Blakeman ("Blake") B. Esselstyn
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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 (and as Blake Esselstyn), Asheville, NC, 2016–present (and in the Netherlands starting late 2022)

- 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

LITIGATION EXPERIENCE (As GIS and/or redistricting expert)

·   Preparation of expert reports for plaintiffs, in *Pierce v. North Carolina State Board of Elections*, U.S District Court for the Eastern District of North Carolina, 2023–2024

·   Testifying expert for plaintiffs, in *Grant v. Raffensperger*, U.S District Court for the Northern District of Georgia, 2022–2023

·   Consulting expert for plaintiffs, in *League of United Latin American Citizens v. Abbott*, U.S District Court for the Western District of Texas, 2022

·   Consulting expert for plaintiffs, in *Rivera v. Schwab*, Wyandotte County (KS) District Court, 2022

·   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

· Design of electoral redistricting plans for Edgecombe County (NC) Board of Education, 2024 (adoption expected in 2025)

· Design and completion of adopted electoral redistricting plans for Watauga County (NC) Board of Commissioners, 2024

· Design and completion of adopted electoral redistricting plans for Buncombe County (NC) Board of Education, 2023–2024

· Design and completion of adopted electoral redistricting plans for Wake County (NC) Board of Education, 2021–2022

· Design and completion of adopted electoral redistricting plans for Mecklenburg County (NC) Board of Commissioners, 2021

· Design and completion of adopted electoral redistricting plans for Craven County (NC) Board of Commissioners, 2021

· Design and completion of adopted electoral redistricting plans for City of Fayetteville (NC) City Council, 2021

· Design and completion of adopted electoral redistricting plans for City of Greenville (NC) City Council, 2021

· Design and completion of adopted electoral redistricting plans for Town of Cary (NC) Town Council, 2021

· Design and completion of adopted electoral redistricting plans for City of Hickory (NC) City Council, 2021

· Design and completion of adopted electoral redistricting plans for Town of Mooresville (NC) Board of Commissioners, 2021

· Design and completion of adopted electoral redistricting plans for City of Clinton (NC) City Council, 2021

· Design and completion of adopted electoral redistricting plans for Siler City (NC) Board of Commissioners, 2021

· Design and completion of adopted electoral redistricting plans for Town of Tarboro (NC) Town Council, 2021

· Design and completion of adopted electoral redistricting plans for Durham Public Schools (NC) Board of Education, 2021

· Design and completion of adopted electoral redistricting plans for Pitt County (NC) Board of Education, 2021

· Design and completion of adopted electoral redistricting plans for Union County (NC) Board of Education, 2021

- Design and completion of adopted electoral redistricting plans for Edgecombe County (NC) Board of Education, 2021

- Design and completion of adopted electoral redistricting plans (in advance of Census data delivery) for Town of Cary (NC) Town Council, 2021

- Lead presenter, Lenoir-Rhyne University Hands-on Redistricting Workshop, Virtual, 2021

- 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

SPEAKER OR PANELIST

- "How Open Source Geo Tools Could Shape (Some) American Elections" Closing Keynote, FOSS4G (Free and Open Source Software for Geospatial) Conference Belgium + Netherlands, Baarle-Hertog, Belgium, 2024

- "Politics and QGIS: Open Source Legislative Reapportionment," QGIS User Conference, Den Bosch, The Netherlands, 2023

- "Political Reapportionment: Drawing Boundaries with QGIS," FOSS4G (Free and Open Source Software for Geospatial) Conference, Florence, Italy, 2022

- "Just Maps: How Gerrymandering Imperils the Right to Vote," Osher Lifelong Learning Institute at the University of North Carolina Asheville, virtual, 2022

- "How to Be a Redistricting Watchdog," Duke University's Redistricting and American Democracy Conference, Durham, NC, 2021

- "North Carolina Redistricting with Geographers: Local Knowledge & Community Considerations," American Association of Geographers (AAG) Redistricting Panel Series, Virtual, 2021

- "The Basics of Redistricting for Local Governments," NC Council of School Attorneys Summer Law Conference, Virtual, 2021

- "Census Timing and Redistricting," UNC School of Government: Municipal Attorneys' Winter Conference, Virtual, 2021

- "Census Delays and Redistricting," North Carolina League of Municipalities Online Meeting, Virtual, 2021

- "Redistricting: Ten Big Changes that GIS People Should Know About for 2021," North Carolina GIS Conference, Virtual, 2021

- "Demographics, the Census, and a Bit about Redistricting," UNC School of Government: County Attorneys Conference, Virtual, 2021

- "NC Redistricting Updates for the GIS Community," Mountain Region GIS Alliance, Virtual, 2021

