

Christopher S. Fowler, PhD.

Associate Professor of Geography and Demography
Associate, Population Research Institute
Director, Gould Center for Geography Education and Outreach
Curriculum Vitae

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Education:

PhD. University of Washington (2007).
Geography Dissertation: "From lived experience to economic models: a mixed methods analysis of competitive policies in Gioia Tauro and Genoa, Italy" Named "Best Dissertation" and "Runner Up Best Dissertation" from, respectively, the Economic Geography and Transportation Geography Specialty Groups of the Association of American Geographers.

M.A. University of Washington (2003).
Geography Awarded Ullman Prize for Best Thesis

A.B. Dartmouth College (1997).
Geography *cum laude* and highest departmental honors. Awarded Marsh Prize for Outstanding Thesis

Recent Positions:

July 2018- present Associate Professor, Department of Geography, Faculty in Demography, The Pennsylvania State University

Aug. 2019-May 2020 Visiting Faculty, Department of Human Geography, Stockholm, University. Stockholm, Sweden

August 2012- May 2018 Assistant Professor, Department of Geography, Faculty in Demography, The Pennsylvania State University.

Jan. 2010- Sept. 2011 Postdoctoral Fellow in Applied Spatial Statistics, Center for Studies in Demography and Ecology, University of Washington

Dec. 2008- Dec. 2009 Postdoctoral Research Associate in Poverty Research, Community Vitality Project, Evans School of Public Affairs, University of Washington.

Refereed Publications: († indicates co-author is a supervised graduate student)

Folch, David, **Christopher Fowler** and Levon Mikaelian (2021) "Day Time, Night Time, Over Time: Geographic and Temporal Uncertainty When Linking Event and Contextual Data" Environmental Health Vol 20, 51 <https://doi.org/10.1186/s12940-021-00734-x>

Lisa M. Gatzke-Kopp, Siri Warkentien, Michael Willoughby, **Chris Fowler**, David C. Folch, Clancy Blair (2021) "Proximity to sources of airborne lead is associated with reductions in Children's executive function in the first four years of life." Health and Place Vol. 68. doi.org/10.1016/j.healthplace.2021.102517.

Refereed Publications (continued):

- Baumer, Eric P., **Christopher Fowler**, Steven F. Messner, and Richard Rosenfeld (2021) "The Spatial Clustering of Poor Neighborhoods and Rates of Homicide Mortality: An Analysis of Metropolitan Counties, 1980-2010." *The Sociological Quarterly* <https://doi.org/10.1080/00380253.2020.1867485>
- Fowler, Christopher**, and Leif Jensen (2020) "Bridging the gap between geographic concept and the data we have: The case of labor markets in the U.S." *Environment and Planning A* Vol. 52, Issue 7 pp. 1395-1414.
- Fowler, Christopher**, Nathan Frey, David C. Folch, Nicholas Nagle, Seth Spielman (2019) "Who are the people in my neighborhood?: The 'contextual fallacy' of measuring individual context with census geographies." *Geographical Analysis* 52(1), 155-168
- Fowler, Christopher** (2018) "Key Assumptions in Multiscale Segregation Measures: how zoning and strength of spatial association condition outcomes." *Environment and Planning B* Vol. 45, Issue 6, pp. 1055-1072.
- Martin, Michael[†], and **Christopher Fowler** (2018) "Connecting the Dots: The Spatial Processes Underlying Place-Level Diversity Change in U.S. Metros Between 1990 and 2010" *Spatial Demography* Vol. 6, Issue 2, pp. 141-157.
- Lumley-Sapanski[†], Audrey and **Christopher Fowler** (2017) "Planning dissonance' and the bases for stably diverse neighborhoods: The case of South Seattle." *City and Community* Vol. 16, Issue 1, pp. 86-115.
- Fowler, Christopher**, Barrett Lee and Stephen Matthews (2016) "The contribution of places to metropolitan ethnorracial diversity and segregation: Decomposing change across space and time." *Demography* Vol. 53, Issue 6, pp. 1955-1977.
- Fowler, Christopher**, Danielle C. Rhubart[†] and Leif Jensen (2016) "Reassessing and revising commuting zones for 2010: History, assessment, and updates for U.S. 'labor-sheds' 1990-2010." *Population Research and Policy Review* Vol. 35, Issue 2, pp. 263-286.
- Fowler, Christopher** (2016) "Segregation as a multi-scalar phenomenon and its implications for neighborhood-scale research: the case of South Seattle 1990-2010." *Urban Geography* Vol. 37, Issue 1, pp. 1-25.
- Chrisinger, Colleen, **Christopher Fowler** and Rachel Garshick Kleit (2015) "Industry clusters and employment outcomes in Washington State." *Economic Development Quarterly* Vol. 29, Issue 3, pp. 199-210.
- Fowler, Christopher**, Jane Cover and Rachel Garshick Kleit (2014) "The geography of fringe banking." *Journal of Regional Science* Vol. 54, Issue 4, pp. 688-710.
- Fowler, Christopher** and Rachel Kleit (2014) "The effects of industrial clusters on the poverty rate." *Economic Geography* Vol. 90, Issue 2, pp. 129-154.
- Chrisinger, Colleen[†], **Christopher Fowler** and Rachel Garshick Kleit (2012) "Shared skills: Occupation clusters for poverty alleviation and economic development in the U.S.." *Urban Studies* Vol. 49, Issue 15, pp.3403-3425.
- Ellis, Mark, Steven Holloway, Richard Wright, and **Christopher Fowler** (2012) "Agents of change: Mixed-race households and the dynamics of neighborhood segregation." *Annals of the Association of American Geographers* Vol. 102, Issue 3, pp.549-570.
- Berkemeier, Betty, Matthew Bryan, Matthew D. Dunbar, and **Christopher S. Fowler** (2012) "Local health department provision of WIC services relative to local "need" –Examining 3 states and 5 years," *Frontiers in Public Health Services and Systems Research* Vol. 1, Issue 1, pp. 1-7.

