Curriculum Vitae for Jeffrey C. Blossom. jblossom@cga.harvard.edu, jeffblossom@gmail.com
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Personal Statement

I have over 25 years of experience working in the GIS industry, and am currently the Manger of GIS Services at the Center for Geographic Analysis, Harvard University. Our mission at the Center for Geographic Analysis at Harvard University is "to support research and education that relies on geographic information." In performing this work, the bulk of services I provide are in the form of teaching GIS and mapping, creation of training materials and tutorials, consultation, map creation (in hard copy, digital, and web form), geographic analysis and data processing. Many maps and analytical results I've created have been published in books, academic journals, and on the web. I teach the courses "Introduction to GIS" through the Harvard university Extension School, and "Computer Cartography" through Salem State University. My focus is on performing research and cartography that utilizes geographic information, and educating others to use GIS and "think geographically".

Education

1995 Willamette University, Salem, Oregon. BS, Environmental Science (major) Geography, Geology (minors)
2002 University of Denver, Denver, Colorado. MA, Geography.

Positions and Employment

1995	GIS Technician, Polk County GIS, Dallas, Oregon
1995-1996	GIS Analyst, Los Alamos National Laboratory, Los Alamos, New Mexico
1996-1998	Graduate Teaching Assistant, University of Denver, Denver, Colorado
1997-1999	GIS Specialist, United States Geological Survey, Denver, Colorado
1998-1999	GIS Research Assistant, Environmental Systems Research Institute (ESRI), Boulder, Colorado
1999-2002	GIS Developer, City and County of Denver, Colorado, Wastewater Management Division
2002-2007	GIS Photogrammetry Administrator, City and County of Denver, Colorado, Wastewater Management Division
2007-2015	Senior GIS Specialist, Center for Geographic Analysis, Harvard University, Cambridge Massachusetts
2007 – 2018	Part time GIS Consultant with Schofield Brothers of New England Civil Engineering/Surveying
2011-present	Adjunct faculty, Harvard University Extension School
2013-present	Adjunct faculty, Salem State (MA) University
2015-present	Manger of GIS Services, Center for Geographic Analysis, Harvard University, Cambridge Massachusetts

Professional Memberships

2007	Geospatial Information & Technology Association
2010, 2015, 2017, 2021	American Association of Geographers
2014, 2016	North American Cartographic Information Society

Honors

1998	STAR Award: United States Geological Survey
1999	STAR Award: United States Geological Survey
2010	Excellence in Teaching, Certificate of Distinction for Teaching Undergraduates, Harvard University
2012	FAS Dean's Distinction Award, Harvard University
2013	FAS Dean's Distinction Award, Harvard University
2016	FAS Dean's Distinction Award, Harvard University
2018	Distinguished Teaching Performance, Harvard University Extension School
2018	Bok Center Certificate of Distinction for Teaching Fellows

Technical Skills

ArcGIS Pro, ArcGIS Desktop, ArcGIS Online, QGIS, R, PostGIS, Adobe Illustrator, Photoshop, Windows and Linux OS.

Publications (in chronological order)

1. D. Vaniman, G. Cole, J. Gardner, J. Conaway, D. Broxton, S. Reneau, M. Rice, G. WoldeGabriel, **J. Blossom**, and F. Goff. (1996) *Development of a Site-Wide Geologic Model for Los Alamos National Laboratory.* Los Alamos Nat. Lab. Rept. #13000-120, Los Alamos, New Mexico.

2. **Blossom, J. C.**, Reneau, S. L., Broxton, D. E., and Wilcox, B. E. (1996) *The Use of a Geographic Information System in the Characterization of Contaminated Sediment, Los Alamos National Laboratory, Los Alamos, New Mexico*. GSA Abstracts, v.28.

3. **Blossom, J. C.** (1996) *Geologic Map of the Jemez Mountains, New Mexico*. ESRI Mapbook, v. 12 Redlands, California.

