Chen's simulations quantify the effects of the gerrymandering and how extreme it is. Both find that the enacted plans are outside the entire distribution of their simulated plans— sometimes by many seats. For instance, Dr. Chen found in his uniform swing analysis that, in electoral environments corresponding to a 52.42% statewide Democratic vote share, Democrats win 11 to 12 fewer seats in the House and 3 to 4 fewer seats in the Senate than they would typically win under the simulated plans. *See* PX1 at 34, 65 (Chen Report). Dr. Mattingly found similar results. *See* PX359 at 12 (Mattingly Report); PX487 at 25 (Mattingly Rebuttal Report).

597. Additionally, Dr. Pegden's analysis demonstrates that the 2017 Plans are extreme partisan outliers even in comparison to other *partisan* maps. Although Dr. Brunell criticized "all three of" Plaintiffs' simulation experts for using "nonpartisan districts" as the point of comparison, Tr. 2277:13-20, this misunderstands Dr. Pegden's methodology. Dr. Pegden started with the enacted plan and made a sequence of small random changes, observing how those changes affected the partisan characteristics of the plan. Tr. 1304:3-1305:7; PX515; PX519. Dr. Pegden's comparison maps thus "are not supposed to be neutral comparison maps drawn from scratch of North Carolina," and "even against a set of extremely similar maps which were generated from the enacted map and which share all sorts of qualities with the enacted map, the enacted map is still an extreme outlier." Tr. 1304:14-1305:7. Dr. Pegden's comparison maps are "tied strongly to the enacted map" and "baked in" intentional partisan choices by the mapmaker. Tr. 1405:1-13, 1406:2-19. This makes it all the more remarkable that the enacted plans are such outliers in his analysis, even against this very similar comparison set. Tr. 1315:22-1316:2.

598. The Court gives no weight to Dr. Brunell's criticisms of uniform swing analysis. Dr. Brunell stated in his report that uniform swing analysis is "not reliable," LDTX291 at 4, and he testified that the assumption of uniform swing analysis was "clearly wrong," Tr. 2289:14-22. But again, when Dr. Brunell was evaluating partisan bias in the Nevada case in 2011, he testified that uniform swing analysis allowed him to be "absolutely conclusive" in finding legislative maps to be heavily biased and gerrymandered. Tr. 2351:19-2352:7.



\*90 599. Dr. Brunell's report and testimony contained numerous statements that were erroneous and reflect a failure to understand the work of Plaintiffs' experts. Dr. Brunell's report asserts that Dr. Pegden "use[d] the results of just two elections for his simulations" and that "both of them have Democratic winners." LDTX291 at 15. In fact, Dr. Pegden used six elections, two of which—2012 Lieutenant Governor and 2014 U.S. Senate—had Republican winners. PX508 at 34-37 (Pegden Report). On the stand, Dr. Brunell explained his assertion by stating that Dr. Pegden "does some quick checks with other elections in his appendix, but he only uses [] two elections for his full simulation," that he "uses one particular metric ... but not all of it," and that he did not use "the four additional elections in his appendix to perform his entire statewide analysis." Tr. 2323:1-15. In fact, Dr. Pegden re-ran his entire statewide analysis using all six elections. PX508 at 34-37 (Pegden Report).

600. Dr. Brunell wrote in his report that he was "confused" by aspects of Dr. Pegden's analysis, Tr. 2318:19-22, that were clearly explained in Dr. Pegden's initial report. Tr. 2318:23-2319:24. Dr. Brunell criticized Dr. Pegden for failing to explain how many changes he made to the enacted map before comparing the simulated maps to the enacted map, LDTX291 at 13, but Dr. Pegden's report made clear that he evaluated the partisanship of the new map after every step, meaning every swap, PX508 at 5. Dr. Brunell also criticized Dr. Pegden for purportedly failing to explain terms like "fragility" and "carefully crafted," Tr. 2320:8-18, but Dr. Pegden's report specifically defined those terms. Tr. 2321:15-2322:2.

601. In criticizing Dr. Chen's application of the Adopted Criteria, Dr. Brunell testified that Dr. Chen's "programmatic algorithm ... maximizes geographic compactness," Tr. 2295:10-16, but Dr. Brunell had not reviewed Dr. Chen's code, Tr. 2333:23-25, and he got it wrong, Tr. 262:24-263:12. When confronted with his error at trial, Dr. Brunell testified that whether Dr. Chen maximized compactness did not matter because Dr. Chen's "algorithm" was "different from the legislative criteria" in unspecified other ways relating to splitting VTDs. Tr. 2334:6-13. However, Dr. Brunell "didn't know" how Dr. Chen's algorithm "worked" with respect to other issues, Tr. 2297:9-14, and he did no work to determine whether a different weighting would have affected Dr. Chen's conclusions, Tr. 2334:18-21.

602. Dr. Brunell's report inaccurately criticized Dr. Mattingly and Dr. Pegden for failing to preserve incumbents, when both ran simulations that avoided pairing incumbents. LDTX291 at 3; Tr. 2326:13-25; Tr. 2329:2-5.

603. The Court rejects Dr. Brunell's testimony that the simulated maps are not proper comparisons to the enacted map to the extent they do not preserve the "core" of an incumbent's district. Tr. 2283:21-2284:19. Dr. Brunell acknowledged that he had "no idea if and to what extent core preservation was used" in the enacted map, Tr. 2329:21-2330:1, and no other witness testified that the 2017 Plans preserved district cores. Neither Dr. Brunell nor any other witness for Legislative Defendants analyzed whether a hypothetical effort to preserve district cores could explain the extreme partisan bias in the 2017 Plans. As Representative Lewis explained, the Adopted Criteria's incumbency protection provision referred only to "not pair[ing] incumbents unduly"—not core preservation. PX603 at 122. As Dr. Brunell acknowledged, core preservation also can be a partisan criterion, Tr. 2332:12-25, and that, when, as here, the prior plan was an unlawful racial gerrymander, preserving cores might also preserve racial gerrymanders, Tr. 2333:1-12.

604. Additionally, Plaintiffs proved that a hypothetical effort to preserve the "cores" of an incumbent's district could not explain the enacted plans' extreme partisan bias. Dr. Pegden's simulations preserved the "cores" of each incumbent's prior district. Tr. 1316:24-1317:10 (Dr. Pegden); *see* Tr. 2330:16-19.

\*91 605. The Court gives little weight to Dr. Brunell's testimony that Figure 8 and Figure 20 of Dr. Chen's report do not show that the enacted plan is an "outlier." Tr. 2302:12-2303:15. Figure 8 of Dr. Chen's report shows at least a five-seat difference between the bulk of his House simulations and the enacted plan, and shows that the enacted plan is off the distribution entirely—it elects fewer Democrats than 100% of his simulated plans. PX1 at 48 (Chen Report). The Court rejects Dr. Brunell's testimony that a five-seat difference is only a "slight[]" difference. Tr. 2302:24-2303:2. Likewise, Figure 20 of Dr. Chen's report shows a two-seat difference between the typical result of his Senate simulations and the enacted plan, and again shows that the enacted plan is off the distribution entirely—it elects fewer Democrats than 100% of his simulated plans. PX1 at 48 (Chen Report). Dr.

Brunell also speculated that changing Dr. Chen's criteria “could shift this over and then this wouldn't be an outlier at all,” Tr. 2303:4-9, but the Court gives no weight to Dr. Brunell's untested conjecture. The Court likewise rejects Dr. Brunell's testimony about Plaintiffs' Exhibit 48, which is Figure 28 of Dr. Chen's report and shows cracking and packing in the Cumberland House grouping. PX1 at 93. Dr. Brunell testified that this figure did not show the enacted plan to be an “outlier” because “the enacted districts are in the gray clouds,” Tr. 2303:16-21, but in fact the figure demonstrates that two districts (HD-45 and HD-43) are entirely outside the “gray clouds” and show more cracking (HD-45) and packing (HD-43) of Democrats than 100% of the districts in Dr. Chen's simulations. PX1 at 93.

### *c. Dr. Hood*

606. Legislative Defendants offered the testimony of Dr. M.V. (Trey) Hood III to respond to Plaintiffs' experts Dr. Cooper and Dr. Chen. LDTX 284; Tr. 2037:21-2038:3.

607. Dr. Hood is a tenured professor of political science at the University of Georgia, a position he has held for 20 years. Tr. 2032:19-2033:5. He holds three degrees in political science: a Ph.D. from Texas Tech University; a Master of Arts degree from Baylor University, and a Bachelor of Science degree from Texas A&M University. Tr. 2032:14-18.

608. Dr. Hood is also the director of the School of Public and International Affairs' Survey Research Center which performs public opinion research and polling for entities including the Atlanta Journal-Constitution. Tr. 2033:6-19.

609. Dr. Hood teaches courses in American politics and policy, Southern politics, research methods and election administration, including redistricting. Tr. 2033:20-2034:9.

610. Dr. Hood also conducts research on redistricting and has published articles in peer-reviewed journals on topics that include redistricting. Tr. 2034:10-18. Dr. Hood's work has appeared in peer-reviewed journals approximately 50 times. Tr. 2034:13-21. He currently serves on the editorial boards of *Social Science Quarterly* and *Election Law Journal*, with the latter journal dealing with issues of election administration, including redistricting. Tr. 2034:22-2035:2.

611. Dr. Hood was accepted by the Court as an expert in American politics and policy, Southern politics, quantitative political analysis, and election administration, including redistricting. Tr. 2037:13-20.

612. Dr. Hood testified about the role of the Whole County Provision and 2017 Adopted Criteria in limiting the mapmaker's discretion in drawing the 2017 Plans, the results of the 2018 elections, and North Carolina's political geography.

613. Dr. Hood's testimony was not persuasive, and the Court gives it little weight.

614. Dr. Hood's expert testimony has been rejected by courts in numerous prior redistricting and other voting rights cases. *See, e.g.*, Tr. 2095:6-2096:9 (in recent Ohio partisan gerrymandering case, stating that Dr. Hood drew “some inapt comparisons”); Tr. 2096:14-24 (in Texas voter ID case, stating that Dr. Hood's testimony and analysis was “unconvincing” and given “little weight”); Tr. 2096:25-2097:19 (in Arizona voting rights case, “afford[ing] little weight to Dr. Hood's opinions” “[f]or a number of reasons”); Tr. 2097:22-2098:6 (in Georgia voter ID case, finding that “Dr. Hood's absentee voting analysis is unreliable or not relevant to the questions the court must resolve”); Tr. 2098:9-16 (in Ohio case involving absentee ballots, affording Dr. Hood's opinions “little weight”); Tr. 2098:22-2099:6 (in recent Virginia racial gerrymandering case, stating: “We do not credit Dr. Hood's testimony for several reasons.”); Tr. 2099:9-2100:1 (in Ohio voting rights case, finding Dr. Hood's views “of little value,” and explaining that “Dr. Hood's testimony and report are in large part irrelevant to the issues before the court and also reflected methodological errors that undermine his conclusions”).

\*92 615. Dr. Hood did not offer—and does not have—any methodology for determining whether or not a map was drawn to create a partisan lean or bias. Tr. 2078:1-2079:3.

616. Dr. Hood's testimony supports the view that the enacted plans were drawn intentionally to favor Republicans. Dr. Hood generally agreed that "the party that controls the legislative process is going to make the maps in their favor," and that the enacted plans "were drawn to favor Republicans" using prior election results. Tr. 2079:4-2081:2.

***(i) Dr. Hood's testimony about the redistricting process in North Carolina was unpersuasive***

617. Dr. Hood testified that the 2017 redistricting was a "fairly formulaic process" because the Whole County Provision and 2017 Adopted Criteria "really limits the discretion, to a large extent, of the map drawers." Tr. 2038:4-2039:12; LDTX284 at 9-10 ("[T]he process is quite constrained, which greatly limits the ability of map drawers to create districts where partisan motives predominate."). However, Dr. Hood did no work to determine whether any of those criteria actually prevented the mapmaker from gerrymandering the enacted plans to advantage Republicans. Tr. 2077:10-15.

618. Dr. Hood's assertion that the Adopted Criteria "constrained" the "map drawer" is incorrect. The Adopted Criteria were not passed by the House and Senate Redistricting Committees until August 10, 2017. As discussed below, Dr. Hofeller had completed much of the General Assembly's eventually enacted House and Senate districts by June 2017, a month and a half before the Adopted Criteria were passed. FOF § F.7. Logically, Dr. Hofeller could not have been following the Adopted Criteria when he was drafting these districts by June 2017.

619. Dr. Hofeller's files further refute Dr. Hood's assertions that the 2017 redistricting process was "quite constrained" and that it is difficult to prove the partisan intent behind the 2017 Plans. PX123 at 48-49 (Chen Response Report). Those files show Dr. Hofeller's continuous efforts and exercise of his discretion to draw the district lines to maximize Republican advantage within the confines of the Whole County Provision, including various drafts that considered alternative possible districtings. FOF § B.2.b.

***(ii) Dr. Hood's testimony about the 2018 elections was unpersuasive***

620. For his analysis of the 2018 election results, Dr. Hood compared the number of seats Democrats actually won in 2018 to the number districts in Dr. Chen's simulated plans that lean Democratic using the 2010-2016 composite statewide election results. Tr. 2083:14-25. But that is an apples-to-oranges comparison, because the 2018 elections were different than the 2010-2016 composite statewide election results. Tr. 2084:1-5. In the 2010-2016 composite statewide election results, the Democratic vote share is 47.9%, whereas 2018 was a far more favorable environment for Democrats. Tr. 2084:12-24.

621. Dr. Hood made no attempt to perform an apples-to-apples comparison by comparing the actual 2018 election results under the enacted 2017 Plans to the performance of alternative nonpartisan plans under the 2018 election results. Tr. 2084:25-2087:19.

***(iii) Dr. Hood's testimony about North Carolina's political geography was unpersuasive***

\*93 622. Dr. Hood's analysis of North Carolina's political geography is unpersuasive because Dr. Hood did not attempt to determine whether the Republican lean in the enacted 2017 Plans can be explained by political geography. Tr. 2094:18-21. By contrast, Dr. Hood agreed that the work of Drs. Chen, Mattingly, and Pegden does address whether political geography could explain the extreme partisan lean of the 2017 Plans. Tr. 2094:22-2095:2.

623. For his analysis of political geography, Dr. Hood analyzed how the partisan makeup of the State of North Carolina would change if its six largest counties were removed. Tr. 2089:14-17; LDTX140. But it is not possible to remove any counties from North Carolina, much less the six largest counties. Of course, hypothetically removing North Carolina's six largest counties would make the state "[m]uch more rural," Tr. 2089:18-22, and much more Republican-leaning, just as would removing New York City from the State of New York.

**d. Dr. Barber**

624. Intervenor Defendants' expert, Dr. Michael Barber, received his Bachelor of Arts degree in International Relations with an emphasis in Political Economy from Brigham Young University in 2008, his Masters in Political Science from Princeton University in 2011, and his Ph.D. in 2014. Tr. 2106:7–22, 2107:4–13, ID Ex. 98 p. 1.

625. Dr. Barber is currently an Assistant Professor at Brigham Young University and an affiliated faculty member with the Center for the Study of Elections and Democracy. Tr. 2109:9–18.

626. Dr. Barber teaches classes on Congress and the legislative process (which includes state-level legislative research), statistical analysis, and a seminar course on contemporary research in American politics. Tr. 2110:14–2111:13.

627. Dr. Barber recently testified as an expert witness in an election law case involving a dispute over ballot order in Federal Court in Florida. Tr. 2113:10–2114:6.

628. Dr. Barber has published 11 peer-reviewed articles involving American Politics, and an additional 5 articles that have been accepted for upcoming publication. Tr. 2111:22–2112:4, 2113:6–9; ID Ex. 98 pp.1–2. Many of these articles involve political ideology, issues of campaign finance, electoral politics, survey research methodologies, [and] political polarization. Tr. 2111:24–2112:4.

629. Dr. Barber was admitted by the Court as an expert in American politics, specifically on the topics of ideology and partisanship, geography of voters, and the analysis of elections results. Tr. 2118:2–13.

630. Dr. Barber offered no opinion as to whether North Carolina's state legislative district maps were gerrymandered.

631. The Court finds that Dr. Barber's criticisms of Dr. Cooper's analysis unpersuasive and gives them little weight.

632. At the outset, the Court notes that none of Dr. Barber's academic research or published articles concern redistricting or North Carolina, nor was redistricting in North Carolina “something [he] had given a lot of thought to” before being retained by Intervenor Defendants in this case. Tr. 2169:19–2170:19. Dr. Barber admitted that he was not an expert on North Carolina's political geography, nor had he spent time in North Carolina other than two vacations in the Outer Banks and one visit to Duke's campus. Tr. 2168:12–2169:13, 2216:4–8. Most importantly, Dr. Barber did not analyze the specific district boundaries or county groupings the Court is reviewing and he could not comment on any of Dr. Cooper's extended analysis of the packing and cracking of Democratic voters in those districts and county groupings. Tr. 2117:24–2118:12, 2213:25–2214:15

**\*94** 633. The majority of Dr. Barber's testimony concerned the opinions Dr. Cooper offered regarding the aggregate political ideology of the North Carolina electorate and that of the General Assembly, including Dr. Cooper's comparison between the two. The Court finds it unnecessary to determine whether the General Assembly is “out of step” with the electorate and therefore, makes no findings regarding Dr. Cooper's testimony, or Dr. Barber's criticism of that testimony, relating thereto.

634. Dr. Barber also sought to rebut opinions Dr. Cooper offered regarding the disproportionality between Democratic seat share and the Democrats' statewide vote share in the General Assembly after the 2011 redistricting. Dr. Barber observed that “it's actually not as rare as you might think” that a party wins a majority of votes for the North Carolina House or Senate statewide, but only a minority of seats. Tr. 2149:21–2150:2. But since Dr. Barber did not analyze the extent to which any of these instances of disproportionality between votes and seats were attributable to gerrymandered district boundaries, his analysis is less useful to the Court. Dr. Barber admitted that it was “very possible” that those instances from 2002–2006 where the Democrats won a minority of the statewide vote and yet a majority of seats in a chamber of the General Assembly “could have been because the Democrats did a good job of gerrymandering the maps that were in place during those elections.” Tr. 2203:12–16.

635. In support of his opinion regarding the translation of seats from votes, Dr. Barber created a chart providing the “absolute difference” in percentage between the vote share and seat share for each party in House and Senate elections since 1994. IDTX23. But as Dr. Barber acknowledged, the greatest difference between the percentage of Republican vote share and seat share in the House occurred in the 2012 election, just after the 2011 redistricting. Tr. 2207:3-12. The difference in the Senate between the percentage of Republican votes received and seats won was also relatively large in 2012, and represented a significant increase from the 2010 election, just before redistricting. Tr. 2207:13-22. If anything, Dr. Barber's analysis suggests that the 2011 redistricting led to more disproportionality between votes cast and seats won, as Dr. Cooper observed. *See* Tr. 2207:23-2212:16.

636. Finally, Dr. Barber noted that there is “academic research that points to political party geography as an important factor in representation and legislatures,” suggesting that the geographic distribution of voters “is something that should be investigated” in this case. Tr. 2152:10-14. Specifically, Dr. Barber referenced a 2013 article co-authored by Plaintiffs' expert, Dr. Chen, focused on the political geography of Florida and Florida's congressional districts, an article in which Dr. Chen used simulations to measure whether political geography created a natural advantage for Republicans in redistricting in Florida. Tr. 2153:2-24. Despite acknowledging that Dr. Chen's co-authored 2013 article did not include any analysis of North Carolina, Tr. 2153:25-2154:2, Dr. Barber testified that the article “invites the question as to what it would look like if we looked to see if this relationship also existed in North Carolina,” Tr. 2154:5-7.

637. Dr. Chen performed that analysis in this case and concluded that North Carolina's political geography does not account for the extreme partisan bias of the enacted plans. Tr. 2216:11-2220:21. Similarly, at the time he conducted his analysis and arrived at the opinions he offered regarding the potential partisan bias of North Carolina's political geography, Dr. Barber was unaware that Dr. Chen's co-author in the same 2013 paper, Dr. Jonathan Rodden, had come to the conclusion that North Carolina's Democratic voters were relatively efficiently distributed throughout the State. Tr. 2222:9-2223:4, 2224:6-2225:8.

**\*95** 638. Dr. Barber did not engage in the type of analysis that Dr. Chen performed to account for and measure the extent to which “natural” partisan bias in North Carolina's political geography could account for electoral outcomes favoring Republicans, but the analysis that Dr. Barber did conduct of the distribution of North Carolina's Democratic voters actually supports Plaintiffs' claims. Dr. Barber observed a positive correlation between the population density of North Carolina's VTDs and their support for Democratic candidates, but he acknowledged that there were “a lot of other Democratic-leaning VTDs” spread across the state, even outside the urban centers of Raleigh and Charlotte. Tr. 2216:11-16. Dr. Barber's analysis fails to offer the Court any information about how the many Democratic-leaning VTDs across North Carolina fit into specific county groupings and specific districts and therefore, his analysis is not directly relevant to the questions the Court faces. Unlike Dr. Cooper, who performed an extensive analysis of North Carolina's House and Senate Districts at the county grouping level, Dr. Barber admitted that he could not offer any opinion to rebut Plaintiffs' evidence regarding gerrymandering within those county groupings. Tr. 2217:8-2218:12.

639. In light of the above shortcomings in Dr. Barber's analysis, the Court gives little weight to his testimony.

#### ***e. Dr. Johnson***

640. Legislative Defendants' expert Dr. Douglas Johnson has a Bachelor of Arts in Government from Claremont McKenna College, a Master of Business Administration from the Anderson School at UCLA, and a Ph.D. in Political Science from Claremont Graduate University. Tr. 1812:15-21; LDTX288. The focus of Dr. Johnson's graduate studies in Political Science was American politics, and he wrote his dissertation on redistricting. Tr. 1812:22-25.

641. Dr. Johnson is a fellow at the Rose Institute of State and Local Government at Claremont McKenna College. Tr. 1813:1-6. In that role, he leads the Institute's research into census and redistricting issues. Tr. 1813:1-6.

642. Dr. Johnson is also the President of National Demographics Corporation (“NDC”), where he has been employed full-time since 2001. Tr. 1814:7-19. NDC is engaged in redistricting work, including liability analyses, polarized voting studies, and other related redistricting issues. Tr. 1814:20-25.



643. Dr. Johnson has used Maptitude for Redistricting software (“Maptitude”) for his work for 20 to 30 hours a week since 2001. Tr. 1816:16-23.

644. Dr. Johnson has served as an expert witness in redistricting litigation numerous times; specifically, he has been involved in hundreds of challenges to at-large elections for city councils, school boards, counties, etc. Tr. 1817:5-7; 1817:14-21. Dr. Johnson has also served as an expert witness in challenges to state redistricting plans. Tr. 1817:22-24. Dr. Johnson has never been excluded as an expert witness by any court. Tr. 1817:8-10.

645. Dr. Johnson was accepted by the Court as an expert in the fields of political science, political geography, redistricting, and Maptitude for Redistricting software. Tr. 1818:11-20.

646. Dr. Johnson offered primarily two sets of opinions in this case. First, Dr. Johnson purported to show that one could draw a Senate map even more favorable to Republicans if one ignored the North Carolina Constitution's Whole County Provision. Second, Dr. Johnson attempted to critique Dr. Chen's analysis of Dr. Hofeller's files.

647. The Court finds Dr. Johnson's analysis unpersuasive and gives his opinions little weight.

648. Dr. Johnson has testified as a live expert witness in four cases previously, and the courts in all four cases have rejected his analysis. Tr. 1886:21-1891:14; *see Covington*, 283 F. Supp. 3d at 450 (finding “Dr. Johnson's analysis and opinion ... unreliable and not persuasive”); *Luna v. Cnty. of Kern*, 291 F. Supp. 3d 1088, 1137 (E.D. Cal. 2018) (holding that defendants' argument based on Dr. Johnson's analysis “lacks merits”); *Garrett v City of Highland*, 2016 WL 3693498, at \*2 (Cal. Super. Apr. 06, 2016) (finding Dr. Johnson's methodology “inappropriate”); *Jauregui v City of Palmdale*, No. BC483039, 2013 WL 7018375, at \*2 (Cal. Super. Dec. 23, 2013) (describing Dr. Johnson's work in the case was “unsuitable” and “troubling”). This Court joins these other courts in rejecting Dr. Johnson's methodologies, analyses, and conclusions.

**\*96** 649. Dr. Johnson created a “test map” for the North Carolina Senate that ignored the Whole County Provision entirely. Tr. 1892:21-1893:4. Based on this test map, Dr. Johnson purported to find that one could draw a Senate map even more favorable for Republicans than the enacted Senate plan if one were to ignore the county groupings and traversal rules. Tr. 1893:17-22. The Court finds Dr. Johnson's analysis using his test map to be of little probative value to the legal and factual issues in this case.

650. Dr. Johnson performed no statewide analysis of the House or the Senate to determine the extent to which, *within* the confines of the Whole County Provision, the enacted House and Senate plans constitute the most favorable maps for Republicans possible. Tr. 1894:13-1896:7. The only individual county groupings for which Dr. Johnson performed partisanship analysis within the confines of the Whole County Provision were Mecklenburg County in the Senate, *id.*, and Wake County in the House, and Dr. Johnson's partisanship analysis of the Mecklenburg Senate districts was erroneous and not credible for the reasons already explained. *See supra*, para 251. Dr. Johnson did not analyze any other individual House or Senate county grouping to determine whether the enacted plans' version of that grouping is the most favorable configuration of the grouping possible for Republicans. *Id.* Dr. Johnson thus offered no rebuttal to the testimony of Plaintiffs' experts demonstrating that the enacted plans constitute extreme partisan gerrymanders of specific county groupings.

651. Dr. Johnson instead ignored the Whole County Provision in creating his Senate test map, but as he acknowledged, the Whole County Provision is a state constitutional requirement. Tr. 1896:8-10. The General Assembly lacks authority to ignore the state constitutional county groupings and traversals requirements in creating redistricting plans. Dr. Johnson's test map analysis is thus no more relevant or helpful than would be a test map that ignores other constitutional requirements, such as the equal population requirement for districts. One could draw a map ignoring the equal population requirement that is even more favorable for Republicans than Dr. Johnson's test map, and certainly more favorable for Republicans than the enacted plan. Tr. 1896:11-1900:21. But the fact that one could draw such a hypothetical map in no way sheds light on whether the enacted plan is an extreme partisan gerrymander. *See id.* It provides no information as to whether the General Assembly acted within

extreme partisan intent in drawing districts within the confines of the accepted constitutional requirements, and it provides no information as to the effects of the gerrymander on the number of Republican and Democratic-leaning districts relative to a nonpartisan plan. *See id.* Dr. Johnson's test map analysis is of little probative value to the legal or factual issues in this case.

