Data and the State

PUBPOL 2130 / INFO 3130



Communities and redistricting

Announcements

- Project guidelines are up on github
- Draft/outline due **Thursday** May 1 by end of day we'll have an upload link for the group work, and you'll get to do individual submissions as well through gradescope
 - "includes planned use of data sources, beginnings of lit review, indications of work in progress" 12 pts for team submission, 4 pts EC for personal supplement (narrative about what you've done personally)
 - Show that the project is seriously underway!
 - Including preliminary data work is strongly recommended
 - Details/length flexible
- We'll post signup for Apr 30-May 3 team meetings later today 2 pts

Assessment

Elements of project	regular credit	extra credit
Complete poll by Monday April 14, noon	2	
Poll submitted early (by Sunday April 13, 5pm)		2
Outline / Draft – includes planned use of data sources, beginnings of lit review, indications of work in progress	12	
Personal supplement to outline/draft		4
Meeting in Apr 30-May 3 window to discuss progress	2	
Paper: your featured data product	4	
Paper: good use of data sources	4	
Paper: lit review	4	
Paper: report overall	8	
Paper: your supplement, including additional plots	4	4
Paper: working, well-commented Colab/Python notebook	4	
TOTAL	44	10

Note: extra credit doesn't get added to your report total, but goes into a separate score that I will use to bump up your grade if you are close to a grade cutoff at the end of the term.



Community

- THICK: "I have called my tiny community a world, and so its isolation made it; and yet there was among us but a half-awakened common consciousness, sprung from common joy and grief, at burial, birth, or wedding; from a common hardship in poverty, poor land, and low wages; and, above all, from the sight of the Veil that hung between us and Opportunity." W.E.B. Du Bois, The Souls of Black Folk.
- THIN: Shared measurable attributes, like income, transit use, etc
- Thick vs thin description comes from anthropology (e.g., Clifford Geertz on culture in 1970s) and permeates social science

