

**Blakeman B. (“Blake”) Esselstyn**

34 Wall Street · Suite 701 · Asheville, NC 28801-1141

blake@mapfigure.com · 828-338-8528

EDUCATION

- University of Pennsylvania, School of Engineering and Applied Science, Master of Computer and Information Technology, 2003; GPA 4.0
- Yale University, Geology & Geophysics and International Studies, Bachelor of Arts, 1996

PROFESSIONAL CERTIFICATIONS

- Geographic Information Systems Professional (GISP), #6946, 2009
- American Institute of Certified Planners (AICP), #026364, 2013

EMPLOYMENT (Teaching positions listed separately)

- Redistricting Consultant, dba Mapfigure Consulting/EQV Maps (and as Blake Esselstyn), Asheville, NC, 2016-present
- Principal Consultant, FrontWater, LLC, Asheville, NC, 2015-present
- Urban Planner III – GIS Specialist, City of Asheville Department of Planning and Urban Design, Asheville, NC, 2008-2015
- Urban Planner II, City of Asheville Planning Department, Asheville, NC, 2004-2008
- Independent GIS Consultant, Freelance, Asheville, NC, 2003-2004
- GIS Programmer, Azavea, Inc., Philadelphia, PA, 2002
- Web Support Fellow, University of Pennsylvania, Philadelphia, PA, 2002
- GIS Analyst, Applied Geographics, Inc., Boston, MA, 2001
- GIS Intern, Community and Environmental Spatial Analysis Center, Seattle, WA, 2000
- GIS Analyst, Applied Geographics, Inc., Boston, MA, 2000
- Mapping Technician, Schlosser Geographic Systems, Seattle, WA, 1997
- Digital Mapping Resources Consultant, Social Science Statistical Laboratory at Yale University, New Haven, CT, 1997
- Special Assistant to the CityRoom Coordinator, Neighborhood Partnerships Network, New Haven, CT, 1996-1997
- Lab Monitor, Center for Earth Observation at Yale University, New Haven, CT, 1995

## TEACHING EMPLOYMENT

- Adjunct Faculty, Lenoir-Rhyne University, Asheville, NC, 2019  
Taught full-semester graduate-level Geographic Information Systems (GIS) course
- Adjunct Faculty, Western Carolina University, Asheville, NC, 2017  
Taught full-semester graduate-level GIS course
- GIS Course Assistant, University of Pennsylvania, Philadelphia, PA, 2002-2003  
Served as teaching assistant for two undergraduate GIS semester courses
- Teacher, Equity American School, Guatemala City, Guatemala, 1998-1999  
Led mathematics department for grades 7-12; taught one technology course
- Teacher, International School of Panama, Panama City, Republic of Panama, 1997-1998  
Taught computer programming and mathematics to secondary school students

## SPEAKER OR PANELIST

- “Redistricting Software 2021: The Next Generation of Tools Could Open New Doors,” Urban and Regional Information Systems Association (URISA) GIS-Pro Conference, Virtual, 2020
- “QGIS and democracy: Redistricting and reapportionment with QGIS,” QGIS North America Conference, Virtual, 2020
- “Does Your Vote Count?: The Impact of Gerrymandering,” virtual panel hosted by League of Women Voters Asheville Buncombe, NC, 2020
- [Scheduled, but cancelled due to COVID-19] “Redistricting with QGIS,” Free and Open Source Software for Geospatial Conference, Calgary, Alberta, Canada, 2020
- [Scheduled, but cancelled due to COVID-19] Teaching Faculty (session title to be determined), National Conference of State Legislatures Redistricting Seminar, Las Vegas, NV, 2020
- [Scheduled, but cancelled due to COVID-19] “Census Geography, Precision & Privacy,” Census Symposium, University of North Carolina Asheville, NC, 2020
- “The State of Redistricting Software and Data Resources for 2020,” Quantitative Investigations of Gerrymandering and Redistricting Conference, Duke University, Durham, NC, 2020
- “School Board Elections,” 53rd School Attorneys’ Conference, UNC School of Government, Chapel Hill, NC, 2020
- “Methods and Techniques in Redistricting,” Harvard Geography of Redistricting Conference, Cambridge, MA, 2019
- “Redistricting Software: A new generation of geospatial tools,” North Carolina GIS Conference, Winston-Salem, NC, 2019