4. **Blossom, J. C.** (2002) *The Creation and Utilization of a Digital Elevation Model from 1:12,000 Scale Aerial Photography for Sediment Studies in the Spring Creek Watershed, Colorado.* Poster presentation at the Geologic Society of America annual conference. Denver, CO.

5. **Blossom, J.** (2004) *Satellite Imagery: A Path to Stormwater Revenues*. Public Works Magazine, September, 2004. Pp. 108 - 111.

6. **Blossom, J.** (2004) *Optimized Stormwater Billing*. Geospatial Solutions Magazine, October, 2004. Pp. 37-41.

7. **Blossom, J.** (2005) *Optimizing Stormwater Billing*. Water and Wastes Digest, February, 2005. P. 14.

8. **Blossom, J.** (2009) *Strict Quality Control with GIS Ensures Accurate Data for Denver*, chapter in: *GIS for Decision Support and Public Policy Making*., ESRI Press, pp. 11 – 21.

9. **Wendy Guan, Bonnie Burns, Julia L. Finkelstein and Jeffrey C. Blossom (2011)** *Enabling Geographic Research Across Disciplines: Building an Institutional Infrastructure for Geographic Analysis at Harvard University* in Journal of Map & Geography Libraries, January, 2011. http://www.tandfonline.com/doi/abs/10.1080/15420353.2011.534688

10. **Duncan DT, Castro MC, Blossom JC, Bennett GG, Gortmaker SL (2011)** *Evaluation of the positional difference between two common geocoding methods* in Geospatial Health - Volume 5, Number 2, May 2011, Pages 265-273. http://www.ncbi.nlm.nih.gov/pubmed/21590677

11. **Karim E. Abou-Nassar, MD, Haesook T. Kim, PhD, Jeff Blossom, MA, Vincent T. Ho, Robert J. Soiffer, MD, Corey S. Cutler, MD, MPH, Edwin P. Alyea, MD. John Koreth, MD, MBBS, DPhil, Joseph H. Antin, MD, and Philippe Armand, MD, PhD (2011)***The Impact of Geographic Proximity to Transplant Center on Outcomes after Allogeneic Hematopoietic Stem Cell Transplantation* in Biology of blood and marrow transplantation: journal of the American Society for Blood and Marrow Transplantation. August, 2011. http://www.researchgate.net/publication/51638077_The_Impact_of_Geographic_Proximity_to_Transplant_Center_on_Outcomes_after_Allogeneic_Hematopoietic_Stem_Cell_Transplantation

12. **Blossom, Jeffrey, Finkelstein, Julia L., Guan, Wendy, Burns, Bonnie (2011)** *Applying GIS Methods to Public Health Research at Harvard University.* in Journal of Map & Geography Libraries, September, 2011. http://www.tandfonline.com/doi/abs/10.1080/15420353.2011.599770

13. **Weihe Wendy Guan, Peter K Bol, Benjamin G Lewis, Matthew Bertrand, Merrick Lex Berman, and Jeffrey C Blossom (2012)** *WorldMap–a geospatial framework for collaborative research*. Annals of GIS, 18, 2, Pp. 121-134.

14. **Oreskovic, NM, Blossom, J, Field, AE, Chiang, SR, Winickoff, JP, Kleinman, RE (2012)** *Combining GPS and accelerometer data to determine the locations of physical activity in children*. Geospatial Health, May, 2012. http://www.ncbi.nlm.nih.gov/pubmed/22639128

15. **Friedman JM1, Hagander L, Hughes CD, Nash KA, Linden AF, Blossom J, Meara JG (2012)** *Distance to hospital and utilization of surgical services in Haiti: do children, delivering mothers, and patients with emergent surgical conditions experience greater geographical barriers to surgical care?* Int J Health Plann Manage. 2012 Aug 31. http://www.ncbi.nlm.nih.gov/pubmed/22936638

16. **Austin SB, Gordon AR, Kennedy GA, Sonneville KR, Blossom J, Blood EA (2013)** *Spatial distribution of cosmetic-procedure businesses in two U.S. cities: A pilot mapping and validation study*. Int J Environ Res Public Health 2013; 10(12): 6832-6862. http://www.mdpi.com/1660-4601/10/12/6832/