shared needs and worries

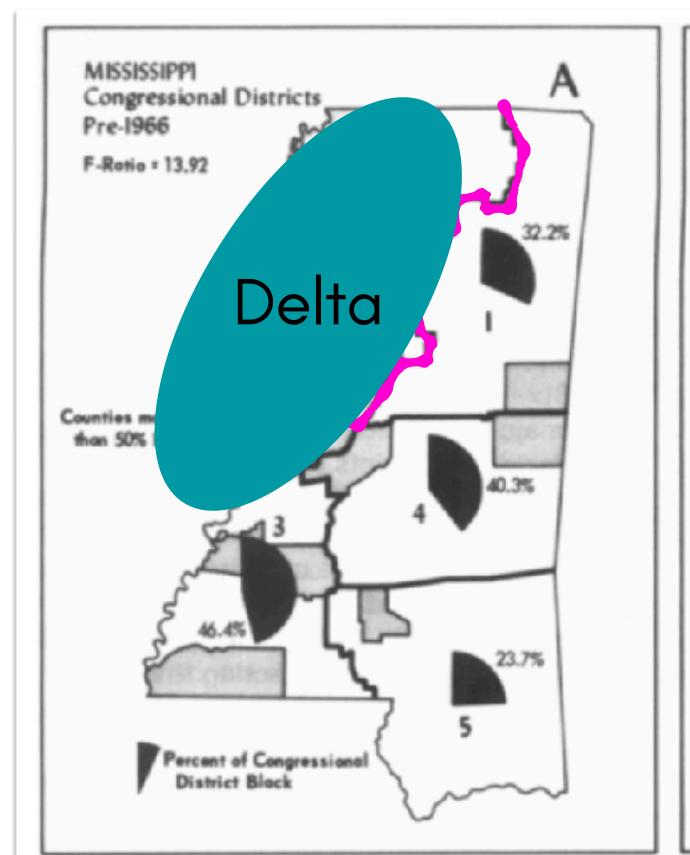


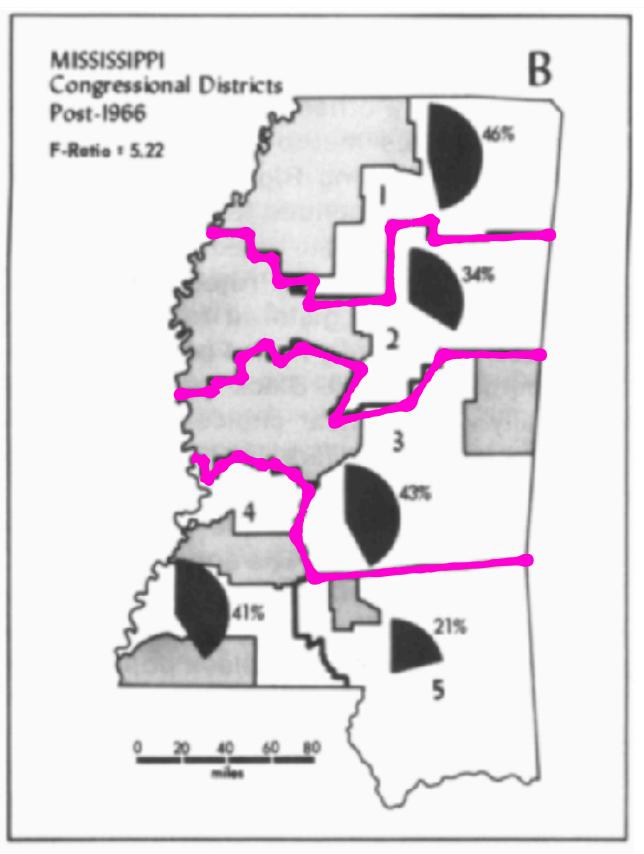
shared interests/industries



What is redistricting?

- Dividing up a locality for an administrative purpose: services, schools, elections
- There are 90,000 local governments in the U.S.!
- But when you know a lot about preferences of voters, this is obviously manipulable through gerrymandering





"Communities of interest"

- Idaho: "To the maximum extent possible, districts shall preserve traditional neighborhoods and local communities of interest."
- Oregon: "Each district, as nearly as practicable, shall ... Not divide communities of common interest."
- South Dakota: "Protection of communities of interest by means of compact and contiguous districts."

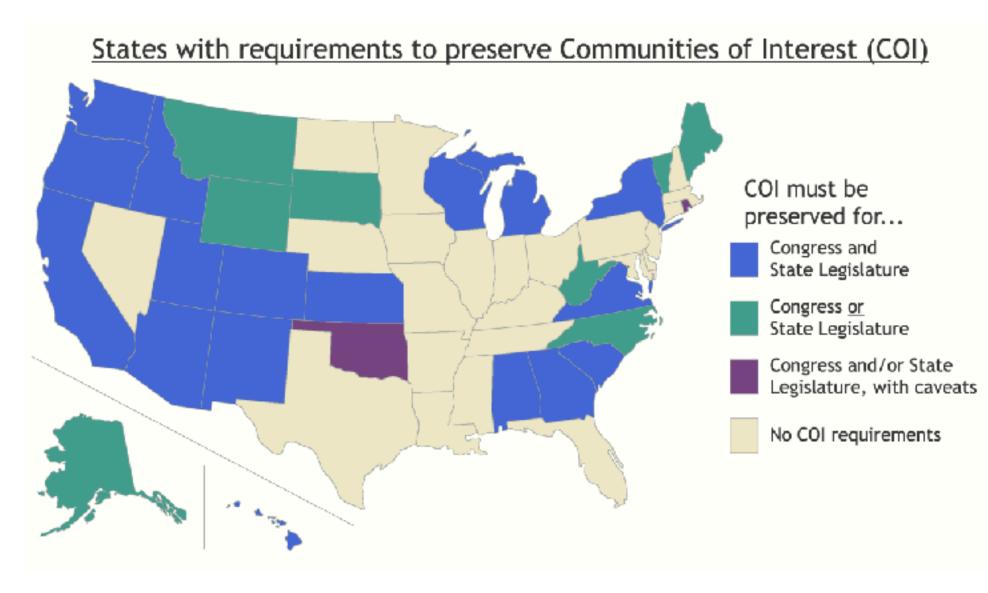
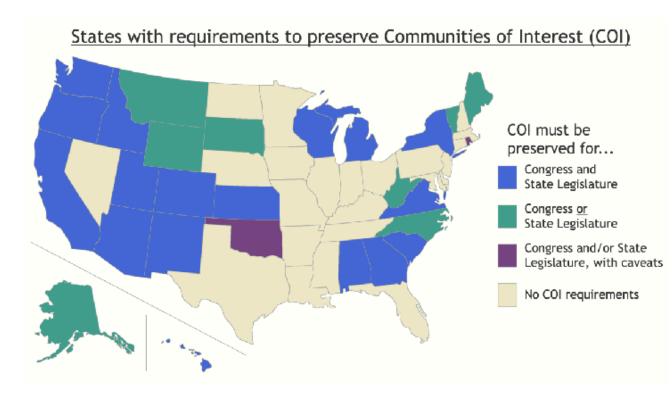


