

R. Maxwell Baber (*Beavers)

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- Education** Ph.D., Department of Geography, University of Georgia (1999)
▶ Dissertation: *An Evaluation of Cartographic Visualization's Utility in the Spatial Analysis of Urban Social Dynamics*
M.A., Department of Geography, Georgia State University (1993)
B.S., College of Education, Georgia State University (1984)
- Professional Interests** *Geographic Information Science*: urban, cultural, multidisciplinary education
Cartography & Information Design: print, interactive, animated, internet
- Academic Appointments** ▶ Assistant Professor, Samford University (2001-present)
▶ Research Scientist, Vulcan Materials Center for Environmental Stewardship and Education, Samford University (2002-present)
▶ Assistant Professor, University of Northern Colorado (1999-2001)
- Courses Taught** ▶ Samford University, Department of Geography
GEOG 214 *Physical Geography*
GEOG 216 *GIS I: Digital Mapping*
GEOG 270 *GIS II: Spatial Analysis*
GEOG 299 *The Craft of Geography*
GEOG 300 *Remote Sensing*
GEOG 362 *The Geography of London*
GEOG 371 *Multimedia Cartography*
GEOG 405 *GIS Project Management*
MCGS 216 *GIS I: Spatial Data*
MCGS 270 *GIS II: Analytical Mapping*
MCGS 371 *Geographic Visualization*
ENVM 509 *Environmental GIS*
▶ University of Northern Colorado, Department of Geography
GEOG 100 *World Geography*
GEOG 264 *Maps and Imagery*
GEOG 302 *Cartography*
GEOG 407 *Theory and Use of Geographic Information Systems*
GEOG 508 *Workshop: Explorations in GIS*
GEOG 560 *Maps and Mapping in Geographic Education*
- Funded Projects** Griffin, Jonnie, James S. Brown, R. Maxwell Baber, Glenda Weathers, Jon Van Sant, and Gerald Bray. "Birmingham International Festival Professional Development Workshop." Submitted to Alabama Humanities Foundation October 2005; awarded \$4000 December 2005.

- Beavers, Robert Maxwell, Paul D. Blanchard, Eric J. Fournier, Robert A. Stiles, and James S. Brown. "Academic Excellence and Geographic Information Systems (AEGIS): Guided Multidisciplinary Integration of Spatial Technologies in Higher Education." Submitted to National Science Foundation (NSF-02-095) December 2002; awarded \$194,905 September 2003.
- Gladney, Robert E., Kimberly Patrick, and Robert Maxwell Beavers. "Science, Technology, And Research Training (S.T.A.R.T.): Giving Youth a Healthy S.T.A.R.T. in GIS Tehnological-Based Employment Opportunities." Submitted to the Jefferson County Workforce Investment Board April 2003; awarded \$203,973 June 2003.
- Beavers, Robert Maxwell. "Custom Development of Geographic Information Systems (GIS) Applications." Submitted to Samford University Academic Affairs Committee October 2002; awarded \$2,000 January 2003.
- Beavers, Robert Maxwell. "Laboratory for Geographic Information Science." Submitted to University of Northern Colorado Information Technology Committee February 2000; awarded \$84,335 April 2000.

**Grant
Proposals**

- Brown, James S., Martha Rawls, and Robert Maxwell Beavers. "Interactive 3-D Maps and a New "Great Roads" Way of Teaching History." Submitted to 3M Foundation Vision Grant program March 2003.
- Blanchard, Paul, Robert A. Stiles, and Robert Maxwell Beavers. "Samford University Proposal to Alabama Power Foundation." Submitted to the Alabama Power Foundation January 2003.
- Beavers, Robert Maxwell, Paul D. Blanchard, Eric J. Fournier, Robert A. Stiles, and James S. Brown. "The Samford Integrated Geographic Information Science (SIGIS) Program: Extending the Grasp of Science and Technology on a Liberal Arts Campus," Submitted to National Science Foundation (NSF-02-075) June 2002.
- Fournier, Eric J., Robert Maxwell Beavers, Brian Burnes, Roald Hazelhoff. "Mapping Alabama's Environmental Future: Using Geographic Information and Global Positioning Systems to Enhance Environmental Science Education," Submitted to AT&T Learning Network 2002-2003 Teaching and Technology Grants May 2002.
- McKinney, Steve, Steve Bedsole, Paul Blanchard, Larry Davenport, Bob Stiles, and Robert Maxwell Beavers. "Birmingham Metropolitan Wetlands Delineation and Environmental Remote Sensing Project," Submitted to NASA BAA-01-OES-01 July 2001.

