

1 Whereas, in 2019, a team of mathematicians sponsored by Duke University made
2 publicly available computer code that can be used to generate the total set of optimum cluster
3 maps; and

4 Whereas, the General Assembly must choose one cluster map for each chamber from
5 among multiple options for the purpose of decennially revising districts for the Senate and the
6 House of Representatives of the General Assembly; and

7 Whereas, the selection of a cluster map for revising districts for the Senate and the
8 House of Representatives of the General Assembly has the potential to influence the partisan
9 distribution of future General Assemblies; and

10 Whereas, objective criteria need to be established and used for selecting one optimum
11 cluster map for each chamber of the General Assembly from among the several options; Now,
12 therefore,

13 The General Assembly of North Carolina enacts:

14 **SECTION 1.** For purposes of this act, the following definitions shall apply:

- 15 (1) Census Bureau. – The United States Bureau of the Census.
16 (2) Cluster. – A grouping of one or more counties that is capable of containing a
17 whole number of legislative districts.
18 (3) Cluster code. – A shorthand cluster descriptor consisting of four numbers and
19 a colon (##:##). The first two spaces indicate the number of districts that can
20 be contained in a cluster. The last two spaces indicate the number of counties
21 that form a cluster.
22 (4) Cluster count. – The number of unique clusters in a cluster map.
23 (5) Cluster map. – A statewide map depicting a complete set of clusters for use in
24 revising districts for the Senate or the House of Representatives of the General
25 Assembly.
26 (6) Cluster map set. – The total collection of optimum cluster maps for
27 consideration prior to revising districts for the Senate and the House of
28 Representatives of the General Assembly.
29 (7) Data from the 2020 decennial census. – Population data needed for legislative
30 redistricting that the Census Bureau is required to provide to the State under
31 P.L. 94-171, including the population of the State and population amounts for
32 each county therein.
33 (8) Ideal cluster population. – The number determined by multiplying the ideal
34 district population by the number of whole districts that can be contained in a
35 cluster.
36 (9) Ideal district population. – The number determined by dividing the number of
37 members in a plan into the population of the State as reported in the 2020
38 decennial census.
39 (10) Monocluster (MC). – A cluster that contains a single district of the Senate or
40 the House of Representatives of the General Assembly and is within five
41 percent (5%) of its ideal cluster population. In a monocluster, the geographic
42 boundary of the cluster and the district that it supports are the same. Thus, all
43 measurable attributes, e.g., compactness and political performance, for the
44 cluster and the district it contains are the same.
45 (11) Optimum cluster map. – A cluster map that meets the requirements of Sections
46 3(3) and 5(3) of Article II of the Constitution of North Carolina, as interpreted
47 by the Supreme Court of North Carolina, including the requirement that no
48 cluster within the map may deviate from the ideal cluster population by more
49 or less than five percent (5%).
50 (12) Plan. – A plan for revising districts for the Senate or the House of
51 Representatives of the General Assembly.

1 (13) Polycluster (PC). – A cluster that contains two or more districts of the Senate
2 or the House of Representatives of the General Assembly and is within five
3 percent (5%) of its ideal cluster population. In a polycluster, the geographic
4 boundary of the cluster and the boundaries of the districts contained therein
5 are not the same. All measurable attributes of a polycluster, e.g., compactness
6 and political performance, may differ from those of the districts contained
7 therein.

8 (14) Super cluster. – A collection of clusters formed from a subset of counties in
9 which the counties can be combined in alternate ways to form one or more
10 complete sets of county clusters. A super cluster may consist of monoclusters,
11 polyclusters, or both.

12 **SECTION 2.** For the purpose of establishing cluster maps to serve as the basis for
13 the apportionment of seats in the Senate and the House of Representatives of the General
14 Assembly following the return of the 2020 decennial census, in order to nominate and elect
15 members of the two chambers, the following process shall be used:

16 (1) Within 14 days of the date on which the Census Bureau provides data from
17 the 2020 decennial census to the State, the Legislative Services Officer shall
18 provide that data to the State Board of Elections. From that data, the State
19 Board shall develop a cluster map set. The State Board may, in its discretion,
20 delegate all or a portion of the responsibility of developing a cluster map set
21 to the Department of Mathematics at Duke University or the School of
22 Government at the University of North Carolina at Chapel Hill.

23 (2) Within 28 days of the date on which the Census Bureau provides data from
24 the 2020 decennial census to the State, the Executive Director of the State
25 Board of Elections (Executive Director) shall provide the cluster map set,
26 obtained pursuant to subdivision (1) of this section, to the President Pro
27 Tempore of the Senate, the Speaker of the House of Representatives, the
28 Principal Clerk of the Senate, and the Principal Clerk of the House of
29 Representatives.

30 (3) Within 29 days of the date on which the Census Bureau provides data from
31 the 2020 decennial census to the State, the Principal Clerk of the Senate and
32 the Principal Clerk of the House of Representatives shall make available the
33 cluster map set to the members of the Senate and the House of
34 Representatives, including the chairs of any standing or select redistricting
35 committee.

36 (4) Within 30 days of the date on which the Census Bureau provides data from
37 the 2020 decennial census to the State, the chair or chairs of any committee
38 tasked with reapportioning districts for the Senate or the House of
39 Representatives shall post the cluster map set on the website for the General
40 Assembly for comment and review by the public. Comments shall be received
41 for a period of at least five days, and the committee or committees shall take
42 no action during that time.

43 (5) Within 37 days of the date on which the Census Bureau provides data from
44 the 2020 decennial census to the State, all committees tasked with
45 reapportioning districts for the Senate and the House of Representatives of the
46 General Assembly shall meet jointly for the purpose of receiving in-person
47 public comments regarding the selection of a cluster map from the cluster map
48 set provided by the State Board of Elections.

49 (6) When selecting a cluster map, no committee tasked with reapportioning
50 districts for the Senate and the House of Representatives of the General
51 Assembly shall consider the following factors:

- 1 a. Incumbency protection. – The committee or committees shall not
- 2 make any effort to avoid pairing an incumbent member of the Senate
- 3 or the House of Representatives with another incumbent when
- 4 selecting a cluster map.
- 5 b. Partisan advantage. – The committee or committees shall not make
- 6 any effort to favor one political party over another when selecting a
- 7 cluster map.
- 8 (7) The Executive Director shall ensure that each cluster map in the cluster map
- 9 set provided to the General Assembly pursuant to subdivision (2) of this
- 10 section includes the following:
- 11 a. A notes section on each cluster map that identifies the total number of
- 12 clusters, monocusters, and polyclusters. Cluster maps shall be
- 13 provided in Portable Document Format.
- 14 b. Shapefiles and block assignment files for each cluster map.
- 15 c. A table for each cluster map that contains the following data in
- 16 separate columns:
- 17 1. An identifying number for the cluster map.
- 18 2. An identifier for each cluster.
- 19 3. A list of all counties in each cluster.
- 20 4. The cluster code for each cluster.
- 21 5. The population of each cluster.
- 22 6. The percentage by which the cluster varies from its ideal
- 23 cluster population.

24 **SECTION 3.** This act is effective when it becomes law.