652. With respect to Dr. Johnson's testimony regarding Dr. Hofeller's files, as described above, the Court struck all of Dr. Johnson's affirmative analysis of Dr. Hofeller's 2017 draft House and Senate plans and the extent to which they overlap with other plans including the final enacted plans. Tr. 1988:11-1990:4. The Court struck this testimony and all related portions of Dr. Johnson's rebuttal report under Rule 702 and Rule 403 after it was uncovered on cross-examination that Dr. Johnson had made a series of significant errors. *Id.*

### **3. Dr. Karen Owen's Testimony on “Representation” and “Competitive Elections” and Representative John Bell's Testimony on Competitive Districts Was Unpersuasive**

#### **a. Dr. Karen Owen**

\*97 653. Legislative Defendants offered expert testimony of Dr. Karen Owen on the issues of “representation” and “competitive elections” in North Carolina. Tr. 1488:6-22; LDTX 293 (Owen report).

654. Dr. Owen is an assistant professor of political science at West Georgia University, and focuses on southern politics, political representation, legislative politics, campaigns and elections and research methodology, and developed her expertise through both academic and professional work. Tr. 1481:18-22, 1483:16-24, 1484:2-1485:24, 1486:4-11; LDTX293 at 1-2, 28-34.

655. Dr. Owen has particular expertise in the area of southern politics; she has presented papers and been a lead discussant at the Citadel's Symposium on Southern Politics for over 10 years, she has taught and studied courses in southern politics. Tr. 1480:15-1481:4.

656. Dr. Owen's work in southern politics has included writing and presenting a paper in 2016 titled “Growth and Geography in the South: Representation in the North Carolina and Texas State Legislatures.” Tr. 1481:5-11; LDTX293 at 31.

657. The Court admitted Dr. Owen as an expert. Tr. 1487:24-1488:1.

658. Dr. Owen has very little experience or expertise with politics, elections, or representation in North Carolina specifically. Dr. Owen has never lived or worked in North Carolina. LDTX 293 at 28-29. With the exception of the aforementioned paper, she has never written or published about North Carolina politics, elections, or representation. Tr. 1555:19-1557:25. She has never participated in or spoken at any conference about North Carolina politics, elections, or representation. Tr. 1558:1-1559:16. She has never been interviewed by any media outlet about North Carolina politics, elections, or representation. Tr. 1559:17-25. She has never taught a class focused on North Carolina politics, elections, or representation—the closest she came was teaching a single course in “Southern Politics” three years ago. LDTX 293 at 32; Tr. 1560:11-24.

659. The methodologies Dr. Owen employed to evaluate “representation” and “competitive elections” in North Carolina were unpersuasive. In conducting her research and analysis for this case, Dr. Owen did not speak to any current or former North Carolina legislator, or any winning or losing North Carolina candidate, or any North Carolina voter. Tr. 1561:7-1564:14. Nor did she consult any North Carolina polling data or survey data. Tr. 1564:15-19. Instead, Dr. Owen's analysis of representation in North Carolina was based on her conversations with several staff members in the General Assembly's Legislative Services Commission. Tr. 1561:7-1562:1. Her analysis of competitive elections in North Carolina was based on her reading of newspaper articles and a website called “Real Facts North Carolina.” Tr. 1566:5-13.

660. Based on her lack of relevant expertise and the inadequate methodologies she employed in this case, the Court gives little weight to Dr. Owen's opinions about “representation” and “competitive elections” in North Carolina.

661. In addition, as described below, Dr. Owen's analysis and opinions are unhelpful in resolving the issues in this case.

*i. Dr. Owen's analysis of "representation" was unpersuasive*

\*98 662. In support of her opinion that Republican members of the General Assembly meaningfully "represent" their Democratic constituents, Dr. Owen emphasized that the members "are noticeably involved in more than producing and passing laws," LDTX 293 at 22, and that they provide "constituent services" to Republican and Democratic voters alike, regardless of their political beliefs, party affiliation, or past votes. Tr. 1567:15-1568:18; *see also* Tr. 1801:17-1803:2 (similar testimony by Rep. Bell); Tr. 2000:21-2001:6 (Sen. Brown).

663. The Court finds, however, that the mere provision of constituent services does not mean that voters of one particularly party are meaningfully "represented" by a member of the other party political and does not mean the voter receives the same "representation" that the voter would if he or she could elect the candidate of that voter's choice. Constituent services are only one part of a legislator's responsibilities. In addition to providing constituent services, members of the North Carolina House and Senate participate in enacting the State's laws and policies. Tr. 1803:3-9 (Rep. Bell). Legislative Defendants' own expert, Dr. Brunell, testified that, among the ways in which a legislator "represents" his or her constituents, providing constituent services may be "an important part, but if you are sort of, you know, worried about the hierarchy of the things that they do, I think that how they vote on the major issues of the day is more important." Tr. 2353:11-2354:4. Dr. Brunell agreed that "policy responsiveness" is a "higher form of representation" and "more critical to the notion of representing someone." Tr. 2354:5-10; *see* Tr. 2353:3-6 (agreeing that "the responsiveness of a legislator to the voters on questions on policy in particular is critical to Democratic representation"). As "just one example of the many issues from which policy responsiveness is the more central form of representing the people in the legislature," Dr. Brunell agreed that if a legislator casts a vote for gun control, the legislator is "not giving good representation to the voters in [his or her] district who don't want gun control." Tr. 2354:11-19. Thus, as Dr. Brunell agreed, "a change in the party that represents a given district generates a huge difference in the policies for which the representative of that district will vote." Tr. 2354:20-23. Another witness for Legislative Defendants, Senator Harry Brown, also testified that "in order to push legislation that we thought was important to this state," a political party must "be in the majority." Tr. 2023:20-22.

664. Other purported indicia of "representation" discussed by Dr. Owen likewise were unhelpful. For example, Dr. Owen pointed to a form "welcome letter" that members of the General Assembly can send to new voters in their districts. LDTX 293 at 22; Tr. 1514:4-1516:23. But sending a form letter does not signify meaningful representation.

*ii. Dr. Owen's analysis of "competitive elections" was unpersuasive*

665. In her analysis of "competitive elections," Dr. Owen suggested that Democrats' failure to win certain House and Senate races in 2018 was the result of poor "candidate quality," rather than the district boundaries. Tr. 1540:13-1542:9; LDTX 293 at 6-7. Dr. Owen's methodology was unreliable, and her conclusions were unpersuasive.

666. The sole criterion that Dr. Owen applied for assessing candidate quality turns on whether the candidate "had held prior elected office." Tr. 1533:5-21. Under this "dichotomous measure," any person who has previously held elective office is a "quality" candidate, and any person without prior experience holding elective office is not "quality." LDTX 293 at 10. This approach ignores other important factors and is an unreliable measure of whether a person is a quality candidate.

\*99 667. For instance, Dr. Owen classified a Democratic candidate who is a U.S. Army Colonel as a "nonquality" candidate. Tr. 1566:18-25; LDTX 293 at 12. She classified another Democratic candidate who is a "small business owner" and "community leader" as a "nonquality" candidate. Tr. 1567:1-7; LDTX 293 at 12. And she classified a "young Air Force veteran and attorney" as a non-quality candidate. LDTX 293 at 16. These examples illustrate the shortcomings in Dr. Owen's methodologies.



**b. Representative John Bell**

668. Legislative Defendants also offered the testimony of Representative John Bell, IV, who testified about the competitiveness of various House districts.

669. Representative Bell is the majority leader for the North Carolina House of Representatives and represents House District 10. Tr. 1739:16-22.

670. As Majority Leader, Representative Bell assists the Conference chair to achieve two goals: 1) recruit candidates and 2) win elections. Tr. 1740:5-6.

671. Representative Bell also pointed to candidate quality as a purported factor in House districts he claimed might be “competitive” in 2020. Tr. 1752:13-1754:18. But Representative Bell's claim that certain House districts could be “competitive” in 2020, and only were not close in 2018 due to purported candidate quality issues is not persuasive. Representative Bell included on his list of purportedly competitive districts numerous districts that were not only extremely lopsided in the 2018 state House elections, but that feature similarly lopsided vote shares under the results of prior statewide elections, including the 2012 Presidential election, the 2016 Presidential election, and the 2016 Governor election. Tr. 1788:5-1801:16. Representative Bell included on his list of purportedly competitive districts a handful of districts in which the Republican candidate won over 60% of the vote share in the district across all of these various elections. *Id.* Moreover, for many of the districts he identified, Representative Bell testified that the race could be competitive only if it was an “open seat”—that is, if the incumbent Republican member either retires or does not run again in 2020. Tr. 1767:3-23, 1772:16-20, 1773:24-1774:2. However, there is no evidence that any of those Republicans members will not run in 2020. Tr. 1786:4-10. The Court finds that Representative Bell's testimony does not provide a reliable basis for assessing the competitiveness of current House districts.

**4. The Whole County Provision Did Not Prevent Systematic Gerrymandering of the Plans for Partisan Gain**

672. Throughout trial, Legislative Defendants and their experts emphasized the existence of the North Carolina Constitution's Whole County Provision, which the North Carolina Supreme Court has held requires dividing the State into discrete county groupings and restricting the traversal of county lines for districts within a county grouping. Tr. 252:17-257:10. The Court finds that Legislative Defendants overstate the constraints imposed by the Whole County Provision, and that Legislative Defendants intentionally and effectively gerrymandered the enacted plans for partisan gain within the confines of the Whole County Provision.

673. Legislative Defendants overstate the impact of the Whole County Provision. Dr. Chen explained in unrebutted testimony that the Whole County Provision dictates the contours of only 13 of 120 House districts and 17 of 50 Senate districts. Tr. 782:2-783:1. Legislative Defendants thus had discretion in drawing 107 of 120 House districts and 33 of 50 Senate districts—constituting over 82% of all districts across both enacted plans. *Id.*

**\*100** 674. As detailed above, the evidence establishes that Legislative Defendants engaged in systematic gerrymandering for partisan gain in the districts in which they did have discretion. All four of Plaintiffs' experts concluded that Legislative Defendants acted with extreme partisan intent within the confines of the Whole County Provision. Plaintiffs' simulations experts—Drs. Chen, Mattingly, and Pegden—simulated plans that adhered to the existing House and Senate county groupings, and all three experts found that the enacted plans are extreme outliers compared to nonpartisan plans that follow the same county groupings. And all three experts found that specific county groupings are extreme outliers compared to other, simulated versions of the same county grouping that contain the same number of traversals as the enacted plan in that grouping. Dr. Cooper independently established—in unrebutted testimony—that the enacted plans pack and crack Democratic voters within specific county groupings.

## 5. Plaintiffs Do Not Seek Proportional Representation

675. Contrary to Legislative Defendants' claim, Plaintiffs do not seek proportional representation. As described in more detail below, Plaintiffs assert that the General Assembly may not intentionally discriminate against voters and may not attempt to predetermine election outcomes and control of the General Assembly. Dr. Chen and Dr. Mattingly established through their simulations that nonpartisan plans that do not intentionally discriminate against Democratic voters may well *not* provide for proportional representation. Under Dr. Chen's and Dr. Mattingly's simulations, there are scenarios where Democrats would win 50% of the statewide vote but less than 50% of the seats in either chamber. Tr. 306:16-307:2 (Dr. Chen); Tr. 1103:24-1104:5, 1132:6-1133:13 (Dr. Mattingly). Dr. Pegden's simulations also did not rely on any notion of proportional representation. Tr. 1306:22-24.

676. Legislative Defendants' presentation regarding the proportionality of seats to votes in specific county groupings like Wake and Mecklenburg Counties, Tr. 2068:10-2069:13, was not persuasive. As Dr. Pegden explained, analyzing proportionality at the local level of a county grouping is “completely useless” and can be misleading in the context of a gerrymandered map. Tr. 1452:17-1454:18. In a county grouping that contains a small number of districts and in which one party wins an overwhelming share of the vote across the grouping, one would expect that party to win a disproportionate share of the seats under a nonpartisan map, and likely all of the seats. Tr. 1452:23-1453:12. Under a Republican gerrymander, however, Republican mapmakers will allow that natural outcome to occur in county groupings that strongly favor Republicans but will gerrymander the more Democratic county groupings in a way that may result in proportional outcomes just in those Democratic county groupings—*e.g.*, by gerrymandering the grouping to elect one or two Republican seats. Tr. 1452:17:22-1454:18. Thus, the fact that the enacted plans may have resulted in proportional seats-to-votes outcomes in individual county groupings that are heavily Democratic is not evidence of a lack of gerrymandering.

## 6. Legislative Defendants Did Not Seek to Comply with the VRA and Did Not Show Nonpartisan Plans Would Violate the VRA

677. Defendants did not present persuasive evidence at trial to substantiate any federal defense under the Voting Rights Act or Fourteenth or Fifteenth Amendments. Defendants did not introduce persuasive evidence at trial to establish any of the prerequisites to application of the Voting Rights Act under *Thornburg v. Gingles*, 478 U.S. 30 (1986). For example, Defendants presented no expert testimony or any other evidence to establish the existence of legally sufficient racially polarized voting in any area of North Carolina, or any particular state House or state Senate district. Nor did Defendants introduce any evidence to establish the minimum African-American percentage of the voting age population (“BVAP”) needed in any particular area of the State for the African American community to be able to elect the candidate of its choice.

**\*101** 678. Notably, Legislative Defendants retained Dr. Jeffrey Lewis, a political scientist from UCLA, who analyzed and provided estimates of the minimum BVAP needed in certain county groupings for African-American-preferred candidates to win. *See* PX773 (Amended Table 4 from Lewis Report). But Legislative Defendants chose not to have Dr. Lewis testify at trial. At the conclusion of trial, Legislative Defendants attempted to introduce expert reports that a different political scientist (Dr. Alan Lichtman) had prepared on behalf of different parties in previous lawsuits in North Carolina years ago, but the Court sustained Plaintiffs' objections to the admission of these reports. Tr. 2376:2-3. The Court excluded these reports as inadmissible hearsay and undisclosed expert work, particularly given that Plaintiffs dispute Legislative Defendants' characterization of those reports. Tr. 2363:16-2364:25.

679. Defendants did not demonstrate that the relief Plaintiffs seek would violate the VRA or federal equal protection requirements. Plaintiffs established that it would not. Using Dr. Lewis's estimates of the minimum BVAP needed in certain county groupings for an African-American-preferred candidate to win a state House or Senate election, Dr. Chen determined how many of his simulations of those county groupings contained districts exceeding Dr. Lewis's BVAP-threshold estimates.

Tr. 512:15-517:6. Dr. Chen determined that for every county grouping that Dr. Lewis analyzed except one in the House and one in the Senate, all of Dr. Chen's simulations produce at least as many districts above Dr. Lewis's BVAP-threshold estimate as does the enacted House or Senate plan. *Id.*; see PX775; PX776. For the two remaining county groupings, which are Forsyth-Yadkin in the House and Davie-Forsyth in the Senate, a majority of Dr. Chen's simulations of each grouping produce at least as many districts above Dr. Lewis's BVAP-threshold estimate as the enacted plan. *Id.*; see PX775; PX776. The evidence at trial thus demonstrated that, based on the BVAP-threshold estimates of Legislative Defendants' own expert, adopting nonpartisan House and Senate plans would not diminish the ability of African Americans to elect the candidate of their choice.

680. While Defendants' failure to introduce any evidence at trial necessary to the legal elements of a racial vote dilution defense is dispositive of any such defense, the Court further finds that—as a factual matter—Legislative Defendants did not draw or adopt any district under the 2017 Plans in an effort to comply with the VRA.

681. One of the Adopted Criteria, titled “No Consideration of Racial Data,” stated that “[d]ata identifying the race of individuals or voters shall not be used in the drawing of legislative districts in the 2017 House and Senate plans.” LDTX155. When submitting the plans to the *Covington* court for approval, Legislative Defendants stated that “[d]ata regarding race was not used in the drawing of districts for the 2017 House and Senate redistricting plans.” PX629 at 10.

682. Legislative Defendants have claimed in this case that, even though they did not use racial data in drawing the districts, they purportedly checked the racial demographics of the districts on the “back end” to ensure that “the VRA was satisfied.” *See, e.g.,* Leg. Defs.' Pre-Trial Brief at 44. Legislative Defendants presented no testimony at trial to substantiate this assertion, and the Court finds the assertion not credible for multiple reasons.

683. Throughout the 2017 redistricting process, Legislative Defendants asserted that the reason they were ignoring racial considerations entirely in drawing the new districts was because they had concluded that the “third *Gingles* factor” was not “present” anywhere in the State of North Carolina. PX593 at 52 (statement of Sen. Berger); *see also id.* (“we cannot prove the third *Gingles* factor”) (statement of Sen. Berger). Legislative Defendants repeatedly told the *Covington* court that they could not “justify the use of race in drawing districts” in the 2017 Plans—and thus could not seek to hit a “racial numerical quota” for any district—because they had insufficient evidence of “legally sufficient racially polarized voting.” *Covington*, No. 15-cv-399, ECF No. 184 at 10; ECF No. 192 at 12; *see also* ECF No. 184-17 at 12.

**\*102** 684. The existence of legally sufficient racially polarized voting is a “prerequisite[]” to VRA liability; if any *Gingles* factor is not met, “§ 2 simply does not apply.” *Cooper v. Harris*, 137 S. Ct. 1455, 1472 (2017). Hence, when Legislative Defendants concluded that the third *Gingles* factor was not met, they necessarily concluded that the VRA did not impose requirements for the racial composition of any state House or state Senate district. Any assertion by Legislative Defendants now that they sought to “satisfy” the VRA in adopting the 2017 Plans does not make sense as a legal or factual matter given their assertions at the time.

685. Moreover, the mere timing of when Legislative Defendants learned of the racial composition of the new districts belies their claim that they reviewed the data to ensure VRA compliance. The Stat Packs that Legislative Defendants produced when they released the initial drafts of the House and Senate plans did not include racial data on any of the draft districts.<sup>13</sup> At the August 24, 2017 hearing at which the Senate Redistricting Committee passed the Senate plan out of committee, Senator Hise insisted, “I have not seen any racial data for these districts.” PX606 at 46:2-3. Representative Lewis said the same the next day at the hearing at which the House plan was passed out of the House Redistricting Committee. PX605 at 20:11-21:18. Only after this point did legislative staff produce racial data on the districts—at the request of Democratic legislators over Legislative Defendants' objections. PX600 at 11. Even then, Legislative Defendants claimed to have remained unaware of the racial composition of the districts. Representative Lewis asserted that he did not “see” any data on the racial composition of the House districts until *after* the House plan was passed by the full House chamber. *Id.* at 12. Legislative Defendants clearly did not have assure themselves that the plans satisfied the VRA by meeting particular racial thresholds when they purportedly had no knowledge of the racial composition of the districts.

13 See <https://bit.ly/2YJnaRP> (Stat Pack for Senate draft plan released on August 21, 2017); <https://bit.ly/2YPch0L> (Stat Pack for House draft plan released on August 20, 2017).

686. Legislative Defendants have pointed to a single floor statement by Senator Berger near the end of the legislative process that mentioned the VRA, but that statement does not establish that Senator Berger, let alone any other Legislative Defendant, actually undertook efforts to comply with the VRA. Senator Berger made that statement immediately after declaring that the third *Gingles* factor was not met, which if true would preclude VRA application as a matter of law. PX593 at 52-54. And neither Senator Berger nor anyone else has pointed to any change that was made to any House or Senate district to ensure VRA compliance.

687. The Court finds that the General Assembly did not enact any House or Senate district under the 2017 Plans with the specific intent of complying with the VRA, and that Defendants have not established that the VRA requires maintaining any of the districts that Plaintiffs challenge in its current form.

688. Indeed, the Court finds that Legislative Defendants' stated concern that "unpacking" heavily-Democratic districts could dilute the voting power of African-Americans to be a pretext for partisan gerrymandering. Unrebutted evidence presented at trial established that Legislative Defendants themselves created districts with artificially low BVAPs when it was politically advantageous. In particular, while Legislative Defendants now accuse Plaintiffs of seeking to "crack" African American voters, the unrebutted evidence established that Legislative Defendants cracked African American voters in rural and semi-rural parts of the state where cracking Democratic voters would maximize Republican victories.

\*103 689. Dr. Chen demonstrated that, for several rural and semi-rural House county groupings, all or nearly all of his simulated plans (which ignored racial data in drawing the districts) produced a district in the grouping with a higher or much higher BVAP than any districts in that grouping under the enacted plan. Tr. 519:6-523:9. These county groupings include the Anson-Union, Cleveland-Gaston, Columbus-Pender-Robeson, and Duplin-Onslow county groupings, all of which are county groupings in which Legislative Defendants cracked Democratic voters to dilute their political power. *Id.*; see PX225; PX226; PX227; PX228. Dr. Chen's findings significantly undermine Legislative Defendants' claims that they seek to create higher-BVAP districts to promote the political power of African-American communities. *Id.*

## 7. Legislative Defendants, through Dr. Hofeller, substantially completed drafting the Enacted Maps in June 2017

690. Based on an analysis of draft maps from June 2017 found on Dr. Hofeller's storage devices, see FOF § B.2., Plaintiffs' expert Dr. Jowei Chen demonstrated that Dr. Hofeller had begun drawing the 2017 Plans prior to July 2017, and that he had already substantially completed them by that point. Dr. Chen's analysis compared the draft maps found on Dr. Hofeller's hard drive, each of which is dated by the metadata, with the Enacted 2017 House and Senate maps to determine the degree of similarity between the drafts and the Enacted Plans.

691. For the Senate, Dr. Chen analyzed a draft map that Dr. Hofeller last modified on June 24, 2017. Tr. 400:7-10, 402:5-403:8; see also PX572 (showing "last modified" date); PX123 at 25 (Chen Rebuttal Report). Dr. Chen found that Dr. Hofeller had already finished assigning 97.6% of the State's census blocks and 95.6% of the State's population to their final Senate districts in this June 24, 2017, draft map. Tr. 400:6-25.

692. To show the extent to which Dr. Hofeller had already completed drawing the new Senate plan, Dr. Chen compared individual Senate county groupings in the June 24, 2017, draft map to the final version of the same grouping in the enacted Senate plan. The figure below, PX142 [Chen rebuttal report, Figure 19], shows one such comparison for a Senate county grouping containing multiple districts that was redrawn in 2017. Tr. 416:15-20; PX123 at 27-38 (Chen Rebuttal Report). Dr. Chen repeated this analysis for every Senate county grouping containing multiple districts that was redrawn in 2017, and the Court adopts, by reference to Dr. Chen's trial testimony and as illustrated in his Rebuttal Report, each of those illustrations as if fully set forth

herein. Tr. 404:19-417:13; PX140; PX141; PX142; PX143; PX144; PX145; PX146; PX147 [Chen rebuttal report, Figures 17-24].

693. In Dr. Chen's illustrations, as shown by the example below, the map on the bottom left is Dr. Hofeller's June 24, 2017, draft, the map on the bottom right is the final enacted plan, and the top half of the figure reports the percentage of the population in each district in Dr. Hofeller's draft (on the vertical axis) that were assigned to the corresponding district in the final enacted plan (on the horizontal axis). Tr. 405:5-407:18. For instance, the figure included below shows that 99.42% of the population assigned to Senate District 19 in Dr. Hofeller's June 24, 2017 draft was also assigned to Senate District 19 in the enacted Senate plan, while 100% of the population in Dr. Hofeller's draft Senate District 21 was assigned to Senate District 21 in the enacted plan. *Id.*

**Figure 19**

**Cumberland-Hoke County Grouping**

**(Numbers indicate the percentage of population in each of Dr. Hotelier's draft 'J\_24' districts that was also assigned to its most similar, corresponding district in the final Senate Bill 691 map)**

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694. Based on Dr. Chen's analysis of each Senate county grouping containing multiple districts that was redrawn in 2017, the Court finds that by June 24, 2017—nearly seven weeks before the Adopted Criteria were passed on August 10, 2017—Dr. Hofeller had fully or at least substantially completed drawing every Senate county grouping redrawn in 2017. Tr. 404:23-417:13. The only Senate districts that were not an over-90% match to their final corresponding districts were a few heavily Democratic districts in Wake and Mecklenburg Counties. Tr. 412:5-414:12; *see* PX146; PX147.

**\*104** 695. Contrary to Legislative Defendants' contention, the North Carolina Constitution's Whole County Provision is not responsible for the high degree of overlap between Dr. Hofeller's draft Senate plan and the final enacted plan. As Dr. Chen testified, the Whole County Provision did not dictate the contours of Senate districts in counties such as Cumberland, Forsyth, Johnston, Durham, Wake, Mecklenburg, and Guilford Counties, and Dr. Hofeller's June 24, 2017 draft districts in these counties distinctly match the final versions. Tr. 408:13-416:1.

696. As with the Senate, Dr. Chen found that Dr. Hofeller had substantially completed drawing the new House plan by June 2017. Analyzing a draft House plan that Dr. Hofeller last modified on June 28, 2017, *see* PX569, Dr. Chen found that Dr. Hofeller had already finished assigning 90.9% of North Carolina's census blocks and 88.2% of the State's population into their final House districts in the June 28, 2017 draft plan. Tr. 401:15-23, 417:14-418:2, PX123 at 2-3 (Chen Rebuttal Report).

697. The figure below, PX124 [Chen rebuttal report, Figure 1], shows Dr. Chen's analysis comparing Dr. Hofeller's June 28, 2017, draft House map to the final enacted House map for a single House county grouping, in this instance, Mecklenburg County. Dr. Chen repeated this analysis for every House county grouping containing multiple districts that was redrawn in 2017, and the Court adopts, by reference to Dr. Chen's trial testimony and as illustrated in his Rebuttal Report, each of those illustrations as if fully set forth herein. Tr. 417:14-427:15; PX124; PX125; PX126; PX127; PX128; PX129; PX131; PX132; PX133 [Chen rebuttal report, Figures 1 – 6, 8-10]

**Figure 1:**

**Mecklenburg County Grouping**

**(Numbers indicate the percentage of population in each of Dr. Hofeller's draft 'J\_25' districts that was also assigned to its most similar, corresponding district in the final House Bill 927 map)**



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698. Based on Dr. Chen's analysis, the Court finds that by June 28, 2017—over six weeks before the Adopted Criteria were passed—Dr. Hofeller had fully or at least substantially completed drawing numerous House county groupings redrawn in 2017. Tr. 419:12-427:1.

