



Digitized by the Internet Archive  
in 2010 with funding from  
University of Illinois Urbana-Champaign

<http://www.archive.org/details/representationpa546whit>

32  
546

REFERENCE

**Council of Planning Librarians** EXCHANGE BIBLIOGRAPHY

**546**

March 1974

---

**REPRESENTATION, PART II: A Bibliographic Supplement and How-to Guide (Supplement to Exchange Bibliography No. 468)**

Anthony G. White

---

THE LIBRARY OF THE

MAR 04 1974

UNIVERSITY OF ILLINOIS  
AT URBANA-CHAMPAIGN

Mrs. Mary Vance, Editor  
Post Office Box 229  
Monticello, Illinois 61856



C 73e

no. 546-COUNCIL OF PLANNING LIBRARIANS

Exchange Bibliography #546

559

REPRESENTATION, PART II:

A BIBLIOGRAPHIC SUPPLEMENT AND HOW-TO GUIDE

(SUPPLEMENT TO EXCHANGE BIBLIOGRAPHY #468).

by

Anthony G. White

Copyright © 1973 Anthony G. White

This bibliography represents a supplement to and amplification of a previous work by the author, "Representation as an Urban Problem: A Selected Bibliography." Ordinarily the author would not attempt to supplement a work so soon after its publication, but the (quite valid) criticism has been made of that source-list, that it was quality-oriented rather than "quantity"-oriented. It is this latter concern that led to a further compilation as contained herein.

There is, of course, no one way to approach the problems of representation through apportionment. Population is enumerated by a number of agencies for a number of purposes in a number of different manners. Thus, the U.S. Census Bureau of the Department of Commerce performs a census every ten years in units of enumeration districts, census tracts, block groups and blocks. Similarly, state agencies such as revenue departments and education boards count or estimate population for the purpose of distributing state-rebated revenues (usually sales taxes) of various kinds. School districts frequently hold school and community censuses, for accreditation and planning purposes.

Planning departments of cities and counties divide their jurisdictions into traffic zones, which aid in the planning process. Any or all of these data sources can be profitably used for apportionment and reapportionment.

Four basic criteria are necessary as a minimum to be followed in order to produce a "fair and equitable" apportionment scheme: equality of population; contiguity of each district; compactness of districts; and preservation of existing boundaries and neighborhoods.

The one overriding factor in apportionment and districting is equality of population. As mandated by the U. S. Supreme Court, national legislative districts have to be as nearly equal in population as possible. The courts have been more lenient with state legislatures, however, allowing in some non-home-rule (which then gives cities and counties a large stake in state legislative processes) states up to 16% variance from the average population in district size. No court tests have been made of urban governments' district sizes per se, although other issues such as requiring district residence in districts of vastly unequal size have been questioned.

A district should be contiguous, that is, someone should be able to travel from one point in the district to another point in that district without ever having to go outside district boundaries. This would prevent widely separated segments of territory with no logical "bridge" between them from being gerrymandered into the same district.

A district should be as compact as possible. There are (at least) two kinds of compactness: geographical and population. The first is relatively easy to define - if any two points in a district can be connected with a straight line that is contained wholly within the district, and if from the geographic center of the district no boundary point lies more than an arbitrary standard (say, 20%) in variance from the average distance, then the district is said to be compact. Population compactness is a more difficult concept, depending upon which sources are consulted. It can be a measure of "clustering" of population within the district; of socio-economic indicators; or a measure of the distance of the center of population from the geographic center of the district. More research is needed in the study of compactness.

Finally, to the extent possible district boundaries should conform to natural (rivers, mountain ridges, gorges) and pre-existing man-made (freeways, major streets, canals, former city limits) boundaries. The primary reasons for this criteria are: first, that population will have been computed most accurately on either side of such pre-existing boundaries; and second, these major features will tend to break up a jurisdiction into neighborhoods and communities, the preservation of which can be of primary importance in a political sense. Election of a representative from a specific constituency can be a positive tool for citizen involvement.

Other criteria can be found in the literature, but these four seem to pop up with the greatest frequency. While a few of the following sources are a supplement to the first bibliography, the majority should lead the reader to concrete techniques, including where to obtain computer programs to apportion according to desired criteria.



- Baker, G. E. Rural Versus Urban Political Power, New York: Doubleday, 1955.
- \_\_\_\_\_. The Reapportionment Revolution, New York: Random House, 1966.
- Castillon, A. A., Jr. "Political Apportionment by Computer," Brown University Computing Review, Vol. 1, 1967, pp. 5-24.
- Chance, C. W., et. al. Political Studies: No. 2--Representation and Reapportionment, Columbus, Ohio: Ohio State University, Department of Political Science, March 1965.
- David, Paul T. and Ralph Eisenberg. Devaluation of the Urban and Suburban Vote, 2 vols., Charlottesville: University of Virginia, Bureau of Public Administration, 1961/62.
- de Grazia, Alfred. Apportionment and Representative Government, Washington, D.C.: American Enterprise Institute, 1963.
- Derge, D. R. "Metropolitan and Outstate Alignments in Illinois and Missouri Legislative Delegations," American Political Science Review, December 1958, pp. 1065+.
- Dixon, Robert G., Jr. "New Constitutional Forms for Metropolis: Reapportioned County Boards: Local Councils of Government," Law and Contemporary Problems, Vol. 30, 1965, pp. 57+.
- Forrest, Edward. "Apportionment by Computer," American Behavioral Scientist, Vol. 7, 1964, p. 23.
- Gansel, J. M. and C. W. Stenberg. "Regional Council Performances: The City Perspective," Municipal Year Book 1973, Washington, D.C.: International City Managers Association, 1973, pp. 64-68.
- Garfinkel, Robert S. Optimal Political Districting, Baltimore: Johns Hopkins University, Ph.D. Thesis, 1968.
- \_\_\_\_\_ and George L. Nemhauser. "Optimal Political Districting by Implicit Enumeration Techniques," Management Science, Vol. 16, April 1970, pp. 495-508.
- Harris, C. C., Jr. "A Scientific Method of Districting," Behavioral Science, Vol. 9, 1964, pp. 219-225.
- Harris, Robert J. The Quest for Equality, Baton Rouge: Louisiana State University Press, 1960.
- Harvey, L. G. "Reapportionment of State Legislatures - Legal Requirements," Law and Contemporary Problems, Vol. 17, 1952, pp. 364-376.