Figure 1: Community of Interest language in the rules for redistricting. Data from [1, 10].

"Communities of interest"



Alaska: "...a relatively integrated socio-economic area."

- Figure 1: Community of Interest language in the rules for redistricting. Data from [1, 10].
- California: "A community of interest is a contiguous population which shares common social and economic interests that should be included within a single district for purposes of its effective and fair representation. Examples of such shared interests are those common to an urban area, a rural area, an industrial area, or an agricultural area, and those common to areas in which the people share similar living standards, use the same transportation facilities, have similar work opportunities, or have access to the same media of communication relevant to the election process. Communities of interest shall not include relationships with political parties, incumbents, or political candidates."
- **Colorado**: "communities of interest, including ethnic, cultural, economic, trade area, geographic, and demographic factors, shall be preserved within a single district wherever possible."
- **Alabama**: "community of interest is defined as an area with recognized similarities of interests, including but not limited to racial, ethnic, geographic, governmental, regional, social, cultural, partisan, or historic interests; county, municipal, or voting precinct boundaries; and commonality of communications."

The following descriptions have counted as COIs:

- Justice Sandra Day O'Connor, writing for the Supreme Court plurality, cites "for example, shared broadcast and print media, public transport infrastructure, and institutions such as schools and churches" as arguable "manifestations of community of interest," but warns that these are not easily disentangled from race (Bush v. Vera, 517 U.S. at 964 (1996))
- A "predominantly urban, low-income population" (Lawyer v. Dept of Justice, 521 U.S. 567, 581–82 (1997));
- Satisfactory evidence of shared socio-economic status (Chen v. City of Houston, 206 F.3d 502, 513 (5th Cir. 2000));
- "[L]ess-educated" citizens, or those "more often unemployed" have "common social and economic needs" suitable for a COI (Theriot v. Parish of Jefferson, 185 F.3d 477, 486 (5th Cir. 1999));
- "There are no doubt religious, class, and social communities of interest that cross county lines and whose protection might be a legitimate consideration in districting decisions." (Kelley v. Bennett, 96 F. Supp. 2d 1301 (M.D. Ala.))
- Lower courts have affirmed that Latino or Hispanic groups can constitute a
 COI (Barnett v. City of Chicago, 141 F.3d 699, 704 (7th Cir. 1998) and Meza
 v. Galvin, 322 F. Supp. 2d 52, 75 (D. Mass. 2004)), but there are ample
 indications that the Supreme Court would not agree (Miller, Session, etc.).
- Census tracts can serve as evidence: the California Supreme Court approved the plan of an outside expert (or "special master"), in part on the reasoning that building it out of whole census tracts contributed to preserving COIs (Wilson v. Eu, 823 P.2d 545, 556 (Cal. 1992)).

On the other hand, the following have been rejected as a basis for COIs:

