Guangqing Chi

Professor of Rural Sociology, Demography, and Public Health Sciences
Director, Computational and Spatial Analysis Core
The Pennsylvania State University
gchi@psu.edu
+1 (814) 826-4686

112E Armsby Building
University Park, PA 16802
https://theEDeNresearch.org
https://arcticpolaris.org
https://csa.ssri.psu.edu
https://github.com/guangqingchi
Twitter: @GuangqingChi
ORCID: 0000-0003-0888-7964
[Updated: November 11, 2023]

EDUCATION

Ph.D., Environmental Demography, University of Wisconsin-Madison, 2006
M.S., Environmental Policy, Michigan Technological University, 2002
B.S., Environmental Science, East China Normal University, 1999

POSITIONS AND AFFILIATIONS

Pennsylvania State University (2015–present)

Faculty Appointments:
> Professor (2020–present) and Associate Professor (2015–2020) of Rural Sociology, Demography, and Public Health Sciences, Department of Agricultural Economics, Sociology, and Education
> Director, Computational and Spatial Analysis Core, Social Science Research Institute and Population Research Institute (2015–present)

Faculty Affiliations:
> Professor (2020–present) and Associate Professor (2016–2020) of Sociology
> Research Associate, Population Research Institute (2015–present)
> Associate, Institute for Computational and Data Sciences (2017–present)
> Graduate Faculty, Social Data Analytics (2016–present)
> Graduate Faculty, Applied Demography (2016–present)
> Graduate Faculty, International Agriculture and Development (2017–present)
> Faculty Affiliate, Engineering Systems and Policy Program (2015–present)
> T32 Training Faculty, Social Environments and Population Health Program (2020–present)

Professional Appointments

Editorial Board Member, *Social Forces* (2023–2026)
Advisory Board Member, *Population and Environment* (2019–present)
Editorial Board Member, *Spatial Demography* (2012–present)
Editorial Board member, *SN Social Sciences* (2022–present)
Deputy Editor, *Demography* (2016–2019)
Rural Sociology Society, Publication Committee Chair (2023–2024) & Council Member (2022–2025)
Member, NAS Board on Environmental Change and Society's Integrating Human Sciences Planning Committee (2023)

Previous Employment

South Dakota State University (2014–2015)
> State Demographer of South Dakota
> Associate Professor, Department of Sociology and Rural Studies
> Director, Rural Life and South Dakota Census Data Center

Mississippi State University (2006–2014)
> Associate Professor (2013–2014) and Assistant Professor (2008–2013), Department of Sociology
> Research Scientist (2008–2014) & Postdoc Fellow (2006–2008), Social Science Research Center

PUBLICATIONS

Book

1. **Chi, Guangqing** and Jun Zhu. 2019. *Spatial Regression Models for the Social Sciences*. Volume 14 of *Advanced Quantitative Techniques in the Social Sciences*. SAGE Publications: Thousand Oaks, CA. 272 pages. ISBN: 9781544302072; 154430207X. [Reviewed in *Environment and Planning B* (2019); *Spatial Demography* (2020)]

Commissioned White Paper

2. **Chi, Guangqing**. 2019. "Demographic Forecasting and Future Interstate Highway System Demands." In: *Renewing the National Commitment to the Interstate Highway System: A Foundation for the Future*, pp. 313–350 by the Future Interstate Study Committee of the Transportation Research Board in response to a Congressional request for the Fixing America's Surface Transportation Act of 2015. Washington, D.C.: The National Academies Press. DOI: 10.17226/25334.

Peer-Reviewed Journal Articles (and Forthcoming)
* indicates student authors at submission

3. Zhou, Shuai* and **Guangqing Chi**. Accepted. "How Do Environmental Changes and Variations Influence Migration? A Meta-regression Analysis of the Environmental Migration Literature." *Demographic Research.*

4. Hamilton, Casey W.*, Erica A.H. Smithwick, Katie V. Spellman, Andy P. Baltensperger, Blaine T. Spellman, and **Guangqing Chi**. Accepted. "Predicting the Suitable Habitat Distribution of Berry Plants under Climate Change." *Landscape Ecology.*

5. Zheng, Qiujie, Weiyang Diao, Yonggang Lu, Yunfeng Wang, and **Guangqing Chi**. In Press. "Transfer or Surrender Rural Homestead Land? An Investigation of Farmers' Preferences in China." *The Chinese Economy.* DOI: 10.1080/10971475.2023.2266966.

6. Liang, Yun*, Junjun Yin, Soyoung Park, Bing Pan, **Guangqing Chi**, and Zach Miller. In Press. "Using Social Media User Profiles to Identify Visitor Demographics and Origins in Yellowstone National Park." *Journal of Outdoor Recreation and Tourism*. DOI: 10.1016/j.jort.2023.100620.

7. Anderson, Cory, Shuai Zhou*, and **Guangqing Chi**. 2023. "Population-Wide Vaccination Hesitancy among the Amish: A County-Level Study of COVID-19 Vaccine Adoption and Implications for Public Health Policy and Practice." *Population Research and Policy Review* 42 (4): 70.

8. Xia, Chen*, Yuqing Hu, **Guangqing Chi**, and Jianli Chen. 2023. "Assessing Dynamics of Human Vulnerability at Community Level – Using Mobility Data." *International Journal of Disaster Risk Reduction* 96(1): 103964.

9. Li, Yurui, Xiaofei Qin*, Abigail Sullivan, **Guangqing Chi**, Zhi Lu, Wei Pan, and Yansui Liu. 2023. "Collective Action Improves Elite-Driven Governance in Rural Development within China." *Humanities and Social Sciences Communications* 10: 600.

10. Mack, Elizabeth A., Laura A. Sauls, Brad D. Jokisch, Kerstin Nolte, Birgit Schmook, Yifan He*, Claudia Radel, Ginger R.H. Allington, Lisa C. Kelley, Christian K. Scott, Steve Leisz, **Guangqing Chi**, Lira Sagynbekova, Nicholas Cuba, and Geoffrey M. Henebry. 2023. "Remittances and Land Change: A Systematic Review." *World Development* 168: 106251.

11. Park, Hyun Joon*, Sara Francisco*, Rosemary Pang*, Lulu Peng*, and **Guangqing Chi**. 2023. "Exposure to Anti-Black Lives Matter Movement and Obesity of the Black Population." *Social Science & Medicine* 316: 114265.

12. Smith, M. Luke and **Guangqing Chi**. 2023. "Spatial Proximity to Wildfires as a Proxy for Measuring PM$_{2.5}$: A Novel Method for Estimating Exposures in Rural Settings." *Journal of Climate Change and Health* 11: 100219.

13. Li, Chuo, Jing Zhao*, Junjun Yin, and **Guangqing Chi**. 2023. "Park Access Affects Physical Activity: New Evidence from Geolocated Twitter Data Analysis." *Journal of Urban Design* 28(3): 316–335.

14. Lin, Yufei*, Yingxia Pu, Xinyi Zhao*, **Guangqing Chi**, and Cui Ye*. 2023. "The Spatiotemporal Elasticity of Age Structure in China's Interprovincial Migration System." *Sustainability* 15: 8001.

15. Hashemi, Farzad*, Ute Poerschke, Lisa D. Lulo, and **Guangqing Chi**. 2023. "Urban Microclimate, Outdoor Thermal Comfort, and Socio-Economic Mapping: A Case Study of Philadelphia, PA." *Buildings* 13(4): 1040.

16. Xu, Feng, **Guangqing Chi**, Zhexi Zhang, and Jianxin Yang. 2023. "How Does Quality Regional Growth Affect Land Resources Dependence in China? Evidence Based on Spatial Durbin Panel Models." *Resources Policy* 81: 103402.

17. Hofmann, Erin and **Guangqing Chi**. 2022. "Bride Kidnapping and Gendered Labor Migration: Evidence from Kyrgyzstan." *Journal of Ethnic and Migration Studies* 48(11): 2493–2514.

18. Yin, Junjun, Yizhao Gao, and **Guangqing Chi**. 2022. "An Evaluation of Geo-located Twitter Data for Measuring Human Migration." *International Journal of Geographic Information Science* 36(9): 1830–1852.

19. Liang, Yun*, Junjun Yin, Bing Pan, Michael Lin*, Lauren Miller*, Derrick Taff, and **Guangqing Chi**. 2022. "Assessing the Validity of Mobile Device Data for Estimating Visitor Demographics and Visitation Patterns in Yellowstone National Park." *Journal of Environmental Management* 317: 115410.

20. Yin, Junjun and **Guangqing Chi**. 2022. "A Tale of Three Cities: Uncovering Human-Urban Interactions with Geographic-Context Aware Social Media Data." *Urban Informatics* 1: 20.

21. Chen, Wanxu and **Guangqing Chi**. 2022. "Spatial Mismatch of Ecosystem Service Demands and Supplies in China, 2000–2020." *Environmental Monitoring and Assessment* 194: 295.

22. Zhou, Shuai* and **Guangqing Chi**. 2022. "Farmland Rental: The Impacts of Household Demographics and Livelihood Strategies in China." *Land* 11(8): 1318.

