### 42.4 Redistricting standards.

1. Legislative and congressional districts shall be established on the basis of population.
a. Senatorial and representative districts, respectively, shall each have a population as nearly equal as practicable to the ideal population for such districts, determined by dividing the number of districts to be established into the population of the state reported in the federal decennial census. Senatorial districts and representative districts shall not vary in population from the respective ideal district populations except as necessary to comply with one of the other standards enumerated in this section. In no case shall the quotient, obtained by dividing the total of the absolute values of the deviations of all district populations from the applicable ideal district population by the number of districts established, exceed one percent of the applicable ideal district population. No senatorial district shall have a population which exceeds that of any other senatorial district by more than five percent, and no representative district shall have a population which exceeds that of any other representative district by more than five percent.
$b$. Congressional districts shall each have a population as nearly equal as practicable to the ideal district population, derived as prescribed in paragraph " $a$ " of this subsection. No congressional district shall have a population which varies by more than one percent from the applicable ideal district population, except as necessary to comply with Article III, section 37 of the Constitution of the State of Iowa.
$c$. If a challenge is filed with the supreme court alleging excessive population variance among districts established in a plan adopted by the general assembly, the general assembly has the burden of justifying any variance in excess of one percent between the population of a district and the applicable ideal district population.
2. To the extent consistent with subsection 1, district boundaries shall coincide with the boundaries of political subdivisions of the state. The number of counties and cities divided among more than one district shall be as small as possible. When there is a choice between dividing local political subdivisions, the more populous subdivisions shall be divided before the less populous, but this statement does not apply to a legislative district boundary drawn along a county line which passes through a city that lies in more than one county.
3. Districts shall be composed of convenient contiguous territory. Areas which meet only at the points of adjoining corners are not contiguous.
4. Districts shall be reasonably compact in form, to the extent consistent with the standards established by subsections 1,2 , and 3 . In general, reasonably compact districts are those which are square, rectangular, or hexagonal in shape, and not irregularly shaped, to the extent permitted by natural or political boundaries. If it is necessary to compare the relative compactness of two or more districts, or of two or more alternative districting plans, the tests prescribed by paragraphs " $a$ " and " $b$ " shall be used.
a. Length-width compactness. The compactness of a district is greatest when the length of the district and the width of the district are equal. The measure of a district's compactness is the absolute value of the difference between the length and the width of the district. In general, the length-width compactness of a district is calculated by measuring the distance from the northernmost point or portion of the boundary of a district to the southernmost point or portion of the boundary of the same district and the distance from the westernmost point or portion of the boundary of the district to the easternmost point or portion of the boundary of the same district. The absolute values computed for individual districts under this paragraph may be cumulated for all districts in a plan in order to compare the overall compactness of two or more alternative districting plans for the state, or for a portion of the state.
b. Perimeter compactness. The compactness of a district is greatest when the distance needed to traverse the perimeter boundary of a district is as short as possible. The total perimeter distance computed for individual
districts under this paragraph may be cumulated for all districts in a plan in order to compare the overall compactness of two or more alternative districting plans for the state, or for a portion of the state.
5. No district shall be drawn for the purpose of favoring a political party, incumbent legislator or member of Congress, or other person or group, or for the purpose of augmenting or diluting the voting strength of a language or racial minority group. In establishing districts, no use shall be made of any of the following data:
a. Addresses of incumbent legislators or members of Congress.
$b$. Political affiliations of registered voters.
c. Previous election results.
$d$. Demographic information, other than population head counts, except as required by the Constitution and the laws of the United States.
6. In order to minimize electoral confusion and to facilitate communication within state legislative districts, each plan drawn under this section shall provide that each representative district is wholly included within a single senatorial district and that, so far as possible, each representative and each senatorial district shall be included within a single congressional district. However, the standards established by subsections 1 through 5 shall take precedence where a conflict arises between these standards and the requirement, so far as possible, of including a senatorial or representative district within a single congressional district.
7. Each bill embodying a plan drawn under this section shall provide that any vacancy in the general assembly which takes office in the year ending in one, occurring at a time which makes it necessary to fill the vacancy at a special election held pursuant to section 69.14 , shall be filled from the same district which elected the senator or representative whose seat is vacant.
8. Each bill embodying a plan drawn under this section shall include provisions for election of senators to the general assemblies which take office in the years ending in three and five, which shall be in conformity with Article III, section 6, of the Constitution of the State of Iowa. With respect to any plan drawn for consideration in a year ending in one, those provisions shall be substantially as follows:
a. Each senatorial district in the plan which is not a holdover senatorial district shall elect a senator in the year ending in two for a four-year term commencing in January of the year ending in three. If an incumbent senator who was elected to a four-year term which commenced in January of the year ending in one, or was subsequently elected to fill a vacancy in such a term, is residing in a senatorial district in the plan which is not a holdover senatorial district on the first Wednesday in February of the year ending in two, that senator's term of office shall be terminated on January 1 of the year ending in three.
b. Each holdover senatorial district in the plan shall elect a senator in the year ending in four for a four-year term commencing in January of the year ending in five.
(1) If one and only one incumbent state senator is residing in a holdover senatorial district in the plan on the first Wednesday in February of the year ending in two, and that senator meets all of the following requirements, the senator shall represent the district in the senate for the general assembly commencing in January of the year ending in three:
(a) The senator was elected to a four-year term which commenced in January of the year ending in one or was subsequently elected to fill a vacancy in such a term.
(b) The senatorial district in the plan which includes the place of residence of the state senator on the date of the senator's last election to the senate is the same as the holdover senatorial district in which the senator
resides on the first Wednesday in February of the year ending in two, or is contiguous to such holdover senatorial district. Areas which meet only at the points of adjoining corners are not contiguous.
(2) Each holdover senatorial district to which subparagraph (1) is not applicable shall elect a senator in the year ending in two for a two-year term commencing in January of the year ending in three. However, if more than one incumbent state senator is residing in a holdover senatorial district on the first Wednesday in February of the year ending in two, and, on or before the first Wednesday in February of the year ending in two, all but one of the incumbent senators resigns from office effective no later than January of the year ending in three, the remaining incumbent senator shall represent the district in the senate for the general assembly commencing in January of the year ending in three. A copy of each resignation must be filed in the office of the secretary of state no later than five p.m. on the third Wednesday in February of the year ending in two.
$c$. For purposes of this subsection:
(1) "Holdover senatorial district" means a senatorial district in the plan which is numbered with an even or odd number in the same manner as senatorial districts, which were required to elect a senator in the year ending in zero, were numbered.
(2) "Incumbent state senator" means a state senator who holds the office of state senator on the first Wednesday in February of the year ending in two, and whose declared residence on that day is within the district from which the senator was last elected.
$d$. The secretary of state shall prescribe a form to be completed by all senators to declare their residences as of the first Wednesday in February of the year ending in two. The form shall be filed with the secretary of state no later than five p.m. on the first Wednesday in February of the year ending in two.
[C81, § 42.4]
90 Acts, ch $1244, \S 1 ; 94$ Acts, ch $1042, \S 1 ; 94$ Acts, ch 1179, §3; 2006 Acts, ch $1010, \S 35,36 ; 2007$ Acts, ch 78, §6, 7; 2008 Acts, ch 1032, §8