- “The Latest Mapping Technology,” Reason, Reform & Redistricting Conference, Duke University, Durham, NC, 2019
- “Redistricting—What Happens Now?” Voter Education Panel hosted by League of Women Voters (and others), Hendersonville, NC, 2019
- “What are all These Districts? How did We Get Here, and Redistricting Reform,” Grassroots Democracy: A Nonpartisan Voter Education Series, Leicester, NC, 2019
- “Re-GIS-tracting? A new generation of redistricting geo-tools,” Mountain Regional GIS Alliance, Asheville, NC, 2019
- “Representing (mis)representation,” Tapestry Data Storytelling Conference, University of Miami, Miami, FL, 2018
- “A Redistricting Tour,” Democracy in our Hands Conference, Asheville, NC, 2018
- “Dis-tricks: GIS and Public Understanding of Redistricting,” NC ArcGIS Users Group, Asheville, NC, 2018
- “Visual Explanations of Gerrymandering,” Highlands Indivisible, Highlands, NC, 2018
- “Dave’s Redistricting App,” Metric Geometry of Gerrymandering Workshop, University of Texas, Austin, TX, 2018
- “Districting Voter Education Forum,” Democracy North Carolina, Asheville, NC, 2017
- “When GIS leads planners astray,” American Planning Association National Conference, New York, NY, 2017
- “Conveying Uncertainty with GIS,” Azavea, Philadelphia, PA, 2017
- “GISkepticism,” Appalachian State University, Boone, NC, 2017
- “When GIS leads planners astray,” North Carolina Planning Conference, American Planning Association North Carolina Chapter, Asheville, NC, 2016
- “What if the ‘S’ in GIS stood for Skepticism?” Mountain Regional GIS Alliance, Asheville, NC, 2015
- “Open Data? Show Me the Money!” North Carolina GIS Conference, Raleigh, NC, 2015

#### TEACHING AS SINGLE-CLASS GUEST SPEAKER (On redistricting and/or GIS)

- University of North Carolina Asheville, Mathematics: Voting Theory Course (speaking on redistricting), 2020
- Metric Geometry and Gerrymandering Group Redistricting Lab (Tufts University + MIT), Geodata Bootcamp Mapmaking Session (speaking on redistricting software), 2020
- [Scheduled, but put on hold until 2020-2021 academic year due to COVID-19] Duke University, Law School: Election Law Course (leading hands-on redistricting simulation exercise), April 2020

- Duke University, Data Science Capstone Seminar (speaking on data science professional/career advice), 2020
- University of North Carolina Asheville, Political Science: Census Course (speaking on redistricting), 2020
- Lenoir-Rhyne University, Public Policy Processes Course (speaking on redistricting), 2019
- Western Carolina University, Geographic Information Systems Course (speaking on GIS), 2019
- Duke University, Democracy Lab Seminar (speaking on redistricting software tools), 2018
- University of North Carolina Asheville, Political Science: US Elections Course (speaking on redistricting), 2018
- University of North Carolina Asheville, Mathematics: Voting Theory Course (speaking on redistricting), 2018
- Lenoir-Rhyne University, Sustainability Management & Decision Making Course (speaking on GIS/location intelligence), 2018
- Yale University, School of Organization and Management: Business Information Course (speaking on Maptitude—one class + multiple labs), 1997

#### LITIGATION EXPERIENCE (As GIS and/or redistricting expert)

- Consulting expert for plaintiffs, in *Harper v. Lewis*, Wake County (NC) Superior Court, 2019
- Consulting expert for plaintiffs, in *Common Cause v. Lewis*, Wake County (NC) Superior Court, 2019
- Preparation of redistricting map exhibits used in *Vesilind v. Virginia State Board of Elections*, Richmond (VA) Circuit Court, 2017
- Expert witness analysis, deposition, and testimony for City of Asheville, in *Jensen v. City of Asheville*, Buncombe County (NC) Superior Court, 2009-2010
- Expert witness analysis and testimony for City of Asheville, in *Hall v. City of Asheville*, Buncombe County (NC) Superior Court, 2007
- Expert witness analysis and testimony for City of Asheville, in *Arnold v. City of Asheville*, Buncombe County (NC) Superior Court, 2005

#### PUBLIC REDISTRICTING PROJECT EXPERIENCE

- Software operator and presenter, National Conference of State Legislatures Redistricting Seminar: Redistricting Simulation, Columbus, OH, 2019
- Software operator and presenter, National Conference of State Legislatures Redistricting Seminar: Redistricting Simulation, Providence, RI, 2019

- Hands-on GIS software workshop session leader, Metric Geometry of Gerrymandering Group (MGGG) Conference at the University of Texas, Austin, TX, 2018
- Co-leader of redistricting hackathon, Metric Geometry of Gerrymandering Group (MGGG) Conference at Duke University, Durham, NC, 2017
- Preparation of simulated redistricting plans for Democracy North Carolina's Districting Voter Education Forum, Asheville, NC, 2017
- Hands-on GIS software workshop session assistant, Metric Geometry of Gerrymandering Group (MGGG) Conference at Tufts University, Medford, MA, 2017
- Redistricting software operator (converting retired jurists' instructions into maps), Duke University and Common Cause NC independent redistricting commission simulation, Raleigh, NC and Winston-Salem, NC, 2016