Refereed Publications (continued):

- Beyers, William and **Christopher Fowler** (2012) "Economic structure, technological change and location theory: The evolution of models explaining the link between cities and flows." in Cities and Flows edited by Peter Hall and Markus Hesse. New York: Routledge. pp. 23-41.
- Wang, Man, Rachel Garshick Kleit, Jane Cover, and **Christopher Fowler** (2012) "Spatial variations in U.S. poverty: Beyond metropolitan and non-metropolitan." *Urban Studies* Vol. 49, Issue 3, pp. 563-585.
- Fowler, Christopher** (2011) "Finding equilibrium: How important is general equilibrium to the results of geographical economics?" *Journal of Economic Geography* Vol. 11, Issue 3, pp. 457-480.
- Fowler, Christopher** (2007) "Taking geographical economics out of equilibrium: implications for theory and policy." *Journal of Economic Geography* Vol. 7, Issue 3, pp. 265-284.
- Fowler, Christopher** (2006) "Re-exploring transport geography and networks: a case study of container shipments to the west coast of the United States." *Environment and Planning A* Vol. 38, Issue 8, pp.1429-1448.
- Fowler, Christopher** (2001) "Applying the least-cost transportation model to estimate the effects of major transportation system changes - case study of dam breaching on the Snake River." *Transportation Research Record: Multimodal and Marine Freight Transportation Issues* No. 1763, pp. 65-72.

In Review

Fowler, Christopher "Race, Space, and the Geography of Representation"

Grants:

Ongoing

- Co-Principal Investigator, "The Reproduction of Social Inequality through Routine Voter Maintenance" NSF Lee Ann Banaszak (Poly Sci) PI (2021-2022) ~\$280,000 PSU Award
- Co-Principal Investigator, "The Reproduction of Social Inequality through Routine Voter Maintenance" Russell Sage Foundation Lee Ann Banaszak (Poly Sci) PI (2021-2022) ~\$75,000 PSU Award
- Principal Investigator, "Quality Geographic Data for Puerto Rico" Russell Sage Foundation sub award from Brown University Beth Fussell (Brown Sociology) PI (2021) ~\$50,000
- Principal Investigator, "School Attendance Zone Boundaries and the connection to neighborhoods, segregation, and access to educational opportunity" SSRI, Penn State University \$25,000
- Principal Investigator, "School Attendance Zone Boundaries and the connection to neighborhoods, segregation, and access to educational opportunity" NSF #1918277 (2019-2021) \$385,000
- Principal Investigator, "Uncertainty in survey-based measures of commuting and its changing impact on ERS RUCA code misclassification" USDA Economic Research Service #58-6000-8-0023 (2018-2020) ~\$15K.
- Principal Investigator, "National Historical Geographic Information System" NSF #1825768. Lead on ~\$250K Penn State sub-award to Minnesota Population Center lead project (2018-2023) ~\$1M.

