

THE UNIVERSITY OF CONNECTICUT
OFFICE OF THE VICE PRESIDENT FOR GRADUATE EDUCATION AND RESEARCH
Biography, Bibliography and Professional Summary
of

Robert G. Cromley, Professor, Department of Geography

Revised

5/13

Date of Appointment: 1983

Education: B.A. 1972 The Ohio State University - Social Science/Demography
M.A. 1975 The Ohio State University - Geography
Ph.D. 1978 The Ohio State University - Geography

Experience - Teaching:

1978-83 Assistant Professor, Department of Geography,
University of Kentucky
1983-88 Associate Professor, Department of Geography,
University of Connecticut
1988- Professor, Department of Geography,
University of Connecticut

Experience - Research:

1979-80 Co-Principal Investigator, "An Analysis of
Characteristics in the Growth and Decline of
Nonmetropolitan Industry in Kentucky." University
of Kentucky Research Foundation Grant.
1980 "Development of an Analytical Mapping System,"
University of Kentucky Summer Faculty Fellowship.
1980-81 Principal Investigator, "Commuting in
Nonmetropolitan Kentucky," University of Kentucky
Graduate School Research Assistantship Award.
1981 Principal Investigator, "An Analysis of the Spatial
Reorganization of Multi-Plant Businesses Following a
Horizontal Merger," University of Kentucky Research
Foundation Grant.
1981 "Development of an Integrated Multivariate
Statistical Analysis and Mapping System," University
of Kentucky Summer Faculty Fellowship.
1981 Project Director, "Development of An Automated
Analytical Mapping and Remote Sensing System for the
Undergraduate Geography Curriculum." Instructional
Scientific Equipment Program, National Science
Foundation SER 8162286, \$20,000., Matching
University Funds, \$22,423.

- 1982 Consultant, Oak Ridge National Laboratory, "Improved Cartographic Display and Pattern Analysis in Mortality Mapping."
- 1985 Project Director, "Cancer Maps for Connecticut Cancer Atlas," Contract for UCONN Medical Center.
- 1987 Principal Investigator, "Establishment of an Integrated Geographic Information System and Remote Sensing Image Processing Center at The University of Connecticut," High Technology Project and Program Grant, Connecticut Board of Governors for Higher Education, \$100,000. with D.R. Miller.
- 1988 Principal Investigator, "Establishment of an Integrated Geographic Information System and Remote Sensing Image Processing Center at The University of Connecticut -- Phase II," High Technology Project and Program Grant, Connecticut Board of Governors for Higher Education, \$100,000. with D.R. Miller and D.L. Civco.
- 1991 Principal Investigator, "A Computer-Aided Design Laboratory for Cartography and Spatial Analysis," Elias Howe Grant, Connecticut Board of Governors for Higher Education, \$45,000.
- 1992 Principal Investigator, "Integrating Geographic Information Science and Technology into the Geography Undergraduate Curriculum," NSF Instructional Laboratory Equipment Program, \$26,000.
- 1995 Co-Principal Investigator, "GIS for Teachers," Connecticut Department of Higher Education, \$53,925. with J.W. Meyer and D. Civco.
- 1997 Principal Investigator, "Establishing a National Data Infrastructure Clearinghouse Node for Connecticut," USGS NSDI Competitive Cooperative Agreement Program, \$38,215. with T. Patrick McGlamery.
- 1997 Co-Principal Investigator, "Real Estate Database and GIS Curriculum Development," Center for Real Estate and Urban Studies Summer Grant Program, \$7,155. with E. Cromley and T. Patrick McGlamery.
- 1997 Co-Principal Investigator, "Postcensal Town Population Estimation Project," Connecticut State Department of Public Health, \$14,239. with E. Cromley.
- 1997 Principal Investigator, "GIS Support for Data Fusion/Spatial Reasoning," Technology Services Corporation, \$27,500.

- 1999 Principal Investigator, "Establishing Distributed Spatial Metadata Collection in Connecticut," USGS NSDI Competitive Cooperative Agreement Program, \$13,400. with T. Patrick McGlamery.
- 2000 Principal Investigator, "National Pipeline Mapping System - State Repository (Connecticut)" USDOT Research And Special Programs Administration, \$9,000.
- 2001 Co-PI, "Evaluating the 2000 Census in Connecticut," Connecticut State Office of Policy and Management
- 2004 Principal Investigator, "Georeferencing and Shoreline Vectorization of 1880s T-Sheets" Connecticut Department of Environmental Protection, \$15,000.
- 2005 Principal Investigator, "Georeferencing of Year 2000 False Color Infrared (FCIR) Coastal Aerial Photos" Connecticut Department of Environmental Protection, \$17,729.