699. Contrary to Legislative Defendants' contention, the Whole County Provision is not responsible for the high degree of overlap between Dr. Hofeller's June 28, 2017 draft House plan and the final enacted House plan. Tr. 419:12-427:1. The Whole County Provision does not dictate the contours of House districts in counties such as Mecklenburg, Harnett, Wayne, Sampson, Orange, Durham, Pitt, Robeson, Granville, Forsyth, and Rockingham Counties, and Dr. Hofeller's June 28, 2017, draft House districts in these counties were near-exact matches to the final districts. *Id.*

700. The Court finds Dr. Chen's comparisons of Dr. Hofeller's June 2017 draft plans to the enacted plans to be highly credible and persuasive. Notably, Dr. Chen's analysis stands unrebutted. Legislative Defendants presented testimony from Dr. Douglas Johnson in an attempt to rebut Dr. Chen's analysis. However, the Court struck all of Dr. Johnson's analysis comparing Dr. Hofeller's draft districts and the final enacted districts after Plaintiffs' cross-examination exposed a series of significant errors and unreliable methodology. Tr. 1988:11-1990:4.

701. As for Dr. Johnson's remaining criticisms of Dr. Chen's methodology for calculating the overlap between Dr. Hofeller's June 2017 draft plans and the final enacted plans, the Court assigns them no weight. The Court finds that Dr. Chen employed a reasonable methodology to estimate the degree of similarity between the draft and final plans, by simply calculating the percentage of census blocks and population in each draft district that was also assigned to the most closely corresponding district in the final enacted House or Senate plan. *See* Tr. 398:3-399:15. Dr. Chen's methodology and findings also accord with a visual comparison of the draft House and Senate districts to the corresponding final versions. No party has disputed that the maps presented in Plaintiffs' Exhibits 124-129, 131-133, and 140-147 accurately reflect the district boundaries in Dr. Hofeller's June 2017 draft plans and the final enacted plans.

**\*105** 702. The Court concludes from this showing, and therefore finds, that Dr. Hofeller, and consequently the Legislative Defendants who retained him, by having largely completed the drafting of House and Senate maps by June, 2017, did so with little regard for the Adopted Criteria, or the neutral, non-partisan criteria contained therein, which were not adopted by the Senate Redistricting Committee and House Select Committee on Redistricting until August 10, 2017, and provided to Dr. Hofeller on August 11, 2017. PX 603 at 4:23-5:5; PX629. The Court finds that this is further compelling evidence of the intent of Legislative Defendants to create legislative districts by subordinating Democratic voters for partisan gain and to entrench the power of the Republican majority.

703. Since Dr. Hofeller's files came to light, Legislative Defendants have asserted that they did not know at the time that Dr. Hofeller was developing draft maps prior to August 2017 or that Plaintiffs cannot “connect” Dr. Hofeller's draft maps to the General Assembly. *See, e.g.,* Leg. Defs'. Pre-trial Brief, p. 36. The Court finds this argument unpersuasive. Dr. Hofeller was retained by the General Assembly on June 27, 2017, for the purposes of drawing the 2017 House and Senate maps. PX641. The Court finds it highly improbable that in the days leading up to his engagement, or in the nearly six weeks following, Dr. Hofeller never mentioned his draft maps to anyone connected with Legislative Defendants until after he received the Adopted Criteria on August 11, 2017— especially since, merely eight or nine days later, Legislative Defendants were able to reveal final drafts of his House and Senate maps. PX605 at 16:2-17:16; PX629 at 7.

704. The Court is troubled by representations made by Legislative Defendants, or attorneys working on their behalf, in briefs and arguments to the *Covington* Court and to General Assembly colleagues at committee meetings that affirmatively stated that no draft maps had been prepared even as late as August 4, 2017. *See, e.g., Covington*, ECF No. 161 at 2, 4, 13, and 28-29; PX601 at 11-12; PX602 at 72-73; and PX629 at 3, 4, 6 and 10 (*Covington*, ECF No. 184). For the purposes of determining liability for the claims asserted in this litigation,<sup>14</sup> the Court finds it unnecessary to delve further into these concerns, other

than to note that the Court, as previously stated, is persuaded, and specifically finds, that Dr. Hofeller's intent and actions, as evidenced throughout his map-drawing process from at least early June 2017, are attributable in full to Legislative Defendants.

- 14 In considering the appropriate remedy, the Court does take this finding into account, among others, when mandating that the remedial process be more transparent to the Court, the public, and the entire General Assembly.

## CONCLUSIONS OF LAW

### I. THE STANDING OF PLAINTIFFS

1. The North Carolina Constitution provides: “All courts shall be open; every person for an injury done him in his lands, goods, person, or reputation shall have remedy by due course of law; and right and justice shall be administered without favor, denial, or delay.” N.C. Const. art. I, § 18.

2. “[B]ecause North Carolina courts are not constrained by the ‘case or controversy’ requirement of Article III of the United States Constitution, our State's standing jurisprudence is broader than federal law.” *Davis v. New Zion Baptist Church*, 811 S.E.2d 725, 727 (N.C. Ct. App. 2018) (quotation marks omitted); accord *Goldston v. State*, 361 N.C. 26, 35, 637 S.E.2d 876, 882 (2006) (“While federal standing doctrine can be instructive as to general principles ... and for comparative analysis, the nuts and bolts of North Carolina standing doctrine are not coincident with federal standing doctrine.”). At a minimum, a plaintiff in a North Carolina court has standing to sue when it would have standing to sue in federal court.

\*106 3. The North Carolina Supreme Court has broadly interpreted Article I, § 18 to mean that “[a]s a general matter, the North Carolina Constitution confers standing on those who suffer harm.” *Mangum v. Raleigh Bd. of Adjustment*, 362 N.C. 640, 642, 669 S.E.2d 279, 281 (2008). The “gist of the question of standing” under North Carolina law is whether the party seeking relief has “alleged such a personal stake in the outcome of the controversy as to assure that concrete adverseness which sharpens the presentation of issues upon which the court so largely depends for illumination of difficult constitutional questions.” *Goldston*, 361 N.C. at 30, 637 S.E.2d at 879 (quoting *Stanley v. Dep't of Conservation & Dev.*, 284 N.C. 15, 28, 199 S.E.2d 641, 650 (1973)). Although the North Carolina Supreme Court “has declined to set out specific criteria necessary to show standing in every case, [it] has emphasized two factors in its cases examining standing: (1) the presence of a legally cognizable injury; and (2) a means by which the courts can remedy that injury.” *Davis*, 811 S.E.2d at 727-28.

#### A. The North Carolina Democratic Party Has Standing

4. The Court determines that the North Carolina Democratic Party (NCDP) has standing, both to sue on its own behalf as an organization and to sue on behalf of its members.

5. “An association may have standing in its own right to seek judicial relief from injury to itself and to vindicate whatever rights and immunities the association itself may enjoy.” *River Birch Assoc. v. Raleigh*, 326 N.C. 100, 129, 388 S.E.2d 538, 555 (1990) (quoting *Warth v. Seldin*, 422 U.S. 490, 511, 95 S. Ct. 2197, 2211 (1975)). The Court finds instructive the United States Supreme Court holdings under federal standing principles that state political parties and organizations similar to the NCDP have standing to bring voting-rights challenges on their own behalf. See, e.g., *Crawford v. Marion County Election Bd.*, 553 U.S. 181, 189 n.7 (2008); *id.* at 204-09 (Scalia, J., concurring); *id.* at 209 n.2 (Souter, J., dissenting); *Gill v. Whitford*, 138 S. Ct. 1916, 1938 (2018) (Kagan, J., concurring) (explaining how these standards can apply to political parties and similar organizations in a partisan gerrymandering case); *Ohio A. Philip Randolph Inst. v. Householder*, 373 F. Supp. 3d 978, 1076 (S.D. Ohio 2019); *League of Women Voters of Mich. v. Johnson*, 352 F. Supp. 3d 777, 801 (E.D. Mich. 2018). Indeed, the federal court in *Common Cause v. Rucho* held that the NCDP had standing to bring a partisan gerrymandering challenge on its own behalf—based in part on the testimony of Mr. Goodwin. See, *Common Cause v. Rucho*, 318 F. Supp. 3d 777, 830 (M.D.N.C. 2018), *vacated on other grounds*, 139 S. Ct. 2484 (2019).

6. The NCDP has standing in its own right to seek judicial relief in this case because the NCDP has sufficiently demonstrated the presence of a legally cognizable injury to NCDP and a means by which the courts of our State can remedy that injury.<sup>15</sup>

<sup>15</sup> Furthermore, even under the federal standing requirements of (1) injury, (2) causation, and (3) redressability, *see Gill v. Whitford*, 138 S. Ct. 1916, 1929 (2018), the NCDP has such a personal stake in the outcome of the controversy that it has standing under this more stringent standard.

7. An association also “has standing to bring suit on behalf of its members when: (a) its members would otherwise have standing to sue in their own right; (b) the interests it seeks to protect are germane to the organization’s purpose; and (c) neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit.” *River Birch Assoc.*, 326 N.C. at 130, 388 S.E.2d at 555 (quoting *Hunt v. Wash. State Apple Adver. Comm’n*, 432 U.S. 333, 343, 97 S. Ct. 2434, 2441 (1977)). An associational plaintiff need not show that *all* of its members would have standing to sue in their own right when seeking declaratory or injunctive relief; rather, it is sufficient if any “one” member would have individual standing. *Id.*; *see also State Employees Ass’n of N.C., Inc. v. State*, 357 N.C. 239, 580 S.E.2d 693 (2003) (reversing lower court decision that had required every member of association or organization to have standing). The Court finds instructive federal court holdings that organizations similar to the NCDP have standing to bring partisan gerrymandering challenges on behalf of their members. *See, e.g., League of Women Voters of Mich.*, 373 F. Supp. 3d at 933, 937-38; *Ohio A. Philip Randolph Inst.*, 373 F. Supp. 3d at 1072-73; *Rucho*, 318 F. Supp. 3d at 827, 835-36 (holding that the NCDP had standing to bring a partisan gerrymandering claim on behalf of its members).

**\*107** 8. The NCDP has standing to sue on behalf of its members in this case because its members—registered Democratic voters located in every state House and state Senate District across our State—otherwise have standing to sue in their own right, the interests that the NCDP seeks to protect are germane to the NCDP’s purpose, and neither the claims asserted nor the declaratory and injunctive relief requested requires the participation of individual NCDP members in this lawsuit.

### B. Common Cause Has Standing

9. The Court further holds that Common Cause has standing, both to sue on its own behalf as an organization and to sue on behalf of its members.

10. The Court finds instructive federal court holdings that organizations similar to Common Cause have standing to bring partisan gerrymandering challenges on their own behalves and on behalf of their members. *See, e.g., League of Women Voters of Mich.*, 373 F. Supp. 3d at 933, 937-38; *Ohio A. Philip Randolph Inst.*, 373 F. Supp. 3d at 1072-75; *Rucho* 318 F. Supp. 3d at 830-31 (holding that Common Cause had standing to bring a partisan gerrymandering challenge).

11. Like the NCDP, Common Cause has standing in its own right to seek judicial relief in this case because Common Cause has sufficiently demonstrated the presence of a legally cognizable injury to Common Cause and a means by which the courts of our State can remedy that injury.<sup>16</sup>

<sup>16</sup> Furthermore, even under the federal standing requirements of (1) injury, (2) causation, and (3) redressability, *see Gill*, 138 S. Ct. at 1929, Common Cause has such a personal stake in the outcome of the controversy that it has standing under this more stringent standard.

12. Common Cause also has standing to sue on behalf of its members in this case because at least one of its individual members has standing to sue in his or her own right, the interests Common Cause seeks to protect in this case are germane to Common Cause’s purposes, and neither the claims asserted nor the declaratory and injunctive relief requested requires the participation of individual Common Cause members in this lawsuit.



### C. The Standing of Individual Plaintiffs

13. Individual Plaintiffs also have standing to challenge each of their individual districts as well as their county groupings. All of the Individual Plaintiffs detailed below have shown “a personal stake in the outcome of the controversy,” *Goldston*, 361 N.C. at 30, 637 S.E.2d at 879, and that the 2017 Plans cause them to “suffer harm,” *Mangum*, 362 N.C. at 642, 669 S.E.2d at 281.

14. Certain Individual Plaintiffs have standing to challenge their own districts. Plaintiffs introduced extensive district-specific evidence demonstrating how, through cracking and packing, the 2017 Plans dilute the voting power of Individual Plaintiffs and other Democratic voters. Plaintiffs also introduced un rebutted, district-specific evidence demonstrating that twenty-two Individual Plaintiffs live in House districts that are outliers in partisan composition relative to the districts in which they live under Dr. Chen's nonpartisan simulated plans and that twenty Individual Plaintiffs live in Senate districts that are outliers in the same manner. FOF § E.3. Each of these Individual Plaintiffs thus established a personal stake in the outcome of the controversy and a specific harm directly attributable to the partisan gerrymandering of the district in which they reside. *Goldston*, 361 N.C. at 30, 637 S.E.2d at 879; *Mangum*, 362 N.C. at 642, 669 S.E.2d at 281; *see, e.g., Rucho*, 318 F. Supp. 3d at 817; *Ohio A. Philip Randolph Inst.*, 373 F. Supp. 3d at 1063; *League of Women Voters of Mich.*, 373 F. Supp. 3d at 916; *Benisek*, 348 F. Supp. 3d 493, 517 (D. Md. 2018), *vacated on other grounds*, 139 S. Ct. 2484 (2019). Moreover, these Individual Plaintiffs have demonstrated, through extensive district-specific evidence, the presence of a legally cognizable injury and, as discussed in great detail below, a means by which the courts of our State can remedy that injury.

**\*108** 15. These Individual Plaintiffs challenge not only the individual districts in which they reside, but also the county groupings as a whole in which they reside. The United States Supreme Court has held that individual voters have standing under the federal Constitution to challenge only their own districts on partisan gerrymandering grounds, *Gill*, 138 S. Ct. at 1930-31; however, in light of the less stringent standing requirements in our State, and because the manner in which one district is drawn in a county grouping necessarily is tied to the drawing of some, and possibly all, of the other districts within that same grouping, a challenge to the entire county grouping by these Individual Plaintiffs constitutes the necessary “personal stake in the outcome of the controversy” for a plaintiff to have standing in this case. *Goldston*, 361 N.C. at 30, 637 S.E.2d at 879; *see Erfer v. Commonwealth*, 794 A.2d 325, 330 (Pa. 2002) (recognizing that a “reapportionment plan acts as an interlocking jigsaw puzzle, each piece reliant upon its neighbors to establish a picture of the whole” and that an “allegation that a litigant's district was improperly gerrymandered necessarily involves a critique of the plan beyond the borders of his district”), *abrogated on other grounds by League of Women Voters of Pa. v. Commonwealth*, 178 A.3d 737 (Pa. 2018).

16. On the other hand, several named Individual Plaintiffs do not have standing to challenge either the individual House or Senate District in which they reside because, under Dr. Chen's analysis, the district in which they would reside is not an outlier—based upon the location of that Individual Plaintiff's residence—when compared to all of Dr. Chen's nonpartisan simulated House or Senate maps.<sup>17</sup> Therefore, these Individual Plaintiffs have not demonstrated a cognizable injury and a means by which the Court could remedy that injury; however, with respect to the challenged districts in which these Individual Plaintiffs reside, because the NCDP has standing to bring partisan gerrymandering claims on behalf of its members, the Court concludes that Plaintiffs' challenges to these districts do not fail for lack of standing.

<sup>17</sup> These Individual Plaintiffs without standing to challenge either their individual House or Senate district are: Virginia Walters Brien, Leon Charles Schaller, Howard Du Bose, Jr., Deborah Anderson Smith, Alyce Machak, John Balla, John Mark Turner, Ann McCracken, and Mary Ann Peden-Coviello. FOF § E.3.; PX238; PX117. The Court notes that although some Individual Plaintiffs may not have standing to challenge *both* of their House and Senate districts, they do have standing to challenge at least *a* district in which they reside.

## II. THE 2017 PLANS VIOLATE THE NORTH CAROLINA CONSTITUTION'S FREE ELECTIONS CLAUSE

17. Two months ago, in *Rucho v. Common Cause*, 139 S. Ct. 2484 (2019), the United States Supreme Court considered constitutional challenges to political gerrymandering of Congressional districts in North Carolina and Maryland.

18. The North Carolina Congressional map under consideration by the Supreme Court, adopted by the General Assembly on February 19, 2016, arose in remarkably similar circumstances as the maps under consideration by this trial court, which were adopted August 31, 2017: both the 2016 Congressional map and the 2017 legislative maps were required after a federal court declared existing maps unconstitutional; both were drawn under the direction of many of the same actors working on behalf of the Republican-controlled General Assembly; both were drawn by Dr. Thomas Hofeller; both were drawn in large part before the General Assembly's redistricting committee met and approved redistricting criteria; and both, as has been found above with respect to the 2017 legislative maps, were drawn with the intent to maximize partisan advantage and, in fact, achieved their intended partisan effects.

19. In the majority opinion of the *Rucho* Court, the Justices found the Congressional maps before them to be “highly partisan, by any measure,” *id.* at 2491, and “blatant examples of partisanship driving districting decisions,” *id.* at 2505. The majority further reaffirmed that “partisan gerrymanders are incompatible with democratic principles.” *Id.* at 2506 (citing *Ariz. State Legislature v. Ariz. Indep. Redistricting Comm'n*, 135 S. Ct. 2652, 2658 (U.S. 2016)).

\*109 20. Nonetheless, the Supreme Court concluded, in the majority opinion, that “partisan gerrymandering claims present political questions beyond the reach of the *federal* courts.” *Rucho*, 139 S. Ct. at 2506-07 (emphasis added). The Court held that the *federal* courts “have no commission to allocate political power and influence in the absence of a constitutional directive or legal standards to guide us in the exercise of such authority,” *id.* at 2508, and that the United States Constitution “confines the *federal* courts to a properly judicial role,” because there is no “no plausible grant of authority in the [United States] Constitution, and no legal standards to limit and direct their decisions,” *id.* at 2507 (emphasis added).

21. The Supreme Court hastened to add, however, that “our conclusion does not condone excessive partisan gerrymandering” and nor does its conclusion “condemn complaints about districting to echo into a void.” *Id.*

22. Rather, the Supreme Court held, “[t]he States ... are actively addressing the issue on a number of fronts,” and “[p]rovisions in state statutes and *state constitutions* can provide standards and guidance for state courts to apply.” *Id.* (emphasis added).

23. The North Carolina Constitution, in the Declaration of Rights, Article I, § 10, declares that “[a]ll elections shall be free.”

24. The Free Elections Clause, Article I, § 10, is one of the clauses that makes the North Carolina Constitution more detailed and specific than the federal Constitution in the protection of the rights of its citizens. *Corum v. Univ. of N.C. ex rel. Bd. of Gov'rs*, 330 N.C. 761, 783, 413 S.E.2d 276, 290 (1992). The federal Constitution contains no similar counterpart to this declaration, although several other states' constitutions do.

25. The broad language of the Free Elections Clause has not heretofore been extensively interpreted by our appellate courts. However, “it is emphatically the province and duty of the judicial department to say what the law is.” *Marbury v. Madison*, 5 U.S. (1 Cranch) 137, 177 (1803).

26. The North Carolina Supreme Court has long recognized the fundamental role of the will of the people in our democratic government. “Our government is founded on the will of the people. Their will is expressed by the ballot.” *People ex rel. Van Bokkelen v. Canaday*, 73 N.C. 198, 220 (1875).

27. In particular, the North Carolina Supreme Court has directed that in construing provisions of the Constitution, “we should keep in mind that this is a government of the people, in which the will of the people--the majority--legally expressed, must govern.” *State ex rel. Quinn v. Lattimore*, 120 N.C. 426, 428, 26 S.E. 638, 638 (1897) (citing N.C. Const. art. I, § 2).

28. Therefore, our Supreme Court continued, because elections should express the will of the people, it follows that “all acts providing for elections, should be liberally construed, that tend to promote a fair election or expression of this popular will.” *Id.* “[F]air and honest elections are to prevail in this state.” *McDonald v. Morrow*, 119 N.C. 666, 673, 26 S.E. 132, 134 (1896).

29. Our Supreme Court has elevated this principle to the highest legal standard, noting that it is a “compelling interest” of the State “in having fair, honest elections.” *State v. Petersilie*, 334 N.C. 169, 184, 432 S.E.2d 832, 840 (1993). As to this there is little room for debate; the Court has recognized that “there is also agreement as to the compelling government interest in ensuring honest and fair elections.” *Id.* (citing *Burson v. Freeman*, 504 U.S. 191, 198-99, 112 S. Ct. 1846, 1851-52 (1992)).

30. In giving meaning to the Free Elections Clause, this Court's construction of the words contained therein must therefore be broad to comport with the following Supreme Court mandate: “We think the object of all elections is to ascertain, fairly and truthfully, the will of the people--the qualified voters.” *Hill v. Skinner*, 169 N.C. 405, 415, 86 S.E. 351, 356 (1915) (quoting *R. v. Comrs.*, 116 N.C. 563, 568, 21 S.E. 205, 207 (1895)).

**\*110** 31. As such, the Court concludes that the meaning of the Free Elections Clause is that elections must be conducted freely and honestly to ascertain, fairly and truthfully, the will of the people. This, the Court concludes, is a fundamental right of the citizens enshrined in our Constitution's Declaration of Rights, a compelling governmental interest, and a cornerstone of our democratic form of government.

32. The Court now turns to the issue of whether extreme partisan gerrymandering of legislative districts run afoul of the mandate of the Free Elections Clause by depriving citizens of elections that are conducted freely and honestly to ascertain, fairly and truthfully, the will of the people.

33. At its most basic level, partisan gerrymandering is defined as: “the drawing of legislative district lines to subordinate adherents of one political party and entrench a rival party in power.” *Ariz. State Legislature*, 135 S. Ct. at 2658.

34. The danger of partisan gerrymandering is that it has the potential to violate “the core principle of republican government ... that the voters should choose their representatives, not the other way around.” *Id.* at 2677; *see also Powell v. McCormack*, 395 U.S. 486, 540-41, 89 S. Ct. 1944, 1974 (1969) (“[T]he true principle of a republic is, that the people should choose whom they please to govern them.” (quoting Alexander Hamilton in 2 Debates of the Federal Constitution 257 (J. Elliott ed. 1876))). Moreover, it can represent “an abuse of power that, at its core, evinces a fundamental distrust of voters, serving the self-interest of the political parties at the expense of the public good.” *LULAC v. Perry*, 548 U.S. 399, 456, 126 S. Ct. 2594, 2631 (2006) (Steven, J., concurring in part and dissenting in part) (quotation and citation omitted).

35. Partisan gerrymandering operates through vote dilution—the devaluation of one citizen's vote as compared to others. A mapmaker draws district lines to “pack” and “crack” voters likely to support the disfavored party. *See generally Gill*, 138 S. Ct. 1916. The mapmaker packs supermajorities of those voters into a relatively few districts, in numbers far greater than needed for their preferred candidates to prevail. Then the mapmaker cracks the rest across many more districts, spreading them so thin that their candidates will not be able to win. Whether the person is packed or cracked, his vote carries less weight—has less consequence—than it would under a neutrally drawn (non-partisan) map. *See id.*, 138 S. Ct. at 1935-36 (Kagan, J., concurring). In short, the mapmaker has made some votes count for less, because they are likely to go for the other party. *Rucho*, 2513-14 (Kagan, J., dissenting).

36. Seen in this light, it is clear to the Court that extreme partisan gerrymandering—namely redistricting plans that entrench politicians in power, that evince a fundamental distrust of voters by serving the self-interest of political parties over the public good, and that dilute and devalue votes of some citizens compared to others—is contrary to the fundamental right of North Carolina citizens to have elections conducted freely and honestly to ascertain, fairly and truthfully, the will of the people.

37. Extreme partisan gerrymandering does not fairly and truthfully ascertain the will of the people. Voters are not freely choosing their representatives. Rather, representatives are choosing their voters. It is not the will of the people that is fairly ascertained through extreme partisan gerrymandering. Rather, it is the will of the map drawers that prevails.

**\*111** 38. The Court is further persuaded that the history of the Free Elections Clause comports with the interpretation applied in this case.

39. The Free Elections Clause dates back to the North Carolina Declaration of Rights of 1776. The framers of the North Carolina Declaration of Rights based the Free Elections Clause on a provision of the 1689 English Bill of Rights providing that “election of members of parliament ought to be free.” Bill of Rights 1689, 1 W. & M. c. 2 (Eng.); see John V. Orth, *North Carolina Constitutional History*, 70 N.C. L. Rev. 1759, 1797-98 (1992).

40. This provision of the 1689 English Bill of Rights grew out of the king's efforts to manipulate parliamentary elections, including by changing the electorate in different areas to achieve “electoral advantage.” J.R. Jones, *The Revolution of 1688 in England* 148 (1972). The king's attempt to maintain control of parliament by manipulating elections led to a revolution, and after dethroning the king, the revolutionaries called for a “free and lawful parliament” as a critical reform. Grey S. De Krey, *Restoration and Revolution in Britain: A Political History of the Era of Charles II and the Glorious Revolution* 241, 247-48, 250 (2007).

41. A number of states included versions of a free election clause in their early Declarations of Rights, all drawing inspiration from the 1689 English Bill of Rights. The Framers of North Carolina's Declaration of Rights in turn drew inspiration for North Carolina's Free Elections Clause from these other states, which included Pennsylvania, Maryland, and Virginia. See Orth, 70 N.C. L. Rev. at 1797-98.

42. Like the 1689 English Bill of Rights, North Carolina's Free Elections Clause, in conjunction with the companion provision of the State Constitution now found in Article I, § 9 concerning redress of grievances, mandates that elections in North Carolina must be “free from interference or intimidation” by the government, so that all North Carolinians are freely able, through the electoral process, to pursue a “redress of grievances and for amending and strengthening the laws.” John V. Orth & Paul M. Newby, *The North Carolina State Constitution* 55-57 (2d ed. 2013) (hereinafter “Orth & Newby”). “[T]his pair of sections concerns the application of the principle of popular sovereignty.” *Id.* at 55. As the North Carolina Supreme Court explained nearly a century ago, the Free Elections Clause reflects that “[o]ur government is founded on the consent of the governed,” and the right to free elections “must be held inviolable to preserve our democracy.” *Swaringen v. Poplin*, 211 N.C. 700, 191 S.E. 746, 747 (1937).