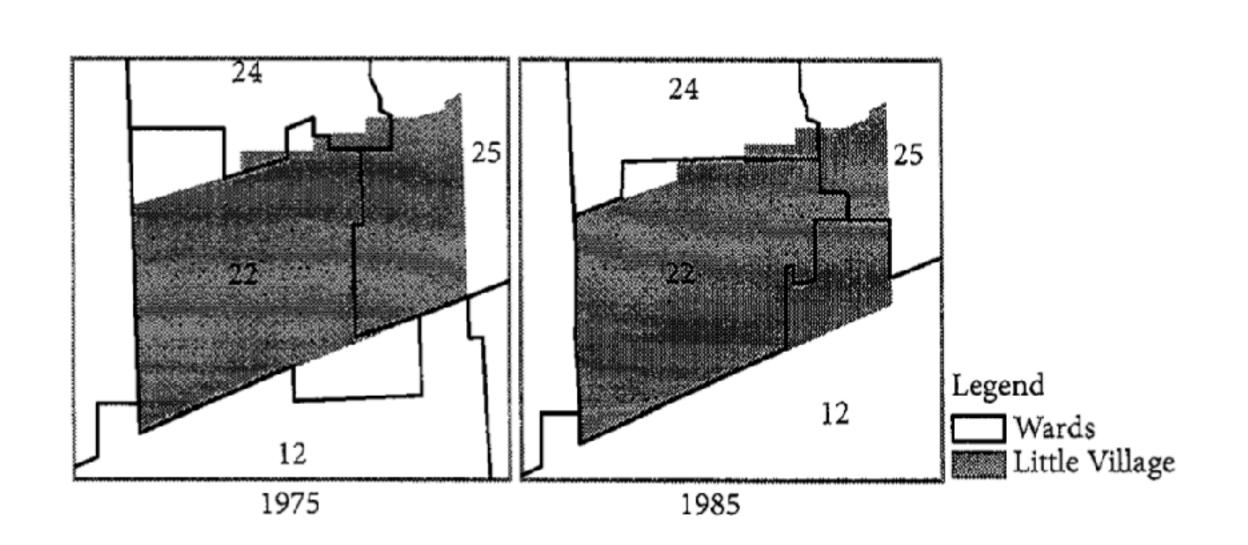
- Keeping urban apart from rural areas (In re Legislative Districting of Gen. Assembly, 193 N.W.2d 784, 789 (Iowa 1972));
- A court itself may not "define what a community of interest is and where its boundaries are" (In re Legislative Districting of State, 805 A.2d 292, 297, 298 (Md. 2002)).

Finally, heterogeneity itself—just the fact that the district is not cohesive—is sometimes taken to show that race or ethnicity predominated over COIs as criteria for drawing districts, as in the following:

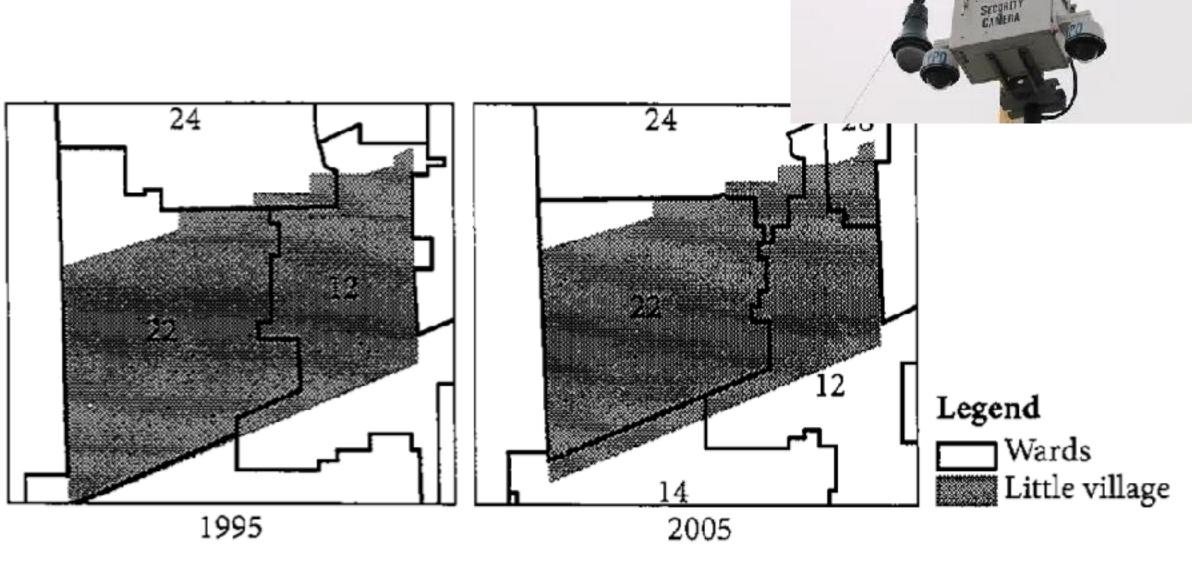
- Evidence of "fractured political, social, and economic interests" argues against specific COIs (Miller v. Johnson, 515 U.S. 900, 919 (1995));
- "Plaintiffs presented evidence of differences in socio-economic status, education, employment, health, and other characteristics between Hispanics who live near Texas's southern border and those who reside in Central Texas" in order to argue that ethnicity had predominated over COIs in forming the districts (Session v. Perry, 298 F. Supp. 2d 451, 512 (E.D. Tex. 2004));