Experience - Service:

Department:

- 1985-1988 Coordinator of Graduate Studies
- 1987-1992 AAUP Liaison
- 1988-2003 Member, Graduate Committee
- 1989-1990 Member, Undergraduate Committee
- 1990 Acting Department Head
- 1992-1997 Department Head

University:

- 1989-1990 Member, Committee on Computationally Intensive Computing
- 1992-1993 Member, Torrington Campus Review Committee
- 1996-1999 Member, Transportation Research Center Advisory Board
- 1997-2008 Director, University Center for Geographic Information and Analysis
- 2008-2012 Member, General Education Oversight Committee

College:

- 1990-1992 Member, Courses and Curricula Committee
- 2007- Member, Courses and Curricula Committee

Honors or Distinctions:

The Huntington Award, May 1977, Department of Geography,
The Ohio State University

Research and Teaching Interests:

Geographic Information Science
 Computer Cartographics
 Location Theory and Industrial Geography
 Mathematical Programming and Statistical Analysis

Publications:

Books and Monographs

R.G. Cromley, 1992. Digital Cartography, Prentice Hall.

Published Articles

- [103]G. Bentley, R. Cromley, and C. Atkinson-Palombo. 2013. "The Network Interpolation of Population for Flow Modeling using Dasymetric Mapping," Geographical Analysis, forthcoming.
- [102]J. Lin, R. Cromley, D. Civco, D. Hanink, and C. Zhang. 2013. "Evaluating the Use of Publicly Available Remotely Sensed Land Cover Data for Areal Interpolation," GIScience & Remote Sensing, forthcoming.
- [101]R.G. Cromley, D.M. Hanink, and J. Lin. 2013. "Developing Choropleth Maps of Parameter Results for Quantile Regression," Cartographica, forthcoming.
- [100]R.G. Cromley, D.M. Hanink, and G. Bentley. 2013. "Geographically Weighted Colocation Quotients: Specification and Application," The Professional Geographer, forthcoming.
- [99] G. Bentley, D.M. Hanink, R.G. Cromley, and C.P. Heidkamp. 2013. "Forest Cover Change in the Northeastern U.S.: A Spatial Assessment in the Context of an Environmental Kuznets Curve," International Journal of Applied Geospatial Research, forthcoming.
- [98] R.G. Cromley and D.M. Hanink. 2012. "Focal Location Quotients: Specification and Application," Geographical Analysis, Vol. 44, pp. 398-410.
- [97] D.M. Hanink, R.G. Cromley, and A.Y. Ebenstein. 2012. "Spatial Variation in the Determinants of House Prices and Apartment Rents in China", Journal of Real Estate Finance and Economics, Vol.45., pp. 347-363.
- [96] R.G. Cromley, D.M. Hanink, and G. Bentley. 2012. "A Quantile Regression Approach to Solving Areal Interpolation", Annals of the Association of American Geographers, Vol. 102, pp. 763-777.