17. **Duncan DT, Kawachi I, Melly SJ, Blossom J, Sorensen G, Williams DR (2014)** *Demographic Disparities in the Tobacco Retail Environment in Boston, Massachusetts? A Citywide Spatial Analysis*. Public Health Reports. 2014 Mar-Apr;129(2):209-15. http://www.ncbi.nlm.nih.gov/pubmed/24587559

18. **Nicolas M Oreskovic, Jeff Blossom, Alyssa I Robinson, Minghua L Chen, Doris K Uscanga, Jason A Mendoza (2014)** *The influence of the built environment on outcomes from a "walking school bus study": a cross-sectional analysis using geographical information systems.* Geospat Health. 2014 Nov; 9(1): 37–44. doi: 10.4081/gh.2014.4

19. **Ingrid V. Bassett, Susan Regan, Hlengiwe Mbonambi, Jeffrey Blossom, Stacy Bogan, Benjamin Bearnot, Marion Robine, Rochelle P. Walensky, Bright Mhlongo, Kenneth A. Freedberg, Hilary Thulare, Elena Losina (2015)** *Finding HIV in Hard to Reach Populations: Mobile HIV Testing and Geospatial Mapping in Umlazi Township, Durban, South Africa.* Aids and Behavior, Feb. 10, 2015.

20. **Nicolas M Oreskovic, James M Perrin, Alyssa I Robinson, Joseph J Locascio, Jeff Blossom, Minghua L Chen, Jonathan P Winickoff, Alison E Field, Chloe Green, Elizabeth Goodman. (2015).** *Adolescents' use of the built environment for physical activity.* BMC public health, Vol. 15 Issue 1, p1-9. 9p., Dec. 2015. https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-015-1596-6

21. 20. **Lauren Fiechtner, Gabriella C Puente, Mona Sharifi, Jason P Block, Sarah Price, Richard Marshall, Jeff Blossom, Monica W Gerber, Elsie M Taveras (2017)** *A Community Resource Map to Support Clinical-Community Linkages in a Randomized Controlled Trial of Childhood Obesity, Eastern Massachusetts, 2014-2016.* Prev Chronic Dis. 2017; 14: E53. Published online 2017 Jul 6. doi: 10.5888/pcd14.160577

22. **Hamdi Eryilmaz, Kevin F. Dowling, Franklin C. Huntington, Anais Rodriguez-Thompson, Thomas W. Soare, Lauren M. Beard, Hang Lee, Jeffrey C. Blossom, Randy L. Gollub, Ezra Susser, Ruben C. Gur, Monica E. Calkins, Raquel E. Gur, Theodore D. Satterthwaite, Joshua L. Roffman (2018).** *Association of Prenatal Exposure to Population-Wide Folic Acid Fortification With Altered Cerebral Cortex Maturation in Youths.* JAMA Psychiatry. 2018;75(9):918-928. doi:10.1001/jamapsychiatry.2018.1381

23. **Akshay Swaminathan, Rockli Kim, Yun Xu, Jeffrey C Blossom, William Joe, R Venkataramanan, Alok Kumar, and SV Subramanian. (2019).** *Burden of Child Malnutrition in India: A View from Parliamentary Constituencies.* Economic & Political Weekly, 2, 2, Pp. 44-52. Publisher's Version.