- "The Census and Demographics," UNC School of Government: Redistricting for Local Governments Conference, Virtual, 2021

- "The Mechanics of Redistricting," UNC School of Government: Redistricting for Local Governments Conference, Virtual, 2021

- "Ask the Experts Panel," National Conference of State Legislatures (NCSL) Redistricting Seminar, Virtual, 2021

- "GIS and the Data Handoff," National Conference of State Legislatures (NCSL) Redistricting Seminar, Virtual, 2021

- "Electoral Redistricting for School Boards after the 2020 Census," North Carolina School Boards Association 2020 Annual Conference, Virtual, 2020

- "Redistricting Software 2021: The Next Generation of Tools Could Open New Doors," Urban and Regional Information Systems Association (URISA) GIS-Pro Conference, Virtual, 2020

- "Changing Demographics, Drawing Districts, and County Impacts," North Carolina Association of County Commissioners 113th Annual 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-tricting? A new generation of redistricting geo-tools," Mountain Region 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 Region 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)

- United World College Maastricht, Geography Course (speaking on GIS), 2024
- Lenoir-Rhyne University, Public Policy Course (speaking on redistricting and representation), 2021
- Lenoir-Rhyne University, Geographic Information Systems Course (speaking on GIS), 2021
- 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 cancelled 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 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

MEDIA APPEARANCES, OP-EDS, AND CITATIONS

· "Gerrymandered or no? How will courts judge new North Carolina political maps?" *Raleigh News & Observer*, February 8, 2022

· "Monster: Math, maps and power in North Carolina," special podcast series from *Raleigh News & Observer*, September 24, 2021

· "Census data has arrived. What comes next?" *Chatham News + Record*, September 1, 2021

· "An Explainer for Redistricting Criteria, Part 1: Political Boundaries," *John Locke Foundation*, August 23, 2021

· "Special report: Demystifying the redistricting process," *NC Policy Watch*, August 20, 2021

· "Raleigh, Cary and other NC cities may have to push back their 2021 elections," *Raleigh News & Observer*, February 24, 2021

· "Triad Cities Awaiting Census Data May Delay Elections," WFDD Radio, February 17, 2021

· Live interview, WPTF Radio Afternoon News, February 15, 2021

· "Census Delays Could Delay Charlotte City Council, CMS Fall Elections," WFAE Radio, January 28, 2021

· "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

- "Republicans silent in wake of court order to draw new maps in one month," *NC Policy Watch*, August 2, 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

PUBLISHED WORK

- "Redistricting Software Applications, Data, and Related Tools," supplement to *Redistricting: A Guide for the GIS Community*, Urban and Regional Information Systems Association, 2021

- (Co-authored with Mark Salling, PhD, GISP) "GIS Software Functionality for Redistricting," *The GIS Professional*, Issue 301, Urban and Regional Information Systems Association, May/June 2021

- (Co-authored with Joan Gardner, Suzanne Rotwein, and Tong Zhang) "Integrating GIS and Social Marketing at HCFA," *ESRI Map Book*, Volume 16, ESRI Press, 2001

SELF-PUBLISHED PUBLIC-FACING EXPLANATORY WRITING & MAPS

- (Co-authored with Christopher Cooper, Gregory Herschlag, Jonathan Mattingly, Rebecca Tippett) "NC General Assembly County Clusterings from the 2020 Census," *Quantifying Gerrymandering* Blog, August 17, 2021

- (Co-authored with Christopher Cooper, Gregory Herschlag, Jonathan Mattingly, Rebecca Tippett) "Legislative County Clustering in North Carolina—Looking towards the 2020 Census," *Quantifying Gerrymandering* Blog, July 16, 2021

- Created the blogs at districks.com (2017) and mapfigure.com (2020) — the story maps "A 'Stephenson' explainer" and "Could COVID repercussions delay NC elections in 2021 & 2022?" have each been viewed more than 2,700 times.

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/DRA 2020 (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)

- Felt (first used 2022)

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

SERVICE AS ELECTION OFFICIAL

·   Poll worker for multiple elections in Buncombe County, North Carolina (2012, 2020, 2022) and King County, Washington (2000), including as Chief Precinct Judge in 2020 general election and 2022 primary election

SERVICE ON BOARDS, COMMISSIONS, AND SELECTIVE COMMUNITY INITIATIVES

·   Leadership Asheville Flagship Program, 2020–2021 cohort

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

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

FOREIGN LANGUAGES

·   French (professional proficiency)

·   Spanish (working proficiency)

·   Dutch (basic proficiency)

MEMBERSHIPS

·   Urban and Regional Information Systems Association (URISA)

·   Mountain Region GIS Alliance (MRGAC)

·   American Planning Association (APA)