Investigator, “Early Life Stress and the Environmental Origins of Disease: A Population-based Prospective Longitudinal Study of Children in Rural Poverty” NIH #1UG3OD023332-01 Clancy Blair Principal Investigator. (2016-2023) ~\$1.6M first year with expected extension with equivalent funding for 6 more years. ~\$670K four-year subcontract to date.

Completed:

Principal Investigator, “Publicly subsidized disasters: examining the connections between economically vulnerable populations, housing policy, and hazard risk in the Houston-Galveston region” NSF Graduate Research Fellowship with advisee Travis Young (2016-2019)

Co-Investigator, NSF-Census Research Network: Spatial Science Node. NSF #1132008 Seth Spielman Principal Investigator. (2011-2017) ~\$1.6M Award ~\$97K subcontract

Co-Principal Investigator, “Designing U.S. Labor Market Areas” USDA Economic Research Service #58-6000-4-0053. (2014-2016). \$25K

Co-Investigator, “Racial and Ethnic Diversity in American Communities, 1980-2010,” NICHD, Principal Investigator Barrett Lee. (2013-16) ~\$250K

Co-Principal Investigator, “Labor Market Areas and the changing connectivity between rural and urban areas in the U.S.” Population Research Institute Seed Grant, Penn State (2015). ~\$14K

Principal Investigator, “Economic Development and Gentrification: The Complex Impacts of Local Investments in Neighborhoods” Deike Research Grant. Penn State College of Earth and Mineral Sciences (2013) ~\$50K

Courses Taught:

At Penn State University

GEOG 2N: Apocalyptic Geographies

GEOG 126/326: Introduction to Economic Geography

GEOG 421: Population Geography

GEOG 424/424W: Geography of the Global Economy

GEOG 520: Seminar in Human Geography

At the Center for Studies in Demography and Ecology, University of Washington (*Workshops*)

Spatial R

Geographically Weighted Regression

Spatial Regression

Exploratory Spatial Data Analysis

Point Patterns and Raster Surfaces

Methods in Spatial Demography

At the University of Washington Department of Geography

GEOG 448: Transportation and Equity

GEOG 377: Urban Political Geography

GEOG 449: Geography of Maritime Transportation

Awards and Fellowships:

Supported Participant, "Metric Geometry Gerrymandering Group" Boston, MA (December 2018)

Best Poster, "The contextual fallacy reframed: uncertainty in the representativeness of census counts for individual experience." Population Association of America Annual Conference, Chicago (2017)

Visiting Fellow, Max Planck Institute for the Study of Racial, Ethnic, and Religious Diversity. Gottingen, Germany (2016).

Supported Participant, Bayesian Modeling for Practicing Ecologists. Fort Collins (2013)

Supported Participant, Institute for Research in the Social Sciences: "Migration as Adaptation," Stanford (2011).

Supported Participant, Advanced Spatial Analysis Workshop: Geographically Weighted Regression. Santa Barbara (2010).

Supported Participant, Advanced Spatial Analysis Workshop: Spatial Regression Analysis. Santa Barbara (2009).

Fellow (Non-residential), Brookings Institute Center on Social and Economic Dynamics (2008-2009).

Supported Participant, Graduate Workshop in Computational Social Science. Santa Fe Institute (2007).
One of ten students selected to participate in an intensive workshop on computational modeling.
The first geographer ever selected for participation in this workshop.

Ullman Prize for Best Dissertation, University of Washington Department of Geography (2007)

Supported Participant, Summer Institute in Economic Geography, Madison, Wisconsin (2006).