- Havard, William C. and Loren P. Beth. The Politics of Misrepresentation, Baton Rouge: Louisiana State University Press, 1962.
- Helbig, R. E., P. K. Orr, and R. R. Roediger. "Political Redistricting by Computer," Communications of the Association for Computing Machinery, Vol. 15, No. 8, August 1972, pp. 735-741.
- Hess, S. "Compactness - What Size and Shape," paper presented to 73rd National Conference on Government, National Municipal League, New York, 1967.
- \_\_\_\_\_, et. al. "Nonpartisan Political Redistricting by Computer," Operations Research, Vol. 13, November 6, 1965, pp. 998-1006.
- Israel, Jerold. "Nonpopulation Factors Relevant to an Acceptable Standard of Apportionment," Notre Dame Law Review, Vol. 38, 1963, pp. 499+.
- Jewell, Malcolm E. "Minority Representation: A Political or Judicial Question?" Kentucky Law Journal, Vol. 53, 1964-65, pp. 267+.
- \_\_\_\_\_. The Politics of Reapportionment, New York: Atherton Press, 1962.
- Johnson, Claudius O. and Associates. American State and Local Government, revised edition, New York: Thomas Y. Crowell Company, 1965.
- "Legal Problems of Ward Realignment in Philadelphia." Temple Law Quarterly, Vol. 38, 1965, pp. 174+.
- Lindecke, Fred W. "Students Let a Computer Offer Redistricting Plan," St. Louis Post-Dispatch, September 20, 1971.
- Nagel, S. S. "Simplified Bipartisan Computer Redistricting," Stamford Law Review, Vol. 17, 1965, pp. 836-899.
- "Report and Proposed Legislation of the Governor's Committee on Reorganization of the Government of New Castle County, Delaware." Dover: Office of the Governor, May 1964.
- Roeck, E. C. "Measuring Compactness as a Requirement of Legislative Reapportionment," Midwest Journal of Political Science, Vol. 5, No. 5, 1961, pp. 70-74.
- Sandlow, Terrance. "The Limits of Power Under Home Rule: A Role for the Courts," Minnesota Law Review, Vol. 48, 1964, pp. 643+.

- Schattschneider, E. E. "Urbanization and Reapportionment,"  
Yale Law Journal, Vol. 72, 1962, pp. 7+.
- Schmeckbier, Laurence F. "The Method of Equal Proportions,"  
Law and Contemporary Problems, Vol. 17, 1952, pp. 302+.
- Silva, Ruth C. "Reapportionment and Redistricting," Scientific  
American, Vol. 213, No. 5, November 1965, pp. 20-27.
- "Small Town Representation: Invidious Discrimination? The  
Reapportionment Problem in Rhode Island, Vermont and  
Connecticut," Brown University Law Review, Vol. 43, 1963,  
pp. 523+.
- Thorenson, J. T. Computer Aided Districting Techniques,  
Iowa City: University of Iowa, unpublished thesis, 1965.
- \_\_\_\_\_, and J. Liittschwager. "Legislative Districting by  
Computer Simulation," Behavioral Science, Vol. 12, 1967,  
pp. 237-247.
- Vickery, W. "On the Prevention of Gerrymandering," Political  
Science Quarterly, Vol. 67, 1961, pp. 105-110.
- Wagner, W. H. "An Application of Integer Progression for  
Legislative Redistricting," paper presented to 34th  
National Meeting of the Operations Research Society of  
America, New York, 1968.
- Weaver, James B., and S. W. Hess. "A Procedure for Nonpartisan  
Districting: Development of Computer Techniques,"  
Yale Law Journal, Vol. 73, 1963, pp. 289-308.
- \_\_\_\_\_. "Districting by Machine," National Civic Review,  
Vol. 53, 1964, pp. 293+.

---

COUNCIL OF PLANNING LIBRARIANS

Exchange Bibliography #546

REPRESENTATION, PART II: A BIBLIOGRAPHIC SUPPLEMENT AND  
HOW-TO GUIDE (SUPPLEMENT TO EXCHANGE BIBLIOGRAPHY #468)

Additional copies available from:

Council of Planning Librarians  
Post Office Box 229  
Monticello, Illinois, 61856

for \$1.50

-----





UNIVERSITY OF ILLINOIS-URBANA

016 7114C73E C001  
EXCHANGE BIBLIOGRAPHY URBANA, ILL  
546-559 1974



3 0112 029109300