Vargas

- Robert Vargas is an urban sociologist at the University of Chicago
- His book Wounded City examines districting and community in a neighborhood called Little Village
- Argues they have no voice in local government because they are not only cut up erratically, but cut up differently every time, by contrast with influential neighborhoods like Bridgeport that are highly stable



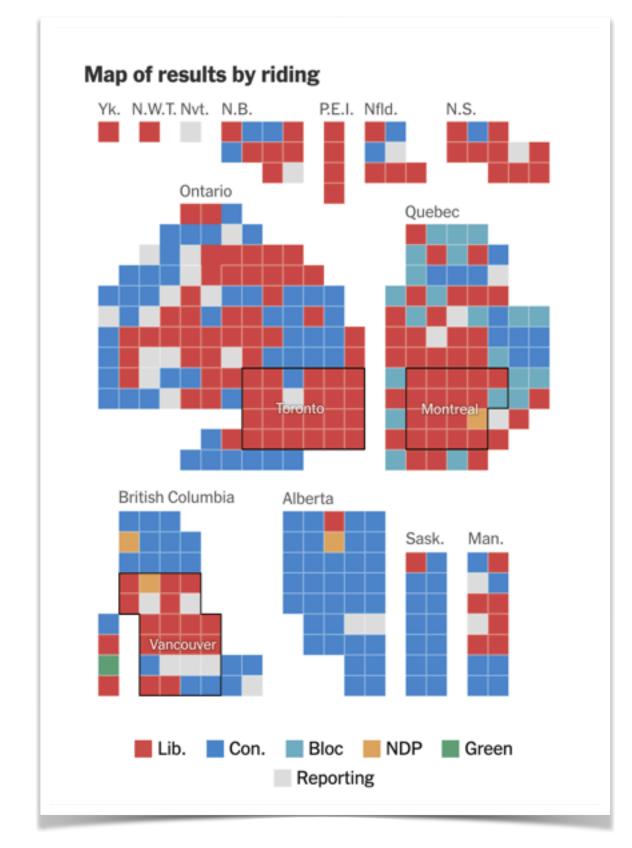




Nelson

- Historical geographer, now runs the map collection at the Boston Public Library
- Geographical places and human groups always intertwined
- "linguistic clues": "region comes from regio, the domain ruled by a monarch; landscape derives from the Germanic Landschaft, a unit of self-government; a neighborhood is both a spatial definition used by planners as well as a group of people who share the quality of neighborliness... politics itself derives from polis, referring to the Greek form of social organization within a city's walls"
- But this is changing: "With the rise of modern forms of transportation and communication, the intensifying complexities of industrial integration, and the spread of diasporic populations, the "primary community" consisting of face-to-face relationships faded in importance."