- [95] D.M. Hanink, R.G. Cromley, and A.Y. Ebenstein. 2012. "Wage-Based Evidence of Returns to External Scale in China's Manufacturing: A Spatial Analysis", Annals of Regional Science, Vol. 49, pp. 1-16.
- [94] C.A. Obidoa and R.G. Cromley. 2012. "A Geographical Analysis of HIV/AIDS Infection in Nigeria, 1991-2001," Journal of Social, Behavioral, and Health Sciences, Vol. 6, pp. 13-29.
- [93] D. Zhang, C. Zhang, R. Cromley, D. Travis, and D. Civco. 2012. "An Object Based Method for Contrail Detection," GIScience & Remote Sensing, Vol. 49, pp. 412-427.
- [92] R.G. Cromley, J. Lin, and D. Merwin. 2012. "Evaluating Representation and Scale Error in the Maximal Covering Location Problem Using GIS and Intelligent Areal Interpolation," International Journal of Geographical Information Science, Vol. 26, pp. 495-517.
- [91] M.J. Smith and R.G. Cromley. 2012. "Measuring Historical Coastal Change using GIS and the Change Polygon Approach," Transactions in GIS, Vol. 16, pp. 3-15.
- [90] D.M. Hanink, A.Y. Ebenstein, and R.G. Cromley. 2011. "Spatial Analysis of Selected Manufacturing and Service Sectors in China's Economy using County Employment Data for 1990 and 2000," Regional Studies, Vol. 45, pp. 351-369.
- [89] J. Lin, R.G. Cromley, and C. Zhang. 2011. "Using Geographically Weighted Regression to Solve the Areal Interpolation Problem", Annals of GIS, Vol. 17, pp. 1-14.
- [88] D.G. Humphreys and R.G. Cromley. 2010. "A GIS Approach to the Positioning of Base Stations for Cellular Network Coverage of Connecticut Route 32", Northeastern Geographer, Vol. 2, pp. 20-35.
- [87] S.L. Straitiff and R.G. Cromley. 2010. "Using GIS and K=3 Central Place Lattices for Efficient Solutions to the Location Set-Covering Problem in a Bounded Plane", Transactions in GIS, Vol. 14, pp: 331-349.
- [86] R.G. Cromley, D.M. Hanink, and A.Y. Ebenstein. 2010. "Estimating and Mapping the Intercensal Internal Net-Migration of China, 1990-2000," Cartography and Geographic Information Science, Vol. 37, pp. 229-238.
- [85] R.G. Cromley, A.Y. Ebenstein, and D.M. Hanink. 2009. "Estimating Components of Population Change from Census Data for Incongruent Spatial/Temporal Units and Attributes", Journal of Spatial Science, Vol. 54, pp. 89-99.
- [84] D.A. Merwin, R.G. Cromley, and D. Civco. 2009. "A Neural Network-Based Method for Solving 'Nested Hierarchy' Areal Interpolation Problems", Cartography and Geographic Information Science, Vol. 36., pp. 347-365.
- [83] R.G. Cromley and E.K. Cromley. 2009. "Choropleth Map Legend Design for Visualizing Community Health Disparities", International Journal of Health Geographics, Vol. 8, No. 52.

- [82] R.G. Cromley and D.M. Hanink. 2008. "Population Growth and the Development of a Central Place System", Journal of Geographical Systems, Vol. 10, pp. 383-405.
- [81] D.M. Hanink and R.G. Cromley. 2008. "Locational Equilibria in Weberian Agglomeration", Geographical Analysis, Vol. 40, pp. 401-421.
- [80] P. Heidkamp, D.M. Hanink, R.G. Cromley. 2008. "A Land Use Model of the Effects of Eco-Labeling in Coffee Markets" Annals of Regional Science, Vol. 42, pp. 705-724.
- [79] B.D. Spaulding and R.G. Cromley. 2007. "Integrating the Maximum Capture Problem into a GIS Framework", Journal of Geographical Systems, Vol. 9, pp. 267-288.
- [78] J.L. Garb, R.G. Cromley, and R.P. Wait, 2007. "Estimating Populations at Risk for Disaster Preparedness and Response", Journal of Homeland Security and Emergency Response, Vol. 4, Issue 1, Article 3.
- [77] R.G. Cromley and Y. Ye. 2006. "Ogive-based Legends for Choropleth Mapping", Cartography and Geographic Information Science, Vol.33, pp. 257-268.
- [76] R.G. Cromley and F.T. Huffman. 2006. "Modeling Situation Factors used in MCE Procedures for Raster GIS", Transactions in GIS, Vol. 10, pp. 239-251.
- [75] P.A. Fernald and R.G. Cromley. 2005. "Equalizing Population Denominators for Australian Metropolitan Areas," Journal of Population Research, Vol. 22, pp. 79-88.
- [74] R.G. Cromley. 2005. "An Alternative to Maximum Contrast Symbolization for Classed Choropleth Mapping", The Cartographic Journal, Vol. 42, pp. 137-144.
- [73] D.M. Hanink and R.G. Cromley. 2005. "Geographic Change with Trade Based on Comparative Advantage," Annals of the Association of American Geographers, Vol. 95, pp. 511-524.
- [72] D.M. Hanink and R.G. Cromley. 2005. "Comparative Advantage in Land Use Allocation," Environment and Planning B, Vol. 32, pp. 281-292.
- [71] W.H. Berentsen and R.G. Cromley. 2005. "German Interstate Migration Since Unification: Temporal and Spatial Patterns, 1990-2003", Eurasian Geography and Economics, Vol. 46, pp. 185-201.
- [70] J. Annino and R.G. Cromley. 2005. "Intelligent Transportation Systems and Travel Behavior in Connecticut," The Professional Geographer, Vol. 57, pp. 106-114.

