

GIS for Democracy: Toward A Solution Against Gerrymandering

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Abstract

Political redistricting is periodically necessary to maintain and promote democracy with population growth and migration. The United States constitution establishes majority rule for democracy, but it also protects minority rights. There is provision that a minority group may form a political district so that the group can have representation in the government. Each state has the right to political redistricting accordingly. Since 1812, this has been referred to as gerrymandering. It was not easy to do and was not considered a serious issue. However, the Geographic Information Systems (GIS) today have made the task much easier, leading to the practice of extreme gerrymandering in the past decade. The practice is detrimental to the health of democracy, but it is difficult to legally disallow. We propose a scheme in which the GIS becomes part of the solution. The proposed scheme is to make the process of political redistricting public, to be scrutinized and debated, and perhaps voted for or against by the voting population. The politicians as well as concerned citizens will need to use the GIS. The paper calls for the promotion of GIS education for democracy, with the need for relevant data in redistricting to be publicly available.

Keywords: Gerrymandering, Political Redistricting, GIS, Geographic Information System.

An updated manuscript may be found at <https://jisar.org>