Graduate Fellow in Canadian-American Studies. Vancouver, B.C. (2006).

Research award from the Canadian Consulate to support two quarters of interviews and archival research related to competition and the port of Vancouver, B.C.

Fellow, Chester Fritz Foundation. Genova and Gioia Tauro, Italy (2005).

Research fellowship funding ten weeks of fieldwork for dissertation research on competition and politics in two Italian ports.

Fellow, Foreign Language Area Studies Fellowship. Genova, Italy (2004).

Federally funded language study in Italian to support dissertation research.

Honorable Mention, National Science Foundation Graduate Fellowship (2003).

Stefansson Fellowship for Arctic Research, Dartmouth College (1997).

Conference Presentations and Invited Talks:

Invited Speaker, "Who are the people in my neighborhood? Race, scale, and the quest to understand contextual effects" University of Bristol, UK (January 27th, 2020)

Invited Speaker, "Who are the people in my neighborhood? Race, scale, and the quest to understand contextual effects" University of Newcastle, UK (January 24th, 2020)

Invited Speaker, "Who are the people in my neighborhood? Race, scale, and the quest to understand contextual effects" SAMM Universite Paris (October 25th, 2019)

Instructor, "Voting Rights Data Institute" Weeklong teaching of GIS for redistricting reform. Boston, MA (July 2019)

Invited Speaker, "Uncertainty in Rural Definitions" HRSA meeting on defining rurality in the 2020 census. Washington, DC (June 2019).

Presenter, "For Representation: Why fixing gerrymandering isn't the solution and geography needs to matter less" AAG Annual Meeting, Washington, DC (April 2019)

Invited Speaker/Panelist "Uncertainty in Metropolitan Definitions" OMB meeting on metropolitan definitions. Washington, DC (March 2019)

Invited Speaker, "Scale and Boundaries in Health Research" National Cancer Institute workshop on Advancing Rural Cancer Control Research, Bethesda, MD (May 2018).

Presenter, "Door to Door Demographics: the similarities and differences among American neighbors" PAA Annual Meeting, Denver, CO (April 2018).

Presenter, Chair, Organizer "Door to Door Demographics: the similarities and differences among American neighbors" AAG Annual Meeting, New Orleans, LA (April 2018).

Invited Speaker, "The geography of small populations: Issues in defining an appropriate geographic context." National Academy of Sciences Workshop on working with Small Populations. Washington, DC (January 2018).

Invited Speaker, "Issues in defining an appropriate context for rural subjects." National Institutes of Health / National Cancer Institute Workshop on Defining Rural Populations. Washington, DC (October 2017).

Poster Presentation, "The contextual fallacy reframed: uncertainty in the representativeness of census counts for individual experience" Best Poster winner, PAA Annual Meetings, Chicago (2017).

Invited Speaker, "Segregation and diversity as multiscale phenomena: Why we need multiscale measures to understand neighborhoods and neighborhood effects." Minnesota Population Center, Minneapolis Minnesota (January 2017).

Presenter, "Delineating labor-sheds from commuter-flow data for the U.S.: A generalized method for defining functional regions with quality of fit statistics." North American Regional Science Association Annual Meeting, Minneapolis Minnesota (November 2016).

Invited Speaker, "Segregation and diversity as multiscale phenomena: Why we need multiscale measures to understand neighborhoods and neighborhood effects." University of Kentucky, Lexington Kentucky (October 2016).

Presenter, "Changing diversity in U.S. metropolitan areas: An analysis of place-level diversity changes 1980-2010" PAA Annual Meetings, Washington D.C. (April 2016).

Presenter, Chair, Organizer, "Why we need multiscale measures to understand neighborhoods and neighborhood effects" AAG Annual Meetings, San Francisco (March 2016).

Invited Speaker, "Remaking commuting zones for 2010" Rural Sociology Department Colloquium, Penn State University (February 2016).

Invited Speaker, "Segregation as a multiscale measure" Population Research Institute, Penn State University (February 2016).

Presenter, "Comparing interpolated and dasymmetric data for use in spatial segregation measures." Regional Science Association Annual Meeting, Portland, Oregon (November, 2015).