#### MEDIA APPEARANCES, OP-EDS, AND CITATIONS

- "What do Buncombe's new district lines mean for 2020 commissioner elections?" (map citation), *Asheville Citizen-Times*, November 21, 2019
- "Confused about new legislative districts? This 'map geek' can help," *NC Policy Watch*, November 21, 2019
- "Which district are you in? After gerrymandering fight, Asheville, Buncombe get final state districts," *Asheville Citizen-Times*, November 4, 2019
- "Suggestions for a fair redistricting process," *Princeton Election Consortium*, September 16, 2019
- "How will Asheville, Buncombe County be affected by gerrymandering decision?" *Asheville Citizen-Times*, September 6, 2019
- "2019 Districting," JMPRO TV's *The Weekly Update*, September 1, 2019
- "As redistricting battle continues in NC, League of Women Voters holds panel," *WLOS-TV*, August 11, 2019
- "With No Supreme Court End to Gerrymandering, Will States Make It More Extreme?" (citation/link of blog article), *New York Times*, June 28, 2019
- "The Supreme Court takes on gerrymandering. A cottage industry wants to prove it's gone too far," *USA Today*, March 26, 2019
- "Gerrymandering: 'Packing' and 'Cracking,' the meat and potatoes of partisan redistricting," *USA Today*, March 25, 2019
- "NC gerrymandering: Turner, McGrady lead reform effort on redistricting," *Asheville Citizen-Times*, February 14, 2019
- "Looking for a Way Forward on Redistricting Reform," *Duke Today*, January 28, 2019

- “Will Asheville try to stop the state from splitting it into districts?” (map citation), *Asheville Citizen-Times*, January 23, 2019
- “Some takeaways from NC’s elections,” WRAL.com, Nov 7, 2018
- “New Asheville districts are racial gerrymandering, black council members say” *Asheville Citizen-Times*, July 2, 2018
- “Legislature sets up districts for Asheville council, eliminates primaries” (map citation), *Asheville Citizen-Times*, June 27, 2018
- “Van Duyn to back Asheville council districts bill if Senate shifts election dates” (map citation), *Asheville Citizen-Times*, June 21, 2018
- “I Ran the Worst 5K of My Life So I Could Explain Gerrymandering to You,” *POLITICO Magazine*, November 15, 2017
- “Event to cover Nov. vote on City Council districts,” *Asheville Citizen-Times*, October 17, 2017
- “Who makes the grade? This week’s editorial report card,” *Asheville Citizen-Times*, June 2, 2017
- “Asheville grows; Charlotte, Raleigh and their suburbs grow faster,” *Asheville Citizen-Times*, May 29, 2017
- “Boundary issues: Where does Asheville end?” (op-ed), *Mountain Xpress*, April 29, 2016
- “For better or worse, Asheville growth inevitable,” *Asheville Citizen-Times*, November 21, 2015
- “St. Lawrence Green no litmus test for voters” (op-ed), *Mountain Xpress*, October 29, 2015

#### REDISTRICTING AND GIS SOFTWARE EXPERIENCE

- MapInfo (first used 1996)
- Maptitude (first used 1997)
- Esri ArcGIS/ArcInfo/ArcView (first used 2000)
- QGIS (first used 2015)
- Maptitude for Redistricting (first used 2016)
- Dave’s Redistricting App (first used 2016)
- DistrictBuilder (first used 2017)
- Esri Redistricting (first used 2018)
- Districtr (first used 2019)
- Statto Software Redistricter (first used 2019)

- ArcBridge DISTRICTSolv (first used 2020)

#### SELECTED AWARDS (As team member)

- G. Herbert Stout Award for Visionary use of GIS by Local Government, 2009
- International Economic Development Council, Excellence in New Media Initiatives, 2008
- Marvin Collins Outstanding Planning Award for Innovations in Planning Services, Education, and Public Involvement, 2007

#### PUBLISHED WORK

- “Integrating GIS and Social Marketing at HCFA,” *ESRI Map Book*, Volume 16, ESRI Press, 2001

#### ADDITIONAL TRAINING

- Introduction to GIS for Equity and Social Justice, Urban and Regional Information Systems Association Certified Workshop, Virtual, 2020
- Public Data, Public Access, Privacy, and Security: U.S. Law and Policy, Urban and Regional Information Systems Association Certified Workshop, Raleigh, NC, 2015
- An Overview of Open Source GIS Software, Urban and Regional Information Systems Association Certified Workshop, Portland, OR, 2012
- An Introduction to Public Participation GIS: Using GIS to Support Community Decision Making, Urban and Regional Information Systems Association Certified Workshop, Orlando, FL, 2010
- 3-D Geospatial Best Practices and Project Implementation Methods, Urban and Regional Information Systems Association Certified Workshop, Vancouver, BC (Canada), 2006

#### BOARDS AND COMMISSIONS

- Asheville City Council Appointee to Comprehensive Plan Advisory Committee, 2016-2018

#### MEMBERSHIPS

- Urban and Regional Information Systems Association (URISA)
- Mountain Regional GIS Alliance (MRGAC)
- American Planning Association (APA)