- [69] Y. Ye and R.G. Cromley. 2004. "Database and Design Considerations for an Online Urban Atlas," Journal of URISA, Vol. 16, pp. 31-38.
- [68] E.K. Cromley, R.G. Cromley, and Y. Ye. 2004. "On-line Reporting and Mapping of Spatially Aggregated Individual Records Selected by User Queries," Cartographica, Vol. 39, pp. 5-13.
- [67] R.G. Cromley and D.M. Hanink. 2003. "Scale Independent Land-Use Modeling in Raster GIS," Cartography and Geographic Information Science, Vol. 29, pp. 343-350.
- [66] R.G. Cromley and P. McGlamery. 2002. "Integrating Spatial Metadata and Data Dissemination Over the Internet," IASSIST Quarterly, Vol. 26, pp. 13-16.
- [65] F.T. Huffman and R.G. Cromley. 2002. "An Automated Multi-Criteria Cartographic Aid for Point Annotation," The Cartographic Journal, Vol. 39, pp. 51-64.
- [64] D.A. Merwin, R.G. Cromley, and D.L. Civco. 2002. "Artificial Neural Networks as a Method of Spatial Interpolation for Digital Elevation Models," Cartography and Geographic Information Science, Vol. 28, pp. 99-110.
- [63] R.G. Cromley and R. Mrozinski. 2002. "Analyzing Geographic Representation Error in Capacitated Location-Allocation Modeling," Networks and Spatial Economics, Vol. 2, pp. 65-78.
- [62] T.P. McGlamery and R.G. Cromley. 2001. "The Map Library's Emerging Role in the Dissemination of Cartographic Information on the Internet," Cartographic Perspectives, No. 39, pp. 4-11.
- [61] R.G. Cromley and R. Mrozinski. 1999. "The Classification of Ordinal Data for Choropleth Mapping," The Cartographic Journal, Vol. 36, pp. 101-109.
- [60] R. Mrozinski and R.G. Cromley. 1999. "Singly- and Doubly-Constrained Methods of Areal Interpolation for Vector-Based GIS," Transactions in GIS, Vol. 3, pp. 285-301.
- [59] R.G. Cromley and D.M. Hanink. 1999. "Coupling Land-Use Allocation Models with Raster GIS," Journal of Geographical Systems, Vol. 1, pp. 137-153.
- [58] D.M. Hanink and R.G. Cromley. 1998. "Land-Use Allocation in the Absence of Complete Market Values," Journal of Regional Science, Vol. 38, pp. 465-480.
- [57] K. Noviello, E.K. Cromley, and R.G. Cromley. 1996. "A Comparison of the Air Passenger and Air Cargo Industries with Respect to Hub Locations," The Great Lakes Geographer, Vol. 3, pp. 75-85.

- [56] R.G. Cromley. 1996. "Incorporating GIS Modeling Techniques into an Introductory Economic Geography Classroom," The Pennsylvania Geographer, Vol. 343, pp. 3-23.
- [55] E.K. Cromley and R.G. Cromley. 1996. "An Analysis of Alternative Classification Schemes for Medical Atlas Mapping," European Journal of Cancer, Vol. 32A, pp. 1551-1559.
- [54] R.G. Cromley. 1996. "A Comparison of Optimal Classification Algorithms for the Choroplethic Displays of Spatially Aggregated Data," International Journal of Geographical Information Systems, Vol. 10, pp. 405-424.
- [53] S. November, R.G. Cromley, and E.K. Cromley. 1996. "Multi-Objective Analysis of School District Regionalization Alternatives in Connecticut," The Professional Geographer, Vol. 48, pp. 1-14.
- [52] R.G. Cromley. 1995. "Classed Versus Unclassed Choropleth Maps: A Question of How Many Classes," Cartographica, Vol. 32., pp. 15-27.
- [51] C. Barber, R.G. Cromley, and R. Andrle. 1995. "Evaluating Alternative Line Simplification Strategies for Multiple Representations of Cartographic Lines," Cartography and Geographic Information Systems, Vol. 22, pp. 276-290.
- [50] R.G. Cromley. 1994. "A Comparison of Suitability Mapping and Multi-Objective Programming Techniques for Performing Spatial Searches," The Pennsylvania Geographer, Vol. 32, pp. 37-46.
- [49] M. Braddock, G. Lapidus, E. Cromley, R. Cromley, G. Burke, and L. Banco. 1994. "Using a Geographic Information System to Understand Child Pedestrian Injury," American Journal of Public Health, Vol. 84, No. 7, pp. 1158-1161.
- [48] R.G. Cromley, D.J. Hempel, and C.L. Hillyer. 1993. "Dimensions of Market Attractiveness: Competitively Interactive Spatial Models," Decision Sciences, Vol. 24, pp. 713-738.
- [47] D.M. Hanink and R.G. Cromley. 1993. "Univariate Classification of Differentiated International Markets," Environment and Planning A, Vol. 25, pp. 409-424.
- [46] R.G. Cromley. 1992. "Principal Axis Line Simplification," Computers and Geosciences, Vol. 18, pp. 1003-1011.
- [45] R.G. Cromley and G.M. Campbell. 1992. "Integrating the Radical Law into Digital Line Simplification," The Cartographic Journal, Vol. 29, pp. 25-30.
- [44] K.G. Zografos, R.G. Cromley, and H.S. Levinson. 1991. "A Multiobjective Hierarchical Model For Locating Public Facilities on a Transportation Network: A Goal Programming Approach," Journal of Advanced Transportation, 1991, Fall, Vol. 25, No3, pp. 329-355.