23. Chen, Wanxu and **Guangqing Chi**. 2022. "Ecosystem Services Trade-Offs and Synergies in China, 2000–2015." *International Journal of Environmental Science and Technology*. DOI: 10.1007/s13762-022-04141-8.

24. Li, Yanling*, Zita Oravecz, Shuai Zhou*, Yosef Bodovski, Ian J. Barnett, **Guangqing Chi**, Yan Zhou, Maomi Friedman, Scott Vrieze, and Sy-Miin Chow. 2022. "Bayesian Forecasting with a Regime-Switching Zero-Inflated Multilevel Poisson Regression Model: An Application to Adolescent Alcohol Use with Spatial Covariates." *Psychometrika* 87(2): 376–402.

25. Chen, Wanxu and **Guangqing Chi**. 2022. "Urbanization and Ecosystem Services: The Multi-Scale Spatial Spillover Effects and Spatial Variations." *Land Use Policy* 114: 105964.

26. Yin, Junjun and **Guangqing Chi**. 2021. "Characterizing People's Daily Activity Patterns in the Urban Environment: A Mobility Network Approach with Geographic Context-Aware Twitter Data." *The Annals of the American Association of Geographers* 111(7): 1967–1987.

27. Wang, Donghui*, Annelise D. Hagedorn*, and **Guangqing Chi**. 2021. "Remittances and Household Spending Strategies: Evidence from the Life in Kyrgyzstan Study, 2011–2013." *Journal of Ethnic and Migration Studies* 47(13): 3015–3036.

28. Pinto, Casey N., Justin K. Niles, Harvey W. Kaufman, Elizabeth M. Marlowe, Damian P. Alagia, **Guangqing Chi**, and Barbara Van Der Pol. 2021. "Impact of the COVID-19 Pandemic on Chlamydia and Gonorrhea Screening in the U.S." *American Journal of Preventive Medicine* 61(3): 386–393.

29. Xu, Feng, Zhanqi Wang, **Guangqing Chi**, Donghui Wang, Zhexi Zhang, and Danyu Zuo. 2021. "Differentiation and Progress of Urban Regionalization in China: Perspectives of Land Use and Geography." *Applied Geography* 137: 102600.

30. Xiao, Chenghan*, Yang Yang, and **Guangqing Chi**. 2021. "Subway Development and Obesity: Evidence from China." *Journal of Transport & Health* 21: 101065.

31. Moss, Jennifer L., Siddhartha Roy, Karl T. Clebak, Julie Radico, Jarrett Sell, Christina Scartozzi, Shuai Zhou*, **Guangqing Chi**, and Tamara Oser. 2021. "Area- and Individual-Level Correlates of Self-Rated Health: Implications for Geographic Health Disparities." *Journal of Primary Care and Community Health*. 12: 1–8.

32. Mohanty, Somya D., Brown Biggers*, Saed Sayedahmed*, Nastaran Pourebrahim, Evan B. Goldstein, Rick Bunch, **Guangqing Chi**, Fereidoon Sadri, Tom McCoy, and Arthur Cosby. 2021. "A Multi-Modal Approach Towards Mining Social Media Data During Natural Disasters – A Case Study of Hurricane Irma." *International Journal of Disaster Risk Reduction* 54: 102032.

33. Zhou, Shuai*, Yanling Li*, **Guangqing Chi**, Junjun Yin, Zita Oravecz, Yosef Bodovski, Naomi Friedman, Scott Vrieze, and Sy-Miin Chow. 2021. "GPS2space: An Open-Source Python Library for Spatial Measure Extraction from GPS Data." *Journal of Behavioral Data Science* 1(2): 127–155.

34. **Chi, Guangqing**, Jing Gao, Donghui Wang*, Annelise D. Hagedorn*, Kamilya Kelgenbaeva, M. Luke Smith, and Geoffrey M. Henebry. 2020. "Agricultural Productivity at the Oblast Level in Post-Soviet Kyrgyzstan, 1990–2014: Implications of Demographic and Climate Changes." *Research in Globalization* 2: 100027.

35. Chi, Guanghua*, Fengyang Lin, **Guangqing Chi**, and Joshua Blumenstock. 2020. "A General Approach to Detecting Migration Events in Digital Trace Data." *PLoS ONE* 15(10): e0239408.

36. Xu, Feng*, Zhanqi Wang, **Guangqing Chi**, and Zhexi Zhang. 2020. "The Impacts of Population and Agglomeration Development on Land Use Intensity: New Evidence behind Urbanization in China." *Land Use Policy* 95: 104639.

37. Xiao, Chenghan*, Yang Yang, and **Guangqing Chi**. 2020. "Does the Mental Health of Migrant Workers Suffer from Long Commute Time? Evidence from China." *Journal of Transport & Health* 19: 100932.

38. Abdar, Moloud, Mohammad Ehsan Basiri, Junjun Yin, Mahmoud Habibnezhad, **Guangqing Chi**, Shahla Nemati, and Somayeh Asadi. 2020. "Energy Choices in Alaska: Mining People's Perception and Attitudes from Geotagged Tweets." *Renewable & Sustainable Energy Reviews* 124: 109781.

39. Chen, Wanxu*, **Guangqing Chi**, and Jiangfeng Li. 2020. "The Spatial Aspect of Ecosystem Service Balance and Its Determinants." *Land Use Policy* 90: 104263.

40. Chen, Wanxu*, **Guangqing Chi**, and Jiangfeng Li. 2020. "Ecosystem Services and Their Driving Forces in the Middle Reaches of the Yangtze River Urban Agglomerations, China." *International Journal of Environmental Research and Public Health* 17(10): 3717.

41. Yang, Fan, **Guangqing Chi**, Ge Wang, Shirui Tang, Yunting Li, and Cong Ju. 2020. "Untangle the Complex Stakeholder Relationships in the Consolidation of Rural Settlements in China: A Social Network Approach." *Land* 9(7): 210.

42. Wang, Ming, **Guangqing Chi**, Yosef Bodovski, Sheldon L. Holder, Eugene J. Lengerich, Emily Wasserman, and Alicia C. McDonald. 2020. "Temporal and Spatial Trends and Determinants of Aggressive Prostate Cancer among Black and White Men with Prostate Cancer." *Cancer Causes and Control* 31(1): 63–71.

43. **Chi, Guangqing**, Derrick Shapley, Tse-Chuan Yang, and Donghui Wang*. 2019. "Lost in the Black Belt South: Health Outcomes and Transportation Infrastructure." *Environmental Monitoring and Assessment* 191(S2): 297.

44. **Chi, Guangqing**, Donghui Wang*, and Annelise D. Hagedorn*. 2019. "Future Interstate Highway System Demands: Predictions Based on Population Projections." *Case Studies on Transport Policy* 7(2): 384–394.

45. Pu, Yingxia, Xinyi Zhao*, **Guangqing Chi**, Jin Zhao, and Fanhua Kong. 2019. "A Spatial Dynamic Panel Approach for Modeling the Space-time Dynamics of Interprovincial Migration Flows in China." *Demographic Research* 41: 913–948.

46. Xu, Feng* and **Guangqing Chi**. 2019. "Spatiotemporal Variations of Land Use Intensity and Its Driving Forces in China, 2000–2010." *Regional Environmental Change* 19(8): 2583–2596.

47. Kamenetsky, Maria*, **Guangqing Chi**, Donghui Wang*, and Jun Zhu. 2019. "Spatial Regression Analysis of Poverty in R." *Spatial Demography* 7(2): 113–147.

48. Parsafard, Mohsen*, **Guangqing Chi**, Xiaobo Qu, Xiaopeng Li, and Haizhong Wang. 2019. "Error Measures for Trajectories Estimations with Geo-tagged Mobility Sample Data." *IEEE Transactions on Intelligent Transportation Systems* 20(7): 2566–2583.

49. Pu, Yingxia, Xiao Han*, **Guangqing Chi**, Yaping Wang, Ying Ge, and Fanhua Kong. 2019. "The Impact of Spatial Spillovers on Interprovincial Migration in China, 2005–2010." *Regional Studies* 53(8): 1125–1136.

50. Kasu, Bishal* and **Guangqing Chi**. 2019. "Transportation Infrastructures and Socioeconomic Statuses: A Spatial Regression Analysis at the County Level in the Continental United States, 1970–2010." *Spatial Demography* 7(1): 27–56.

51. Chen, Wanxu*, **Guangqing Chi**, and Jiangfeng Li. 2019. "The Spatial Effects of Land Use and Land Cover Change on Ecosystem Services Intensity at the County Level in China, 1995–2015." *Science of the Total Environment* 669: 459–470.

52. Pu, Yingxia, Xinyi Zhao*, **Guangqing Chi**, Shuhe Zhao, Jiechen Wang, Zhibin Jin, and Junjun Yin. 2019. "Design and Implementation of a Parallel Geographically Weighted k-Nearest Neighbor Classifier." *Computers and Geosciences* 127: 111–122.

53. Xu, Feng*, Hung Chak Ho, **Guangqing Chi**, and Zhanqi Wang. 2019. "Abandoned Rural Residential Land: Using Machine Learning Methods to Identify Rural Residential Land Vulnerable to be Abandoned in Mountainous Areas." *Habitat International* 84: 43–56.