Invited Speaker, “Segregation as a multiscale measure” Spatial Statistics in the Social Sciences at Brown University, Providence Rhode Island (October 2015).

Presenter, “Planning dissonance’ and the bases for stably diverse neighborhoods: The case of South Seattle” RC21 Conference on the Ideal City, Urbino, Italy (August 2015).

Presenter, “Segregation as a multiscale measure” PAA Annual Meeting, San Diego, California (April 2015).

Discussant, “Spatial demographic analysis of poverty” PAA Annual Meeting, San Diego, California (April 2015).

Poster Presenter, “Identifying neighborhoods based on context: Multi-scale segregation and neighborhood dynamics in space and time” PAA Annual Meeting, Boston, Massachusetts (May 2014).

Organizer, Presenter, Discussant, “Understanding neighborhood change.” Three part series of presentations, and panel discussion at AAG Annual Meeting, Tampa, Florida (April 2014).

Presenter, “Multiscale segregation and neighborhood change: Diversity and enclaves in South Seattle” Changing American Communities and Neighborhoods Working Group. Penn State University (Jan. 27, 2014).

Discussant, “Evolutionary economic geographies” AAG Annual Meeting, Los Angeles, California (April 2013).

Discussant, “Port cityscapes” AAG Annual Meeting, Los Angeles, California (April 2013).

Presenter, “Can lagging cities have taxes?” AAG Annual Meeting, Los Angeles, California (April 2013).

Discussant, “Cities and flows” AAG Annual Meeting, Seattle, Washington (April 2011).

Presenter, “Geography of fringe banking” Annual Meeting of the North American Regional Science Association, San Francisco, California (November 2009).

Presenter, “Rising oil prices and globalization: A comparative analysis of general equilibrium and agent-based methods.” AAG Annual Meeting, Las Vegas, Nevada (March 2009).

Organizer, Chair, Presenter, “When geographers do economics.” AAG Annual Meeting, Boston, Massachusetts (April 2008).

Participant and Presenter, Microeconomics of Competitiveness Faculty Workshop, Harvard Business School (2008).

Panelist and Presenter “Scale and spatial complexity: Agent-based models and geographical economics.” , Brookings Institute, Symposium on agent-based modeling and demography, Washington, D.C. (Dec. 2007).

Presenter, “The complex city: agent-based models and the potential for a critical quantitative economic geography.” AAG Annual Meeting, San Francisco, California (April 2007).

Presenter, “Port competition and the Puget Sound.” Black Hills Audubon Society, Olympia (Jan. 2007).

Organizer, Chair, Presenter “Models as theory/Models as explanation.” AAG Annual Meeting, Chicago, Illinois (March 2006).

Presenter, “The last bastion of the middle class: the effects of local competitive policy on essential services in U.S. cities 1980-2000.” AAG Annual Meeting, Denver, Colorado (March 2005).

Presenter, “Traffic jams in the ‘Spaces of flows:’ Bringing transport networks into the globalization debate.” AAG Annual Meeting, Philadelphia, Pennsylvania (March 2004).

Presenter, “Links and nodes in the global network: The role of transportation companies in shaping globalization.” AAG Annual Meeting, New Orleans, Louisiana (Feb. 2003).

Professional Service and Membership:

Editorial Board Member, *Population and Environment* 2020-present

Editorial Board Member, *Geographical Analysis* 2019-present

Editorial Board Member, *Demography* 2016-present

American Community Survey Data Users Group Steering Committee Member (2021-present)

Member, Association of American Geographers

-----Executive Committee Member, Population Geography Specialty Group (2016-present)

-----Executive Committee Member, Economic Geography Specialty Group (2006-2007).

Member, Population Association of America

Work and Other Non-Academic Experience:

Instructor, “Introduction to spatial statistics” course taught through Statistical Horizons Philadelphia, PA. October 16-17 2013.

Owner, C.S. Fowler Consulting LLC (2011 – 2013)

Planning Commissioner, Lake Oswego, Oregon (1998-2000).

Economist and Planner, HDR Engineering, Portland, Oregon (1998-2000).

Planner, Group Mackenzie, Portland, Oregon (1997-1998).