Publications

- Baber, R. Maxwell, and James S. Brown. "Touring 'Great Roads' of Human Activity: Using Geographic Visualization to Explore Historical Landscapes," in *Proceedings of the 22nd International Cartographic*

Conference, July 2005.

- Brown, James S., and Max Baber. "Using the Johannesburg-to-Durban Corridor to Teach Modern South African History in Microcosm," in *Proceedings of the South African Past in the 21st Century Conference*, Historical Association of South Africa, University of Stellenbosch, April 2004.
- Beavers, R. M. "Visual Estimation of Correlation via Thematic Map Animations of Urban Demographic Trends," in *Proceedings of the 21st International Cartographic Conference*, by the International Cartographic Association, August 2003.
- Alderman, Derek H., and Robert Maxwell Beavers. "Heart of Dixie Revisited: An Update on the Geography of Naming in the American South," *Southeastern Geographer*, November 1999.

**Scholarly
Review**

- National Science Foundation* (agency, 2005)
Professional Geographer (journal, 2002-2005)
Cartography and Geographic Information Science (journal, 2003-2004)
IV03–Spatial Data Visualization Symposium (conference, 2003)

**Academic
Presentations**

- Baber, Max, and James S. Brown. *Forward into the Past: Geographic Visualization Enlivens History Education with Dynamic Interactivity*, Association of American Geographers annual meeting, Chicago, Illinois, March 2006.
- Baber, R. Maxwell, and James S. Brown. *Visualizing "Great Roads" of History: Using Dynamic and Interactive Mapping to Enhance Undergraduate Student Learning*, North American Cartographic Information Society annual meeting, October 2005.
- Baber, R. Maxwell, and James S. Brown. *On the Trail of Human Events: Navigating Historical Landscapes with Cartographic Visualization*, British Cartographic Society – 42nd annual symposium, Plymouth, England, September 2005.
- Baber, R. Maxwell, and James S. Brown. *Touring 'Great Roads' of Human Activity: Using Geographic Visualization to Explore Historical Landscapes*, International Cartographic Conference, A Coruña, Spain, July 2005.
- Baber, R. Maxwell. *The AEGIS Project: Expanding the Reach of Geographic Information Systems at a Liberal Arts University*, Association of American Geographers annual meeting, Denver, Colorado, April 2005.
- Baber, R. Maxwell. *Mapping by Degrees: Enhancing Liberal Arts Education with Geographic Information Systems*. North American Cartographic Information Society annual meeting, October 2004.
- Baber, R. Maxwell. *Mapping a Brighter Future for Inner-City Youth: Using GIS to Span the Digital Divide* (poster), British Cartographic Society –