54. **Chi, Guangqing** and Donghui Wang*. 2018. "Population Projection Accuracy: The Impacts of Sociodemographics, Accessibility, Land Use, and Neighbor Characteristics." *Population, Space and Place* 24(5): e2129. [Winner of the 2017 E. Walter Terrie Best Paper Award in Applied Demography, Southern Demographic Association]

55. **Chi, Guangqing** and Hung Chak Ho. 2018. "Population Stress: A Spatiotemporal Analysis of Population Change and Land Development at the County Level in the Continental United States, 2000–2010." *Land Use Policy* 70(1): 128–137.

56. Kasu, Bishal* and **Guangqing Chi**. 2018. "The Evolving and Complementary Impacts of Transport Infrastructures on Population and Employment Change in the United States, 1970–2010." *Population Research and Policy Review* 37(6): 1003–1029.

57. Kasu, Bishal* and **Guangqing Chi**. 2018. "Intercity Passenger Rails: Facilitating the Spatial Spillover Effects of Population and Employment Growth in the United States, 2000–2010." *Journal of Urban Planning and Development* 144(4): 04018037.

58. Li, Chuo, **Guangqing Chi**, and Robert Jackson*. 2018. "Neighborhood Built Environment and Walking Behaviors: Evidence from the Rural American South." *Indoor and Built Environment* 27(7): 938–952.

59. Li, Chuo, Amir Ghiasi*, Xiaopeng Li, and **Guangqing Chi**. 2018. "Sociodemographics and Access to Organic and Local Food: A Case Study of New Orleans, Louisiana." *Cities: The International Journal of Urban Policy and Planning* 79: 141–150.

60. Chen, Xinxiang, Guanghua Chi*, and **Guangqing Chi**. 2018. "Do Airports Boost Economic Development by Attracting Talent? An Empirical Investigation at the Sub-County Level." *Social Science Quarterly* 99(1): 313–329.

61. Ho, Hung Chak*, Anders Knudby, **Guangqing Chi**, Mehdi Aminipouri, and Derrick Yuk-Fo Lai. 2018. "Spatiotemporal Analysis of Regional Socio-Economic Vulnerability Change Associated with Heat Risks in Canada." *Applied Geography* 95(1): 61–70.

62. Li, Kun*, **Guangqing Chi**, Ling Wang, Yujing Xie, Xiangrong Wang, and Zhengqiu Fan. 2018. "Identifying the Critical Riparian Buffer Zone with the Strongest Linkage between Landscape Characteristics and Surface Water Quality." *Ecological Indicators* 93: 741–752.

63. **Chi, Guangqing** and Jamie Boydstun*. 2017. "Are Gasoline Prices a Factor in Residential Relocation Decisions? Preliminary Findings from the American Housing Survey, 1996–2008." *Journal of Planning Education and Research* 37(3): 334–346.

64. Pinto, Casey, Lorah D. Dorn, Vernon M. Chinchilli, Ping Du, and **Guangqing Chi**. 2017. "Rural Counties Chlamydia and Gonorrhea Rates in Pennsylvania Among Adolescents and Young Adults." *Annals of Epidemiology* 27(9): 606–610.

65. Wang, Donghui* and **Guangqing Chi**. 2017. "Different Places, Different Stories: A Study of Spatial Heterogeneity of County-Level Fertility in China." *Demographic Research* 37: 493–526.

66. **Chi, Guangqing**, Willie Brown, Xiang Zhang*, and Yanbing Zheng. 2015. "Safer Roads Owing to Higher Gasoline Prices: How Long It Takes." *American Journal of Public Health* 105(8): 119–125. [Interviewed by *National Public Radio, Huffington Post*, *The Weather Channel*, *South Dakota Public Broadcasting*, *VOAnews*, *KSFY ABC*, *Fox 5 News New York*, *Money,* and many other news media]

67. Clement, Matthew, **Guangqing Chi**, and Derrick Ho*. 2015. "Urbanization and Land Use Change: A Human Ecology of Deforestation Across the United States, 2001–2006." *Sociological Inquiry* 85(4): 628–653.

68. Li, Chuo, **Guangqing Chi**, and Robert Jackson*. 2015. "Perceptions and Barriers to Walking in the Rural American South: The Influence of the Neighborhood Built Environment on Pedestrian Behaviors." *Urban Design International* 20(4): 255–273.

69. **Chi, Guangqing** and David W. Marcouiller. 2013. "In-Migration to Remote Rural Regions: The Relative Impacts of Natural Amenities and Land Developability." *Landscape and Urban Planning* 117(1): 22–31.

70. **Chi, Guangqing**, Jeremy R. Porter, Arthur G. Cosby, and David Levinson. 2013. "The Impact of Gasoline Price Changes on Traffic Safety: A Time Geography Explanation." *Journal of Transport Geography* 28(1): 1–11.

71. **Chi, Guangqing** and David W. Marcouiller. 2013. "Natural Amenities and Their Effects on Migration along the Urban-Rural Continuum." *The Annals of Regional Science* 50(3): 861–883.

72. **Chi, Guangqing**, Mohammed A. Quddus, Arthur Huang*, and David Levinson. 2013. "Gasoline Prices Effects on Traffic Safety in Urban and Rural Areas: Evidence from Minnesota, 1998–2007." *Safety Science* 59(1): 154–162.

73. Robertson, Angela A., Sheena Gardner*, Xiaohe Xu, **Guangqing Chi**, and D. Lee McCluskey. 2013. "Mississippi's DUI Offender Intervention: 40 Years of Programming and Research." *Journal of Offender Rehabilitation* 52(2): 138–155.

74. **Chi, Guangqing** and Yanbing Zheng. 2013. "Estimating Transport Footprint along Highways at Local Levels: A Combination of Network Analysis and Kriging Methods." *International Journal of Sustainable Transportation* 7(3): 261–273.

75. **Chi, Guangqing**. 2012. "The Impacts of Transport Accessibility on Population Change across Rural, Suburban, and Urban Areas: A Case Study of Wisconsin at Subcounty Levels." *Urban Studies* 49(12): 2711–2731.

76. Chen, Xinxiang and **Guangqing Chi**. 2012. "Natural Beauty, Money, and Talent Distribution: A Local-Level Panel Data Analysis." *Population Research and Policy Review* 31(5): 665–681.

77. **Chi, Guangqing** and David W. Marcouiller. 2012. "Recreational Homes and Migration to Remote Amenity-Rich Areas." *Journal of Regional Analysis and Policy* 42(1): 47–60. [Invited Presidential Symposium for the 2011 annual meeting of the Mid-Continent Regional Science Association]

78. **Chi, Guangqing**, Timothy E. McClure, and David B. Brown. 2012. "Gasoline Prices and Traffic Crashes in Alabama, 1999–2009." *Traffic Injury Prevention* 13(5): 476–484.

79. **Chi, Guangqing** and Stephen J. Ventura. 2011. "An Integrated Framework of Population Change: Influential Factors, Spatial Dynamics, and Temporal Variation." *Growth and Change* 42(4): 549–570.

80. **Chi, Guangqing** and David W. Marcouiller. 2011. "Isolating the Effect of Natural Amenities on Population Change at the Local Level." *Regional Studies* 45(4): 491–505.

81. **Chi, Guangqing** and Paul R. Voss. 2011. "Small-Area Population Forecasting: Borrowing Strength across Space and Time." *Population, Space and Place* 17(5): 505–520.

82. **Chi, Guangqing**, Xuan Zhou*, and Paul R. Voss. 2011. "Small-Area Population Forecasting in an Urban Setting: A Spatial Regression Approach." *Journal of Population Research* 28(2): 185–201.

83. **Chi, Guangqing** and Domenico Parisi. 2011. "Highway Expansion Effects on Urban Racial Redistribution in the Post-Civil Rights Period." *Public Works Management and Policy* 16(1): 40–58.

84. Misra, Kaustav* and **Guangqing Chi**. 2011. "Measuring Public School Competition from Private Schools: A Gravity-Based Index." *Journal of Geographic Information System* 3(4): 306–311.

85. **Chi, Guangqing** and Stephen J. Ventura. 2011. "Population Change and Its Driving Factors in Rural, Suburban, and Urban Areas of Wisconsin, USA, 1970–2000." *International Journal of Population Research* 2011: 1–14.

86. **Chi, Guangqing**, Xuan Zhou*, Timothy E. McClure*, Paul A. Gilbert*, Arthur G. Cosby, Li Zhang, Angela A. Robertson, and David Levinson. 2011. "Gasoline Prices and Their Relationship to Drunk-Driving Crashes." *Accident Analysis and Prevention* 43(1): 194–203.

87. **Chi, Guangqing**. 2010. "The Impacts of Highway Expansion on Population Change: An Integrated Spatial Approach." *Rural Sociology* 75(1): 58–89.

88. **Chi, Guangqing**, Arthur G. Cosby, Mohammed A. Quddus, Paul A. Gilbert, and David Levinson. 2010. "Gasoline Prices and Traffic Safety in Mississippi." *Journal of Safety Research* 41(6): 493–500.

89. **Chi, Guangqing**. 2010. "Land Developability: Developing an Index of Land Use and Development for Population Research." *Journal of Maps* 2010: 609–617.