43. North Carolina has broadened and strengthened the Free Elections Clause since its adoption in 1776 to make these purposes clear. The original clause stated that “elections of members, to serve as Representatives in the General Assembly, ought to be free.” N.C. Declaration of Rights, VI (1776). The next version of the State's Constitution, adopted in 1868, declared that “[a]ll elections ought to be free,” expanding the principle to include all elections in North Carolina. N.C. Const. art. I, § 10 (1868). In the current State Constitution, adopted in 1971, the Free Elections Clause now mandates that “[a]ll elections *shall* be free.” N.C. Const. art. I, § 10 (emphasis added). This change was intended to “make [it] clear” that the Free Elections Clause and the other rights secured to the people by the Declaration of Rights “are commands and not mere admonitions” to proper conduct on the part of the government. *N.C. State Bar v. DuMont*, 304 N.C. 627, 635, 639, 286 S.E.2d 89, 94, 97 (1982) (quoting Report of the N.C. State Constitution Study Comm'n to the N.C. State Bar and the N.C. Bar Ass'n, 75 (1968)).

**\*112** 44. The North Carolina Supreme Court has enforced the Free Elections Clause to invalidate laws that interfere with voters' ability to freely choose their representatives. In *Clark v. Meyland*, the North Carolina Supreme Court struck down a law that required voters seeking to change their party affiliation to take an oath supporting the party's nominees “in the next election and ... thereafter.” 261 N.C. 140, 141, 134 S.E.2d 168, 169 (1964). The Court held that this attempt to manipulate the outcome of future elections “violate[d] the constitutional provision that elections shall be free.” *Id.* at 143, 134 S.E.2d at 170.

45. The partisan gerrymandering of the 2017 Plans strikes at the heart of the Free Elections Clause. Using their control of the General Assembly, Legislative Defendants manipulated district boundaries, to the greatest extent possible, to control the outcomes of individual races so as to best ensure their continued control of the legislature.

46. Plaintiffs' experts demonstrated that the 2017 Plans were designed, specifically and systematically, to maintain Republican majorities in the state House and Senate. Drs. Chen and Mattingly each independently established that the 2017 Plans were gerrymandered to be most resilient in electoral environments where Democrats could win majorities in either chamber under nonpartisan plans. FOF § B.3.a, b. Their analyses establish that it is nearly impossible for Democrats to win majorities in either chamber in any reasonably foreseeable electoral environment. *Id.* Elections are not free when partisan actors have tainted future elections by specifically and systematically designing the contours of the election districts for partisan purposes and a desire to preserve power. In doing so, partisan actors ensure from the outset that it is nearly impossible for the will of the people—should that will be contrary to the will of the partisan actors drawing the maps—to be expressed through their votes for State legislators.

47. The 2017 Plans also unlawfully seek to predetermine election outcomes in specific districts and county groupings. Drs. Chen and Mattingly each found numerous districts and county groupings that result in safe or relatively safe Republican seats under the enacted plans but would be far more competitive or even Democratic-leaning under nonpartisan plans. In the remaining county groupings, Drs. Chen and Mattingly similarly found that Legislative Defendants placed their thumbs heavily on the scale to favor Republicans. *See* FOF § C.

48. The harm caused by this manipulation of election outcomes subverts another key purpose of the Free Elections Clause, which, in conjunction with Article I, § 9, is to facilitate the ability of North Carolina citizens to seek a “redress of grievances and for amending and strengthening the law.” *Orth & Newby*, at 56. Democratic voters in North Carolina cannot meaningfully seek to redress their grievances or amend the laws consistent with their policy preferences when they cannot obtain a majority of the General Assembly.

49. For the foregoing reasons, the Court concludes that Plaintiffs have met their burden of showing, plainly and clearly without any reasonable doubt, that the enacted plans violate the North Carolina Constitution's guarantee of free elections in Article I, Section 10 of the North Carolina Constitution by demonstrating that Legislative Defendants, with the predominant intent to control and predetermine the outcome of legislative elections for the purpose of retaining partisan power in the General Assembly, manipulated the current district boundaries. And Plaintiffs have met their burden to establish that the manipulation of district boundaries by Legislative Defendants resulted in extreme partisan gerrymandering, subordinating traditional redistricting criteria, so that the resulting maps cracked and packed voters to achieve these partisan objectives. The 2017 Plans, individually and collectively, deprive North Carolina citizens of the right to vote for General Assembly members in elections that are conducted freely and honestly to ascertain, fairly and truthfully, the will of the people.

### III. THE 2017 PLANS VIOLATE THE NORTH CAROLINA CONSTITUTION'S EQUAL PROTECTION CLAUSE

**\*113** 50. The Equal Protection Clause of the North Carolina Constitution guarantees to all North Carolinians that “[n]o person shall be denied the equal protection of the laws.” N.C. Const., art. I, § 19.

51. Generally, partisan gerrymandering runs afoul of the State's obligation to provide all persons with equal protection of law because, by seeking to diminish the electoral power of supporters of a disfavored party, a partisan gerrymander treats individuals who support candidates of one political party less favorably than individuals who support candidates of another party. *Cf. Lehr v. Robertson*, 463 U.S. 248, 265, 103 S. Ct. 2985 (1983) (“The concept of equal justice under law requires the State to govern impartially.”)



### A. North Carolina's Equal Protection Clause Provides Greater Protection for Voting Rights Than its Federal Counterpart

52. North Carolina's Equal Protection Clause provides greater protection for voting rights than federal equal protection provisions. *Stephenson v. Bartlett*, 355 N.C. 354, 377-81 & n.6, 562 S.E.2d 377, 393-96 & n.6 (2002); *Blankenship v. Bartlett*, 363 N.C. 518, 522-28, 681 S.E.2d 759, 763-66 (2009). “It is beyond dispute that [North Carolina courts] ha[ve] the authority to construe [the North Carolina Constitution] differently from the construction by the United States Supreme Court of the Federal Constitution, as long as our citizens are thereby accorded no lesser rights than they are guaranteed by the parallel federal provision.” *Stephenson*, 355 N.C. at 381 n.6, 562 S.E.2d at 395 n.6. North Carolina courts can and do interpret even “identical term[s]” in the State's Constitution more broadly than their federal counterparts. *Northampton Cnty. Drainage Dist. No. One v. Bailey*, 326 N.C. 742, 749, 392 S.E.2d 352, 357 (1990).

53. The North Carolina Supreme Court has held that North Carolina's Equal Protection Clause protects “the fundamental right of each North Carolinian to *substantially equal voting power*.” *Stephenson*, 355 N.C. at 379, 562 S.E.2d at 394 (emphasis added). “It is well settled in this State that ‘the right to vote *on equal terms* is a fundamental right.’” *Id.* at 378, 562 S.E.2d at 393 (quoting *Northampton Cnty.*, 326 N.C. at 747, 392 S.E.2d at 356) (emphasis added). These principles apply with full force in the redistricting context, and because a fundamental right is implicated, strict scrutiny applies. *See id.* at 377-78, 562 S.E.2d at 393-94.

54. The North Carolina Supreme Court has applied this broader state constitutional protection to invalidate redistricting schemes and other elections laws under Article I, § 19, irrespective of whether they violated federal equal protection guarantees. In *Stephenson*, the Court held that use of single-member and multi-member districts in a redistricting plan violated Article I, § 19. *Id.* at 377-81 & n.6, 562 S.E.2d at 393-95 & n.6. The Court explained that, although such a redistricting scheme did not violate the United States Constitution, it restricted the “fundamental right under the State Constitution” to “substantially equal voting power and substantially equal legislative representation.” *Id.* at 382, 562 S.E.2d at 396. Because the “classification of voters” between single-member and multi-member districts created an “impermissible distinction among similarly situated citizens,” it “necessarily implicate[d] the fundamental right to vote on equal terms,” triggering “strict scrutiny.” *Id.* at 377-78, 562 S.E.2d at 393-94.

\*114 55. In *Blankenship*, the Court held that Article I, § 19 mandates one-person, one-vote in judicial elections, even though the United States Constitution does not. 363 N.C. at 522-24, 681 S.E.2d at 762-64. The Court stressed that “[t]he right to vote on equal terms in representative elections ... is a fundamental right” and therefore “triggers heightened scrutiny.” *Id.*

56. And in *Northampton County*, the Court applied strict scrutiny to invalidate certain rules related to voting for drainage districts, holding that the rules at issue deprived one county's residents of the “fundamental right” to “vote on equal terms” with residents of a neighboring county. 326 N.C. at 747, 392 S.E.2d at 356.

57. Although the North Carolina Constitution provides greater protection for voting rights than the federal Equal Protection Clause, our courts use the same test as federal courts in evaluating the constitutionality of challenged classifications under an equal protection analysis. *Duggins v. N.C. State Bd. of Certified Pub. Accountant Exam'rs*, 294 N.C. 120, 131, 240 S.E.2d 406, 413 (1978); *Richardson v. N.C. Dep't of Corr.*, 345 N.C. 128, 134, 478 S.E.2d 501, 505 (1996).

58. Generally, this test has three parts: (1) intent, (2) effects, and (3) causation. First, the plaintiffs challenging a districting plan must prove that state officials' “predominant purpose” in drawing district lines was to “entrench [their party] in power” by diluting the votes of citizens favoring their rival. *Ariz. State Legis.*, 135 S. Ct. at 2658. Second, the plaintiffs must establish that the lines drawn in fact have the intended effect by “substantially” diluting their votes. *Rucho*, 318 F. Supp. 3d at 861. Finally, if the plaintiffs make those showings, the State must provide a legitimate, non-partisan justification (*i.e.*, that the impermissible intent did not cause the effect) to preserve its map. *Rucho*, 139 S. Ct. at 2516 (Kagan, J., dissenting).

**B. The 2017 Plans Were Created with the Intent to Discriminate Against Plaintiffs and Other Democratic Voters**

59. To establish a discriminatory purpose or intent, a plaintiff need not show that the discriminatory purpose is “express or appear[s] on the face of the statute.” *Washington v. Davis*, 426 U.S. 229, 241, 96 S. Ct. 2040, 2048 (1976). Rather, “an invidious discriminatory purpose may often be inferred from the totality of the relevant facts.” *Id.* at 242, 96 S. Ct. at 2048.

60. The United States Supreme Court has recognized that there are certain purposes for which a state redistricting body may take into account political data or partisan considerations in drawing district lines. For example, a legislature may, under appropriate circumstances, draw district lines to avoid the pairing of incumbents. *Karcher v. Daggett*, 462 U.S. 725, 740, 103 S. Ct. 2653, 2663 (1983). Likewise, a state redistricting body does not violate the United States Constitution by seeking “to create a districting plan that would achieve a rough approximation of the statewide political strengths of the Democratic and Republican Parties.” *Gaffney v. Cummings*, 412 U.S. 735, 752, 93 S. Ct. 2321, 2331 (1973). And a redistricting body may draw district lines to respect municipal boundaries or maintain communities of interest. *Abrams v. Johnson*, 521 U.S. 74, 100, 117 S. Ct. 1925, 1940 (1997). Accordingly, a plaintiff in a partisan gerrymandering case cannot satisfy the discriminatory intent requirement simply by proving that the redistricting body intended to rely on political data or to take into account political or partisan considerations. Rather, the plaintiff must show that the redistricting body intended to apply partisan classifications or deprive citizens of the right to vote on equal terms “in an invidious manner or in a way unrelated to any legitimate legislative objective.” *Vieth*, 541 U.S. at 307, 124 S. Ct. at 1793 (Kennedy, J., concurring in the judgment).

\*115 61. “Blatant examples of partisanship driving districting decisions,” *Rucho*, 139 S. Ct. at 2505, are unrelated to any legitimate legislative objective. Indeed, partisan gerrymanders are incompatible with democratic principles. *Vieth*, 541 U.S. at 292, 124 S. Ct. at 1785 (plurality opinion); *id.*, at 316, 124 S. Ct. at 1798 (Kennedy, J., concurring in judgment); *Ariz. State Legislature*, 135 S. Ct. at 2658.

62. Partisan gerrymanders are also contrary to the compelling governmental interests established by the North Carolina Constitution “in having fair, honest elections,” *see Petersilie*, 334 N.C. at 182, 432 S.E.2d at 840, where the “will of the people” is ascertained “fairly and truthfully,” *Skinner*, 169 N.C. at 415, 86 S.E. at 356. Partisan gerrymandering contravenes the legitimate purposes of redistricting because it is intended to hamper, rather than to “achiev[e,] ... fair and effective representation for all citizens.” *Reynolds v. Sims*, 377 U.S. 533, 565-66, 84 S. Ct. 1362, 1383 (1964).

63. Moreover, the intentional “classification of voters” based on partisanship in order to pack and crack them into districts is an “impermissible distinction among similarly situated citizens” aimed at denying equal voting power. *See Stephenson*, 355 N.C. at 377-78, 562 S.E.2d at 393-94 (“The classification of voters into both single-member and multi-member districts within plaintiffs' proposed remedial plans necessarily implicates the fundamental right to vote on equal terms ... These classifications, as used within plaintiffs' proposed remedial plans, create an impermissible distinction among similarly situated citizens based upon the population density of the area in which they reside.”). “A state may not dilute the strength of a person's vote to give weight to other interests.” *Texfi Indus., Inc. v. Fayetteville*, 301 N.C. 1, 13, 269 S.E.2d 142, 150 (1980) (citing *Evans v. Cornman*, 398 U.S. 419, 90 S. Ct. 1752 (1970)).

64. Legislative Defendants openly admitted that they used prior election results to draw districts to benefit Republicans in both 2011 and 2017. FOF § B.1. Dr. Hofeller's own files provide even more direct evidence that the predominant goal of the 2017 Plans was to maximize Republicans' political advantage by drawing Democratic voters into districts where their votes would be diluted, and in many cases where their votes would not matter. FOF § B.2.

65. The analysis and conclusions of Plaintiffs' experts confirm the point. Dr. Chen's analysis confirms that the General Assembly intentionally subordinated traditional districting principles to maximize Republican advantage. FOF § B.3.a. Dr. Mattingly's analysis confirms that the enacted plans' extreme partisan bias could only have been intentional. FOF § B.3.b. Dr. Pegden's sensitivity analysis shows that the enacted plans are more carefully crafted to favor Republicans than 99.999% of all possible plans of North Carolina meeting the same nonpartisan criteria laid out in the Adopted Criteria. FOF § B.3.c. And Dr. Cooper

demonstrated, by analyzing the district boundaries within each relevant county grouping, that the enacted plans intentionally and systematically pack and crack Democratic voters. FOF § C.

66. As such, the Court concludes that, in drawing the 2017 House and Senate Maps, Legislative Defendants acted with the intent, unrelated to any legitimate legislative objective, to classify voters and deprive citizens of the right to vote on equal terms. Legislative Defendants did so by subordinating Democratic voters to Legislative Defendants' partisan goals—in other words, by devaluing their vote as compared to the votes of Republican voters with the aim of entrenching the Republican Party in power—and the Court concludes that this intent was the predominant purpose of drawing the district lines in individual districts and statewide.

### **C. The 2017 Plans Deprive Plaintiffs and Other Democratic Voters of Substantially Equal Voting Power and the Right to Vote on Equal Terms**

**\*116** 67. The United States Supreme Court has recognized that the injury associated with partisan gerrymandering “arises from the particular composition of the voter's own district, which causes his vote – having been packed or cracked – to carry less weight than it would carry in another hypothetical district.” *Gill*, 138 S. Ct. at 1931. It is the “voter's placement in a ‘cracked’ or ‘packed’ district” that causes injury. *Id.*

68. Therefore, to prevail, Plaintiffs must also establish that the enacted legislative districts actually had the effect of discriminating against—or subordinating—voters who support candidates of the Democratic Party by virtue of district lines that crack or pack those voters, thereby depriving them of substantially equal voting power in an effort to entrench the Republican Party in power, in violation of Article I, § 19.

69. The manipulation of district boundaries in the enacted plans prevents Democratic voters from obtaining a majority in the House or the Senate even in election environments where Democrats would obtain a majority under virtually any nonpartisan map. Dr. Chen and Dr. Mattingly each independently found that the effects of the gerrymanders are most extreme in circumstances where Democrats could win majorities in one or both chambers under nonpartisan plans. FOF § B.3.a, b. There is nothing “equal” about the “voting power” of Democratic voters when they have a vastly less realistic chance of winning a majority in either chamber under the enacted plans. “The right to vote is the right to participate in the decision-making process of government.” *Texfi Indus.*, 301 N.C. at 13, 269 S.E.2d at 150. Democratic voters are significantly hindered from meaningfully participating in the decision-making process of government when the maps are drawn to systematically prevent Democrats from obtaining a majority in either chamber of the General Assembly.

70. Beyond the issue of majority control, Dr. Chen and Dr. Mattingly also concluded that the gerrymanders deprive Democratic voters of multiple seats in the House and the Senate across a variety of electoral environments. FOF § B.3.a, b. The 2017 Plans achieve these effects by cracking and packing Democratic voters in districts contained within county grouping after county grouping. FOF § C. This packing and cracking diminishes the “voting power” of Democratic voters in these districts and groupings; packing dilutes the votes of Democratic voters such that their votes, when compared to the votes of Republican voters, are substantially less likely to ultimately matter in deciding the election results, and the entire purpose of cracking likeminded voters across multiple districts is so they do not have sufficient “voting power” to join together and elect a candidate of their choice.

71. Moreover, although not necessary to establish Plaintiffs' equal protection claim, the Court similarly concludes that the 2017 Plans not only deprive Democratic voters of equal voting power in terms of electoral outcomes, but also deprive them of substantially equal legislative representation. *See Stephenson*, 355 N.C. at 379, 562 S.E.2d at 394. Partisan gerrymandering insulates legislators from popular will and renders them unresponsive to portions of their constituencies. *See Reynolds*, 377 U.S. at 565 (“Since legislatures are responsible for enacting laws by which all citizens are to be governed, they should be bodies which are collectively responsible to the popular will.”). When a district is created solely to effectuate the interests of one group,



the elected official from that district is “more likely to believe that their primary obligation is to represent only the members of that group, rather than their constituency as a whole.” *See Shaw I*, 509 U.S. at 648 (in the context of racial gerrymandering).

\*117 72. Just as the “political reality” is that “legislators are much more inclined to listen to and support a constituent than an outsider,” *Stephenson*, 355 N.C. at 380, 562 S.E.2d at 395, the reality is that legislators are far more likely to represent the interests and policy preferences of voters of the same party. Legislative Defendants' own expert, Dr. Brunell, agreed that “a voter whose candidate of choice loses will on average be less well-represented than a voter who voted for the winning candidate.” Tr. 2370:22-2371:2.

#### **D. The 2017 Plans Cannot be Justified by any Legitimate Governmental Interest**

73. Once a plaintiff establishes a *prima facie* case that boundaries of legislative districts violate the Equal Protection Clause of the North Carolina Constitution, which Plaintiffs have done in this case by establishing a discriminatory intent and a discriminatory effect, the burden shifts to Legislative Defendants to prove that a legitimate state interest or other neutral factor justified such discrimination.

74. Legislative Defendants offer limited neutral justifications for the enacted maps. They contend that the plans “satisfy the equal-population rule and the strict county-grouping and transversal rules of Article II of the State Constitution” and that “[t]he districts were far more compact than in 2011 or prior years; they split fewer VTDs than in 2011 or prior years; they ... minimized incumbency pairings; and they preserved core constituency-incumbent relations.” Leg. Defs.' Post-Trial Brief at p. 28.

75. While all of this may be true, these neutral justifications do not provide a sufficient justification for the substantial evidence, proffered by Plaintiffs and given substantial weight by this Court, showing that Legislative Defendants' predominant intent was to classify voters and deprive citizens of the right to vote on equal terms and substantially equally voting power. Legislative Defendants did so by subordinating Democratic voters to Legislative Defendants' partisan goals—in other words, by devaluing their vote as compared to the votes of Republican voters with the aim of entrenching the Republican Party in power—and the Court concludes that this intent was the predominant purpose of drawing the district lines in individual districts and statewide.

76. Nor do these justifications address the substantial evidence that the neutral criteria offered by Legislative Defendants, and indeed all other neutral objectives of the Adopted Criteria, were subordinated by Legislative Defendants in the map drawing process in order to attain the discriminatory effects of the resulting extreme partisan gerrymandering.

77. Because the 2017 Plans impermissibly interfere with the exercise of the fundamental right to vote, strict scrutiny applies. *See Stephenson*, 355 N.C. at 377-78, 562 S.E.2d at 393. Legislative Defendants have not established that the 2017 Plans are narrowly tailored to advance a compelling governmental interest. *See Id.* Advantaging a particular political party or discriminating against voters based on how they vote for the purposes of entrenching a political party's power is not a compelling government interest.

78. For the foregoing reasons, the Court concludes that Plaintiffs have met their burden of showing, plainly and clearly without any reasonable doubt, that the enacted plans violate the North Carolina Constitution's guarantee of equal protection in Article I, Section 19 of the North Carolina Constitution by demonstrating that (1) Legislative Defendants acted with the intent, unrelated to any legitimate legislative objective, to classify voters and deprive citizens of the right to vote on equal terms by subordinating Democratic voters to Legislative Defendants' partisan goals—in other words, by devaluing their vote as compared to the votes of Republican voters with the aim of entrenching the Republican Party in power—and this intent was the predominant purpose of drawing the district lines in individual districts and statewide; (2) that the legislative maps drawn by Legislative Defendants with this intent had the effect of depriving disfavored voters in North Carolina of substantially equal voting power and the right to vote on equal terms, as well as substantially equal legislative representation; and (3) Legislative Defendants have not provided a neutral justification or a compelling governmental rationale for their actions.

\*118 79. Specifically, voters in specific districts in the following county groupings are unlawfully deprived of equal protection under the law in violation of the North Carolina Constitution. In these districts, Plaintiffs have demonstrated through Dr. Chen, Dr. Mattingly, and Dr. Cooper, whose expert testimony has been given substantial weight by the Court, that Democratic voters were packed or cracked into extreme gerrymandered districts so that the effect upon these voters was to deprive them of substantially equal voting power and the right to vote on equal terms, as well as substantially equal legislative representation. County groupings including these districts are as follows:

*Senate Districts:* FOF § C.1.a (Mecklenburg); C.1.b (Franklin-Wake); C.1.c (Nash-Johnston-Harnett-Lee-Sampson-Duplin); C.1.d. (Guilford-Alamance-Randolph); C.1.e (Davie-Forsyth); C.1.g (Buncombe-Henderson-Transylvania);

*House Districts:* FOF § C.2.a (Robeson-Columbus-Pender); C.2.b (Cumberland); C.2.d (Franklin-Nash); C.2.e (Pitt-Lenoir); C.2.f (Guilford); C.2.g (Davie-Rowan-Cabarrus-Stanly-Montgomery-Richmond); C.2.h (Yadkin-Forsyth); C.2.i (Mecklenburg); C.2.k (New Hanover-Brunswick); C.2.l (Duplin-Onslow); C.2.m (Anson-Union); C.2.n. (Alamance); C.2.o (Cleveland-Gaston); C.2.p (Buncombe).

In the remaining county groupings challenged by Plaintiffs, Drs. Chen and Mattingly similarly found that Legislative Defendants placed their thumbs heavily on the scale to favor Republicans. *See* FOF § C.

#### **IV. THE 2017 PLANS VIOLATE THE NORTH CAROLINA CONSTITUTION'S FREEDOM OF SPEECH AND FREEDOM OF ASSEMBLY CLAUSES**

80. The Freedom of Speech Clause in Article I, § 14 of the North Carolina Constitution provides that “[f]reedom of speech and of the press are two of the great bulwarks of liberty and therefore shall never be restrained.” The Freedom of Assembly Clause in Article I, § 12 provides, in relevant part, that “[t]he people have a right to assemble together to consult for their common good, to instruct their representatives, and to apply to the General Assembly for redress of grievances.”

81. The 2017 Plans violate the North Carolina Constitution's guarantees of free speech and assembly, irrespective of whether the plans violate the U.S. Constitution. *See Michigan v. Long*, 463 U.S. 1032, 103 S. Ct. 3469 (1983).

##### **A. North Carolina's Constitution Protects the Rights of Free Speech and Assembly Independently from the Federal Constitution**

82. “[I]n construing provisions of the Constitution of North Carolina,” the North Carolina Supreme Court “is not bound by opinions of the Supreme Court of the United States construing even identical provisions in the Constitution of the United States.” *State v. Hicks*, 333 N.C. 467, 483, 428 S.E.2d 167, 176 (1993). While the North Carolina Supreme Court gives “great weight” to decisions of the United States Supreme Court that interpret corresponding provisions in the federal constitution, *Hicks*, 333 N.C. at 484, 428 S.E.2d at 176, only North Carolina courts can “answer[] with finality” questions of North Carolina constitutional law, *State v. Arrington*, 311 N.C. 633, 643, 319 S.E.2d 254, 260 (1984). North Carolina courts thus “have the authority to construe [the State's] own constitution differently from the construction by the United States Supreme Court of the Federal Constitution, as long as [its] citizens are thereby accorded no lesser rights than they are guaranteed by the parallel federal provision.” *State v. Carter*, 322 N.C. 709, 713, 370 S.E.2d 553, 555 (1988).

83. The North Carolina Supreme Court has held that the North Carolina Constitution's Free Speech Clause provides broader rights than does federal law. In particular, the Court has held that the North Carolina Constitution affords a direct cause of action for damages against government officers in their official capacity for speech violations, even though federal law does not. *Corum*, 330 N.C. at 783, 413 S.E.2d at 290. Noting that “[o]ur Constitution is more detailed and specific than the federal Constitution in the protection of the rights of its citizens,” the Court explained that the North Carolina courts “give our Constitution a liberal interpretation in favor of its citizens with respect to those provisions which were designed to safeguard the liberty and security of the citizens in regard to both person and property.” *Id.* Indeed, in recognizing a direct cause of action

under the State Constitution, the Court expressly relied on *the lack of* a federal remedy, which left plaintiffs with “no other remedy ... for alleged violations of his constitutional freedom of speech rights.” *Id.*

\*119 84. Similarly, in *Evans v. Cowan*, the Court of Appeals reversed a trial court that had dismissed a claim under Article I, § 14, on the erroneous ground that it was *res judicata* based on a prior dismissal of the plaintiff’s claim under the federal First Amendment. 122 N.C. App. 181, 183-84, 468 S.E.2d 575, 577-78, *aff’d*, 477 S.E.2d 926 (N.C. 1996). While “both the North Carolina Constitution and the United States Constitution contain similar provisions proclaiming certain principles of liberty,” North Carolina courts “are *not* bound by the opinions of the federal courts.” *Id.* at 183-84, 468 S.E.2d at 577. “[A]n independent determination of plaintiff’s constitutional rights under the state constitution [was] required, and the state courts reserve the right to grant relief under the state constitution in circumstances under which no relief might be granted under the federal constitution.” *Id.* at 184, 468 S.E.2d at 577 (citation and internal quotations marks omitted); *see also McLaughlin v. Bailey*, 240 N.C. App. 159, 172, 771 S.E.2d 570, 579-80 (2015), *aff’d*, 781 S.E.2d 23 (N.C. 2016); *see also Lenzer v. Flaherty*, 106 N.C. App. 496, 418 S.E.2d 276 (1992).