- [43] G.M. Campbell and R.G. Cromley. 1991. "Optimal Simplification of Cartographic Lines Using Shortest Path Formulations," Journal of the Operational Research Society, Vol. 42, pp. 793-802.
- [42] R.G. Cromley. 1991. "Hierarchical Methods of Line Simplification," Cartography and Geographic Information Systems, Vol. 18, pp. 125-131.
- [41] R.G. Cromley and G.M. Campbell. 1991. "Noninferior Bandwidth Line Simplification: Algorithm and Structural Analysis," Geographical Analysis, Vol. 23, pp. 25-38.
- [40] T.R. Leinbach and R.G. Cromley. 1989. "Modeling Integrated Development Investments in Rural Areas: An Indonesian Illustration," International Regional Science Review, Vol. 12, pp. 229-243.
- [39] R.G. Cromley and D.M. Hanink. 1989. "A Financial-Economic Von Thunen Model," Environment and Planning A, Vol. 21, pp. 951-960.
- [38] D.M. Hanink and R.G. Cromley. 1989. "A Portfolio Analysis of Manufacturing within the U.S. Urban System," Geography Research Forum, Vol. 9, pp. 127-144.
- [37] T.R. Leinbach and R.G. Cromley. 1988. "The Utility of a Goal Programming Heuristic in Decentralized Development Planning: The Case of Accessibility," Singapore Journal of Tropical Geography, Vol. 9, pp. 86-95.
- [36] R.G. Cromley and S.J. Morse. July, 1988. "Some Comments on Numerical Line Generalization," Geographical Analysis, Vol. 20, No. 3, pp. 263-269.
- [35] D.M. Hanink and R.G. Cromley. 1987. "Minimizing the Geographical Risk of Foreign Direct Investment," Geoforum, Vol. 18, No. 3, pp. 247-256.
- [34] K. Zografos and R.G. Cromley. 1987. "Low Volume Roadway Network Improvements and Accessibility of Public Facilities Located in Rural Areas," Transportation Research Record 1106, Vol. 1, pp. 26-33.
- [33] D.M. Hanink and R.G. Cromley. May, 1987. "Basic Portfolio Models for Interregional Economic Analysis," Professional Geographer, Vol. 39, No. 2, pp. 159-165.
- [32] R.G. Cromley and R.H. Webster. March, 1987. "Commuting Patterns Among Female Workers in Nonmetropolitan Manufacturing," Transactions, Kentucky Academy of Sciences, Vol. 48, No. 1-2, pp. 5-10.
- [31] D.M. Hanink and R.G. Cromley. 1987. "A Risk-Return Model for Multiregion and Multiproduct Diversification of the firm," Environment and Planning A, Vol. 19, No. 1, pp. 81-92.
- [30] R.G. Cromley. December, 1986. "A Topological Approach to Area Measurement in an Automated System," Surveying and Mapping, Vol. 46, No. 4, pp. 269-278.