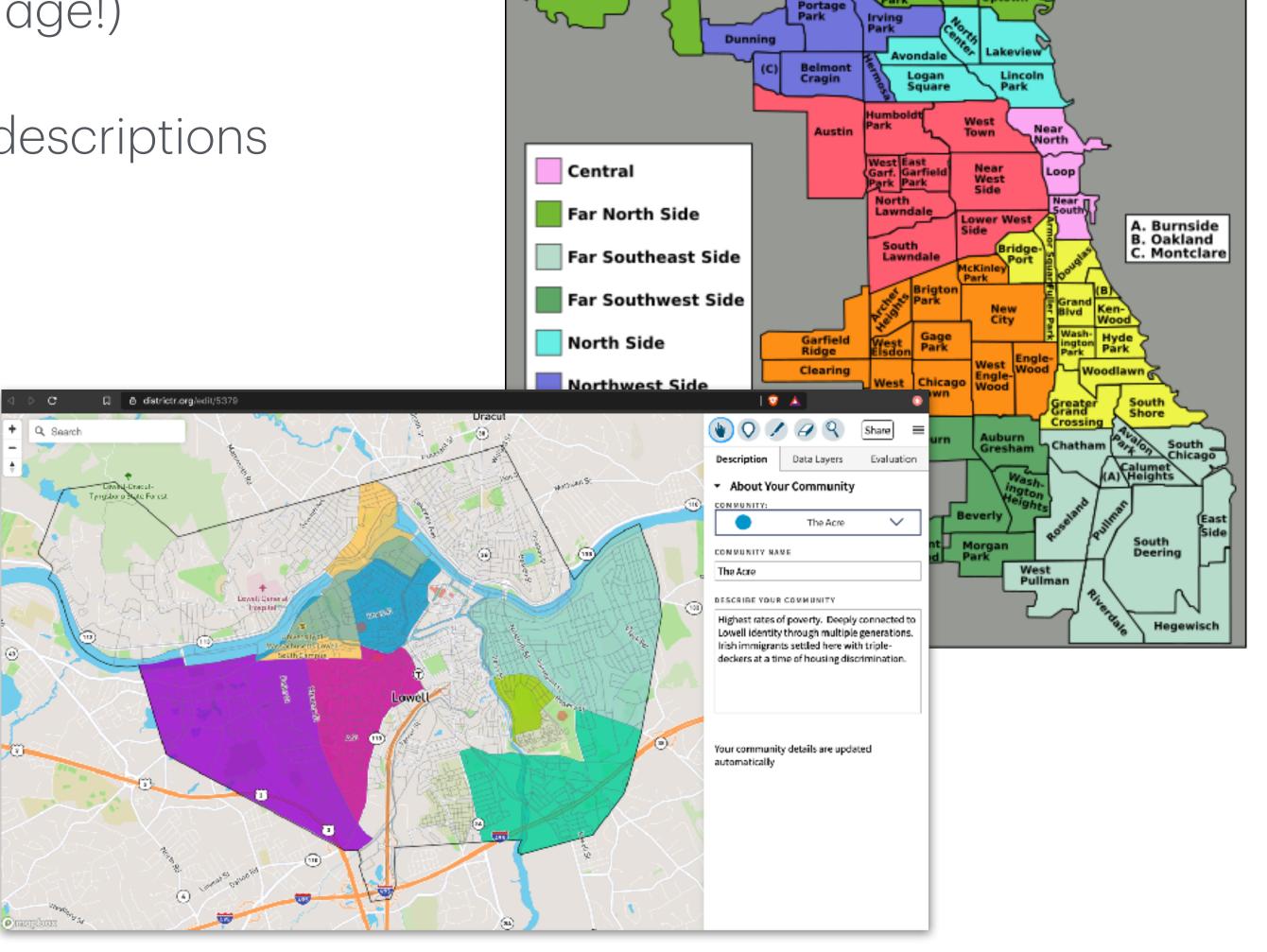




Turning community into data

- Elite/academic: Chicago's 77 community areas (pretty robust, but doesn't include Little Village!)
- Elite/governmental: Post hoc community descriptions
- Participatory: Bottom-up, crowdsourced