85. In the context of partisan gerrymandering, it is especially important that North Carolina courts give independent force to North Carolina’s constitutional protections. The United States Supreme Court recently held that federal courts applying the federal constitution have no power to adjudicate claims of partisan gerrymandering. *Rucho*, 139 S. Ct. 2484. That ruling does not mean that partisan gerrymandering complies with the constitution; it means that federal courts have no power to decide *whether* the practice complies with the constitution. “Having no other remedy,” the North Carolina Constitution “guarantees [P]laintiff[s] a direct action under the State Constitution for alleged violations of [their] constitutional freedom of speech rights.” *Corum*, 330 N.C. at 783, 413 S.E.2d at 290.

## **B. Voting, Banding Together in a Political Party, and Spending on Elections Are Protected Expression and Association**

86. Voting for the candidate of one’s choice and associating with the political party of one’s choice are core means of political expression protected by the North Carolina Constitution’s Freedom of Speech and Freedom of Assembly Clauses. The 2017 Plans burden that protected expression and thus are subject to scrutiny under those clauses.

87. Voting provides citizens a direct means of expressing support for a candidate and his views. *See Buckley v. Valeo*, 424 U.S. 1, 21, 96 S. Ct. 612, 635 (1976). Indeed, if donating money to a candidate constitutes a form of protected speech, then voting for that same candidate necessarily does as well. “There is no right more basic in our democracy than the right to participate in electing our political leaders”—including, of course, the right to “vote.” *McCutcheon v. FEC*, 572 U.S. 185, 191, 134 S. Ct. 1434, 1440 (2014) (plurality op.). “[P]olitical belief and association constitute the core of those activities protected by the First Amendment.” *Elrod v. Burns*, 427 U.S. 347, 356, 96 S. Ct. 2673, 2681 (1976).

88. Plaintiffs’ expression is no less protected “merely because it involves the ‘act’” of casting a ballot. *State v. Bishop*, 368 N.C. 869, 874, 787 S.E.2d 814, 818 (2016). “[M]uch speech requires an ‘act’ of some variety—whether putting ink to paper or paint to canvas, or hoisting a picket sign, or donning a message-bearing jacket.” *Id.* Voting, like donating money to a candidate or signing a petition for a referendum, constitutes “expressive activity” that “express[es] [a] view” about the State’s laws and policies. *Winborne v. Easley*, 136 N.C. App. 191, 198, 523 S.E.2d 149, 153 (1999); *Doe v. Reed*, 561 U.S. 186, 195, 130 S. Ct. 2811, 2817 (2010). Voting’s expressive force is not diminished by the fact that it “is a legally operative legislative act.” *Id.* at 195; *see also Nev. Comm’n on Ethics v. Carrigan*, 564 U.S. 117, 134, 131 S. Ct. 2343, 2355 (2011) (Alito, J., concurring) (“[T]he act of voting is not drained of its expressive content when the vote has a legal effect.”). Having “cho[sen] to tap the energy and the legitimizing power of the democratic process,” the government “must accord the participants in that process the First Amendment rights that attach to their roles.” *Republican Party of Minn. v. White*, 536 U.S. 765, 788, 122 S. Ct. 2528, 2541 (2002) (quotation omitted). The ballots cast by Plaintiffs and other Democratic voters to elect candidates to the North Carolina General Assembly are protected by North Carolina’s Freedom of Speech Clause.

\*120 89. Expression aside, the Freedom of Assembly Clause independently protects Plaintiffs' voting and their association with the Democratic Party. The Freedom of Assembly Clause—part of North Carolina's original 1776 Declaration of Rights—protects the right of the people “to assemble together to consult for their common good, to instruct their representatives, and to apply to the General Assembly for redress of grievances.” N.C. Const. art. I, § 12; *see* N.C. Const. art. I, § 18 (1776). In North Carolina, the right to assembly encompasses the right of association. *Feltman v. City of Wilson*, 238 N.C. App. 246, 253, 767 S.E.2d 615, 620 (2014).

90. Just as voting is a form of protected expression, banding together with likeminded citizens in a political party is a form of protected association. “[C]itizens form parties to express their political beliefs and to assist others in casting votes in alignment with those beliefs.” *Libertarian Party of N.C. v. State*, 365 N.C. 41, 49, 707 S.E.2d 199, 204-05 (2011). “[F]or elections to express the popular will, the right to assemble and consult for the common good must be guaranteed.” John V. Orth, *The North Carolina State Constitution* 48 (1995).

91. A final form of relevant protected expression involves the expenditure of funds in support of candidates. It is now well-settled that “political contributions and expenditures” constitute “expressive activity” that are constitutionally protected. *Winborne*, 136 N.C. App. at 198, 523 S.E.2d at 153-54.

### C. The 2017 Plans Burden Protected Expression and Association

92. The 2017 Plans are subject to strict scrutiny because they burden Plaintiffs' and Democratic voters' political expression and association.

#### 1. The 2017 Plans Burden Protected Expression Based on Viewpoint by Making Democratic Votes Less Effective

93. It is “axiomatic” that the government may not infringe on protected activity based on the individual's viewpoint. *Rosenberger v. Rector & Visitors of Univ. of Va.*, 515 U.S. 819, 828, 115 S. Ct. 2510, 2516 (1995). “The government must abstain from regulating speech when the specific motivating ideology or the opinion or perspective of the speaker is the rationale for the restriction.” *Id.* at 829, 115 S. Ct. at 2516. The guarantee of free expression “stands against attempts to disfavor certain subjects or viewpoints.” *Citizens United v. FEC*, 558 U.S. 310, 340, 130 S. Ct. 876, 898 (2010).

94. Viewpoint discrimination is *most* insidious where the targeted speech is political. “[I]n the context of political speech, ... [b]oth history and logic” demonstrate the perils of permitting the government to “identif[y] certain preferred speakers” while burdening the speech of “disfavored speakers.” *Id.* at 340-41, 130 S. Ct. at 899. The government may not burden the “speech of some elements of our society in order to enhance the relative voice of others” in electing officials. *McCutcheon*, 572 U.S. at 207, 134 S. Ct. at 1450; *see also Winborne*, 136 N.C. App. at 198, 523 S.E.2d at 154 (“political speech” has “such a high status” that free speech protections have their “fullest and most urgent application” in this context (quotations marks omitted)).

95. Here, Legislative Defendants “identified[] certain preferred speakers” (Republican voters), while targeting certain “disfavored speakers” (Plaintiffs and other Democratic voters) for “disfavored treatment” because of disagreement with the views they express when they vote. *Citizens United*, 558 U.S. at 340-41, 130 S. Ct. at 899; *see Sorrell v. IMS Health Inc.*, 564 U.S. 552, 565, 131 S. Ct. 2653, 2663 (2011). Legislative Defendants analyzed the voting histories of every VTD in North Carolina, identified VTDs that favor Democratic candidates, and then singled out the voters in those VTDs for disfavored treatment by packing and cracking them into districts with the aim of diluting their votes and, in the case of cracked districts, ensuring that these voters are significantly less likely, in comparison to Republican voters, to be able to elect a candidate who shares their views.

\*121 96. The fact that Democratic voters can still cast ballots under gerrymandered maps changes nothing. The government unconstitutionally burdens speech where it renders disfavored speech *less effective*, even if it does not ban such speech outright.

The government may not restrict a citizen's "ability to effectively exercise" their free speech rights. *Heritage Vill. Church & Missionary Fellowship, Inc. v. State*, 40 N.C. App. 429, 451, 253 S.E.2d 473, 486 (1979), *aff'd*, 299 N.C. 399, 263 S.E.2d 726 (1980). "It is thus no answer to say that petitioners can still be 'seen and heard'" if the burdens placed on their speech "have effectively stifled petitioners' message." *McCullen v. Coakley*, 573 U.S. 464, 489-90, 134 S. Ct. 2518, 2537 (2014).

97. In *McCullen*, for instance, the United States Supreme Court invalidated a law that imposed a buffer zone around abortion clinics because the law "compromise[d] [the] ability" of the plaintiffs to "initiate the close, personal conversations that they view as essential" to effectively communicate their message. 573 U.S. at 487, 134 S. Ct. at 2535. And in *Sorrell*, the United States Supreme Court invalidated on viewpoint discrimination grounds a state law that burdened drug manufacturers by denying them information that made their marketing more effective. 564 U.S. at 580, 131 S. Ct. at 2672. The Court stressed that "the distinction between laws burdening speech is but a matter of degree and the Government's content-based burdens must satisfy the same rigorous scrutiny as its content-based bans." *Id.* at 555-56, 131 S. Ct. at 2664 (quotation marks omitted).

98. These principles apply equally to burdens on political expression. In *Davis v. FEC*, the United States Supreme Court struck down a law that disfavored candidates who self-financed their campaigns. 554 U.S. 724, 128 S. Ct. 2759 (2008). The law in question did *not* limit how much money self-financing candidates could spend, but it still unconstitutionally "diminishe[d] the effectiveness of [their] speech." *Id.* at 736, 128 S. Ct. at 2770. The Court held the same in *Ariz. Free Enterprise Club's Freedom Club PAC v. Bennett*, where it invalidated a public-matching scheme because it rendered the money spent by privately financed candidates "less effective." 564 U.S. 721, 747, 131 S. Ct. 2806, 2824 (2011); *see also Randall v. Sorrell*, 548 U.S. 230, 248-49, 126 S. Ct. 2479, 2492 (2006) (invalidating limit on campaign donations that made such donations less "effective").

99. North Carolina courts have recognized "several paths" leading to the conclusion that laws burdening protected expression are impermissibly discriminatory and thus "subject to strict scrutiny." *State v. Bishop*, 368 N.C. 869, 875, 787 S.E.2d 814, 819 (2016). A finding of discrimination "can find support in the plain text of a statute, or the animating impulse behind it, or the lack of any plausible explanation besides distaste for the subject matter or message." *Id.* The 2017 Plans thus need not explicitly mention any particular viewpoint to be impermissibly discriminatory. *See, e.g., Reed v. Town of Gilbert*, 135 S. Ct. 2218, 2227 (2015).

100. Here, all paths lead to the same conclusion: the 2017 Plans reflect viewpoint discrimination against Plaintiffs and other Democratic voters that render their protected political expression less effective.

101. Overwhelming, un rebutted evidence establishes that the 2017 Plans were laced with viewpoint-driven intent. Legislative Defendants directed Dr. Hofeller to assign voters to districts using "election data" reflecting the contents of their prior votes for Democratic or Republican candidates, and Dr. Hofeller abided, using a color-coded shading system to track voters based on their partisan preferences and voting histories. FOF § C. Within county groups, Dr. Hofeller placed Democratic voters in this district or that one based *solely* on their political views. If this direct evidence left any doubt, the expert testimony showed that the mapmaker crafted the plans with partisanship as the predominant (if not sole) focus. Dr. Cooper in particular illustrated the intentional packing and cracking of specific Democratic voters and communities. FOF § C.

**\*122** 102. This sorting of Plaintiffs and other Democratic voters based on disfavor for their political views has burdened their speech by making their votes less effective. Many Plaintiffs and other Democratic voters live in districts where their votes are guaranteed to be less effective—either because the districts are packed such that Democratic candidates will win by astronomical margins or because the Democratic voters are cracked into seats that are safely Republican. Plaintiff Derrick Miller testified that he is one such voter: with the Wilmington Notch having been placed in Senate District 8, it is "impossible for [he] and Democratic neighbors to elect a Democrat, a candidate of our choice." Tr. 205:13-15. Plaintiff Joshua Brown similarly testified that the mapmaker's placing High Point's Democrats into Senate District 26 "clearly dilutes the ability of Democrats to even attempt to run a fair race." Tr. 833:20-21.



103. By packing and cracking Democratic voters to make it harder for them to translate votes into legislative seats, the 2017 Plans “single[] out a subset of messages for disfavor based on the views expressed.” *Matal v. Tam*, 137 S. Ct. 1744, 1766 (2017) (Kennedy, J., concurring). “This is the essence of viewpoint discrimination.” *Id.*

104. Even were Legislative Defendants permitted to *consider* voters' political beliefs when drawing district maps, the 2017 Plans would still be unlawful. In arenas where the government is allowed (or even required) to consider the content or viewpoint of expression that it regulates, it is still forbidden from intentionally elevating one viewpoint over the other. In *Board of Education v. Pico*, for example, the Supreme Court recognized that, while local school boards “possess significant discretion to determine the content of their school libraries,” their discretion may “not be exercised in a narrowly partisan or political manner.” 457 U.S. 853, 870, 102 S. Ct. 2799, 2810 (1982). As the Court observed, “[i]f a Democratic school board, motivated by party affiliation, ordered the removal of all books written by or in favor of Republicans, few would doubt that the order violated the constitutional rights of the students denied access to those books.” *Id.* at 870-71, 102 S. Ct. at 2810. So too here. Legislative Defendants did not simply look at partisan data to satisfy their curiosity. They drew the 2017 Plans in a way that deliberately minimized the effectiveness of the votes of citizens with whom they disagree.

## 2. The 2017 Plans Burden Plaintiffs' Ability to Associate

105. The 2017 Plans independently violate Article I, § 12 by burdening the ability of the NCDP, Common Cause, and Democratic voters to associate effectively.

106. The 2017 Plans severely burden—if not outright preclude—the ability of the NCDP, Common Cause, and Democratic voters “to instruct their representatives, and to apply to the General Assembly for redress of grievances.” N.C. Const. art. I, § 12. Democratic voters who live in cracked districts have little to no ability to instruct their representatives or obtain redress from their representatives on issues important to those voters. FOF § E.3. And as a result of the gerrymanders, Democratic voters across the state, as well as the NCDP, will be unlikely to obtain redress from “the General Assembly” on important policy issues, because they will unlikely be able to obtain Democratic majorities in the General Assembly. *Id.* Common Cause likewise cannot instruct representatives or obtain redress on the issues central to its mission due to the gerrymanders. FOF § E.2. The 2017 Plans “burden[] the ability of like-minded people across the State to affiliate in a political party and carry out [their] activities and objects.” *Gill*, 138 S. Ct. at 1939 (Kagan J., concurring).

107. The 2017 Plans separately violate NCDP's associational rights by “deblitat[ing] [the] party” and “weaken[ing] its ability to carry out its core functions and purposes.” *Id.* Due to the unfair playing field created by the 2017 Plans, the NCDP “face[s] difficulties fundraising, registering voters, attracting volunteers, generating support from independents, and recruiting candidates to run for office.” *Id.* at 1938; *see* FOF § E.1. And, even when overcoming these difficulties through extraordinary efforts, fundraising and enthusiasm, as was evidenced in the 2018 election cycle, the 2017 Plans nonetheless debilitate the NCDP and weaken its ability to translate its effort, funds and enthusiasm into a meaningful opportunity to gain majority control of the General Assembly. FOF § E.1.

## 3. The 2017 Plans Burden the NCDP's Expression Through Financial Support for Candidates

**\*123** 108. The 2017 Plans independently violate the NCDP's free expression and assembly rights under Article I, §§ 12 and 14 by burdening their campaign donations and expenditures. The NCDP must spend more money than it would need to under nonpartisan plans, both statewide and in individual races, and the money that the NCDP spends is less effective than it would be under nondiscriminatory maps. FOF § E.1. The NCDP's political opponent, the North Carolina Republican Party, faces no such burdens.

109. The operation of the 2017 Plans is analogous to the laws struck down in *Davis* and *Bennett* in this regard. Those laws did not preclude or limit any campaign expenditures, but were still held unconstitutional because they “diminishe[d] the effectiveness”

of the expenditures of some candidates. *See Bennett*, 564 U.S. at 736, 131 S. Ct. at 2818 (quoting *Davis*, 554 U.S. at 736, 128 S. Ct. at 2770). The same is true here. The 2017 Plans create “a political hydra” that forces the NCDP to drain and divert resources across the State merely to avoid being relegated to a super-minority. *Id.* at 738.

#### **D. The 2017 Plans Fail Strict Scrutiny—and Indeed Any Scrutiny**

110. Because the 2017 Plans discriminate against Plaintiffs and other Democratic voters based on their protected expression and association, the burden shifts to the Legislative Defendants to establish that the 2017 Plans were narrowly tailored to achieve a compelling government interest. *See Petersilie*, 334 N.C. at 206, 432 S.E.2d at 853-54 (Mitchell, J., dissenting).

111. As noted above, COL § III.D., Legislative Defendants have offered no credible justification for their partisan discrimination. Nor could they have. Discriminating against citizens based on their political beliefs does not serve any legitimate government interest.

#### **E. The 2017 Plans Impermissibly Retaliate Against Voters Based on Their Exercise of Protected Speech**

112. The 2017 Plans violate the Freedom of Speech and Assembly Clauses for an independent reason. In addition to forbidding discrimination, those clauses also bar *retaliation* based on protected speech and expression. *See McLaughlin*, 240 N.C. App. at 172, 771 S.E.2d at 579-80. Courts carefully guard against retaliation by the party in power. *See Elrod*, 427 U.S. at 356, 96 S. Ct. at 2681; *Branti v. Finkel*, 445 U.S. 507, 100 S. Ct. 1287 (1980); *Rutan v. Republican Party of Ill.*, 497 U.S. 62, 110 S. Ct. 2729 (1990). When patronage or retaliation restrains citizens' freedoms of belief and association, it is “at war with the deeper traditions of democracy embodied in the First Amendment.” *Elrod*, 427 U.S. at 357, 96 S. Ct. at 2682 (quotation marks omitted).

113. To establish a violation of the North Carolina Constitution under a retaliation theory, Plaintiffs must show, in addition to their engagement in protected expression or association, that (1) the 2017 Plans take adverse action against them, (2) the 2017 Plans were created with an intent to retaliate against their protected speech or conduct, and (3) the 2017 Plans would not have taken the adverse action but for that retaliatory intent. *See McLaughlin*, 240 N.C. App. at 172, 771 S.E.2d at 579-80. Plaintiffs proved all of these elements.

114. *First*, the 2017 Plans take adverse action against Plaintiffs. For the Individual Plaintiffs and the Organizational Plaintiffs' members, the plans dilute the weight of their votes. The enacted plans adversely affect the individual Plaintiffs' associational rights. In *relative* terms, Democratic voters under the 2017 Plans are far less able to succeed in electing candidates of their choice than they would be under plans that were not so carefully crafted to dilute their votes. And in *absolute* terms, Plaintiffs are significantly foreclosed from succeeding in electing preferred candidates or a Democratic majority.

**\*124** 115. *Second*, the Plans were clearly crafted with an *intent* to retaliate against Plaintiffs and other Democratic voters on the basis of their voting history. Again, Dr. Hofeller's files showed that when drafting the House and Senate maps he intentionally targeted Democratic voters based on their voting histories. Legislative Defendants cannot escape a finding of retaliatory intent by re-characterizing their actions as helping Republicans rather than hurting Democrats. In two-party elections, an intent to help one party necessarily implies an intent to hurt the other party. Nor does it matter that Legislative Defendants did not target specific individual voters. Plaintiffs were targeted for disfavored treatment because of a shared marker of political belief—their status as Democratic voters. That suffices. *See Miller v. Johnson*, 515 U.S. 900, 920, 115 S. Ct. 2475, 2490 (1995) (condemning State's targeting of areas with “dense majority-black populations”).

116. *Third*, Legislative Defendants' impermissible partisan intent *caused* the burden on Plaintiffs' expression and association. The adverse effects described above would not have occurred if Legislative Defendants had not cracked and packed Democratic voters and thereby diluted their votes. In particular, Dr. Chen compared the districts in which the Individual Plaintiffs currently

reside under the enacted plans with districts in which they would have resided under each of his simulated plans. Many of the Individual Plaintiffs' actual districts are extreme partisan outliers when compared with their districts under the simulated plans.

117. For the foregoing reasons, the Court concludes that Plaintiffs have met their burden of showing, plainly and clearly without any reasonable doubt, that the enacted plans violate the North Carolina Constitution's guarantees of free speech and assembly under Article I, Sections 12 and 14 of the North Carolina Constitution.

## V. PARTISAN GERRYMANDERING CLAIMS ARE JUSTICIABLE UNDER THE NORTH CAROLINA CONSTITUTION

118. In all but the most exceptional circumstances, North Carolina courts are duty-bound to say what the law of this State is and to adjudicate cases on the merits.

119. In cases brought under the North Carolina Constitution, “[i]t has long been understood that it is the duty of the courts to determine the meaning of the requirements of our Constitution.” *Leandro v. State*, 346 N.C. 336, 345, 488 S.E.2d 249, 253 (1997). “When a government action is challenged as unconstitutional, the courts have a duty to determine whether that action exceeds constitutional limits.” *Id.* “It is the duty of this Court to ascertain and declare the intent of the framers of the Constitution and to reject any act in conflict therewith.” *Maready v. City of Winston-Salem*, 342 N.C. 708, 716, 467 S.E.2d 615, 620 (1996).

120. State courts' duty to decide constitutional cases applies with full force in the redistricting context. Although the North Carolina Constitution directs the General Assembly to revise and reapportion districts after each census, “[t]he people of North Carolina chose to place several explicit limitations upon the General Assembly's execution of the legislative reapportionment process,” which state courts have not hesitated to enforce. *Stephenson*, 355 N.C. at 370, 562 S.E.2d at 389. North Carolina courts have adjudicated claims that redistricting plans violated the Whole County Provision, the mid-decade redistricting bar, the Equal Protection Clause, and other provisions of the North Carolina Constitution. *See Stephenson*, 355 N.C. at 376, 380-81, 562 S.E.2d at 392, 395; *State ex rel. Martin v. Preston*, 325 N.C. 438, 385 S.E.2d 473 (1989); *NAACP v. Lewis*, 18 CVS 2322 (N.C. Super. Ct. Nov. 2, 2018). “[W]ithin the context of ... redistricting and reapportionment disputes, it is well within the power of the judiciary of [this] State to require valid reapportionment or to formulate a valid redistricting plan.” *Stephenson*, 355 N.C. at 362, 562 S.E.2d at 384 (quotation marks omitted).

**\*125** 121. Courts of other states have decided constitutional challenges to redistricting plans, including partisan gerrymandering claims, on the merits. In adjudicating a recent partisan gerrymandering suit, the Pennsylvania Supreme Court held that “it is the duty of the Court, as a co-equal branch of government, to declare, when appropriate, certain acts unconstitutional.” *League of Women Voters of Pa.*, 178 A.3d at 822. The Florida Supreme Court similarly held that “there can hardly be a more compelling interest than the public interest in ensuring that the Legislature does not engage in unconstitutional partisan political gerrymandering.” *League of Women Voters of Fla. v. Detzner*, 172 So. 3d 363, 416 (Fla. 2015). And in another constitutional redistricting challenge, the Texas Supreme Court held that “[t]he judiciary ... is both empowered and, when properly called upon, obliged to declare whether an apportionment statute enacted by the Legislature is valid.” *Terrazas v. Ramirez*, 829 S.W.2d 712, 717 (Tex. 1991). “A judicial determination that an apportionment statute violates a constitutional provision is no more an encroachment on the prerogative of the Legislature than the same determination with respect to some other statute.” *Id.*; *see also, e.g., Johnson v. State*, 366 S.W.3d 11, 23 (Mo. 2012) (similar).

122. Indeed, state courts are particularly well-positioned to adjudicate redistricting disputes, as the public may “more readily accept state court intervention ... than ... federal intervention in matters of state government.” *Brooks v. Hobbie*, 631 So. 2d 883, 890 (Ala. 1993). “The power of the judiciary of a State to require valid reapportionment or to formulate a valid redistricting plan has not only been recognized by th[e] United States Supreme Court but ... has been specifically encouraged.” *Scott v. Germano*, 381 U.S. 407, 409 (1965). In *Rucho*, the United States Supreme Court recently made clear that partisan gerrymandering claims are not “condemn[ed] ... to echo in the void,” because although the federal courthouse doors may be closed, “state constitutions can provide standards and guidance for state courts to apply.” 139 S. Ct. at 2507.



123. If unconstitutional partisan gerrymandering is not checked and balanced by judicial oversight, legislators elected under one partisan gerrymander will enact new gerrymanders after each decennial census, entrenching themselves in power anew decade after decade. When the North Carolina Supreme Court first recognized the power to declare state statutes unconstitutional, it presciently noted that absent judicial review, members of the General Assembly could “render themselves the Legislators of the State for life, without any further election of the people.” *Bayard v. Singleton*, 1 N.C. 5, 7 (1787). Those legislators could even “from thence transmit the dignity and authority of legislation down to their heirs male forever.” *Id.* Extreme partisan gerrymandering reflects just such an effort by a legislative majority to permanently entrench themselves in power in perpetuity.

124. The fact that the process employed by the Legislative Defendant in crafting the 2017 Maps is a process that has been used in North Carolina for decades—albeit in less precise and granular detail—by Democrats and Republicans alike does render political gerrymandering nonjusticiable. Long standing, and even widespread historical practices do not immunize governmental action from constitutional scrutiny. *See e.g., Citizens United v. FEC*, 558 U.S. 310, 365 (2010); *Reynolds v. Sims*, 377 U.S. 533, 582 (1964) (holding that malapportionment of state legislative districts violates Equal Protection Clause, notwithstanding that malapportionment was widespread in the Nineteenth and early Twentieth Centuries.)

125. In rare instances, North Carolina courts have held that certain exceptional cases are non-justiciable because they present a “political question.” “The political question doctrine controls, essentially, when a question becomes not justiciable because of the separation of powers provided by the Constitution.” *Cooper v. Berger*, 370 N.C. 392, 407, 809 S.E.2d 98, 107 (2018) (quotation marks omitted; cleaned up). “The doctrine excludes from judicial review those controversies which revolve around policy choices and value determinations constitutionally committed for resolution to the legislative or executive branches of government.” *Id.* at 408, 809 S.E.2d at 107 (quotation marks omitted; cleaned up). The “dominant considerations” in determining whether the political question doctrine applies are “the appropriateness under our system of government of attributing finality to the action of the political departments and also the lack of satisfactory criteria for a judicial determination.” *Id.* (quotation marks omitted).