- 41st annual symposium, Durham, England, September 2004.
- Baber, R. Maxwell. *Integrating Geographic Information Systems (GIS) Experiences into Undergraduate Courses Across the Arts and Sciences Curriculum* (poster), National Science Foundation – Course, Curriculum, and Laboratory Improvement conference, Washington, DC, April 2004.
- Baber, R. Maxwell. *START Your Engines: GIS as a Vehicle for Crossing the Digital Divide* (poster), Association of American Geographers annual meeting, Philadelphia, Pennsylvania, March 2004.
- Beavers, R.M. *Visual Estimation of Correlation via Thematic Map Animations of Urban Demographic Trends*, International Cartographic Conference, Durban, South Africa, August 2003.
- Beavers, Robert Maxwell. *Leavin' Me Blue for Dixie: Representations of Poverty in Alabama* (poster), Association of American Geographers annual meeting, New Orleans, Louisiana, March 2003.
- Beavers, Robert Maxwell. *An Animated Look at Broad-Scale Demographic Trends in Metropolitan Birmingham, Alabama from 1960 to 2000*, Association of American Geographers annual meeting, Los Angeles, California, March 2002.
- Collins, Charles O., and Robert Maxwell Beavers. *Electronic Map Production and the Atlas of Colorado: Updating Resources for Geographic Education*, GeoTech Colorado conference sponsored by Colorado Geographic Alliance, Monument, Colorado, May 2001.
- Beavers, Robert Maxwell, and Charles O. Collins. *Ranchettes on the High Plains: Visualizing Residential Transformation of Agricultural Landscapes in Weld County, Colorado*, Association of American Geographers annual meeting, New York, New York, March 2001.
- Beavers, Robert M. *Academic GIS and Service to Local Communities: Ranchettes and Radon in Weld County, Colorado* (poster), GIS in the Rockies annual meeting, Denver, Colorado, September 2000.
- Collins, Charles O., and R. Maxwell Beavers. *Ranchettes in Weld County, Colorado: Reasonable or Regrettable Land Use*, Great Plains/Rocky Mountain Division–Association of American Geographers annual meeting, Provo, Utah, September 2000.
- Beavers, Robert Maxwell. *Visualizing Urban Social Dynamics: A Test of Correlation Estimation Using Animated Thematic Map Pairs*, Association of American Geographers annual meeting, Pittsburgh, Pennsylvania, April 2000.
- Beavers, Robert M. *The Social Sciences and Computerized Research Methods: Using Analytical Mapping Systems to Explore Human Landscapes*, Social and Behavioral Sciences Research Institute, University of Arizona, Tucson, Arizona, May 10, 1998.
- Beavers, Robert M. *Spatial Interpolation and the Isoplethic Mapping of*

- Urban Population Data*, Association of American Geographers annual meeting, Fort Worth, Texas, April 1997.
- Beavers, Robert M. *The Contours of Urban Population: A Consideration of Cartographic Data Model Transformation from a Stepped to a Smoothed Statistical Surface*, Southeastern Division–Association of American Geographers annual meeting, Athens, Georgia, November 1996.
- Alderman, Derek H., Robert M. Beavers, Jack Hierholzer, and Bob Martin. *Animated Cartography: Communicating a Dynamic World*, Graduate Student Forum Promoting Interdisciplinary Interaction, University of Georgia, Athens, Georgia, May 1995.
- Beavers, Robert M., John B. Strait, and Selima Sultana. *Contemporary Characteristics of Racially Sectorized Residential Space in Metropolitan Atlanta*, Association of American Geographers annual meeting, Chicago, Illinois, March 1995.
- Beavers, Robert M. *Hot Fun in the Summertime: A Look at Human Spatial Behavior in an Urban Recreational Setting*, Tenth Annual Georgia/Florida Geography Conference, Athens, Georgia, February 1995.
- Beavers, Robert M. *An Exploration of Metropolitan Atlanta's Contemporary Socioeconomic Landscape as Viewed Via Factorial Ecology*, Southeastern Division–Association of American Geographers annual meeting, Virginia Beach, Virginia, November 1994.
- Beavers, Robert M. *In the Wake of Urbanization: A Descriptive Socioeconomic Analysis of Decatur, Georgia from 1960 to 1990*, Southeastern Division–Association of American Geographers annual meeting, Greensboro, North Carolina, November 1993.
- Beavers, Robert M. *The Imprint of Socioeconomic Stratification on Housing Values in DeKalb County, Georgia: A Brief Examination of Relationships and Distributional Patterns of Selected Data from the 1990 United States Census*, Southeastern Division–Association of American Geographers annual meeting, Louisville, Kentucky, November 1992.