24. **Jeffrey C Blossom, Akshay Swaminathan, William Joe, Rockli Kim, and SV Subramanian. (2019).** *Robust Parliamentary Constituency Estimates: Geographic Data Science Approaches.* Economic & Political Weekly, Vol. No. 19, Pp. 66-70. https://www.epw.in/journal/2019/19/discussion/robust-parliamentary-constituency-estimates.html

25. **Ur, Jason, Jeffrey Blossom, and Christian Harder. (2019)**. *Mapping Ancient Landscapes.* GIS for Science: Applying Mapping and Spatial Analytics, edited by Dawn Wright, 142-165. Redlands CA: Esri Press. Copy at http://j.mp/2YGJ6Jd

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28. **Kim R, Bijral AS, Xu Y, Zhang X, Blossom JC, Swaminathan A, King G, Kumar A, Sarwal R, Ferres JML, Subramanian S V. (2021).** *Precision mapping child undernutrition for nearly 600,000 inhabited census villages in India. Proceedings of the National Academy of Sciences 2021, 118, 18.*. https://doi.org/10.1073/pnas.2025865118

29. **Patrick Ryan, Cole Brokamp, Jeff Blossom, et. al. (2021***) A distributed geospatial approach to describe community characteristics for multi-site studies*. *Cambridge University Press, 05 February 2021.* https://doi.org/10.1017/cts.2021.7

30. **Marcia C. Castro, Sun Kim, Lorena Barberia, Ana Freitas Ribeiro, Susie Gurzenda, Karina Braga Ribeiro, Erin Abbott, Jeffrey Blossom, Beatriz Rache, Burton H. Singer. (2021)** *Spatiotemporal pattern of COVID-19 spread in Brazil. Science, 14 Apr. 2021. DOI: 10.1126/science.abh1558. ScienceMag website:* https://science.sciencemag.org/content/early/2021/04/13/science.abh1558

31. **Pardeshi G, Wang W, Kim J, Blossom J, Kim R, Subramanian S V. (2021)** *TB notification rates across Parliamentary Constituencies in India: A step towards data-driven political engagement. Trop Med Int Health*: https://doi.org/10.1111/tmi.13574

32. **Julie Kim, Yuning Liu, Weiyu Wang, Jeffrey C. Blossom, Laxmi Kant Dwivedi, K. S. James, Rakesh Sarwal, Rockli Kim, S.V. Subramanian (2021)** *Estimating the Burden of Child Undernutrition for Smaller Electoral Units in India. JAMA Network.* doi:10.1001/jamanetworkopen.2021.29416

33. **Weiyu Wang, Jeffrey Blossom, Julie Kim, Priyanka deSouza, Weixing Zhang, Rockli Kim, Rakesh Sarwal & S V Subramanian (2022)** *COVID-19 metrics across parliamentary constituencies and districts in India.* Annals of GIS. doi: *https://doi.org/10.1080/19475683.2022.2044903*

34. **Antonella Zanobetti, Patrick H. Ryan, Brent Coull, Cole Brokamp, Soma Datta, Jeffrey Blossom, Nathan Lothrop, Rachel L. Miller, Paloma I. Beamer, Cynthia M. Visness, Howard Andrews, Leonard B. Bacharier, Tina Hartert, Christine C. Johnson, Dennis Ownby, Gurjit K. Khurana Hershey, Christine Joseph, Song Yiqiang, Eneida Mendoza, Daniel J. Jackson, Heike Luttmann-Gibson, Edward M. Zoratti, Anne L. Wright, Fernando D. Martinez, Christine M. Seroogy, James E. Gern, Diane R. Gold (2022).** *Childhood Asthma Incidence, Early and Persistent Wheeze, and Neighborhood Socioeconomic Factors in the ECHO/CREW Consortium*. JAMA Pediatr. Published online May 23, 2022. doi:10.1001/jamapediatrics.2022.1446 .

35. **D. Kakkar, J. Blossom, and W. Guan (2022)** *RINX: A Solution For Information Extraction From Big Raster Datasets*. Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci., XLVIII-4/W1-2022, 245–250, 2022 https://doi.org/10.5194/isprs-archives-XLVIII-4-W1-2022-245-2022.