**\*126** 126. The Court concludes that partisan gerrymandering claims are justiciable under the North Carolina Constitution. Such claims fall within the broad, default category of constitutional cases the North Carolina courts are empowered and obliged to decide on the merits, and not within the narrow category of exceptional cases covered by the political question doctrine.

127. The Court concludes that partisan gerrymandering does not “involve a textually demonstrable constitutional commitment of the issue to a coordinate political department.” *Bacon v. Lee*, 353 N.C. 696, 717, 549 S.E.2d 840, 854 (2001) (quotation marks omitted).

128. Although Article II, §§ 3 and 5, of the North Carolina Constitution direct the General Assembly to revise and reapportion state House and Senate districts after each decennial census, North Carolina courts often decide constitutional challenges to state redistricting plans. COL ¶ 125 (citing cases). These cases conclusively refute any notion that redistricting is “committed to the sole discretion of the General Assembly” without judicial review by the courts. *Cooper*, 370 N.C. at 409, 809 S.E.2d at 108 (emphasis added).

129. “[T]he General Assembly’s authority pursuant to [Article II, §§ 3 and 5] is necessarily constrained by the limits placed upon that authority by other provisions.” *Cooper*, 370 N.C. at 410, 809 S.E.2d at 109. The North Carolina Supreme Court has held that the State Constitution’s Equal Protection Clause constrains the General Assembly’s exercise of its redistricting authority pursuant to Article II, §§ 3 and 5. *Stephenson*, 355 N.C. at 376-82, 562 S.E.2d at 392-96. The people of North Carolina amended the Free Elections Clause to mandate that “all elections” not only “ought to be” but “shall be free.” N.C. Const. art. I, § 10 (emphasis added). This change “ma[d]e [it] clear” that the Free Elections Clause is a “command[] and not mere[ly] [an] admonition” to proper conduct on the part of the government. *DuMont*, 304 N.C. at 639, 286 S.E.2d at 97 (quotation marks omitted). And the North Carolina Supreme Court has held that North Carolinians must have a judicial “remedy for the violation of plaintiff’s constitutionally protected right of free speech.” *Corum*, 330 N.C. at 784, 413 S.E.2d at 290.

130. In North Carolina, cases presenting “a conflict between ... competing constitutional provisions” involve proper “constitutional interpretation, ... rather than a nonjusticiable political question arising from nothing more than a policy dispute.” *Cooper*, 370 N.C. at 412, 809 S.E.2d at 110. The Court held in *Cooper* that a challenge to a statute creating a new State Board of Elections and Ethics Enforcement did not present a political question, because the General Assembly's authority over the functions and powers of administrative agencies was limited by the Governor's constitutional duty to “take care that the laws be faithfully executed.” *Id.* at 417-18, 809 S.E.2d at 113-14. Similarly, in *News & Observer Publ'g Co. v. Easley*, the Court held that a suit seeking public records related to clemency applications was not a political question, because the Governor's power over clemency was limited by the General Assembly's power to enact laws “relative to the manner of applying for pardons.” 182 N.C. App. 14, 16, 641 S.E.2d 698, 700 (2007). So too, partisan gerrymandering claims do not present a political question because the General Assembly's redistricting authority under Article II, §§ 3 and 5 is limited by the Equal Protection Clause, the Free Elections Clause, and the Freedom of Speech and Assembly Clauses. This Court's task is “to identify where the line should be drawn” between these provisions. *Id.* at 15-16, 641 S.E.2d at 700. “There can be no doubt that [the Court has] the power and the responsibility to do so.” *Id.*

\*127 131. This case bears no resemblance to cases in which North Carolina courts have applied the political question doctrine. In *Bacon v. Lee*, for example, the North Carolina Supreme Court rejected a claim seeking a disinterested arbiter for a clemency application because the North Carolina Constitution “expressly commits the substance of the clemency power to the *sole discretion* of the Governor.” 353 N.C. at 698, 717, 549 S.E.2d at 843, 854 (emphasis added). Similarly, in *Hoke Cnty. Bd. of Educ. v. State*, the Supreme Court rejected a challenge to a statute setting the proper age for children to attend public school because the Constitution placed “the determination of the proper age for school children ... squarely ... in the hands of the General Assembly.” 358 N.C. 605, 639, 599 S.E.2d 365, 391 (2004). These cases centered on the appropriate exercise of authority under a single constitutional provision that was committed to the sole discretion of one of the political branches. Other cases cited by Legislative Defendants are similarly inapposite. *See* Leg. Defs.' Pre-Trial Brief at 17 (citing cases).

132. The Court also concludes that “satisfactory and manageable criteria [and] standards ... exist” for adjudicating partisan gerrymandering claims under the North Carolina Constitution. *Hoke*, 358 N.C. at 639, 599 S.E.2d at 391. Plaintiffs have articulated satisfactory, manageable standards for each of their claims for relief.

133. The standard for Plaintiffs' claim under the Free Elections Clause is based on the venerable history of that clause, as well as the commonsense insight that elections are not “free” where the partisan will of the mapmaker predominates over the ascertainment of the fair and truthful will of the voters. COL § II. The Court concludes this standard is satisfactory and manageable.

134. The standard for Plaintiffs' claim under the Equal Protection Clause is based on the fundamental right to “substantially equal voting power” and to “vote on equal terms.” *Stephenson*, 355 N.C. at 378-79, 562 S.E.2d at 393-94. The North Carolina Supreme Court has previously applied this long-recognized standard, including in redistricting cases. *See id.*; *Blankenship*, 363 N.C. at 522-24, 681 S.E.2d at 762-64; *Northampton Cnty.*, 326 N.C. at 747, 392 S.E.2d at 356. This standard is not only “manageable”—the North Carolina Supreme Court has already managed to apply it to resolve actual cases. The Court concludes that this standard is satisfactory and manageable.

135. The standards for Plaintiffs' claims under the Free Speech and Free Assembly Clauses are based on longstanding doctrine, which recognizes that (1) voting is an expressive and associative act, and (2) government actions that burden or discriminate against protected expression or association, are subject to strict scrutiny. COL § IV.B-D. Plaintiffs also rely on longstanding retaliation doctrine, which prohibits the government from taking adverse actions based on protected expression or association. COL § IV.E. North Carolina courts routinely apply these standards to numerous government actions and programs in various contexts. The Court concludes that these standards are satisfactory and manageable.

136. Plaintiffs' claims are justiciable notwithstanding that they arise under broad constitutional provisions that require interpretation. Courts routinely interpret broad constitutional text, adopt legal standards to operationalize such text, and then apply those legal standards to adjudicate the constitutionality of statutes. That is exactly what the North Carolina Supreme Court did in *Stephenson*. There, the Court interpreted a broad constitutional requirement that “[n]o county shall be divided in the formation of a [district],” N.C. Const. art. II, §§ 3 and 5, to require a detailed, multi-step procedure for redistricting, 355 N.C. at 383-84, 562 S.E.2d at 396-97. In adopting this standard, the Court explained that it was “not permitted to construe the [Whole County Provision] mandate as now being in some fashion unmanageable.” *Id.* at 382, 562 S.E.2d at 396. “Any attempt to do so,” the Court explained, “would be an abrogation of the Court's duty to follow a reasonable, workable, and effective interpretation that maintains the people's express wishes.” *Id.* So too here, it is the Court's responsibility to distill the Free Elections Clause, the Equal Protection Clause, and Free Speech and Free Assembly Clauses into a “reasonable, workable, and effective interpretation.”

\*128 137. In *Stephenson*, the North Carolina Supreme Court also noted that “[p]rogress demands that government should be further refined in order to best respond to changing conditions.” *Id.* (quotation marks omitted). Like the Whole County Provision, the constitutional provisions invoked by Plaintiffs in this case “provide the elasticity which ensures the responsive operation of government.” *Id.* (quotation marks omitted). As the North Carolina Supreme Court asked rhetorically more than a century ago: “Is it true that we are living in a popular government, depending upon free and fair elections, and have a constitution that prohibits the legislature from authorizing a judge or a justice of the supreme court to investigate alleged irregularities of the election officers? If this were so, elections would become a farce, and free government a failure. But, fortunately for the people and the government, in our opinion, this is not true, and fair and honest elections are to prevail in this state.” *McDonald*, 119 N.C. at 666, 26 S.E. at 134.

138. Legislative Defendants, joined by the Intervening Defendants, assert that this matter is not justiciable because when a claim, like they contend Plaintiffs' to be, is that a districting plan is “somehow harmful to democracy,” there is “no way for the Court to address these concerns under a neutral, manageable standard.” Leg. Defs.' and Int. Defs.' Proposed Findings of Fact and Conclusions of Law at para. 800. They further suggest that judicial review of political redistricting claims will amount to “freewheeling policymaking,” *id.* at 803, and that “this court is not capable of controlling the exercise of power on the part of the General Assembly,” *id.* at 806 (citing *Howell v. Howell*, 66 S.E. 571, 573 (N.C. 1911)).

139. However, this is not a case where this Court is called upon to answer whether partisan gerrymandering is harmful to democracy (although the United States Supreme Court has certainly suggested that partisan gerrymandering is indeed harmful to democracy. *See, Veith v. Jubelirer*, 541 U.S. 267, 292, 124 S. Ct. 1769, 1785 (plurality opinion); *id.* at 316, 124 S. Ct. at 1798 (Kennedy, J., concurring); *Ariz. State Legislature*, 135 S. Ct. at 2658.). Nor is it a case where this Court is called upon to engage in policy-making by comparing the enacted maps with others that might be “ideally fair” under some judicially-envisioned criteria. It is not a case that threatens the General Assembly's broad discretionary powers to create legislative districts, or threatens the General Assembly's consideration of political data for legitimate purposes when crafting such districts. Rather this is a case where the Court is called upon to take the Adopted Criteria that the General Assembly itself, in its sole discretion, established, and compare the resulting maps with those criteria to see “how far the State had gone off that track because of its politicians' effort to entrench themselves in office.” *Rucho*, 139 S. Ct. at 2521 (Kagan, J., dissenting).

140. Allowing the General Assembly discretion to establish its own redistricting criteria and craft maps accordingly is what the North Carolina Constitution requires; systematically packing and cracking voters to the extent that their votes are subordinated and devalued for no legitimate governmental purpose, but rather the purposes of entrenching a political party in power, is what the North Carolina Constitution forbids. When the Court is presented with evidence of the scope and quality proffered by Plaintiffs that shows widespread and extreme partisan gerrymandering—multiple districts showing a greater partisan skew than any of 3,000 randomly generated maps (all with the State's political geography and districting criteria built in)—the standard is indeed clear and manageable. Such extreme partisan gerrymanders violate the fundamental constitutional rights of free elections, equal protection, speech, assembly and association. It is the Court's duty to say so.

\*129 141. The separation of powers—which is expressly guaranteed by the North Carolina Constitution, art. I, § 6, and which underlies the political question doctrine—underscores the Court's obligation to craft manageable judicial standards to adjudicate partisan gerrymandering claims. Each of the constitutional provisions invoked by Plaintiffs in this case appears in the Declaration of Rights in Article I of the North Carolina Constitution. And “[t]he civil rights guaranteed by the Declaration of Rights in Article I of our Constitution are individual and personal rights entitled to protection against state action.” *Corum*, 330 N.C. at 782, 413 S.E.2d at 289. “The very purpose of the Declaration of Rights is to ensure that the violation of these rights is never permitted by anyone who might be invested under the Constitution with the powers of the State.” *Id.* at 783, 413 S.E.2d at 290. And “[i]t is the state judiciary that has the responsibility to protect the state constitutional rights of the citizens.” *Id.* Indeed, “this obligation to protect the fundamental rights of individuals is as old as the State.” *Id.*

142. This Court is not bound by dicta from *Stephenson* that “[t]he General Assembly may consider partisan advantage and incumbency protection in the application of its discretionary redistricting decisions.” 355 N.C. at 371, 562 S.E.2d at 390. To begin with, the Supreme Court in *Stephenson* stated that any such considerations “must” be “in conformity with the State Constitution.” *Id.* In this case, Plaintiffs allege that partisan gerrymandering of the 2017 Plans violates provisions of the State Constitution, and there is an extensive trial record concerning those allegations. By contrast, *Stephenson* did not involve any partisan gerrymandering claim—let alone partisan gerrymandering claims under the constitutional provisions Plaintiffs invoke here—nor was there any record concerning partisan gerrymandering. The statements in *Stephenson* were “mere obiter dictum and [are] not binding on this Court or any other.” *Taylor v. J.P. Stevens & Co.*, 300 N.C. 94, 100-01, 265 S.E.2d 144, 148 (1980). In a case with such important consequences, the Court will decide Plaintiffs' claims on the basis of the record and arguments presented by the parties here, rather than follow dicta from prior cases involving different claims and evidence.

143. In order to reject Defendants' invocation of the political question doctrine, this Court need not decide that the legal standards governing Plaintiffs' claims would apply in all future cases, including a hypothetical close case. This case is not close. The extreme, intentional, and systematic gerrymandering of the 2017 Plans runs far afoul of the legal standards set forth above, or any other conceivable legal standard that could govern Plaintiffs' constitutional claims. As Dr. Pegden testified, “[t]hese maps are so gerrymandered that no matter how you do the analysis, no matter who does the analysis, no matter which side is doing the analysis, you reach the same answer.” Tr. 1400:18-21.

144. The Court concludes that partisan gerrymandering claims are justiciable under the North Carolina Constitution.

## VI. ANY LACHES DEFENSE LACKS MERIT

145. To the extent Defendants contend that Plaintiffs' claims are barred by laches, that defense lacks merit. North Carolina courts have recognized that laches is inapplicable to continuing obligations. *See Malinak v. Malinak*, 242 N.C. App. 609, 612-13, 775 S.E.2d 915, 917 (2015). State and federal courts alike routinely refuse to apply laches in voting-rights and other constitutional cases seeking solely prospective relief. *E.g.*, *Sprague v. Casey*, 550 A.2d 184, 188-89 (Pa. 1988); *Garza v. Cnty. of Los Angeles*, 918 F.2d 763, 772 (9th Cir. 1990); *Am. Trucking Ass'ns, Inc. v. N.Y. State Thruway Auth.*, 199 F. Supp. 3d 855, 872 (S.D.N.Y. 2016), *vacated on other grounds*, 238 F. Supp. 3d 527 (S.D.N.Y. 2017); *Miller v. Bd. of Comm'rs of Miller Cnty.*, 45 F. Supp. 2d 1369, 1373 (M.D. Ga. 1998). Multiple federal courts have held that laches does not apply to partisan gerrymandering claims as a matter of law. *See League of Women Voters of Mich.*, 373 F. Supp. 3d at 909; *Ohio A. Philip Randolph Inst. v. Smith*, 335 F. Supp. 3d 988, 1001-02 (S.D. Ohio 2018).

\*130 146. Moreover, “laches is an affirmative defense which the pleading party bears the burden of proving.” *Malinak*, 242 N.C. App. at 611, 775 S.E.2d at 916. Defendants presented no evidence at trial supporting laches.

147. Defendants offered no evidence of any “unreasonable” delay in filing this case. *Id.* at 612, 775 S.E.2d at 916. Plaintiffs commenced this case just fourteen months after the 2017 Plans were enacted.

148. Even if there had been any delay, Defendants presented no evidence that it “worked to the[ir] disadvantage, injury or prejudice.” *Id.* While Defendants have suggested that the time pressures of this case prevented their experts from conducting additional or more thorough analyses, any limitation on the time for Defendants' expert reports was not the result of any delay by Plaintiffs. Rather, any such limitation resulted from Defendants' own discovery misconduct in this case, which led the Court to extend the time for Plaintiffs' expert reports at the expense of the time for Defendants. *See* Order of Mar. 25, 2019. And the Court later granted Defendants a one-week extension to file their expert reports. Order of May 1, 2019.

## VII. DEFENDANTS' FEDERAL DEFENSES LACK MERIT

149. Legislative Defendants and Intervenor Defendants raise a series of defenses under federal law, but none of these defenses has merit.

### A. The *Covington* Remedial Order Does Not Bar Changes to the 2017 Plans

150. Legislative Defendants contend that the *Covington* court's remedial order in January 2018 precludes *any* changes being made to the current House and Senate plans. Legislative Defendants argue that the *Covington* remedial order contained an “express command that the 2017 plans be used in future elections,” so as to purportedly immunize the 2017 Plans from any state-law challenge. Leg. Defs.' Pre-Trial Br. at 39.

151. Legislative Defendants made this same argument when they removed this case to federal court in December 2017, and the federal district court rejected it. The federal court held that the *Covington* remedial order “does not mandate the specific existing apportionment to the exclusion of no others.” *Common Cause v. Lewis*, 358 F. Supp. 3d 505, 512 (E.D.N.C. 2019). That holding constitutes law-of-the-case, or at minimum is entitled to controlling deference.

152. In any event, the federal court's holding was clearly correct. In the very same remedial order that Legislative Defendants now cite, the *Covington* district court made clear that the 2017 Plans *could be* challenged on state-law grounds in state court. At Legislative Defendants' urging, the *Covington* court declined to address state-law objections that the *Covington* plaintiffs had raised to the 2017 Plans, because those objections involved “unsettled questions of state law.” *Covington v. North Carolina*, 283 F. Supp. 3d 410, 428 (M.D.N.C. 2018). In declining to address such “unsettled question of state law,” the *Covington* court expressly stated that its order was “without prejudice to Plaintiffs or other litigants asserting such arguments in separate proceedings, including in “state court.” *Id.* at 447 n.9. The *Covington* court even noted that any “partisan gerrymandering objection” to the 2017 Plans “would demand development of significant new evidence and therefore [would] be more appropriately addressed in a separate proceeding.” *Id.* at 427. These statements squarely refute Legislative Defendants' contention that the *Covington* remedial order precludes any changes to the 2017 Plans based on state-law violations that a state court may find.

\*131 153. The United States Supreme Court's holding on appeal from the *Covington* remedial order eliminates any doubt on this score. The Court held that “[t]he District Court's remedial authority was ... limited to ensuring that the plaintiffs were relieved of the burden of voting in racially gerrymandered legislative districts.” 138 S. Ct. 2548, 2554 (2018). The Court explained: “Once the District Court had ensured that the racial gerrymanders at issue in this case were remedied, its proper role in North Carolina's legislative districting process was at an end.” *Id.* at 2555. The *Covington* district court thus had no authority to do anything other than ensure the curing of the prior racial gerrymandering. It did not and could not immunize the plans from future challenge.

154. The *Covington* remedial order does not preclude North Carolina courts from invalidating the 2017 Plans for violations of state law and ordering the creation of new plans.



### B. There Is No Conflict with Federal Civil Rights Laws

155. The Court also rejects Legislative Defendants' arguments that affording Plaintiffs relief on their claims would necessarily violate federal civil rights laws.

156. As described, Legislative Defendants introduced no evidence at trial to establish that any of the three *Gingles* factors, including the existence of legally sufficient racially polarized voting, is present in any area of the State or any particular districts. Legislative Defendants' failure to present any evidence to establish that the *Gingles* factors are met is “is fatal to [any] Section 2 defense” under the VRA. *Covington v. North Carolina*, 316 F.R.D. 117, 169 (M.D.N.C. 2016), *aff'd*, 137 S. Ct. 2211 (2017).

157. Indeed, Legislative Defendants affirmatively represented throughout the 2017 redistricting process that the third *Gingles* factor was *not* met. FOF § F.6. Legislative Defendants have presented no evidentiary basis for any change in that position. The Court concludes that Legislative Defendants have not established that the VRA justifies the current House or Senate districts or precludes granting Plaintiffs relief on their claims.

158. Legislative Defendants also have not established any defense under the Fourteenth or Fifteenth Amendment. Legislative Defendants argue that affording Plaintiffs relief would require intentionally lowering the BVAP in purported “crossover” districts below the level necessary to elect candidates of choice of African Americans, but Legislative Defendants again have advanced no evidence to substantiate this claim. They provided no evidence to establish any district qualifies as a “crossover district,” or that remedying the partisan gerrymander in any district or grouping would require lowering the BVAP of any crossover district below the level necessary for African Americans to elect candidates of their choice.

159. Indeed, Legislative Defendants' own expert Dr. Lewis generated estimates of the minimum BVAP needed in certain county groupings for African-American-preferred candidate to win, and Dr. Chen demonstrated that his nonpartisan simulations produce districts within each such county grouping with BVAPs above Dr. Lewis's estimates. FOF § F.6.

160. Legislative Defendants' federal equal protection defense suffers from another fatal defect—it requires a showing of an intent to discriminate against African Americans. To establish a Fourteenth or Fifteenth Amendment violation, there must be “racially discriminatory intent,” *Lee v. Va. State Bd. of Elections*, 843 F.3d 592, 603 (4th Cir. 2016), which in the redistricting context means “intentional vote dilution,” *i.e.*, “invidiously minimizing or canceling out the voting potential of racial or ethnic minorities,” *Abbott v. Perez*, 138 S. Ct. 2305, 2314 (2018) (quotation marks and alterations omitted).

**\*132** 161. The Court finds without difficulty that Plaintiffs have no intent to discriminate against racial minorities in seeking remedial plans to replace the current plans that violate state constitutional provisions. Further, Plaintiffs alone cannot adopt or approve remedial plans in this case. The remedial plans approved or adopted in this case, as ordered below, will not intentionally dilute the voting power of any North Carolina citizens.

### C. Granting Relief Will Not Violate the Fundamental Right to Vote

162. Finally, Legislative Defendants contend that affording Plaintiffs relief in this case will violate the “fundamental right to vote” under the Fourteenth Amendment. Legislative Defendants cite no federal precedent for this purported defense, but in any event it lacks merit.

163. Granting Plaintiffs relief will promote, not violate, the fundamental right to vote of North Carolina citizens. Legislative Defendants' defense operates from the misapprehension that voting rights must be a zero-sum game, such that curing discrimination against one set of citizens necessarily requires discriminating against another set of citizens. The right that Plaintiffs seek to vindicate is the right to be free from intentional discrimination, and vindicating that right in no way requires or will result in discriminating against others.

**VIII. THE COURT WILL ENJOIN USE OF THE 2017 PLANS IN FUTURE ELECTIONS AND THE GENERAL ASSEMBLY IS TO IMMEDIATELY BEGIN THE PROCESS OF REDRAWING THE RELEVANT DISTRICTS**

**A. The Court Will Require the Redrawing of Specific County Groupings**

164. For the reasons stated above, and as set forth in the decree below, the Court declares that there is no reasonable doubt the 2017 House and Senate Plans are unconstitutional under the North Carolina Constitution, and the Court enjoins their use in the 2020 primary and general elections. In particular, the Court enjoins use of the districts in the specific House and Senate county groupings as specified in the decree below.

165. The Court does not enjoin or order any relief with respect to the current House districts in Wake County. Shortly before the trial in this matter, those districts were redrawn pursuant to a separate litigation. *See NAACP v. Lewis*, No. 18 CVS 2322 (N.C. Super. Ct. Nov. 2, 2018); N.C. Sess. Laws 2019-46. Plaintiffs did not present evidence in this case regarding the new Wake County House districts and do not seek relief with respect to those districts.

166. The Court does not enjoin or order the redrawing of House Districts 57, 61, and 62 or Senate Districts 24 or 28, all of which were redrawn by the *Covington* Special Master. With respect to House District 59 and Senate District 27, for which small portions of the current districts were added by the Special Master in *Covington*, the Court will order that the remedial versions of these districts not alter any portions of these districts that were added by the Special Master, but any other portions of these districts may be redrawn. Neither House District 59 nor Senate District 27 were found by the *Covington* court to have been racially gerrymandered (under either the 2011 Plans or the 2017 Plans enacted by the General Assembly), and the *Covington* court did *not* direct the Special Master to redraw either of these districts. The Special Master nonetheless made small changes to these districts, principally to equalize population, in the course of constructing other districts he was tasked with redrawing. While this Court concludes that there is no legal impediment to redrawing any portion of House District 59 and Senate District 27, including the portions that the Special Master added, the Court nonetheless imposes the limitation set forth in this paragraph out of an abundance of caution.

**B. The Court Will Require the Use of the Adopted Criteria, with certain exceptions, and Prohibit the Use of Other Criteria in Redrawing the Districts**

**\*133** 167. As set forth in the Court's decree below, the Court will require that Remedial Maps for the House and Senate legislative district maps for the 2020 election (hereinafter "Remedial Maps") be drawn, and that the Remedial Maps comply with the criteria adopted by the General Assembly's House and Senate Redistricting Committees on August 10, 2017, with several exceptions.

168. First, with respect to "Incumbency Protection," the drafters of the Remedial Maps may take reasonable efforts to not pair incumbents unduly in the same election district. Because Representative David Lewis, Chair of the House Redistricting Committee, explained at the time of the adoption of the Adopted Criteria that the "Incumbency Protection" criteria was "simply saying that mapmakers may take reasonable efforts to not pair incumbents unduly," PX603 at 122:4-18; Tr. 1640:16-1641:12, and the criteria was understood as such, *see* PX606 at 9:24-10:1 (Sen. Hise: "The Committee adopted criteria pledging to make reasonable efforts not to double-bunk incumbents"), the Remedial Maps shall comply with this explanation and understanding.

169. Second, the "Election Data" criteria shall not be permitted in the drafting of the Remedial Maps. In other words, partisan considerations and election results data *shall not* be used in the drawing of legislative districts in the Remedial Maps. The Court likewise will prohibit any intentional attempt to favor voters or candidates of one political party.

170. In redrawing the relevant districts in the Remedial Maps, the invalidated 2017 districts may not be used as a starting point for drawing new districts, and no effort may be made to preserve the cores of invalidated 2017 districts. *See Covington*, 283 F. Supp. 3d at 431-32 (holding that remedial plan could not seek to “preserve the ‘cores’ of unconstitutional districts”).