- [29] R.G. Cromley and T.R. Leinbach. November, 1986. "External Control of Nonmetropolitan Industry in Kentucky," Professional Geographer, Vol. 38, No. 4, pp. 332-342.
- [28] M.B. Green and R.G. Cromley. October, 1986. "United States-Foreign Joint Venture Patterns," Tijdschrift Voor Economische en Sociale Geografie, Vol. 77, No. 2, pp. 103-112.
- [27] S. Jaworowski, R.G. Cromley, and T.R. Leinbach. September, 1986. "Resolving Locational Conflict In Public Transport by Voter Referendum: A Study of the Lexington Issue," Transactions, Kentucky Academy of Sciences, Vol. 47, No. 3-4, pp. 27-34.
- [26] R.G. Cromley. June, 1986. "The Communalities Between Computer-Assisted Procedures for Choroplethic and Isarithmic Mapping," The Cartographic Journal, Vol. 23, No. 1, pp. 35-41.
- [25] R.G. Cromley and E.K. Cromley. May-April, 1986. "Cognitive Maps of Campus: Student's Views of Spatial Arrangement," Journal of Geography, Vol. 85, No. 2, pp. 67-71.
- [24] R.G. Cromley and D.M. Hanink. October, 1985. "Portfolio Location Analysis," Geographical Analysis, Vol. 17, No. 3, pp. 318-330.
- [23] R.G. Cromley and M.B. Green. July, 1985. "Joint Venture Activity Patterns of U.S. Firms, 1972-1979," Growth and Change, Vol. 16, No. 3, pp. 40-53.
- [22] R.G. Cromley and D. Grogan. April, 1985. "An Algorithm for Identifying and Storing a Thiessen Diagram Within a Convex Boundary," Geographical Analysis, Vol. 17, No. 2, pp. 167-175.
- [21] R.G. Cromley and T. Arcury. March, 1985. "Spread Effects of Nonmetropolitan Industrialization," Transactions, Kentucky Academy of Sciences, Vol. 46, Nos. 1-2, pp. 36-42.
- [20] J. vanWilligen, T. Arcury, and R.G. Cromley. Spring, 1985. "Tobacco Men and Factory Hands: The Effects of Migration Turnaround and Decentralized Industrialization on the Social Lives of Older People in a Rural Kentucky County," Human Organization, Vol. 44, No. 1, pp. 50-57.
- [19] M.B. Green and R.G. Cromley. August 1984. "Merger and Acquisition Fields for Large United States Cities, 1955-1970," Regional Studies, Vol. 18, No. 4, pp. 292-301.
- [18] R.G. Cromley. June, 1984. "A Triangulation Data Structure for Storing Choropleth Base Maps," The Cartographic Journal, Vol. 21, No. 1, pp. 19-22.
- [17] R.G. Cromley. April, 1984. "The 'Peak, Pit, Pass' Polygon Line-Shading Procedure," The American Cartographer, Vol. 11, No. 1, pp. 70-79.

- [16] R.G. Cromley and R.L. Haven. May, 1983. "Differences in the Commuting Fields of Branch Plants and Indigenous Industrial Activity," Southeastern Geographer, Vol. 23, No. 1, pp. 10-25.
- [15] R.G. Cromley and R.L. Haven. March, 1983. "Extended and Internal Commuting Change in the Intermetropolitan Periphery of Western Kentucky," Transactions, Kentucky Academy of Sciences, Vol. 44, Nos. 1-2, pp. 1-8.
- [14] T.R. Leinbach and R.G. Cromley. 1983. "A Goal Programming Approach to Public Investment Decisions: A Case Study of Rural Roads in Indonesia," Socio-Economic Planning Sciences, Vol. 17, No. 1, pp. 1-10.
- [13] G.W. Shannon and R.G. Cromley. October-December, 1982. "Philadelphia and the Yellow Fever Epidemic of 1798," Urban Geography, Vol. 3, No. 4, pp. 355-370.
- [12] M.B. Green and R.G. Cromley. October, 1982. "The Horizontal Merger: Its Motives and Spatial Employment Impact," Economic Geography, Vol. 58, No. 4, pp. 358-370.
- [11] R.G. Cromley. September, 1982. "The Von Thunen Model and Environmental Uncertainty," Annals, Association of American Geographers, Vol. 72, No. 3, pp. 404-410.
- [10] T.R. Leinbach and R.G. Cromley. July, 1982. "Appalachia Kentucky: The Role of Manufacturing in Micropolitan Development," Growth and Change, Vol. 13, No. 3, pp. 11-20.
- [9] R.G. Cromley, K.B. Raitz, and R. Ulack. Winter, 1981. "Automated Cognitive Mapping," Cartographica, Vol. 18, No. 4, pp. 36-50.
- [8] R.G. Cromley and T.R. Leinbach. December, 1981. "Patterns of Manufacturing in Nonmetropolitan Kentucky: 1968-1978," Kentucky Economy: Review and Perspective, Vol. 5, No. 4, pp. 10-13.
- [7] R.G. Cromley and T.R. Leinbach. July, 1981. "The Pattern and Impact of the Filter-Down Process in Non-Metropolitan Kentucky," Economic Geography, Vol. 57, No. 3, pp. 208-224.
- [6] R.G. Cromley. November, 1980. "The Isolated Estate: An Agricultural Location Game," Journal of Geography, Vol. 70, No. 6, pp. 230-234.
- [5] M.D. Woodall, R.G. Cromley, R.K. Semple, and M.B. Green. November, 1980. "The Elimination of Racially Identifiable Schools," Professional Geographer, Vol. 32, No. 4, pp. 412-421.
- [4] G.W. Shannon and R.G. Cromley. July-September, 1980. "The Great Plague of London, 1665," Urban Geography, Vol. 1, No. 3, pp. 254-270.
- [3] M.B. Green, R.G. Cromley, and R.K. Semple. January, 1980. "The Bounded Transportation Problem," Economic Geography, Vol. 56, No. 1, pp. 30-44.