36. **Emma M. Kileel, Kirsten A. Dickins, Jeff Blossom, Sara E. Looby & Kathleen V. Fitch (2022)** *Regional Differences in Added Sweetener Knowledge, Consumption and Body Mass Index in People with HIV in the United States*. AIDS and Behavior, September 22, 2022. https://doi.org/10.1007/s10461-022-03814-2 Full article: https://jamanetwork.com/journals/jamapediatrics/fullarticle/2792664

37. **Nassikas NJ, Rifas-Shiman SL, Luttmann-Gibson H, Chen K, Blossom JC, Oken E, Gold DR, Rice MB (2023).** *Precipitation and adolescent respiratory health in the Northeast United States*. Annals of the American Thoracic Society. https://doi.org/10.1513/AnnalsATS.202209-805OC

38. **Deborah A. Olarte, Joshua Petimar, Peter James, Kristen Cooksey-Stowers, Sean B. Cash, Eric B. Rimm, Christina D. Economos, Marlaina Rohmann, Jeffrey C. Blossom, Yuting Chen, Rinki Deo, Juliana F.W. Cohen (2023).** *Trends in Quick-Service Restaurants near Public Schools in the United States: Differences by Community, School, and Student Characteristics*. Journal of the Academy of Nutrition and Dietetics. https://doi.org/10.1016/j.jand.2023.01.016

39. **Jewel Gausman, Sowmya Ramesh, Richard M. Adanu, Delia A. B. Bandoh, Jeff Blossom, Suchandrima Chakraborty, Ernest Kenu, Nizamuddin Khan, Ana Langer, Magdalene A. Odikro, Niranjan Saggurti, R. Rima Jolivet (2023).** *Measuring adequacy of the midwifery workforce using standards of competency and scope of work: Exploring the density and distribution of midwives in three low- and middle-income countries using cross-sectional and geospatial data.* Public Library of Sciences (PLOS) One. Published April 6, 2023. DOI: https://doi.org/10.1371/journal.pone.0284034

40. **Rachel L. Miller MD, Holly Schuh PhD, MPH, Aruna Chandran MD, PhD, Izzuddin M. Aris PhD, Casper Bendixsen PhD, Jeffrey Blossom MA, Carrie Breton ScD, Carlos A. Camargo Jr. MD, DrPH, Glorisa Canino PhD, Kecia N. Carroll MD, Sarah Commodore PhD, José F. Cordero MD, MPH, Dana M. Dabelea MD, PhD, Assiamira Ferrara MD, PhD, Rebecca C. Fry PhD, Jody M. Ganiban PhD, James E. Gern MD, Frank D. Gilliland MD, PhD, Diane R. Gold MD, Rima Habre ScD, Marion E. Hare MD, Robyn N. Harte MPH, Tina Hartert MD, MPH, Kohei Hasegawa MD, MPH, MS, Gurjit K. Khurana Hershey MD, PhD, Daniel J. Jackson MD, Christine Joseph PhD, Jean M. Kerver PhD, MSc, RD, Haejin Kim MD, Augusto A. Litonjua MD, MPH, Carmen J. Marsit PhD, Cindy McEvoy MD, MCR, Eneida A. Mendonça MD, PhD, Paul E. Moore MD, Flory L. Nkoy MD, MS, MPH, Thomas G. O'Connor PhD, Emily Oken MD, MPH, Dennis Ownby MD, Matthew Perzanowski PhD, Katherine Rivera-Spoljaric MD, Patrick H. Ryan PhD, Anne Marie Singh MD, Joseph B. Stanford MD, MSPH , Rosalind J. Wright MD, MPH, Robert O. Wright MD, MPH, Antonella Zanobetti PhD, Edward Zoratti, Christine C. Johnson PhD, MPH (2023).** *Incidence rates of childhood asthma with recurrent exacerbations in the US Environmental influences on Child Health Outcomes (ECHO) program.* Journal of Allergy and Clinical Immunology. DOI: https://doi.org/10.1016/j.jaci.2023.03.016
41. **X. Fu, D. Kakkar, J. Chen, K. M. Moynihan, T. A. Hegland, and J. Blossom (2023).** *A comparative study of methods for drive time estimation on geospatial big data: a case study in USA*. The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences. DOI: https://doi.org/10.5194/isprs-archives-XLVIII-4-W7-2023-53-2023