90. **Chi, Guangqing**. 2009. "Can Knowledge Improve Population Forecasts at Subcounty Levels?" *Demography* 46(2): 405–427. [Winner of the 2007 E. Walter Terrie Best Paper Award in Applied Demography, Southern Demographic Association]

91. **Chi, Guangqing** and David W. Marcouiller. 2009. "Rethinking the Migration Effects of Natural Amenities: Part I." *Canadian Journal of Regional Science* 32(3): 331–348.

92. **Chi, Guangqing** and David W. Marcouiller. 2009. "Rethinking the Migration Effects of Natural Amenities: Part II." *Canadian Journal of Regional Science* 32(3): 349–360.

93. **Chi, Guangqing** and Jun Zhu. 2008. "Spatial Regression Models for Demographic Analysis." *Population Research and Policy Review* 27(1): 17–42. [Reprinted in Salvatore Babones (Ed.) 2013. *Applied Statistical Modeling*. SAGE Publications. ISBN: 9781446208397]

94. Voss, Paul R. and **Guangqing Chi**. 2006. "Highways and Population Change." *Rural Sociology* 71(1): 33–58.

95. **Chi, Guangqing**, Paul R. Voss, and Steven C. Deller. 2006. "Rethinking Highway Effects on Population Change." *Public Works Management and Policy* 11(1): 18–32.

96. **Chi, Guangqing** and Paul R. Voss. 2005. "Migration Decision-Making: A Hierarchical Regression Approach." *Journal of Regional Analysis and Policy* 35(2): 11–22.

97. **Chi, Guangqing** and Brian Stone, Jr. 2005. "Sustainable Transport Planning: Estimating the Ecological Footprint of Vehicle Travel in Future Years." *Journal of Urban Planning and Development* 131(3): 170–180.

Book Chapters, Law Review Articles, and Encyclopedia Entries

98. Holen, Davin, Lance Howe, and **Guangqing Chi**. 2023. "Fishing in the Time of COVID: Assessing Risk in the Bristol Bay Commercial Salmon Fishery and the Societal Benefits of Social Science Research." In: *Arctic Pandemics: COVID-19 and Other Pandemic Experiences and Lessons Learned*, edited by Jennifer Spence, Heather Exner-Pirot, and Andrey Petrov. Akureyri, Iceland: Arctic Portal.

99. Korkut, Ekrem, Lara B. Fowler, Kathleen E. Halvorsen, Davin Holen, E. Lance Howe, and **Guangqing Chi**. 2022. "Addressing Climate Impacts in Alaska Native Tribes: Legal Barriers for Community Relocation due to Thawing Permafrost and Coastal Erosion." *UCLA Journal of Environmental Law & Policy* 40(2): 185–228.

100. Scott, Christian* and **Guangqing Chi**. 2022. "The Meaning of Food in Rural Mountainous Kyrgyzstan." In: *Food Studies: Matter, Meaning & Movement*, pp. 200–211, edited by David Szanto, Amanda Di Battista, and Irena Knezevic. Carleton University: Food Studies Press.

101. Kasu, Bishal*, Ernesto Castañeda, and **Guangqing Chi**. 2018. "Remittance-driven Migration in Spite of Microfinance? The Case of Nepalese Households." In: *Immigration and Categorical Inequality: Migration to the City and the Birth of Race and Ethnicity*, pp. 171–196, edited by Ernesto Castañeda. New York: Routledge.

102. **Chi, Guangqing** and Donghui Wang*. 2017. "Small-Area Population Forecasting: A Geographically Weighted Regression Approach." In: *The Frontiers of Applied Demography*, pp. 449–471, edited by David Swanson. New York: Springer.

103. **Chi, Guangqing**. 2014. "Social and Economic Impacts of Highways." In: *Encyclopedia of Transportation: Social Science and Policy*, pp. 756–759, edited by Mark Garrett and J. Geoffrey Golson. Thousand Oaks, CA: SAGE Publications. DOI: 10.4135/9781483346526.n269.

104. **Chi, Guangqing**. 2014. "Economic Development." In: *Encyclopedia of Transportation: Social Science and Policy*, pp. 454–457, edited by Mark Garrett and J. Geoffrey Golson. Thousand Oaks, CA: SAGE Publications. DOI: 10.4135/9781483346526.n172.

105. Parisi, Domenico, Steven M. Grice, **Guangqing Chi**, and Jed Pressgrove*. 2011. "Poverty, Work, and the Local Environment: TANF and EITC." In: *Economic Restructuring and Family Well-Being in Rural America,* pp. 320–335, edited by Ann Tickamyer and Kristin Smith. University Park, PA: Pennsylvania State University Press.

106. **Chi, Guangqing**. 2007. "Highway Effects on Economic and Population Growth: Regional Economic Explanation." In: *Encyclopedia of Earth*, edited by Cutler J. Cleveland. Washington, D.C.: Environmental Information Coalition, National Council for Science and the Environment.

Software Packages and Data Products

107. **Chi, Guangqing**, Junjun Yin, Jennifer Van Hook, Eric Plutzer, and Heng Xu. 2020. "Estimation of Twitter user demographics in the USA, 2014." [python package and data]. Available at https://doi.org/10.7910/DVN/PKKAPK. Released on November 23, 2020.

108. Kamenetsky, Maria*, **Guangqing Chi**, and Jun Zhu. 2020. "strm: Spatio-Temporal Regression Modeling." [R package]. Available at https://cran.r-project.org/web/packages/strm/index.html. Released on November 2, 2020.

109. Zhou, Shuai*, Yanling Li*, **Guangqing Chi**, Sy-Miin Chow, and Yosef Bodovski. 2020. "GPS2space: An Open-source Python Library for Spatial Data Building and Spatial Measure Extraction." [python package]. Available at https://gps2space.readthedocs.io/en/latest. Released on September 23, 2020.

110. **Chi, Guangqing**, Junjun Yin, and Yosef Bodovski. 2020. "Global Tweet Mentions of COVID-19." [webGIS product]. Available at https://webgis.pop.psu.edu/COVID-19. Released on April 6, 2020.

111. **Chi, Guangqing**, and Hung Chak Ho. 2020. "Land Developability." https://doi.org/10.7910/DVN/AMZMWH. Released on February 10, 2020.

112. **Chi, Guangqing** and Derrick Ho*. 2014. "Land Developability from 2001-2010 in the Continental U.S." [webGIS product]. Available at https://webgis.pop.psu.edu/LandDevelopability. Released on September 18, 2014.

113. **Chi, Guangqing** and Derrick Ho*. 2013. "Land Developability: A Measure of the Proportion of Lands Available for Development and Conversion." [webGIS product]. Available at https://webgis.pop.psu.edu/LandDevelopability. Released on April 15, 2013.

Opinion Articles

114. **Chi, Guangqing** and Jessica Miller*. 2022. "The Americans Already Suffering Most from the Fall of Roe." *Slate*. August 10, 2022. Available at https://slate.com/news-and-politics/2022/08/out-of-state-abortion-data-roe.html

115. **Chi, Guangqing** and Erin Hofmann. 2022. "The Russia-Ukraine War Will Hurt Millions in Central Asia." *Philadelphia Inquirer*. August 8, 2022. Available at https://www.inquirer.com/opinion/commentary/central-asia-migrants-russia-ukraine-war-20220808.html

116. **Chi, Guangqing**, Davin Holen, Heather Randell, Megan Mucioki, and Rebecca Napolitano. 2021. "Rural Alaska Needs New Bridges as Permafrost Thaws and River Ice Gets Dangerously Thin – The Infrastructure Bill Is Only a Start." *The Conversation*. October 12, 2021. Available at https://theconversation.com/rural-alaska-needs-new-bridges-as-permafrost-thaws-and-crossing-river-ice-gets-riskier-the-infrastructure-bill-is-only-a-start-169345

117. **Chi, Guangqing** and Junjun Yin. 2021. "Social Media Data for Social and Behavioral Research." *Open Access Government*. Issue July 2021, pp. 200–201. Available at https://www.openaccessgovernment.org/social-media-data/113292/

118. Hofmann, Erin and **Guangqing Chi**. 2021. "'Bride Kidnapping' Haunts Rural Kyrgyzstan, Causing Young Women to Flee Their Homeland." *The Conversation*. June 7, 2021. Available at https://theconversation.com/bride-kidnapping-haunts-rural-kyrgyzstan-causing-young-women-to-flee-their-homeland-158404

119. **Chi, Guangqing**. 2020. "#SocialScience: Mining Twitter for Social and Behavioural Research." *Research Outreach* 115: 22–25. Available at https://researchoutreach.org/articles/social-science-mining-twitter-social-behavioural-research/

120. Kasu, Bishal* and **Guangqing Chi**. 2019. "The Evolving and Complementary Impacts of Transportation Infrastructures on Growth and Development." N-IUSSP, The International Union for the Scientific Study of Population's online news magazine. Available at http://www.niussp.org/article/the-impact-of-transportation-infrastructures-on-growth-and-development/

121. Wang, Donghui* and **Guangqing Chi**. 2018. "The Spatial Heterogeneity of County-Level Fertility in China." Report No. 85, The Young Scholar Committee of Chinese Population Association. Available at https://mp.weixin.qq.com/s/iJvn7cu6trpPYKhM6reNAA. [in Chinese]

Journal Special Issues

122. Chi, Guangqing, and Junjun Yin (eds). 2024 Expected. "Big Spatial Data in Demography." *Spatial Demography*.

123. Gao, Jinlong, Yurui Li, Guangqing Chi, and David W. Marcouiller (eds). 2022. "Rural Restructuring and Pathways Towards Revitalization in Transitional China and Beyond." *Growth and Change*.