- [2] J.P. Osleeb and R.G. Cromley. January, 1978. "The Location of Plants for the Uniform-Delivered Price Manufacturer: A Case Study of Coca-Cola Limited," Economic Geography, Vol. 54, No. 1, pp. 40-52.
- [1] J.P. Osleeb and R.G. Cromley. April, 1977. "The Location-Production-Allocation Problem with Nonlinear Production Costs," Geographical Analysis, Vol. 9, No. 2, pp. 142-159.

Book Chapters, Commentaries and Proceedings

- R.G. Cromley, R. Mrozinski, and D. Merwin. October 2001. "Estimating Average Distances Using Areal Interpolation," Proceedings, NESTVAL, pp. 92-101.
- R.G. Cromley and R. Mrozinski. April 1997. "An Evaluation of Classification Schemes Based on the Statistical Versus the Spatial Structure Properties of Geographic Distributions," Proceedings, Auto-Carto 13, pp. 76-85.
- R.G. Cromley and D.M. Hanink. November, 1996. "A Multiobjective Procedure for Land Use Allocation in a Raster GIS," Proceedings, NESTVAL, pp. 26-36.
- R. Mrozinski and R.G. Cromley. November 1995. "Using Areal Interpolation to Disaggregate Data in Location-Allocation Modelling," Proceedings, NESTVAL, pp. 140-153.
- R. Mrozinski and R.G. Cromley. October 1994. "The Spatial Interpolation of Areal Units Formed by the Polygon Overlay of Socioeconomic Map Layers," Proceedings, NESTVAL, pp. 108-126.
- R.G. Cromley and G.M. Campbell. September 1994. "Range Constrained Grouping of Univariate Data for Choroplethic Displays" Proceedings, Sixth International Symposium on Spatial Data Handling, pp. 341-355. (Republished in Advances in GIS, T. Waugh and R. Healey (eds.), London: Taylor and Francis.
- M.B. Green, S.P. Meyer, and R.G. Cromley. 1993. "Canadian Institutional Investment and Regional Development," Ontario Geography, No. 38, pp. 11-19.
- S. Pritchard, R. Cromley, and R. Andrie. October 1993. "A GIS Approach to Highway Corridor Identification," Proceedings, NESTVAL, pp.32-46.
- R.G. Cromley. November, 1993. "Automated Geography: Some Reflections," Professional Geographer, Vol. 45, No. 4.
- C. Barber, R.G. Cromley, and R. Andrie. October 1992. "A Comparison of Hierarchical and Non-hierarchical Line Simplification Algorithms," Proceedings, NESTVAL, pp. 62-79.

