GVPT 373

Redistricting for GIS

Class: Tu-Th 11-12:15, Tydings 2102 Professor: Jim Gimpel
Office: Morrill 1106C Hours: Th 9-11 AM

This class is dedicated to learning to use GIS tools to study and draw political and legislative districts, but also other kinds. A major part of the course will be the lab sessions held on Thursdays. The Tuesday session of the class will be focused on the political, legal and constitutional background of redistricting. We will begin by studying major reapportionment decisions during the 1960s, and move forward to examine the claims and rulings in more recent Court decisions. The goal for the course will be to merge the constitutional/legal background that has enunciated various redistricting values with the concepts as they have been operationalized by map makers responsible for producing redistricting plans.

The 2020 U.S. Census will soon be in the field. If reapportionment were done today, with nearly eight years of population change baked in, we would be able to forecast the result pretty accurately. The additional two years of data will not change things appreciably from where they stand now. Western and Southern states will gain congressional seats (especially, FL, TX, NC, AZ, CO, OR). The Upper Midwest and Northeast will lose seats (especially PA, OH, MI, MN, IL, NY, RI). Once the number of representatives each State receives is determined, each State has the responsibility of creating specific congressional and state legislative districts from which representatives are to be elected. This is the process of redistricting.

How the districts electing members to those seats will be drawn is of great concern to citizens, political parties and officeholders alike. Several pending lawsuits reflect a concern amplified by elected officials and allied interest groups about partisan line drawing. In particular, a forthcoming decision by the Supreme Court in the Wisconsin case, *Gill v. Whitford*, claims that the Wisconsin legislative district lines have been excessively gerrymandered, distorted by Republicans in that state to award them a much larger share of legislative seats than the number of votes they receive.

Up to now, the Supreme Court has not invalidated a districting map due to the drawing of politically one-sided districts. That might change soon. Even if the Supreme Court does not rule against partisan gerrymandering in Gill v. Whitford, the redistricting effort in 2020 will have to be very cognizant of the conflicting principles that are considered in any plan of representation. If partisan gerrymandering is struck down, then any new plan must carefully consider the underlying mix of partisans along with the other criteria that have been considered in the past.

Just what are those other criteria? This class will devote time to studying each of them:

1. Compactness and contiguity
2. Equal population
3. Unifying communities of interest

4. Maintaining counties and cities as whole units (minimizing splits)
5. Minority descriptive representation
6. Incumbency protection
7. Fairness to the major political parties
8. Competitive elections
9. Congruence or continuity with previous districts

It is impossible to accomplish all of these goals at once. This research will lay out the difficult trade-offs posed by these conflicting criteria and show how an emphasis on one goal will sacrifice the others, using maps from several example states.

Focal States

Our research will focus primarily on the following states: Wisconsin, Pennsylvania, North Carolina, Maryland, and perhaps Texas, Florida and Michigan. All of these states have had continuing controversies surrounding their redistricting schemes and will likely continue to face litigation after 2020.

Homework and Exams

We will have 8 homework assignments and two exams. The homework will be due the week after it is assigned at the beginning of the lab session on Thursday. More information will be provided about the exams as we move into the term. The final grade for the course will be divided about equally between the homework grades and the exam grades.

Court Cases

We will be reading portions and significant passages from court rulings on the following major court cases that have shaped redistricting law. The most important excerpts can be found online.

1. *Gomillion v. Lightfoot* (1960) for example, find it here: https://supreme.justia.com/cases/federal/us/364/339/case.html
2. *Baker v. Carr* (1962)
3. *Wesberry v. Sanders* (1964)
4. *Reynolds v. Simms* (1964)
5. *Lucas v. Forty-Fourth General Assembly of Colorado* (1964)
6. *Fortson v. Dorsey* (1965)
7. *Avery v. Midland County* (1968)
   And *Hadley v. Junior College District of Metropolitan Kansas City (1970)*
8. *Mahan v. Howell* (1973)
9. *White v. Weiser* (1973)
10. *Karcher v. Daggett* (1983)
11. *Thornburg v. Gingles* (1986)
12. *Davis v. Bandemer* (1986)

Court Cases (cont'd):

13. *Shaw v. Reno* (1993)
14. *Miller v. Johnson* (1995)
15. *Hunt v. Cromartie* (1999)
16. *Easley v. Cromartie* (2001)
17. *Vieth v. Jubelirer* (2004)
18. *League of United Latin American Citizens v. Perry* (2006)
19. *Alabama Legislative Black Caucus v. Alabama* (2015)
20. *Arizona State Legislature v. Arizona Independent Redistricting Commission* (2015)
21. *Evenwel v. Abbott* (2016)
22. *Bethune Hill v. Virginia State Board of Elections* (2017)
23. *Cooper v. Harris* (2017)

Other Reading:

Excerpts from: David Butler and Bruce Cain. 1992. *Congressional Redistricting: Comparative and Theoretical Perspectives*. New York, NY: Macmillan.

Districting Extension for ArcGIS. Pdf Here:
http://help.arcgis.com/en/redistricting/pdf/Districting_for_ArcGIS_Help.pdf

iRedistrict User Guide. To be made available.

Guide to Lectures and Lab Sessions (Approximate)			
Week	**Dates**	**Lecture**	**Lab**
Week 1	Jan 25	Constitution	No lab this week
Week 2	Jan 30-Feb 1	1960s cases	ArcGIS for Redistricting Equal Population; *Homework 1: Drawing equal population districts*
Week 3	Feb 6-8	1970s cases	Incumbency Protection/Continuity with Previous Districts: *Homework 2: Maximize partisan advantage for D or R*
Week 4	Feb 13-15	1980s cases	Minority Descriptive Representation *Homework 3: Provide for minority descriptive representation*
Week 5	Feb 20-22	NC and race	Fairness to Parties/Competitiveness *Homework 4: Drawing politically balanced districts*

Guide to Lectures and Lab Sessions, cont'd.			
Week	**Dates**	**Lecture**	**Lab**
Week 6	Feb 27-March 1	More recent cases	Communities of Interest/Minimizing Splits
Week 7	March 6-8	Pending cases	Bringing it All Together: *Homework 5: Assess your plan*
Week 8	March 13-15	**Exam 1**	*No lab this week*
Week 9	March 20-22	Spring Break	Spring Break
Week 10	March 27-29	Comparing Many Plans	Working with iRedistrict
Week 11	April 3-5	Redistricting and Political Polarization	Compactness and Equal Population *Homework 6: Produce an iRedistrict plan*
Week 12	April 10-12	Redistricting and Turnout	Adding Other Criteria Homework 7*: iRedistrict with minority representation*
Week 13	April 17-19	Redistricting, Political Parties and Campaigns	Working with Conflicting Criteria
Week 14	April 24-26	Issues in State Legislative Redistricting	Resolving Conflicts: Homework 8: iRedistrict to balance minority representation and partisan balance
Week 15	May 1-3	Local Level Issues in Redistricting	Local Districts: Other Types of Districts
Week 16	May 8-10	Review	Lab for Completing all Assignments
Final Exam	**May 12 Saturday**	**8:00-10:00am**	