124. Zhang, Jianjun, Guangqing Chi, Yongheng Rao, and Feng Xu (eds). 2022. "Land Use Change and Anthropogenic Disturbances: Relationships, Interactions, and Management." *Land*. https://www.mdpi.com/journal/land/special_issues/land_anthropogenic

125. Chen, Wanxu, Jie Zeng, and Guangqing Chi (eds). 2022. "Ecosystem Health and Human Well-Being." *International Journal of Environmental Research and Public Health*. https://www.mdpi.com/journal/ijerph/special_issues/0CLH08QMI0

Other Publications

126. National Academies of Sciences, Engineering, and Medicine. 2023. Integrating the Human Sciences to Scale Societal Responses to Environmental Change: Proceedings of a Workshop. Washington, DC: The National Academies Press. https://doi.org/10.17226/27129. [Contributor]

127. Xu, Feng, Guangqing Chi, Yongheng Rao, and Jianjun Zhang. 2022. "Editorial for the Special Issue 'Land Use Change and Anthropogenic Disturbances: Relationships, Interactions, and Management.'" *Land* 11: 1522. DOI: 10.3390/land11091522.

128. Liang, Yun*, Junjun Yin, Bing Pan, Michael Lin*, and Guangqing Chi. 2021. "Assessing the Validity of SafeGraph Data for Visitor Monitoring in Yellowstone National Park." The Travel and Tourism Research Association, June 14–16, 2021, Fort Worth, TX. [Conference proceeding]

129. Singh, Lisa, Leticia Bode, Pamela Davis-Kean, Tanya Berger-Wolf, Ceren Budak, Guangqing Chi, Andy Guess, Jennifer Hill, Adam Hughes, Brad Jensen, Frauke Kreuter, Jonathan Ladd, Margaret Little, Zeina Mneimneh, Kevin Munger, Josh Pasek, Trivellore Raghunathan, Rebecca Ryan, Stuart Soroka, and Michael Traugott. 2020. "Study Designs for Quantitative Social Science Research Using Social Media." [PsyArXiv, DOI: 10.31234/osf.io/zp8q2]

130. Singh, Lisa, Shweta Bansal, Leticia Bode, Ceren Budak, Guangqing Chi, Kornraphop Kawintiranon, Colton Padden, Rebecca Vanarsdall, Emily Vraga, and Yanchen Wang*. 2020. "A First Look at COVID-19 Information and Misinformation Sharing on Twitter." [arXiv:2003.13907]

131. Liang, Yun*, Junjun Yin, Bing Pan, Guangqing Chi, Clio Andris, Zach Miller, Jack Jorgenson, and Norma Nickerson. 2020. "Understanding Demographics and Experience of Tourists in Yellowstone National Park through Social Media." The Travel and Tourism Research Association, June 16–18, 2020, Victoria, Canada. [Conference proceeding]

132. Aidaraliev AA, GM Henebry, G Chi, P Groisman, M Tomaszewska, MS Baihodjoev, KA Kelgenbaeva, 2019. "Climatic impacts on mountainous livelihood in Kyrgyzstan." Proceedings of the 15th anniversary of the Foundation of CAIAG "Remote and Terrestrial Research of the Land in Central Asia", September 17–18, 2019, Bishkek, Kyrgyzstan, pp. 148–153 (in Russian). [Conference proceeding]

133. Yin, Junjun, Guangqing Chi, and Jennifer Van Hook. 2018. "Evaluating the Representativeness in the Geographic Distribution of Twitter User Population." GIR'18 Proceedings of the 12th Workshop on Geographic Information Retrieval, ACM SIGSPATIAL, November 6, 2018, Seattle, WA. [Conference proceeding]

134. Wang, Donghui*, Annelise D. Hagedorn*, Guangqing Chi, Guljamal Ibraimova, Kamilya Kelgenbaeva, and Geoffrey M. Henebry. 2016. "Agricultural Productions in Kyrgyzstan, 1990–2014." The International University of Kyrgyzstan Journal 29(1): 11–16. [Conference proceeding]

135. Li, Chuo, Amir Ghiasi*, Xiaopeng Li, and Guangqing Chi. 2016. "Socio-demographic Characteristics Associated with Access to Organic and Local Food." #16–2058. The Transportation Research Board, January 10–14, 2016, Washington, D.C. [Conference proceeding]

136. Chi, Guangqing, Bishal Kasu*, and Annelise D. Hagedorn*. 2016. "The Economic Demography of Passenger Intermodal Transportation: Opportunities and Challenges." Project Report No. 13-007. National Center for Intermodal Transportation for Economic Competitiveness, U.S. Department of Transportation. Available at https://trid.trb.org/view.aspx?id=1400760.

137. Chi, Guangqing and Bishal Kasu*. 2016. "Economic and Demographic Impacts of Passenger Rail Systems: The Impact of Intercity Passenger Rails on Population and Employment Change in the United States, 2000–2010." Project Report No. 13-008. National Center for Intermodal Transportation for Economic Competitiveness, U.S. Department of Transportation. Available at https://trid.trb.org/view.aspx?id=1400761.

138. Chi, Guangqing and Mary Killsahundred*. 2015. "Rapid City School District School-Level Enrollment Projections 2015–2024." Project Report. The Black Hills Knowledge Network, Rapid City, SD.

139. Chi, Guangqing. 2014. "South Dakota State Data Center Newsletter, Winter 2014 Issue." Rural Life and State Data Center, Department of Sociology and Rural Studies, South Dakota State University.

140. Chi, Guangqing. 2014. "South Dakota State Data Center Newsletter, Fall 2014 Issue." Rural Life and State Data Center, Department of Sociology and Rural Studies, South Dakota State University.

141. Chi, Guangqing. 2014. "Traffic Fatalities Have Been Declining Steadily Since 2005: Why?" In: *Mississippi Traffic Safety Data Book 2014,* pp. 13–16, edited by McKee, C., Burns, M.A., Farrell, B., Neaves, T., Falls, A., Singletary, K., Nguyen, J., & Ginn, A. Starkville, MS: Social Science Research Center, Mississippi State University.

142. Chi, Guangqing and Willie Brown. 2014. "Rising Gasoline Prices Lead to the Reduction in Drunk-Driving Crashes." Policy Brief. Public Safety Data Laboratory, Social Science Research Center, Mississippi State University. Available at http://psdl.ssrc.msstate.edu/wp/wp-content/uploads/GasolinePricesandDrunk-DrivingCrashes.pdf.

143. Chi, Guangqing. 2013. "Applied Spatial Data Analysis with R" by Roger S. Bivand, Edzer J. Pebesma, and Virgilio Gómez-Rubio (New York, NY: Springer. 374 + xiv. ISBN: 978-0-387-78170-9). *Spatial Demography* 1(2): 227–228. [Book review]

144. Chi, Guangqing and Jamie Boydstun. 2013. "Passenger Usages of the Intermodal Transportation System: An Analysis of the 2009 National Household Travel Survey Data." Project Report. National Center for Intermodal Transportation for Economic Competitiveness, U.S. Department of Transportation.

145. Chi, Guangqing and Jamie Boydstun*. 2013. "Rising Gasoline Prices and Residential Relocation Closer to Workplaces." #13–1686. The Transportation Research Board, January 13–17, 2013, Washington, D.C. [Conference proceeding]

146. Chi, Guangqing, Jeremy R. Porter, Arthur G. Cosby, and David Levinson. 2013. "Understanding the Impact of Gasoline Price Changes on Traffic Safety: A Time Geography Approach." #13–1687. The Transportation Research Board, January 13–17, 2013, Washington, D.C. [Conference proceeding]

147. Chi, Guangqing, Mohammed A. Quddus, Arthur Huang*, and David Levinson. 2013. "Urban-Rural Difference of Gasoline Price Effects on Traffic Safety." #13–1688. The Transportation Research Board, January 13–17, 2013, Washington, D.C. [Conference proceeding]

148. Chi, Guangqing and Yanbing Zheng. 2012. "Estimating Transport Footprint along Highways at Local Levels: Combination of Network Analysis and Kriging Methods." #12–0754. The

Transportation Research Board, January 22–26, 2012, Washington, D.C. [Conference proceeding]

149. Chi, Guangqing and Jamie Boydstun. 2012. "Passenger Responses to Gasoline Price Increases: Residential Relocation and Intermodal Transportation." Project Report. Henry Family Research Fund, College of Arts and Sciences, Mississippi State University.