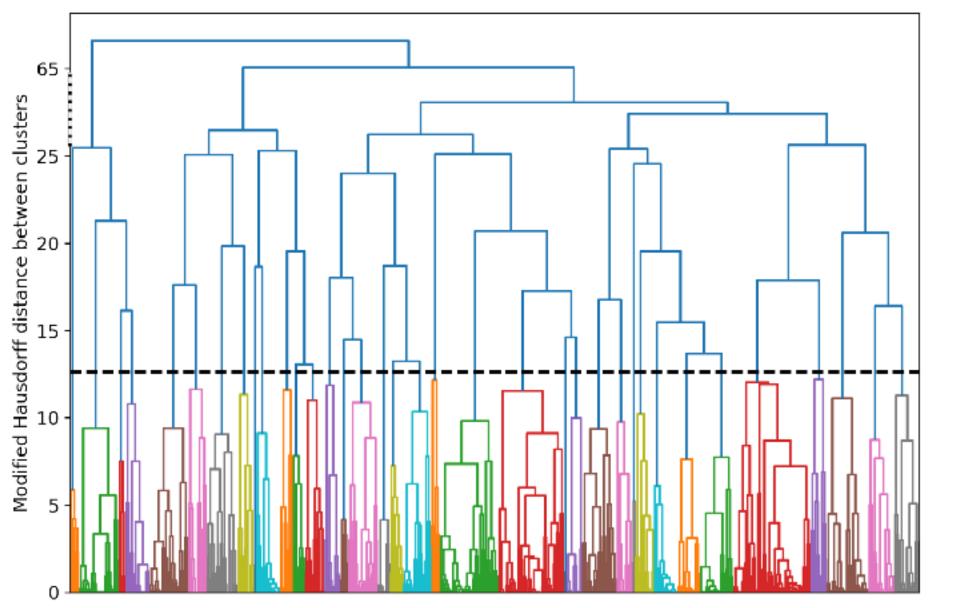
COI Theme	Count
Environmental concerns	495
Common culture/cultural community	440
Recreation	251
Fire danger/services	220
Ethnic community	164
High-tech industry	
Aerospace industry	97
Religious community	
Air quality	38

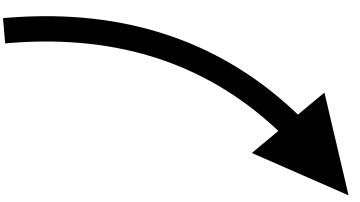


Chicago

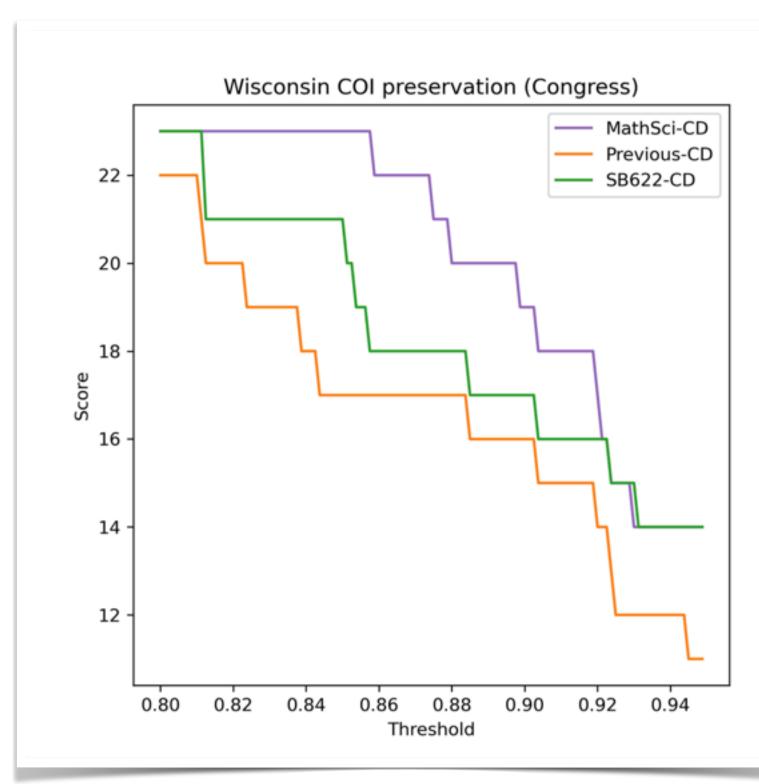
Districts, communities, and scale

- How could you measure whether a plan respects a set of communities?
- One obvious idea is splittedness (entropy!)
- But this is difficult when some are large and some are small
- My lab came up with a measurement of COI integrity:
 - 1. Group the communities into geographical clusters, preferably several dozen
 - 2. Check if the language descriptions are harmonious. If not, make sub-clusters.
 - 3. Sum up over the clusters a **score** from 0 to 1: 1 if the cluster is mostly whole inside a district, with a fractional reward if districts are mostly whole inside the cluster





Cluster C-18, "Upper Mitten"



outdoor and recreational spaces, environment, and agriculture

shared values and identity, including religion