- R.G. Cromley and G.M. Campbell. July 1990. "A Geometrically Efficient Bandwidth Line Simplification Algorithm," Proceedings, Fourth International Symposium on Spatial Data Handling, pp. 77-84.
- R.G. Cromley. August 1988. "A Vertex Substitution Approach to Numerical Line Simplification," Proceedings, Third International Symposium on Spatial Data Handling, pp. 57-64.
- E.K. Cromley and R.G. Cromley. August 1988. "A Market Potential Approach to Analyzing Regional Physician Availability," Proceedings, Third International Symposium on Medical Geography.
- R. Annitto and R.G. Cromley. November 1987. "MARKMAP: A GIS for Small Scale Market Area Analysis," Proceedings, International Conference on Geographic Information Systems, Vol. 3, pp. 37-44.
- E.K. Cromley and R.G. Cromley. November 1987. "A GIS for Local Health Services Planning," Proceedings, International Conference on Geographic Information Systems, Vol. 3, pp. 551-558.
- K. Zografos and R.G. Cromley. August 1987. "Modelling Large Scale Hierarchical Public Facility Location Problems," Proceedings, Conference on Planning and Design in Urban and Regional Planning, pp. 97-103.
- R.G. Cromley. March 1987. "Calculating Bisector Skeletons Using a Thiessen Data Structure," Proceedings, The International Symposium on Automated Cartography (AUTO-CARTO 8), pp. 719-724.
- R.G. Cromley. July, 1986. "A Spatial Allocation Analysis of the Point Annotation Problem," Proceedings, Second International Symposium on Spatial Data Handling, pp. 38-49.
- D.M. Hanink and R.G. Cromley. November, 1985. "A Risk-Return Model for Multiregion and Multiproduct Diversification of the Firm," Proceedings, Joint Middle Atlantic and NESTVAL, pp. 140-149.
- R.G. Cromley. March, 1985. "An LP Relaxation Procedure for Annotating Point Features Using Interactive Graphics," Proceedings, The International Symposium on Automated Cartography (AUTO-CARTO 7), pp. 127-132.
- R.G. Cromley and D.M. Hanink. November, 1984. "Minimizing Production Risk Through Geographical Diversification," Proceedings, NESTVAL, pp. 63-69.
- R.G. Cromley. August, 1984. "An Efficient Digitizing System For Encoding Conformant Zone Maps on a Vector Mode Device," Proceedings, The First International Symposium on Spatial Data Handling, Vol. 1, pp. 181-188.
- R.G. Cromley. November, 1983. "A Procedure for Shading Class-Interval Regions," Proceedings, The International Symposium on Automated Cartography (AUTO-CARTO VI), Vol. 2. pp. 453-442.

- R.G. Cromley. August, 1983. "Automated Geography: Some Problems and Pitfalls," Professional Geographer, Vol. 35, No. 3, p. 340-341.
- R.G. Cromley and M.D. Woodall. November, 1982. "An Appraisal of School Desegregation Models," Proceedings, Kentucky Academy of Sciences, pp. 18-35.
- R.G. Cromley and R.L. Haven. November, 1981. "Commuting and Population Trends in the Intermetropolitan Periphery of Western Kentucky," Proceedings, Kentucky Academy of Sciences, pp. 26-42.
- R.G. Cromley and R.L. Haven. November, 1980. "Industrial Commuting Patterns in Nonmetropolitan Kentucky," Proceedings, Kentucky Academy of Sciences, pp. 24-41.
- G.W. Shannon and R.G. Cromley. November, 1979. "Bring Out Yer Dead," A Cartographic Analysis of the Spread of the Black Death in London, England, 1665," Proceedings, The International Symposium on Computer-Assisted Cartography (AUTO-CARTO IV), Vol. 1, pp. 411-421.

Professional Activities

- Member, Editorial Review Board, The Northeastern Geographer, 2007-present.
- President, Cartography and Geographic Information Society of the ACSM, 2003-2004.
- Vice-President, Cartography and Geographic Information Society of the ACSM, 2002-2003.
- Member, Article Review Board, Journal of URISA, 1999-2010.
- Member, Editorial Review Board, Cartography and Geographic Information Science, 2000-2008.
- Editor, Cartography and Geographic Information Science, 1996-2000.
- Co-editor, Resource Publication Series in College Geography, Association of American Geographers, 1991-1994.
- Co-editor, Occasional Papers Series, Association of American geographers, 1992-1994.
- Chair, GIS Specialty Group, AAG, 1992-1993.
- Vice-Chair, GIS Specialty Group, AAG, 1991-1992.
- Software Review Editor, The Professional Geographer, 1987-1991.
- Chair, GIS Specialty Group Awards Committee, AAG, 1991.