150. Chi, Guangqing. 2010. "Land Developability and Population Dynamics: Developing an Index of Land Use and Development for Sustainability Research." #3D7–ICSU10387. The First International Conference on Sustainable Urbanization, December 15–17, 2010, Hong Kong. [Conference proceeding]

151. Chi, Guangqing. 2010. "Estimating Transport Ecological Footprint at Local Levels: An Ordinary Kriging Approach." #8A02–ICSU10386. The First International Conference on Sustainable Urbanization, December 15–17, 2010, Hong Kong. [Conference proceeding]

152. Chi, Guangqing. 2010. "Assessing Economic and Demographic Impacts of Intermodal Transportation Systems." Project Report. National Center for Intermodal Transportation, U.S. Department of Transportation.

153. Mo, Xiugen*, Guangqing Chi, and Charles A. Campbell. 2009. "The Temporal and Spatial Effect of Highways on China's Economic Growth." Working Paper. Social Science Research Network. Available at SSRN: http://ssrn.com/abstract=1580246.

154. Voss, Paul R. and Guangqing Chi. 2004. "On the Causality between Highway Expansion and Population Change: A Spatial Multivariate Regression Analysis." *Applied Demography* 17(2): 5–6.

155. Chi, Guangqing. 1999. "Identifying and Weighing Environmental Factors in Communities." *Shanghai Property Management* 24: 24–25. [in Chinese]

156. Chi, Guangqing. 1999. "Applying the ISO14001 Environmental Management System to Manage Communities: A Case Study of Ching Chu Garden, Shanghai." *Shanghai Property Management* 24:18–20. [in Chinese]

157. Wang, Xiangrong and Guangqing Chi. 1999. "Implementing the ISO14001 Environmental Management System to Improve the Ecological Construction of Urban Communities." *Shanghai Property Management* 24:10–13, 17. [in Chinese]

RESEARCH GRANTS

PI = Principal Investigator; Co-PI = Co-Principal Investigator; Co-I = Co-Investigator; SP = Senior Personnel.
NSF = National Science Foundation; NIH = National Institutes of Health; NASA = National Aeronautics and Space Administration; USDOT = U.S. Department of Transportation; NHTSA = National Highway Traffic Safety Administration; DOD = Department of Defense; HHS CMS = U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services.

Active External Grants

1. **NSF** Navigating the New Arctic Program. "NNA Track 1: Pursuing Opportunities for Long-term Arctic Resilience for Infrastructure and Society (POLARIS)" (Award # NNA-1927827). 1/1/2020–12/31/2023. **PI**. $3,018,000.

2. **NSF** Navigating the New Arctic Program. "Collaborative Research: NNA Research: Arctic, Climate, and Earthquakes (ACE): Seismic Resilience and Adaptation of Arctic Infrastructure and Social Systems amid Changing Climate" (Award # NNA-2220219). 1/1/2023–12/31/2027. **PI**. $559,000. (Lead PI: Majid Ghayoomi, U New Hampshire. Total award: $3,009,000.)

3. **NSF**. "Planning: Collaborative: Food Security and Traditional Foods in Urban Spaces" (Award # OPP-2306041). **Co-PI** with Megan Mucioki (PI). 5/1/2023–4/30/2025. $200,000.

4. **NSF** Office of Polar Program. "RAPID: Using Mobile Phone Data to Understand the Impacts of the COVID-19 Pandemic on Food Assistance Use in Alaska" (Award # OPP-2207436). 2/1/2022–1/31/2024. **PI**. $200,000.

5. **NSF** Environmental Sustainability Program. "CAS-Climate: An Integrated Framework to Investigate Thermal Resilience of Sustainable Buildings and Living Environments for Greater Preparedness to Extreme Temperature Events" (Award # CBET-2215421). 9/1/2022–2/28/2027. **Co-PI** with Julian Wang (PI). $500,000.

6. **NSF** Strengthening American Infrastructure Program. "EAGER: SAI: Collaborative Research: Community-Driven Innovation for Resilient Bridges in Remote Communities" (Award # BCS-2121909). 10/1/2021–9/30/2024. **PI**. $259,112.

7. **NSF** Office of Polar Program. "Planning: Building Community Resilience in the Food-Energy-Water and Society Nexus" (Award # OPP-2225982). 10/1/2022–9/30/2024. **Co-PI** with Somayeh Asadi (PI). $200,000.

8. **NIH**. "The Impact of Structural Racism on Racial/Ethnic Disparities in End-Stage Kidney Disease from Healthy Population to Mortality" (Award # 1R01DK132953-01). 8/1/2022–5/31/2026. **Co-I** with Jonathan Daw (PI). $2,646,872.

9. **NIH/NICHD**. "Population Research Institute" (Award # 2P2C HD041025). 6/1/2021–5/31/2026. **SP** (**PI** of the Computational and Spatial Analysis Core) with Jennifer Glick (PI). $3,530,135.

10. **NSF** Office of Polar Program. "Convergence NNA: Coordinate a Transdisciplinary Research Network to Identify Challenges and Solutions of Permafrost Coastal Erosion and Its Socioecological Impact in the Arctic" (Award # OPP-1745369). 1/1/2018–12/31/2023. **Co-PI** with Ming Xiao (PI). $500,000.

11. **Pittsburgh Supercomputer Center**. "The Generalizability and Replicability of Twitter Data for Population Research" (Award # SES180006). 4/15/2018–4/16/2024. **PI**. Memory: 50,000 SUs; Storage: 30,000 GB; 100,000 ACCESS Credits.

12. **National Park Service Research Center**. "Bicycle Patterns in Grand Teton National Park's Multi-Use Pathway: Integrating Behavior, Recreation Specialization, and Big Data." **Co-I** with Bing Pan (PI). 4/1/2023–3/31/2024. $5,000.

13. **DOD**. "Permanent Change of Station and Variation in Cancer Prevention and Care in the Military Health System" (Award # HQ0034-20-1-0002). 9/29/2019–12/31/2023. **Co-I** with Joel Segel (PI). $717,562.

Completed External Grants

14. **NSF** Sociology Program. "RR: The Generalizability and Replicability of Twitter Data for Population Research" (Award # SES-1823633). 7/15/2018–6/30/2023. **PI**. $500,000.

15. **NIH**. "The Center for Innovation in Intensive Longitudinal Studies (CIILS)" (Award # U24 AA027684). 9/20/2018–8/31/2023. **Co-I** with Sy-Miin Chow (PI). $1,835,411.

16. **NSF** Office of Polar Program. "RAPID: Collaborative Research: COVID-19 Preparedness in Remote Fishing Communities in Rural Alaska" (Award # OPP-2032790). 6/15/2020–5/31/2022. **PI**. $119,868.

17. **NIH**. "Play & Learning Across a Year (PLAY)." 4/1/2018–3/31/2023. Consultant with Karen E. Adolph, Catherine Tamis-Lemonda, and Rick Gilmore (PIs). $8.5 million.

18. **The Food and Agriculture Organization of the United Nations**. "Drivers of Deforestation Analysis and Synthesis Research Project." 1/1/2022–6/30/2022. **SP** with Katie Bernhard and Edwin Sabuhoro (co-PIs). $40,000.

19. **Social Science Research Council**. "Are We More Willing to Speak Up When We Share Without Clicking? A Study of Political Content Sharing on Facebook" (Award # 228621). 7/1/2020–6/30/2022. **Co-PI** with Shyam Sundar (PI). $49,017.

20. **NIH**. "Population Research Institute" (Award # P2C HD041025). 9/4/2016–5/31/2021. **Co-I** (**PI** of the Scientific and Technical Core) with Jennifer Van Hook (PI). $13,179,754.

21. **FWD.us**. "Twitter Data for Environmental Migration from Central America." 8/23/2021–10/15/2021. **PI**. $7,798. [contract]

22. **NSF** Innovations in Graduate Education Program. "IGE: Individualized Pathways and Resources to Adaptive Control Theory-Inspired Scientific Education (iPRACTISE)" (Award # DGE-1806874). 7/1/2018–6/30/2021. **SP** with Sy-Miin Chow (PI). $490,804.

23. **HHS CMS**. "Pennsylvania Rural Health Model" (Award # 4400015622). 11/7/2019–10/20/2020. **Co-I** with Lisa Davis and Chris Hollenbeak (co-PIs). $4,957,486.

24. **NASA** Land Use and Land Cover Change Program. "How Environmental Change in Central Asian Highlands Impacts High Elevation Communities" (Award # NNX15AP81G). 7/1/2015–6/30/2020. **Co-I** with Geoffrey Henebry (PI). $969,551.

25. **HHS CMS**. "Pennsylvania Rural Health Model" (Award # 4400015622). 4/17/2019–10/20/2019. **Co-I** with Lisa Davis and Dennis Scanlon (co-PIs). $4,426,440.

26. **NSF** Critical Resilient Interdependent Infrastructure Systems and Processes Program. "CRISP Type 1/Collaborative Research: Population-Infrastructure Nexus: A Heterogeneous Flow-based Approach for Responding to Disruptions in Interdependent Infrastructure Systems" (Award # CMMI-1541136). 1/1/2016–12/31/2018. **PI**. $150,000.

27. **Microsoft Azure for Research Program**. "Data Science: Mining Twitter User Demographics as a First-Step in Big Data for Population Research with Microsoft Azure." 3/14/2018–12/31/2018. **PI**. $10,000.