171. Any Remedial Maps must comply with the VRA and other federal requirements concerning the racial composition of districts. The Court will afford all parties an opportunity to submit briefing, which may attach expert analysis, on whether the *Gingles* factors are met in particular counties and county groupings and/or the minimum BVAP needed in particular counties and county groupings for African-Americans to be able to elect candidates of their choice to the General Assembly. Any such submission by Legislative Defendants, however, is subject to two limitations set forth below.

a) First, if Legislative Defendants assert that the *Gingles* factors are met in any particular district or county grouping, they must not only provide evidentiary support for that assertion, but also must also show good cause why they did not compile such evidence during the 2017 redistricting process and must show good cause why they should not be held judicially estopped from arguing that the *Gingles* factors are met given their repeated representations to the *Covington* court in 2017 that the third *Gingles* factor was not met anywhere in the State.

b) Second, for districts in counties and county groupings for which Legislative Defendants' expert Dr. Lewis estimated the minimum BVAP needed for an African-American preferred candidate to prevail in a state legislative election, Legislative Defendants may not assert that the VRA or the United States Constitution requires or justifies making the BVAP of any such district higher than the minimum BVAP threshold estimated by Dr. Lewis in his Amended Table 4 (which was admitted into evidence at trial) for the relevant county or county grouping. PX773. For districts in counties and county groupings that Dr. Lewis did not analyze, Legislative Defendants may not assert that the VRA or the United States Constitution requires or justifies any minimum BVAP for the districts in that county or county grouping. The Court holds that Legislative Defendants are bound by the BVAP threshold-estimates generated by the expert they retained in this case and are estopped from departing from those estimates, which were relied upon by Plaintiffs' experts, at this late stage of the litigation.

**\*134** 172. The Court will afford the General Assembly two weeks from the date of this Order, namely through September 18, 2019, to enact Remedial Maps in conformity with this Order. *See* N.C.G.S. § 120-2.4.

173. The Court concludes that this two week period is consistent with N.C.G.S. § 120-2.4, which states that “in no event may a court impose its own substitute plan unless the court first gives the General Assembly a period of time to remedy any defects identified by the court in its findings of fact and conclusions of law. That period of time shall not be less than two weeks.” Although § 120-2.4 goes on to state that a longer period of time might be required in some instances, that longer period, the Court concludes, is applicable only if the General Assembly is not currently in session. *See* N.C. Sess. Laws 2018-146, § 4.7. The Court notes that the General Assembly, as of the date of this Order, is in session.

174. The Court will require Legislative Defendants and their agents to conduct the entire remedial process in full public view. At a minimum, that would require all map drawing to occur at public hearings, with any relevant computer screen visible to legislators and public observers. Given what transpired in 2017, the Court will prohibit Legislative Defendants and their agents from undertaking any steps to draw or revise the new districts outside of public view.

175. If Legislative Defendants wish to retain one or more individuals who are not current legislative employees to assist in the map-drawing process, the Court will require Legislative Defendants to obtain approval from the Court to engage any such individuals.

176. Notwithstanding the General Assembly having the opportunity to draw Remedial Maps in the first instance, the Court will still immediately appoint a Referee to (1) assist the Court in reviewing any Remedial Maps enacted by the General Assembly; and (2) to develop remedial maps for the Court should the General Assembly fail to enact lawful Remedial Maps within the time allowed.



### **C. The Court Will Not Stay the Remedial Process Pending Appeal**

177. The Court orders that the remedial process commence immediately upon entry of this Order, and the Court will not grant a stay of the remedial process pending appeal.

178. The central inquiry in deciding whether to grant a stay of relief pending appeal is a balancing of the prejudice and risk of irreparable harm to the parties. *See 130 of Chatham, LLC v. Rutherford Elec. Mbrshp. Corp.*, 2014 WL 3809066, at \*9 (N.C. Super. Ct. July 31, 2014).

179. Here, the balance of the equities weighs definitively against any stay. “[C]ourts evaluating redistricting challenges have generally denied motions for a stay pending appeal.” *Harris v. McCrory*, 2016 WL 6920368, at \*1 n.1 (M.D.N.C. Feb. 9, 2016) (citing cases and denying stay pending appeal). In such cases, a stay pending appeal could “risk that the State would not be able to implement” the remedial plans “in time for the [next] elections in the event that the [appellate courts] affirm[] this Court’s judgment.” *Covington*, 2018 WL 604732, at \*6 (denying stay pending appeal). “The risk of harm is particularly acute where Plaintiffs and other North Carolina voters have already cast their ballots under unconstitutional district plans” in every election this decade. *Id.* The prejudice to Plaintiffs here would be magnified because the state legislators elected in 2020 will redraw the state House and Senate districts in 2021 following the Decennial Census, substantially compounding the effects of allowing the current unconstitutional plans to be used in the 2020 elections.

\*135 180. In contrast, Legislative Defendants will suffer little if any prejudice from refusing any stay pending appeal. If Legislative Defendants ultimately prevail in an appeal, then the current districts will remain in place for the 2020 elections, and there will be no tangible harm from having allowed the remedial process to move forward while the appeal was pending. On balance, the equities and the public interest counsel strongly against a stay.

### **D. The Court Retains Discretion to Move the Primary Dates**

181. Finally, the Court holds that the remedial schedule and process that the Court has set forth in this Order should ensure that remedial plans will be in place sufficiently in advance of the current primary date of March 3, 2020. However, the Court retains authority and discretion to move the primary date for the General Assembly elections, or all of the State’s 2020 primaries, including for offices other than the General Assembly, should doing so become necessary to provide effective relief in this case.

182. While the Court concludes that moving the 2020 primaries is not needed at this date, the Court may consider doing so if necessary to grant effective relief in this case.

### **DECREE**

Having considered all of the evidence, the memoranda and arguments of counsel, and the record proper, the Court ORDERS the following:

1. The Court declares that the 2017 House and Senate Plans are unconstitutional and invalid because there is no reasonable doubt each plan violates the rights of Plaintiffs and other Democratic voters under the North Carolina Constitution’s Equal Protection Clause, art. I, § 19; the Free Elections Clause, art. I, § 10; and the Freedom of Speech and Freedom of Assembly Clauses, art. I, §§ 12 & 14.
2. Legislative Defendants and State Defendants, and their respective agents, officers, and employees, are permanently enjoined from preparing for or administering the 2020 primary and general elections for House districts in the following House county groupings:

- a. Alamance
- b. Anson-Union
- c. Brunswick-New Hanover
- d. Buncombe
- e. Cabarrus-Davie-Montgomery-Richmond-Rowan-Stanly (except that House District 66 shall not be redrawn)
- f. Cleveland-Gaston
- g. Columbus-Pender-Robeson h. Cumberland
- i. Duplin-Onslow
- j. Franklin-Nash
- k. Forsyth-Yadkin
- l. Guilford (except that House Districts 57, 61, and 62 shall not be redrawn, and any portions of House District 59 added by the *Covington* Special Master shall not be altered)
- m. Lenoir-Pitt
- n. Mecklenburg

3. Legislative Defendants and State Defendants, and their respective agents, officers, and employees, are permanently enjoined from preparing for or administering the 2020 primary and general elections for Senate districts in the following Senate county groupings:

- a) Alamance-Guilford-Randolph (except that Senate Districts 24 and 28 shall not be redrawn, and any portions of Senate District 27 added by the *Covington* Special Master shall not be altered)
- b) Bladen-Brunswick-New Hanover-Pender
- c) Buncombe-Henderson-Transylvania
- d) Davie-Forsyth
- e) Duplin-Harnett-Johnston-Lee-Nash-Sampson
- f) Franklin-Wake
- g) Mecklenburg

4. The Court will afford the General Assembly two weeks from the date of this Order, namely through September 18, 2019, to enact Remedial Maps for the House and Senate legislative districts for the 2020 election (hereinafter “Remedial Maps”) in conformity with this Order.

5. Except as otherwise noted in this Order, the following criteria shall exclusively govern the redrawing of districts in the House and Senate county groupings set forth above:

**\*136** a. *Equal Population*. The mapmakers shall use the 2010 federal decennial census data as the sole basis of population for drawing legislative districts in the Remedial Maps. The number of persons in each legislative district shall comply with the +/- 5 percent population deviation standard established by *Stephenson v. Bartlett*, 355 N.C. 354, 562 S.E. 2d 377 (2002).

b. *Contiguity*. Legislative districts shall be comprised of contiguous territory. Contiguity by water is sufficient.

c. *County Groupings and Traversals*. The mapmakers shall draw legislative districts in the Remedial Maps within county groupings as required by *Stephenson v. Bartlett*, 355 N.C. 354, 562 S.E. 2d 377 (2002) (*Stephenson I*), *Stephenson v. Bartlett*, 357 N.C. 301, 582 S.E.2d 247 (2003) (*Stephenson II*), *Dickson v. Rucho*, 367 N.C. 542, 766 S.E.2d 238 (2014) (*Dickson I*) and *Dickson v. Rucho*, 368 N.C. 481, 781 S.E.2d 460 (2015) (*Dickson II*). Within county groupings, county lines shall not be traversed except as authorized by *Stephenson I*, *Stephenson II*, *Dickson I*, and *Dickson II*. The county groupings utilized in the 2017 House and Senate Maps shall be utilized in the Remedial Maps.

d. *Compactness*. The mapmakers shall make reasonable efforts to draw legislative districts in the Remedial Maps that improve the compactness of the districts when compared to districts in place prior to the 2017 Enacted Legislative Maps. In doing so, the mapmaker may use as a guide the minimum Reock (“dispersion”) and Polsby-Popper (“perimeter”) scores identified by Richard H. Pildes and Richard G. Neimi in *Expressive Harms, “Bizarre Districts,” and Voting Rights: Evaluating Election-District Appearances After Shaw v. Reno*, 92 Mich. L. Rev. 483 (1993).

e. *Fewer Split Precincts*. The mapmakers shall make reasonable efforts to draw legislative districts in the Remedial Maps that split fewer precincts when compared to districts in place prior to the 2017 Enacted Legislative Maps.

f. *Municipal Boundaries*. The mapmakers may consider municipal boundaries when drawing legislative districts in the Remedial Maps.

g. *Incumbency Protection*. The mapmakers may take reasonable efforts to not pair incumbents unduly in the same election district.

h. *Election Data*. Partisan considerations and election results data *shall not* be used in the drawing of legislative districts in the Remedial Maps.

6. In redrawing the relevant districts in the Remedial Maps, the invalidated 2017 districts may not be used as a starting point for drawing new districts, and no effort may be made to preserve the cores of invalidated 2017 districts.

7. Any Remedial Maps must comply with the VRA and other federal requirements concerning the racial composition of districts. Within 14 days of this Order, all parties may submit briefing, which may attach expert analysis, on whether the *Gingles* factors are met in particular counties and county groupings and/or the minimum BVAP needed in particular counties and county groupings for African Americans to be able to elect candidates of their choice to the General Assembly. Any such submission by Legislative Defendants is subject to the limitations set forth in subparagraphs (a) and (b) immediately below.

a) If Legislative Defendants assert that the *Gingles* factors are met in any counties or county groupings, they shall not only provide evidentiary support for that assertion, but shall also show good cause why they did not compile such evidence during the 2017 redistricting process and shall show good cause why they should not be held judicially estopped from

arguing that the *Gingles* factors are met given their repeated representations to the *Covington* court in 2017 that the third *Gingles* factor was not met anywhere in the State.

\*137 b) For districts in counties and county groupings for which Legislative Defendants' expert Dr. Lewis estimated the minimum BVAP needed for an African-American preferred candidate to prevail in a state legislative election, Legislative Defendants shall not assert that the VRA or the United States Constitution requires or justifies making the BVAP of any such district higher than the minimum BVAP threshold estimated by Dr. Lewis in his Amended Table 4 (PX773) for the relevant county or county grouping. For districts in counties and county groupings that Dr. Lewis did not analyze, Legislative Defendants shall not assert that the VRA or the United States Constitution requires or justifies any minimum BVAP for the districts in that county or county grouping.

8. Legislative Defendants and their agents shall conduct the entire remedial process in full public view. At a minimum, this requires all map drawing to occur at public hearings, with any relevant computer screen visible to legislators and public observers. Legislative Defendants and their agents shall not undertake any steps to draw or revise the new districts outside of public view.
9. To the extent that Legislative Defendants wish to retain one or more individuals who are not current legislative employees to assist in the map-drawing process, Legislative Defendants must seek and obtain prior approval from the Court to engage any such individuals.
10. Notwithstanding the General Assembly having the opportunity to draw Remedial Plans in the first instance, the Court, by subsequent Court Order, shall promptly appoint a Referee to (1) assist the Court in reviewing any Remedial Maps enacted by the General Assembly; and (2) to develop remedial maps for the Court should the General Assembly fail to enact lawful Remedial Maps within the time allowed.
14. No later than September 6, 2019, the parties may submit to the Court names and qualifications of suggested referees. The Court will thereafter appoint a referee by subsequent Court Order.
15. The Court orders that the remedial process will commence immediately upon entry of this Order.
17. The Court, on its own motion, denies a stay of the remedial process pending appeal.
18. The Court retains jurisdiction to move the primary date for the General Assembly elections, or all of the State's 2020 primaries, including for offices other than the General Assembly, should doing so become necessary to provide effective relief in this case.

SO ORDERED, this the 3rd day of September, 2019.

*/s/ Paul C. Ridgeway*

Paul C. Ridgeway, Superior Court Judge

*/s/ Joseph N. Crosswhite*

Joseph N. Crosswhite, Superior Court Judge

*/s/ Alma L. Hinton*

Alma L. Hinton, Superior Court Judge

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861 S.E.2d 885 (Mem)  
Supreme Court of North Carolina.

COMMUNITY SUCCESS INITIATIVE;

Justice Served NC, Inc.; Wash Away  
Unemployment; North Carolina  
State Conference of the NAACP;  
Timothy Locklear; Drakarus Jones;  
Susan Marion; Henry Harrison;  
Ashley Cahoon; and Shakita Norman

v.

Timothy K. MOORE, in His Official  
Capacity as Speaker of the North Carolina  
House of Representatives; Philip E. Berger,  
in His Official Capacity as President  
Pro Tempore of the North Carolina  
Senate; the North Carolina State Board  
of Elections; Damon Circosta, in His  
Official Capacity as Chairman of the North  
Carolina State Board of Elections; Stella  
Anderson, in Her Official Capacity as  
Secretary of the North Carolina State  
Board of Elections; Kenneth Raymond,  
in His Official Capacity as Member of the  
North Carolina State Board of Elections;  
Jeff Carmon in His Official Capacity as  
Member of the North Carolina State  
Board of Elections; and David C. Black,  
in His Official Capacity as Member of the  
North Carolina State Board of Elections

No. 331P21-1

|  
September 10, 2021

WAKE COUNTY, Tenth District

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Kellie Z. Myers, Trial Court Administrator.

**\*886 ORDER**

On Plaintiffs' Petition for a Writ of Supersedeas and  
Emergency Motion for a Temporary Stay, this Court orders  
that the status quo be preserved pending defendant's appeal  
of the expanded preliminary injunction issued initially by the  
trial court on 23 August 2021 in open court by maintaining  
in effect the original preliminary injunction issued on 4  
September 2020 as it was understood at the time and  
implemented for the November 2020 elections. Further,  
the Court orders that the Court of Appeals stay issued 3  
September 2021 be implemented prospectively only, meaning  
that any person who registered to vote at a time when it was

legal for that person to register under then-valid court orders as they were interpreted at the time, shall remain legally registered voters. The North Carolina Board of Elections shall not remove from the voter registration database any person legally registered under the expanded preliminary injunction between 23 August 2021 and 3 September 2021, and those persons are legally registered voters until further Order.

In all other respects, Plaintiffs' Petition for a Writ of Supersedeas and Emergency Motion for a Temporary Stay is denied without prejudice.

By order of the Court in conference, this the 10th day of September 2021

**All Citations**

861 S.E.2d 885 (Mem)

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STATE OF NORTH CAROLINA  
WAKE COUNTY

IN THE GENERAL COURT OF JUSTICE  
SUPERIOR COURT DIVISION  
19 CVS 012667

REBECCA HARPER, *et al.*  
*Plaintiffs,*

v.

Representative DAVID R. LEWIS,  
in his official capacity as Senior  
Chairman of the House Standing  
Committee on Redistricting, *et al.*,  
*Defendants.*

ORDER

On November 20, 2019, this Court, on its own motion, enjoined the filing period for the 2020 congressional primary elections in North Carolina until further order of the Court.

The Court, in its discretion and pursuant to its inherent authority, hereby ORDERS that the injunction entered by the Court on November 20, 2019, delaying the filing period for Congressional candidates until further order of this Court is set aside, and it is FURTHER ORDERED that the North Carolina State Board of Elections may immediately accept for filing any notices of candidacy from candidates seeking party primary nominations for the House of Representatives of the United States for congressional districts as defined by the newly-enacted Session Law 2019-249.

SO ORDERED, this the 2nd day of December, 2019.

/s/ Paul C. Ridgeway

Paul C. Ridgeway, Superior Court Judge

/s/ Joseph N. Crosswhite

Joseph N. Crosswhite, Superior Court Judge

/s/ Alma L. Hinton

Alma L. Hinton, Superior Court Judge



**CERTIFICATE OF SERVICE**

I hereby certify that a copy of the foregoing document was served upon the parties by emailing a copy thereof to the address below, in accordance with the October 10, 2019 Case Management Order:

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This the 2<sup>nd</sup> day of December 2019.



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STATE OF NORTH CAROLINA  
WAKE COUNTY

IN THE GENERAL COURT OF JUSTICE  
SUPERIOR COURT DIVISION  
19 CVS 012667

REBECCA HARPER, *et al.*  
*Plaintiffs,*  
  
v.  
  
Representative DAVID R. LEWIS,  
in his official capacity as Senior  
Chairman of the House Standing  
Committee on Redistricting, *et al.*,  
*Defendants.*

ORDER

THIS MATTER comes before the undersigned three-judge panel upon its own motion pursuant to its inherent authority and discretion to manage proceedings before the Court.

Plaintiffs in this litigation challenge the congressional districts established by an act of the North Carolina General Assembly in 2016, N.C. Sess. Laws 2016-1 (hereinafter S.L. 2016-1), claiming the districts violate the rights of Plaintiffs and all Democratic voters in North Carolina under the North Carolina Constitution.

On October 28, 2019, this Court granted Plaintiffs’ motion for a preliminary injunction, enjoining Legislative Defendants and State Defendants from preparing for or administering the 2020 primary and general elections for Congressional Representatives under the 2016 congressional districts established by S.L. 2016-1. Plaintiffs seek to permanently enjoin the future use of the 2016 congressional districts and have filed a motion for summary judgment, scheduled to be heard on December 2, 2019.

In this Court's October 28, 2019, Order granting the preliminary injunction, the Court noted that summary judgment or trial may not be needed in the event the General Assembly, on its own initiative, acted immediately and with all due haste to enact new

congressional districts. The Court suggested the General Assembly proceed in a manner that ensured full transparency and allowed for bipartisan participation and consensus that would result in congressional districts more likely to achieve the constitutional objective of allowing for those elections to be conducted more freely and honestly to ascertain, fairly and truthfully, the will of the people. On November 15, 2019, new congressional districts were established by an act of the General Assembly. N.C. Sess. Laws 2019-249 (hereinafter S.L. 2019-249). Shortly thereafter on November 15, 2019, Legislative Defendants filed a motion for summary judgment arguing Plaintiffs’ present action—challenging the constitutionality of S.L. 2016-1—is moot, and Plaintiffs filed a response and motion for expedited review of the newly-enacted congressional districts.

Section 163-106.2 of our General Statutes provides that “[c]andidates seeking party primary nominations for the following offices shall file their notice of candidacy with the State Board no earlier than 12:00 noon on the first Monday in December and no later than 12:00 noon on the third Friday in December preceding the primary: . . . Members of the House of Representatives of the United States.” N.C.G.S. § 163-106.2(a). In the Court’s October 28, 2019, Order, the Court retained jurisdiction to adjust the State’s 2020 congressional primary elections should doing so become necessary to provide effective relief in this case. In light of the recent developments in this litigation, including the enactment of S.L. 2019-249, Legislative Defendants’ motion for summary judgment, and Plaintiffs’ motion for the Court’s review of S.L. 2019-249, and to allow the Court sufficient opportunity to fully consider the significant issues presented by the parties, the Court will enjoin the filing period for the 2020 congressional primary elections in North Carolina until further order of the Court.

Accordingly, the Court, in its discretion and pursuant to its inherent authority,  
hereby ORDERS that:

1. On the Court's own motion, the filing period provided by N.C.G.S. § 163-106.2(a) is hereby enjoined for only the 2020 congressional primary elections, and the North Carolina State Board of Elections shall not accept for filing any notices of candidacy from candidates seeking party primary nominations for the House of Representatives of the United States until further order of the Court.
2. Any party to this action may respond to Plaintiffs' motion for review of the newly-enacted congressional districts, S.L. 2019-249, by submitting a response brief to the Court by 11:59 p.m. on November 22, 2019, in the manner set forth in the Case Management Order. Plaintiffs shall have until 11:59 p.m. on November 26, 2019, to submit a reply to any response brief in the manner set forth in the Case Management Order.
3. The Court's November 1, 2019, Order establishing a briefing schedule for summary judgment motions remains in effect.
4. The following will be heard by the Court at 9:00 a.m. on December 2, 2019:
  - a. Plaintiffs' motion for summary judgment;
  - b. Legislative Defendants' motion for summary judgment; and,
  - c. Plaintiffs' motion for review of S.L. 2019-249.

SO ORDERED, this the 20th day of November, 2019.

**/s/ Paul C. Ridgeway**

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Paul C. Ridgeway, Superior Court Judge

**/s/ Joseph N. Crosswhite**

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Joseph N. Crosswhite, Superior Court Judge

**/s/ Alma L. Hinton**

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Alma L. Hinton, Superior Court Judge

As of: December 5, 2021 8:17 PM Z

## Harper v. Lewis

Superior Court of North Carolina, Wake County

October 28, 2019, Decided; October 28, 2019, Filed

19 CVS 012667

### Reporter

2019 N.C. Super. LEXIS 122 \*

REBECCA HARPER, et al. Plaintiffs, v. Representative DAVID R. LEWIS, in his official capacity as Senior Chairman of the House Standing Committee on Redistricting, et al., Defendants.

**Judges:** [\*1] Paul C. Ridgeway, Superior Court Judge. Joseph N. Crosswhite, Superior Court Judge. Alma L. Hinton, Superior Court Judge.

### Opinion

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#### ORDER ON INJUNCTIVE RELIEF

THIS MATTER came on for hearing on October 24, 2019, before the undersigned three-judge panel upon Plaintiffs' Motion for Preliminary Injunction, filed September 30, 2019. All adverse parties to this action received the notice required by [Rule 65 of the North Carolina Rules of Civil Procedure](#).

#### Procedural History

On February 19, 2016, the current North Carolina congressional districts (hereinafter "2016 congressional districts") were established by an act of the General Assembly, N.C. Sess. Laws 2016-1 (hereinafter "S.L. 2016-1"), as a result of litigation in federal court over the congressional districts originally drawn in 2011. On September 27, 2019, Plaintiffs filed a verified complaint

in Superior Court, Wake County, seeking a declaration that the 2016 congressional districts violate the rights of Plaintiffs and all Democratic voters in North Carolina under the North Carolina Constitution's Free Elections Clause, Art. I, § 10; Equal Protection Clause, Art. I, § 19; and Freedom of Speech and Freedom of Assembly Clauses, Art. I, §§ 12 & 14. Plaintiffs seek to enjoin the future use of the 2016 congressional districts. On September [\*2] 30, 2019, this action was assigned to the undersigned panel by the Chief Justice of the Supreme Court of North Carolina.

On September 30, 2019, Plaintiffs filed a motion for a preliminary injunction seeking to bar Defendants from administering, preparing for, or moving forward with the 2020 primary and general elections in North Carolina for the United States House of Representatives using the 2016 congressional districts. Plaintiffs also filed a motion for expedited briefing and resolution of Plaintiffs' motion for a preliminary injunction. On October 2, 2019, Defendants North Carolina State Board of Elections and its members (collectively hereinafter "State Defendants") notified the Court that, among other things, candidate filing for congressional primaries is set to begin on December 2, 2019. On October 9, 2019, a motion to intervene was filed by three incumbent Congressional Representatives seeking to intervene in this action in both their capacity as Representatives and as residents and voters in three of the congressional districts

challenged in Plaintiffs' verified complaint.

On October 10, 2019, the Court granted in part Plaintiffs' motion for expedited briefing, establishing [\*3] a briefing schedule on Plaintiff's motion for preliminary injunction and setting for hearing Plaintiffs' motion for preliminary injunction and the motion to intervene.

On October 14, 2019, Defendants Representative David R. Lewis, Senator Ralph E. Hise, Jr., Speaker Timothy K. Moore, President Pro Tempore Philip E. Berger, Senator Warren Daniel, and Senator Paul Newton (hereinafter "Legislative Defendants") removed this case to the United States District Court for the Eastern District of North Carolina. On October 21, 2019, State Defendants and Legislative Defendants each filed in federal court a brief in response to Plaintiffs' motion for preliminary injunction in accordance with the Court's October 10, 2019 order. Plaintiffs notified and provided to the Court the Defendants' briefs on October 22, 2019, and, on the same date, the federal court remanded this case to state court.

On October 22, 2019, the Congressional Representatives seeking to intervene in this case submitted a brief in response to Plaintiffs' motion for preliminary injunction. On October 23, 2019, Plaintiffs filed a motion to strike the Congressional Representatives' response brief, the Congressional Representatives [\*4] submitted a response brief to Plaintiffs' motion, and Plaintiffs submitted a brief in reply to that response brief. Additionally, on October 23, 2019, Plaintiffs submitted a brief in reply to Legislative Defendants' brief in response to Plaintiffs' motion for preliminary injunction.

These matters came on to be heard on October 24, 2019, during which time the Court granted the Congressional Representatives (hereinafter "Intervenor-Defendants") permissive intervention and notified the

parties that Intervenor-Defendants' response brief would be considered by the Court in its discretion. Plaintiffs' motion for preliminary injunction was taken under advisement.

The Court, having considered the pleadings, motions, briefs and arguments of the parties, supplemental materials submitted by the parties, pertinent case law, and the record proper and court file, hereby finds and concludes, for the purposes of this Order, as follows.