**Professional
Affiliations**

Association of American Geographers (AAG)
- Southeastern Division, Association of American Geographers (SEDAAG)
Cartography and Geographic Information Society (CaGIS)
North American Cartographic Information Society (NACIS)
Urban and Regional Information Systems Association (URISA)
- Alabama Chapter of Urban and Regional Information Systems Association
Association for Geographic Information (AGI)
British Cartographic Society (BCS)

**Service to
Discipline**

Member, U.S. National Committee for the International Cartographic Association (2004-2008)
Organizer, U.S. entries to International Map Exhibition, International Cartographic Conference (2005, 2007)
Member, Board of Directors, North American Cartographic Information Society (2005-2007)
President, Alabama Chapter of the Urban and Regional Information Systems Association (2004-2005)
Cartographic Editor, *Southeastern Geographer*, journal of the Southeastern Division, Association of American Geographers (1997-1999, 2004-present)
Newsletter Editor, Cartography Specialty Group, Association of American Geographers (2000-present)
Judge, National Geographic Award in Mapping, Cartography Specialty Group, Association of American Geographers (2003-2004)
Academic Director, Cartography Specialty Group, Association of American Geographers (2002-2004)
Co-organizer, Geographic Visualization Sessions, Association of American Geographers Annual Meetings (2001 - 2003)

**Service to
University**

A&S Representative, Faculty Senate, Samford University (2004-2007)
Member, Academic Freedom Senate Subcommittee, Samford University (2004-2005)
A&S Representative, Learning Resources Committee, Samford University (2005-2008)
Member, International Studies Advisory Committee, Samford University (2005-2006)
Participant, New Faculty in London Cadre, "The Convening University: Engaging the Church and Society," Daniel House, Samford University (May 2005)
Presenter, "Report on the Academic Excellence and Geographic Information Systems (AEGIS) Project," submitted to Samford University Foundation Board of Directors (March 2005).
Organizer, "Women in Geography," panel presentation on career prospects and professional success at Samford University (October 2004).
Organizer, "Samford GIS Exposition," at Samford University Department of Geography (2004)
Presenter, "Using GIS to Enhance Learning in Your Discipline," Breakout session at the Samford University Faculty Workshop (August 2004)
Presenter, "AEGIS: A Case Study in Interdepartmental Collaboration," at the *New Directions in Interdisciplinary Collaboration at Samford University* faculty development seminar (May 2004)
Member, A&S Core Literacies Team, Transformational Learning Abilities

program, Samford University (2003-2004)
Organizer, "Samford GIS Exposition," at Samford University Department of
Geography (2001-2003)
Mapping Sciences Event Coordinator, Science Olympiad, Samford University
(2002, 2003)
Webmaster, Department of Geography, Samford University (2003-present)
Powell Club Sponsor, Department of Geography, University of Northern
Colorado (2000-2001)
Member, Academic Appeals Board, University of Northern Colorado (2000-
2001)
Member, Arts and Sciences Technology Advisory Committee, University of
Northern Colorado (1999-2001)
Member, Department of Geography Curriculum Subcommittee, University of
Northern Colorado (1999-2000)
Webmaster, Department of Geography, University of Northern Colorado
(1999-2001)
Webmaster, Colorado Geographic Alliance, Department of Geography,
University of Northern Colorado (1999-2001)

Honors

- *Outstanding Graduate Teaching Award*, University of Georgia (May 1997)
- *Prize for Presentation*, 1st Annual Graduate Student Forum Promoting
Interdisciplinary Interaction, University of Georgia (May 1995)
- *Best Student Paper Masters' Level Award*, Annual Meeting of the
Southeastern Division, Association of American Geographers,
Louisville, Kentucky (November 1992)

***Personal Note** Surname was changed from *Beavers* to *Baber* in 2003, restoring family name
to original spelling prior to mid-19th century change.