28. **PA Tobacco Settlement Fund**. "Neighborhood Effects on Health in Pennsylvania." 6/1/2016–12/31/2017. **Co-I** with Cynthia Chuang (PI). $107,494.

29. **USDOT** National Center for Intermodal Transportation for Economic Competitiveness. "The Economic Demography of Passenger Intermodal Transportation: Opportunities and Challenges" (Award # DTRT12GUTC14-201307). 07/1/2013–12/31/2015. **PI**. $199,858.

30. **USDOT** National Center for Intermodal Transportation for Economic Competitiveness. "Economic and Demographic Impacts of Passenger Rail Systems: A Scenario Analysis of Restoring the Passenger Rail Corridor between New Orleans and Orlando" (Award # DTRT12GUTC14-201308). 05/15/2013–12/31/2015. **PI**. $201,226.

31. **South Dakota Rapid City School District**. "School Enrollment Projections." 11/1/2014–2/28/2015. **PI**. $11,500. [Contract]

32. **NHTSA**, Mississippi Highway Patrol, and Mississippi Department of Public Safety. "Mississippi Highway Patrol Data and Analysis Program: Year Six" (Award # 14-MC-401-1). 10/01/2013–09/30/2014. **Co-PI** with Tonya Thornton-Neaves (PI). $238,811.

33. **USDOT** National Center for Intermodal Transportation for Economic Competitiveness. "Passenger Usages of the Intermodal Transportation System: An Analysis of the 2009 National Household Travel Survey Data" (Award # DTRT12GUTC14-12050543). 07/01/2012–08/15/2013. **PI**. $65,459.

34. **USDOT** University Transportation Center Program. "National Center for Intermodal Transportation and Economic Competitiveness." 2012–2014. Faculty Affiliate with Burak Eksioglu (PI). $3,500,000.

35. **NHTSA**, Mississippi Highway Patrol, and Mississippi Department of Public Safety. "Mississippi Highway Patrol Data and Analysis Program: Year Five" (Award # 13-K9-401-1). 10/01/2012–09/30/2013. **Co-PI** with Tonya Thornton-Neaves (PI). $194,557.

36. **NHTSA**, Mississippi Highway Patrol, and Mississippi Department of Public Safety. "Mississippi Highway Patrol Data and Analysis Program: Year Four" (Award # 12-K9-401-1). 10/01/2011–09/30/2012. Research Scientist with Arthur G. Cosby (PI). $270,466.

37. **NHTSA**, Mississippi Highway Patrol, and Mississippi Department of Public Safety. "Mississippi Highway Patrol Data and Analysis Program: Year Three" (Award # 11-K9-401-1). 10/01/2010–09/30/2011. Research Scientist with Arthur G. Cosby (PI). $277,225.

38. **USDOT** National Center for Intermodal Transportation. "Assessing Economic and Demographic Impacts of Intermodal Transportation Systems" (Award # 363010100-07070609). 08/16/2009–08/15/2010. **PI**. $44,112.

39. **NHTSA**, Mississippi Highway Patrol, and Mississippi Department of Public Safety. "Mississippi Highway Patrol Data and Analysis Program: Year Two" (Award # 10-K9-401-1). 10/01/2009–09/30/2010. Research Scientist with Arthur G. Cosby (PI). $392,160.

40. **USDOT** National Center for Intermodal Transportation. "Modeling Economic Benefits of Resilience Enhancement Strategies for Intermodal Transportation Systems." (Award # 363010100-009067-018). 07/01/2009–06/30/2010. **Co-PI** with Li Zhang (PI). $57,519.

41. **NHTSA**, Mississippi Highway Patrol, and Mississippi Department of Public Safety. "Mississippi Highway Patrol Data and Analysis Program: Year One" (Award # 09-K9-401-1). 10/01/2008–09/30/2009. Research Scientist with Arthur G. Cosby (PI). $516,632.

Internal Grants

42. PSU Social Science Research Institute. "New Tools for Visualization Research to Improve Hazard and Risk Communication." 7/1/2023–6/30/2024. **Co-PI** with Peter Stempel (PI). $20,000.

43. PSU Center for Socially Responsible Artificial Intelligence and College of Information Science and Technology. "Predicting Number of Tenants At-Risk of Eviction in High Resolution using Social Media, E-Commerce Data, Sociological Insights, and Low-Resolution Eviction Data." 5/1/2023–10/30/2024. **Co-PI** with Dongwon Lee (PI). $40,000.

44. PSU C-SoDA Accelerator. "Expanding Methods and Understanding of Trail Use and Users at Grand Canyon National Park with Spatial Applications of Big Data." 1/1/2023–10/31/2023. **Co-PI** with Colby Parkinson (PI). $5,000.

45. PSU C-SoDA Accelerator. "# BlackHiker: A Black Perspective on Outdoor Recreation by Tweets." 1/1/2023–7/31/2023. **Co-PI** with Yun Liang (PI). $5,000.

46. NIH Interdisciplinary Network on Rural Population Health and Aging (INRPHA). "Aging Amish: Toward Usable Population Microdata and an Investigation of Residence Proximity, Occupational Change, and Informal Care Practices for the Elderly." 4/15/2021–6/30/2022. **Co-I** with Cory Anderson (PI). $15,000.

47. PSU Social Science Research Institute. "Mobility Patterns and Their Influence on Food Security in Alaskan Communities: Using Digital Trace Data for Social and Behavioral Research during the COVID-19 Pandemic." 4/1/2021–3/31/2023. **Co-PI** with Junjun Yin (PI). $30,000.

48. PSU Institution for Computational and Data Sciences. "A Deep Learning-enabled Dasymetric Mapping Approach for Fine-Scale Population Estimation in Alaska." 5/1/2021–4/30/2023. **Co-PI** with Junjun Yin (PI). $35,000.

49. PSU C-SoDA Accelerator. "Who Visits Yellowstone National Park during the COVID-19 Pandemic? A Gravity Model Analysis by Mobile Device Data." 2/1/2022–10/31/2022. **Co-PI** with Yun Liang (PI). $6,500.

50. PSU Institutes of Energy and the Environment. "Urban Microclimate, Outdoor Thermal Comfort, and Socio-Economic Mapping: A Case Study of Two High-Density Cities." 4/16/2021–6/30/2022. **Co-PI** with Ute Poerschke (PI). $26,420.

51. PSU Social Science Research Institute. "Revisiting Secular Trends on Migration." 7/1/2019–6/30/2020. **Co-PI** with Elisa Giannone (PI). $5,000.

52. PSU Social Science Research Institute, Institute for CyberScience, and College of Information Science and Technology. "Regional Differences in Opinions Toward Climate Change Among Twitter Users." 3/1/2019–12/31/2020. **Co-PI** with Ting-Hao Huang (PI). $30,000.

53. PSU Social Science Research Institute and Institute for CyberScience. "Food-Water-Energy Choices in Alaska: Mining People's Perception and Attitudes from Geotagged Tweets." 3/1/2019–3/1/2020. **Co-PI** with Somayeh Asadi (PI). $5,000.

54. PSU Social Science Research Institute and Institute for CyberScience. "What Can Social Media Sentiment Analysis of Flu Risk and Vaccine Efficacy Tell Us About Regional and Demographic Variations in Flu Vaccination Rates?" 3/1/2019–2/28/2021. **Co-PI** with Suresh Kuchipudi (PI). $20,000.

55. Penn State's 2016-2020 Strategic Plan. "Pennsylvania Population Network." 7/1/2018–6/30/2021. **Collaborator** with Jennifer Glick (PI). $243,423.

56. PSU Social Science Research Institute. "Spatial Economic Patterns in Refugee Integration: An Analysis of TurkTelecom Call Data Records and Geographic Information Systems." 8/1/2018–7/31/2019. **Co-PI** with Clio Andris (PI). $20,000.

57. PSU Social Science Research Institute. "An Innovative Approach to Tackle the Opioid Epidemic: Utilizing Twitter Data and Integrating Big Data Analytics and Spatial and Social Network Analyses." 5/1/2018–6/30/2019. **Co-PI** with Zhen Lei (PI). $20,000.

58. Penn State's 2016-2020 Strategic Plan. "Individualized Pathways and Resources to Adaptive Control Theory-Inspired Scientific Education (iPRACTISE)." 7/1/2018–6/30/2020. **Co-I** with Sy-Miin Chow (PI). $250,000.

59. PSU Human Health and Environment. "Heavy Metal Exposures and Aggressive Prostate Cancer." 7/1/2018–6/30/2020. **Co-I** with Alicia C. McDonald and Ming Wang (PIs). $50,000.

60. PSU Institute for CyberScience. "The Generalizability and Replicability of Twitter Data for Population Research." 5/1/2018–6/30/2019. **PI**. $35,000.

61. PSU Social Science Research Institute and Institutes of Energy and the Environment. "From Environmental Change to Left-behind Children's Well-being in Rural Highlands: The Nexus of Pasture Productivity, Family Processes, Labor Migrants, and Child Development." 7/1/2017–6/30/2019. **PI**. $50,000.

62. Penn State's 2016-2020 Strategic Plan. "Integrated Data Systems Solutions for Health Equity." 7/1/2017–6/30/2019. **Co-I** with Susan McHale (PI). $180,000.