#### Political Question Doctrine

Legislative Defendants contend Plaintiffs' claims—challenges to the validity of an act of the General Assembly that apportions or redistricts the congressional districts of this State—present non-justiciable political questions. Such claims are [\*5] within the statutorily-provided jurisdiction of this three-judge panel, [N.C.G.S. § 1-267.1](#), and the Court concludes that partisan gerrymandering claims specifically present justiciable issues, as distinguished from non-justiciable political questions. Such claims fall within the broad, default category of constitutional cases our courts are empowered and obliged to decide on the merits, and not within the narrow category of exceptional cases covered by the political question doctrine. Indeed, as the Supreme Court of the United States recently explained, partisan gerrymandering claims are not "condemn[ed] . . . to echo in the void," because although the federal courthouse doors may be closed, "state constitutions can provide standards and guidance for state courts to apply." [Rucho v. Common Cause, 139 S. Ct. 2484, 2507 \(2019\)](#).<sup>1</sup>

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<sup>1</sup> Likewise, Legislative Defendants' and Intervenor-Defendants' contentions that federal law—i.e., the Elections clause and [Supremacy clause of the United States Constitution](#)—serves as a bar in state court to Plaintiffs' action seeking to enjoin the



### Standing of Plaintiffs

Legislative Defendants and Intervenor-Defendants contend that Plaintiffs lack standing to pursue their claims in this action. The North Carolina Constitution, however, provides: "All courts shall be open; every person for an injury done him in his lands, goods, person, or reputation shall have remedy by due course of law; and right and justice shall be administered without favor, denial, or delay." [\*N.C. Const. art. I, § 18\*](#). "[B]ecause [\*6] North Carolina courts are not constrained by the 'case or controversy' requirement of Article III of the United States Constitution, our State's standing jurisprudence is broader than federal law." [\*Davis v. New Zion Baptist Church\*, 811 S.E.2d 725, 727 \(N.C. Ct. App. 2018\)](#) (quotation marks omitted); *accord* [\*Goldston v. State\*, 361 N.C. 26, 35, 637 S.E.2d 876, 882 \(2006\)](#) ("While federal standing doctrine can be instructive as to general principles . . . and for comparative analysis, the nuts and bolts of North Carolina standing doctrine are not coincident with federal standing doctrine.").

The North Carolina Supreme Court has broadly interpreted Article I, § 18 to mean that "[a]s a general matter, the North Carolina Constitution confers standing on those who suffer harm." [\*Mangum v. Raleigh Bd. of Adjustment\*, 362 N.C. 640, 642, 669 S.E.2d 279, 281 \(2008\)](#). The "gist of the question of standing" under North Carolina law is whether the party seeking relief has "alleged such a personal stake in the outcome of the controversy as to assure that concrete adverseness which sharpens the presentation of issues upon which

the court so largely depends for illumination of difficult constitutional questions." [\*Goldston\*, 361 N.C. at 30, 637 S.E.2d at 879](#) (quoting [\*Stanley v. Dep't of Conservation & Dev.\*, 284 N.C. 15, 28, 199 S.E.2d 641, 650 \(1973\)](#)). Although the North Carolina Supreme Court "has declined to set out specific criteria necessary to show standing in every case, [it] has emphasized two factors in its cases examining standing: (1) the presence of a legally cognizable injury; and [\*7] (2) a means by which the courts can remedy that injury." [\*Davis\*, 811 S.E.2d at 727-28](#).

Plaintiffs in this case have standing to challenge the congressional districts at issue because Plaintiffs have shown a likelihood of "a personal stake in the outcome of the controversy," [\*Goldston\*, 361 N.C. at 30, 637 S.E.2d at 879](#), and a likelihood that the 2016 congressional districts cause them to "suffer harm," [\*Mangum\*, 362 N.C. at 642, 669 S.E.2d at 281](#).

### Applicable Legal Standards

At its most basic level, partisan gerrymandering is defined as: "the drawing of legislative district lines to subordinate adherents of one political party and entrench a rival party in power." [\*Ariz. State Legislature v. Ariz. Indep. Redistricting Comm'n\*, 135 S. Ct. 2652, 2658 \(U.S. 2016\)](#). Partisan gerrymandering operates through vote dilution—the devaluation of one citizen's vote as compared to others. A mapmaker draws district lines to "pack" and "crack" voters likely to support the disfavored party. *See generally* [\*Gill v. Whitford\*, 138 S. Ct. 1916 \(2018\)](#).

Plaintiffs claim the 2016 congressional districts are partisan gerrymanders that violate the rights of Plaintiffs and all Democratic voters in North Carolina under the North Carolina Constitution's Free Elections Clause, Art. I, § 10; Equal Protection Clause, Art. I, § 19; and

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2016 congressional districts on state constitutional grounds is equally unavailing. Our state courts have jurisdiction to hear and decide claims that acts of the General Assembly apportioning or redistricting the congressional districts of this State run afoul of the North Carolina Constitution.



Freedom of Speech and Freedom of Assembly Clauses, Art. I, §§ 12 & 14. Extreme partisan gerrymandering violates each of these provisions of the North Carolina Constitution. **[\*8]** *See Common Cause v. Lewis*, 18-CVS-014001, slip. op. at 298-331 (N.C. Sup. Ct. Sept. 3, 2019).

### *Free Elections Clause*

The North Carolina Constitution, in the Declaration of Rights, Article I, § 10, declares that "[a]ll elections shall be free." Our Supreme Court has long recognized the fundamental role of the will of the people in our democratic government: "Our government is founded on the will of the people. Their will is expressed by the ballot." [\*People ex rel. Van Bokkelen v. Canaday\*, 73 N.C. 198, 220 \(1875\)](#). In particular, our Supreme Court has directed that in construing provisions of the Constitution, "we should keep in mind that this is a government of the people, in which the will of the people--the majority--legally expressed, must govern." [\*State ex rel. Quinn v. Lattimore\*, 120 N.C. 426, 428, 26 S.E. 638, 638 \(1897\)](#) (citing [\*N.C. Const. art. I, § 2\*](#)). Therefore, our Supreme Court continued, because elections should express the will of the people, it follows that "all acts providing for elections, should be liberally construed, that tend to promote a fair election or expression of this popular will." *Id.* "[F]air and honest elections are to prevail in this state." [\*McDonald v. Morrow\*, 119 N.C. 666, 673, 26 S.E. 132, 134 \(1896\)](#). Moreover, in giving meaning to the Free Elections Clause, this Court's construction of the words contained therein must therefore be broad to comport with the following Supreme Court mandate: "We think the object of all elections **[\*9]** is to ascertain, fairly and truthfully, the will of the people--the qualified voters." [\*Hill v. Skinner\*, 169 N.C. 405, 415, 86 S.E. 351, 356 \(1915\)](#) (quoting [\*R. R. v. Comrs.\*, 116 N.C. 563, 568, 21 S.E. 205, 207 \(1895\)](#)).

As such, the meaning of the Free Elections Clause is that elections must be conducted freely and honestly to ascertain, fairly and truthfully, the will of the people. In contrast, extreme partisan gerrymandering—namely redistricting plans that entrench politicians in power, that evince a fundamental distrust of voters by serving the self-interest of political parties over the public good, and that dilute and devalue votes of some citizens compared to others—is contrary to the fundamental right of North Carolina citizens to have elections conducted freely and honestly to ascertain, fairly and truthfully, the will of the people. *See Common Cause*, 18-CVS-014001, slip. op. at 298-307.

### *Equal Protection Clause*

The Equal Protection Clause of the North Carolina Constitution guarantees to all North Carolinians that "[n]o person shall be denied the equal protection of the laws." [\*N.C. Const., art. I, § 19\*](#). Our Supreme Court has held that North Carolina's Equal Protection Clause protects "the fundamental right of each North Carolinian to *substantially equal voting power*." [\*Stephenson v. Bartlett\*, 355 N.C. 354, 379, 562 S.E.2d 377, 394 \(2002\)](#) (emphasis added). "It is well settled in this State that 'the right to vote on *equal terms* is a fundamental right!'" *Id.* at 378, 562 S.E.2d at 393 (quoting [\*Northampton Cnty. Drainage Dist. No. One v. Bailey\*, 326 N.C. 742, 747, 392 S.E.2d 352, 356 \(1990\)](#) (emphasis added)). **[\*10]**

Although the North Carolina Constitution provides greater protection for voting rights than the federal Equal Protection Clause, our courts use the same test as federal courts in evaluating the constitutionality of challenged classifications under an equal protection analysis. [\*Duggins v. N.C. State Bd. of Certified Pub. Accountant Exam'rs\*, 29-4 N.C. 120, 131, 240 S.E.2d 406, 413 \(1978\)](#); [\*Richardson v. N.C. Dep't of Corr.\*, 345](#)

[N.C. 128, 134, 478 S.E.2d 501, 505 \(1996\)](#). Generally, this test has three parts: (1) intent, (2) effects, and (3) causation. First, the plaintiffs challenging a districting plan must prove that state officials' "predominant purpose" in drawing district lines was to "entrench [their party] in power" by diluting the votes of citizens favoring their rival. [Ariz. State Legis., 135 S. Ct. at 2658](#). Second, the plaintiffs must establish that the lines drawn in fact have the intended effect by "substantially" diluting their votes. [Common Cause v. Rucho, 318 F. Supp. 3d 777, 861 \(M.D.N.C. 2018\)](#). Finally, if the plaintiffs make those showings, the State must provide a legitimate, non-partisan justification (*i.e.*, that the impermissible intent did not cause the effect) to preserve its map. [Rucho, 139 S. Ct. at 2516](#) (Kagan, J., dissenting).

Generally, partisan gerrymandering runs afoul of the State's obligation to provide all persons with equal protection of law because, by seeking to diminish the electoral power of supporters of a disfavored party, a partisan gerrymander treats individuals who support candidates **[\*11]** of one political party less favorably than individuals who support candidates of another party. *Cf. Lehr v. Robertson, 463 U.S. 248, 265, 103 S. Ct. 2985 (1983)* ("The concept of equal justice under law requires the State to govern impartially.")

As such, extreme partisan gerrymandering runs afoul of the North Carolina Constitution's guarantee that no person shall be denied the equal protection of the laws. *See Common Cause*, 18-CVS-014001, slip. op. at 307-17.

#### *Freedom of Speech and Freedom of Assembly Clauses*

The Freedom of Speech Clause in [Article I, § 14 of the North Carolina Constitution](#) provides that "[f]reedom of speech and of the press are two of the great bulwarks of liberty and therefore shall never be restrained." The

Freedom of Assembly Clause in Article I, § 12 provides, in relevant part, that "[t]he people have a right to assemble together to consult for their common good, to instruct their representatives, and to apply to the General Assembly for redress of grievances."

"There is no right more basic in our democracy than the right to participate in electing our political leaders"—including, of course, the right to "vote." [McCutcheon v. FEC, 572 U.S. 185, 191, 134 S. Ct. 1434, 1440 \(2014\)](#) (plurality op.). "[P]olitical belief and association constitute the core of those activities protected by the First Amendment." [Elrod v. Burns, 427 U.S. 347, 356, 96 S. Ct. 2673, 2681 \(1976\)](#). In North Carolina, the right to assembly encompasses the right of association. [Feltman v. City of Wilson, 238 N.C. App. 246, 253, 767 S.E.2d 615, 620 \(2014\)](#). Moreover, **[\*12]** "citizens form parties to express their political beliefs and to assist others in casting votes in alignment with those beliefs." [Libertarian Party of N.C. v. State, 365 N.C. 41, 49, 707 S.E.2d 199, 204-05 \(2011\)](#). And "for elections to express the popular will, the right to assemble and consult for the common good must be guaranteed." John V. Orth, *The North Carolina State Constitution* 48 (1995).

It is "axiomatic" that the government may not infringe on protected activity based on the individual's viewpoint. [Rosenberger v. Rector & Visitors of Univ. of Va., 515 U.S. 819, 828, 115 S. Ct. 2510, 2516 \(1995\)](#). The guarantee of free expression "stands against attempts to disfavor certain subjects or viewpoints." [Citizens United v. FEC, 558 U.S. 310, 340, 130 S. Ct. 876, 898 \(2010\)](#). Viewpoint discrimination is *most* insidious where the targeted speech is political; "in the context of political speech, . . . [b]oth history and logic" demonstrate the perils of permitting the government to "identif[y] certain preferred speakers" while burdening the speech of "disfavored speakers." *Id. at 340-41, 130 S. Ct. at 899*.

The government may not burden the "speech of some elements of our society in order to enhance the relative voice of others" in electing officials. [\*McCutcheon\*, 572 U.S. at 207, 134 S. Ct. at 1450](#); *see also Winborne v. Easley*, 136 N.C. App. 191, 198, 523 S.E.2d 149, 154 (1999) ("political speech" has "such a high status" that free speech protections have their "fullest and most urgent application" in this context (quotations marks omitted)). The government also may not retaliate [\*13] based on protected speech and expression. *See McLaughlin*, 240 N.C. App. at 172, 771 S.E.2d at 579-80. Courts carefully guard against retaliation by the party in power. *See Elrod*, 427 U.S. at 356, 96 S. Ct. at 2681; *Branti v. Finkel*, 445 U.S. 507, 100 S. Ct. 1287 (1980); *Rutan v. Republican Party of Ill.*, 497 U.S. 62, 110 S. Ct. 2729 (1990). When patronage or retaliation restrains citizens' freedoms of belief and association, it is "at war with the deeper traditions of democracy embodied in the First Amendment." *Elrod*, 427 U.S. at 357, 96 S. Ct. at 2682 (quotation marks omitted).

When a legislature engages in extreme partisan gerrymandering, it identifies certain preferred speakers (e.g. Republican voters) while targeting certain disfavored speakers (e.g. Democratic voters) because of disagreement with the views they express when they vote. Then, disfavored speakers are packed and cracked into legislative districts with the aim of diluting their votes and, in cracked districts, ensuring that these voters are significantly less likely, in comparison to favored voters, to be able to elect a candidate who shares their views. Moreover, a legislature that engages in extreme partisan gerrymandering burdens the associational rights of disfavored voters to "instruct their representatives, and to apply to the General Assembly for redress of grievances." [\*N.C. Const. art. I, § 12\*](#). As such, extreme partisan gerrymandering runs afoul of these important guarantees in the North Carolina Constitution [\*14] of the freedom of speech and the

right of the people of our State to assemble together to consult for their common good, to instruct their representatives, and to apply to the General Assembly for redress of grievances. *See Common Cause*, 18-CVS-014001, slip. op. at 317-31.

#### Injunctive Relief

"It is well settled in this State that the courts have the power, and it is their duty in proper cases, to declare an act of the General Assembly unconstitutional—but it must be plainly and clearly the case. If there is any reasonable doubt, it will be resolved in favor of the lawful exercise of their powers by the representatives of the people." [\*City of Asheville v. State\*, 369 N.C. 80, 87-88, 794 S.E.2d 759, 766 \(2016\)](#) (quoting [\*Glenn v. Bd. of Educ.\*, 210 N.C. 525, 529-30, 187 S.E. 781, 784 \(1936\)](#)); [\*State ex rel. Martin v. Preston\*, 325 N.C. 438, 449, 385 S.E.2d 473, 478 \(1989\)](#).

"The purpose of a preliminary injunction is ordinarily to preserve the *status quo* pending trial on the merits. Its issuance is a matter of discretion to be exercised by the hearing judge after a careful balancing of the equities." [\*State ex rel. Edmisten v. Fayetteville Street Christian School\*, 299 N.C. 351, 357, 261 S.E.2d 908, 913 \(1980\)](#). A preliminary injunction is an "extraordinary remedy" and will issue "only (1) if a plaintiff is able to show *likelihood* of success on the merits of his case and (2) if a plaintiff is likely to sustain irreparable loss unless the injunction is issued, or if, in the opinion of the Court, issuance is necessary for the protection of a [\*15] plaintiffs rights during the course of litigation." [\*A.E.P. Industries, Inc. v. McClure\*, 308 N.C. 393, 401, 302 S.E.2d 754, 759-60 \(1983\)](#) (emphasis in original); *see also N.C.G.S. § 1A-1, Rule 65(b)*. When assessing the preliminary injunction factors, the trial judge "should engage in a balancing process, weighing potential harm to the plaintiff if the injunction is not issued against the

potential harm to the defendant if injunctive relief is granted. In effect, the harm alleged by the plaintiff must satisfy a standard of relative substantiality as well as irreparability." *Williams v. Greene*, 36 N.C. App. 80, 86, 243 S.E.2d 156, 160 (1978).

### *Status Quo*

The 2011 congressional districts, enacted by the General Assembly on July 28, 2011, were struck down as unconstitutional racial gerrymanders and ordered to be redrawn on February 5, 2016. See *Harris v. McCrory*, 159 F. Supp. 3d 600, 627 (M.D.N.C. 2016). As a result, the 2016 congressional districts were then enacted by the General Assembly on February 19, 2016. N.C. Sess. Laws 2016-1. Plaintiffs' challenge to the 2016 congressional districts is a challenge to S.L. 2016-1 as enacted; hence, the status quo which Plaintiffs desire to preserve is the existing state of affairs prior to the enactment of S.L. 2016-1. Therefore, the existing state of affairs—i.e., the status quo—prior to the enactment of S.L. 2016-1 was the period in which no lawful congressional district map for [\*16] North Carolina existed absent the enactment of a remedial map by the General Assembly.

### *Plaintiffs are Likely to Succeed on the Merits*

Quite notably in this case, the 2016 congressional districts have already been the subject of years-long litigation in federal court arising from challenges to the districts on partisan gerrymandering grounds. See *Rucho*, 318 F. Supp. 3d 777. As such, there is a detailed record of both the partisan intent and the intended partisan effects of the 2016 congressional districts drawn with the aid of Dr. Thomas Hofeller and enacted by the General Assembly. See *Rucho*, 318 F. Supp. 3d at 803-10 (detailing the history of the drawing and enactment of the 2016 congressional districts); see

also Declaration of Elisabeth S. Theodore (attaching as exhibits a number of documents from the record in federal court); *Rucho*, 139 S. Ct. at 2491-93.

For instance, Dr. Hofeller was directed by legislators "to use political data — precinct-level election results from all statewide elections, excluding presidential elections, dating back to January 1, 2008 — in drawing the remedial plan," and was further instructed to "use that political data to draw a map that would maintain the existing partisan makeup of the state's congressional delegation, which, as elected [\*17] under the racially gerrymandered plan, included 10 Republicans and 3 Democrats." *Rucho*, 318 F. Supp. 3d at 805 (internal citations omitted).

As another example, the redistricting committee approved several criteria for the map-drawing process, including the use of past election data (i.e., "Political Data") and another labeled "Partisan Advantage," which was defined as: "The partisan makeup of the congressional delegation under the enacted plan is 10 Republicans and 3 Democrats. The Committee shall make reasonable efforts to construct districts in the 2016 Contingent Congressional Plan to maintain the current partisan makeup of North Carolina's congressional delegation." *Id.* at 807. In explaining these two criteria, Representative David Lewis "'acknowledged freely that this would be a political gerrymander,' which he maintained was 'not against the law,'" *id.* at 808 (citation omitted), while also going on to state that he "propose[d] that [the Committee] draw the maps to give a partisan advantage to 10 Republicans and 3 Democrats because [he] d[id] not believe it[ would be] possible to draw a map with 11 Republicans and 2 Democrats," *id.* (alterations in original).

Moreover, when drawing the 2016 congressional districts, Dr. Hofeller [\*18] used "an aggregate variable he created to predict partisan performance" all while

"constantly aware of the partisan characteristics of each county, precinct, and VTD." [\*Id. at 805-06.\*](#)

Finally, the redistricting committee, and ultimately the General Assembly as a whole, approved the 2016 congressional districts by party-line vote. [\*Id. at 809.\*](#)

In light of the above, this Court agrees with Plaintiffs and finds there is a substantial likelihood that Plaintiffs will prevail on the merits of this action by showing beyond a reasonable doubt that the 2016 congressional districts are extreme partisan gerrymanders in violation of the North Carolina Constitution's Free Elections Clause, Art. I, § 10; Equal Protection Clause, Art. I, § 19; and Freedom of Speech and Freedom of Assembly Clauses, Art. I, §§ 12 & 14.

*Plaintiffs Will Suffer Irreparable Loss Unless the Injunction is Issued*

The loss to Plaintiffs' fundamental rights guaranteed by the North Carolina Constitution will undoubtedly be irreparable if congressional elections are allowed to proceed under the 2016 congressional districts. As discussed above, Plaintiffs' have shown a likelihood of succeeding on the merits of their claims that these districts violate multiple fundamental rights guaranteed [\*19] by the North Carolina Constitution. And as Defendants have emphasized, the 2020 primary elections for these congressional districts—the final congressional elections of this decade before the 2020 census and subsequent decennial redistricting—are set to be held in March of 2020 with the filing period beginning December 2, 2019.

As such, this Court finds that Plaintiffs are likely to sustain irreparable loss to their fundamental rights guaranteed by the North Carolina Constitution unless the injunction is issued, and likewise, issuance is necessary for the continued protection of Plaintiffs'

fundamental rights guaranteed by the North Carolina Constitution during the course of the litigation.

*A Balancing of the Equities Weighs in Favor of Plaintiffs*

On one hand, Legislative Defendants contend a general harm to them will result from issuing the injunction because the General Assembly will be prevented from effectuating an act of the General Assembly. On the other hand, Plaintiffs' and all North Carolinians' fundamental rights guaranteed by the North Carolina Constitution will be irreparably lost, as discussed above, if the injunction is not granted. Simply put, the people of our State will [\*20] lose the opportunity to participate in congressional elections conducted freely and honestly to ascertain, fairly and truthfully, the will of the people. The Court finds that this specific harm to Plaintiffs absent issuance of the injunction outweighs the potential harm to Legislative Defendants if the injunction is granted.

Legislative Defendants and Intervenor Defendants also contend the issuance of the injunction will result in disruption, confusion, and uncertainty in the electoral process for them, candidates, election officials, and the voting public. But, again, such a proffered harm does not outweigh the specific harm to Plaintiffs from the irreparable loss of their fundamental rights guaranteed by the North Carolina Constitution. Moreover, while State Defendants would prefer not to move elections or otherwise change the current schedule for the 2020 congressional primary election, they recognize that proceeding under the 2016 congressional districts "would require the Board to administer an election that violates the constitutional rights of North Carolina voters" and acknowledge that the election schedule can be changed if necessary. State Defs. Response Brief at 2. In that [\*21] vein, State Defendants agree with Plaintiffs that "it would be appropriate for this Court to



issue an injunction that relieves the Board of any duty to administer elections using an unconstitutionally gerrymandered congressional redistricting plan." *Id.*

Finally, Legislative Defendants and Intervenor-Defendants contend Plaintiffs simply waited too long to bring their challenge to the 2016 congressional districts in state court. Plaintiffs, however, filed this action in state court only a matter of months after litigation reached its conclusion in federal court, at a time still prior to the candidate filing period. While the timing of Plaintiffs' action does weigh against Plaintiffs, the Court does not find that the timing of Plaintiffs' filing of this action should bar them from seeking equitable relief in the form of the requested preliminary injunction.

Consequently, after weighing the potential harm to Plaintiffs if the injunction is not issued against the potential harm to Defendants if injunctive relief is granted, this Court concludes the balance of the equities weighs in Plaintiffs' favor. Indeed, the harm alleged by Plaintiffs is both substantial and irreparable should congressional [\*22] elections in North Carolina proceed under the 2016 congressional districts.

### Conclusion

Under these circumstances, the Court, in its discretion and after a careful balancing of the equities, concludes that the requested injunctive relief shall issue in regard to the 2016 congressional districts. The Court further concludes that security is required of Plaintiffs pursuant to [Rule 65\(c\) of the North Carolina Rules of Civil Procedure](#) to secure the payment of costs and damages in the event it is later determined this relief has been improvidently granted.

This Court recognizes the significance and the urgency of the issues presented by this litigation, particularly when considering the impending 2020 congressional

primary elections and all accompanying deadlines, details, and logistics. This Court also is mindful of its responsibility not to disturb an act of the General Assembly unless it plainly and clearly, without any reasonable doubt, runs counter to a constitutional limitation or prohibition. For these reasons, the Court will, upon the forthcoming filing of Plaintiffs' motion for summary judgment, provide for an expedited schedule so that Plaintiffs' dispositive motion may be heard prior to the close of the filing period for the 2020 primary [\*23] election.

This Court observes that the consequences, as argued by Legislative Defendants and Intervenor-Defendants, resulting from a delay in the congressional primary—*e.g.*, decreased voter turnout, additional costs and labor for the State Board of Elections—would be both serious and probable should the primary schedule be adjusted as a result of this Order and Plaintiffs' ultimate success on the merits of this action. But as discussed above, should Plaintiffs prevail through motion or trial, these consequences pale in comparison to voters of our State proceeding to the polls to vote, yet again, in congressional elections administered pursuant to maps drawn in violation of the North Carolina Constitution.

This Court, however, notes that these disruptions to the election process need not occur, nor may an expedited schedule for summary judgment or trial even be needed, should the General Assembly, on its own initiative, act immediately and with all due haste to enact new congressional districts. This Court does not presume, at this early stage of this litigation, to have any authority to compel the General Assembly to commence a process of enacting new Congressional districts, and this [\*24] Court recognizes that such a decision is wholly within the discretion of a co-equal branch of government. The General Assembly, however, has recently shown it has the capacity to enact new legislative districts in a short amount of time in a

transparent and bipartisan manner, and that the resulting legislative districts, having been approved by this Court, are districts that are more likely to achieve the constitutional objective of allowing for elections to be conducted more freely and honestly to ascertain, fairly and truthfully, the will of the people. *See Common Cause v. Lewis*, 18-CVS-014001 (N.C. Sup. Ct., October 28, 2019). The Court respectfully urges the General Assembly to adopt an expeditious process, as it did in response to this Court's mandate in the September 3, 2019, Judgment in *Common Cause v. Lewis*, that ensures full transparency and allows for bipartisan participation and consensus to create new congressional districts that likewise seek to achieve this fundamental constitutional objective.

Accordingly, the Court, in its discretion and for good cause shown, hereby ORDERS that Plaintiffs' motion for preliminary injunction is GRANTED as follows:

1. Legislative Defendants [\*25] and State Defendants, their officers, agents, servants, employees and attorneys and any person in active concert or participation with them are hereby enjoined from preparing for or administering the 2020 primary and general elections for congressional districts under the 2016 congressional districts established by S.L. 2016-1.
2. Security in an amount of \$1,000 shall be required of Plaintiffs pursuant to [Rule 65](#).
3. The Court retains jurisdiction to move the primary date for the congressional elections, or all of the State's 2020 primaries, including for offices other than Congressional Representatives, should doing so become necessary to provide effective relief in this case.

SO ORDERED, this the 28th day of October, 2019.

/s/ Paul C. Ridgeway

Paul C. Ridgeway, Superior Court Judge

/s/ Joseph N. Crosswhite

Joseph N. Crosswhite, Superior Court Judge

/s/ Alma L. Hinton

Alma L. Hinton, Superior Court Judge

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