63. Penn State's 2016-2020 Strategic Plan. "Digital Collaboratory for Precision Health Research." 7/1/2017–6/30/2019. **Co-I** with Vasant Honavar (PI). $250,000.

64. PSU Human Health and Environment. "Predictive Modeling of Health Risks and Outcomes from Clinical, Environmental, Contextual, Behavioral Data: A Proof-of-Concept Study Focused on Breast Cancer in Central Pennsylvania." 6/1/2017–5/31/2018. **Co-PI** with Vasant Honavar and Eugene Lengerich (PIs). $50,000.

65. PSU Institutes of Energy and the Environment. "Ecological Migration in a Large-Scale Quasi-Experiment Design in China: Implications of Climate Change, Landscape Structure, Ecosystem Services and Government Intervention." 4/1/2017–6/30/2018. **PI**. $25,000.

66. PSU Pathway to Partnership Stage I. "Aggressive Prostate Cancer in Pennsylvania: Health Disparities and Environmental Risk Factors." 8/1/2016–2/1/2017. **Co-I** with Ming Wang and Alicia C. McDonald (Co-PIs). $5,000.

67. PSU Social Science Research Institute. "The Computational and Spatial Analysis Core's Twitter Initiative as Part of Social Science Research Institute's Strategic Area in Innovative Methods." 6/1/2016–6/1/2019. **PI**. $83,585.

68. PSU Social Science Research Institute and Institutes of Energy and the Environment. "A Household-level Longitudinal Investigation into the Food Environment's Impact on Food Behavior and Health." 7/1/2015–6/30/2016. **Co-I** with Jennifer Van Hook (PI). $20,000.

69. PSU Pathway to Partnership Stage I. "Population Health Research in the Era of Big Data." 6/1/2015–11/1/2015. **Co-PI** with Cynthia Chuang (co-PI). $5,000.

70. MSU Office of Research and Economic Development. "Big Data Analysis in Transportation and Sociology." 8/16/2013–8/15/2014. **Co-PI** with Xiaopeng Li (PI). $2,000.

71. MSU Office of Research and Economic Development. "Infrastructure and Livable Community." 8/16/2012–8/15/2013. **Co-PI** with Xiaopeng Li (PI). $2,000.

72. MSU College of Arts and Sciences, Henry Family Research Fund. "Social and Spatial Implications of Gasoline Price Changes on Commuting Behaviors." 06/01/2011–05/31/2012. **PI**. $5,000.

PRESENTATIONS (selected)

Invited Talks

UMBC (2023); ICIMOD, Nepal (2023); UiO Arctic Committee (2023); Pennsylvania State University (2014–2016, 2018, 2019, 2022, 2023); University of Wisconsin–Madison (2005, 2006, 2022); National Science Foundation (2015, 2018, 2019); International University of Kyrgyzstan (2017, 2019); University of Illinois (2018); Temple University (2016); University of Central Asia (2016); Rotary Club of Watertown, SD (2014); South Dakota State University (2014); University of Toronto (2014); University of Texas at El Paso (2014); University of Tennessee–Knoxville (2013); Mississippi State University (2006, 2009, 2013); University of Utah (2012); Michigan State University (2007); State University of New York at Buffalo (2006); University of Illinois–Chicago (2004)

Conference Presentations

Population Association of America (2004–2008, 2011–2014, 2016–2019, 2021–2023)
Rural Sociological Society (2008–2009, 2015–2019, 2021–2023)
Association of American Geographers (2006, 2014, 2017, 2019)
American Sociological Association (2010, 2019)
Regional Science Association International (2005, 2009, 2012, 2019)
International Symposium on Society and Resource Management (2016, 2019)
American Geophysical Union (2019)
Southern Demographic Association (2004, 2007–2010, 2013, 2017)
International Union for the Scientific Study of Population (2017)
Transportation Research Board (2011–2013, 2016)

TEACHING AND SUPERVISING

PSU = Pennsylvania State University; SDSU = South Dakota State University; MSU = Mississippi State University

Courses Taught at PSU

RSOC 597 Spatial Analysis of Social Data. Spring 2016; Spring 2019; Spring 2021.
RSOC 597 Elements of Social Statistics. Spring 2018.
CED 410 Population and Environment. Spring 2017; Spring 2020; Spring 2023.

Courses Taught at MSU

SO4703/6703 Population Problems. Fall 2012; Fall 2013.
SO4990/6990 Transportation and Society. Spring 2012; Spring 2013.
SO8243 Spatial Analysis of Social Data. Fall 2008; Summer 2011; Spring 2014.

SO8274 Graduate Social Statistics I. Spring 2009; Spring 2010; Spring 2011.
SO8284 Graduate Social Statistics II. Fall 2009; Fall 2010; Fall 2011.

Ph.D. and M.S. Advisees

Ayse Akyildiz, Rural Sociology and Demography, PSU, PhD in progress
Jessica Miller, Rural Sociology and Demography, PSU, PhD in progress
Yining Feng, Rural Sociology and Demography, PSU, PhD in progress
Shuai Zhou, Rural Sociology and Demography, PSU, PhD 2023 (Postdoc, Cornell)
Christian Scott, Rural Sociology and International Agriculture and Development, PSU, PhD 2021
    (Postdoc, Michigan State)
Xiaoran Sun, Social Data Analytics, PSU 2019 (research rotation advisee, Assistant Professor, U
    Minnesota)
Shuai Zhou, Rural Sociology and Demography, PSU, MS 2019
Donghui Wang, Rural Sociology and Demography, PSU, PhD 2018 (Associate Professor, Renmin
    University of China; co-advised with Leif Jensen)
Bridget Ward, Geographic Information Systems, PSU, MS 2017 (GIS Analyst, HDR, Inc.)
Bishal Kasu, Sociology and Rural Studies, SDSU, PhD 2017 (Postdoc, South Dakota State U)
Derrick Shapley, Sociology, MSU, PhD 2015 (Associate Professor, Talladega College)

Faculty and Postdoc Mentees

Casey Pinto, Assistant Professor of Public Health Sciences, PSU, 2016–present
Megan Henly, Project Director of Institute on Disability, U New Hampshire, 2023–2024
Cory Anderson, Postdoctoral Fellow, Population Research Institute, PSU, 2020–2023 (co-mentored with
    Mary Shenk)
Heng Xu, Associate Professor of Information Sciences and Technology, PSU, 2017–2018 (SSRI Faculty
    Fellow)

Ph.D. Dissertation and M.S. Thesis Committees

Bianca Wirth (Criminology, PSU, PhD in progress); Shiyan Zhang (Geography, PSU, PhD in progress);
Haoyang Zhang (Sociology, PSU, PhD in progress); Chen Xia (Architectural Engineering, PSU, PhD in
progress); Jessie Slepicka (Criminology, PSU, PhD in progress); Saydeh Karabatis (Information Systems,
UMBC, PhD in progress); Yun Liang (Recreation, Park, and Tourism Management, PSU, PhD 2023);
Rachel L. McNealey (Criminology, PSU, PhD 2023); Katrina Alford (Rural Sociology and Demography,
PSU, PhD 2023); Megan Evans (Sociology and Demography, PSU, PhD 2023); Grace Wildermuth (Rural
Sociology and Demography, PSU, PhD 2022); Dylan Davis (Anthropology, PSU, PhD 2022); Kaida Zhang
(Economics, PSU, PhD 2022); Katie Sneeringer (Public Health Sciences, PSU, PhD 2021); Laura
Stiberman (Sociology and Demography, PSU, MS 2021); Xuetao Huang (Agricultural, Environmental, and
Regional Economics and Demography, PSU, PhD 2021); Richard Bankoff (Bioethics and Anthropology,
PSU, PhD 2020); Qiong Zhu (Higher Education, PhD 2019); Wei-Lin Wang (Rural Sociology and
Demography, PSU, PhD 2019); Abou Traore (Rural Sociology, PSU, PhD 2018); Bo Bian (Economics,
PSU, PhD 2018); Yunmei Lu (Sociology, PSU, PhD 2018); Mohsen Parsafard (Civil and Environmental
Engineering, U South Florida, PhD 2017); Chia-Yueh Hus (Social Work and Social Administration, U of
Hong Kong, PhD 2017); Andrew Gladfelter (Criminology, PSU, PhD 2016); Danya Kim (Urban and
Regional Planning, U of Wisconsin-Madison, PhD 2016); Jamie Boydstun (Sociology, MSU, PhD 2014);
Onyumbe E. Lukongo (Finance and Economics, MSU, PhD 2014); Li Zheng (Sociology, MSU, PhD
2013); Philip Mason (Sociology, MSU, PhD 2012); Kaustav Misra (Finance and Economics, MSU, PhD
2010); John S. McCown (Sociology, MSU, MS 2011); Jamie Boydstun (Sociology, MSU, MS 2009)

PROFESSIONAL SERVICE (selected)

Disciplinary Service

Editorial:
    Deputy Editor, *Demography* (2016–2019)
    Editorial Board Member, *Social Forces* (2023–2026)
    Advisory Board member, *Population and Environment* (2019–)
    Editorial Board member, *Spatial Demography* (2012–)
    Editorial Board member, *SN Social Sciences* (2022–)
    Ad hoc Article Editor, *SAGE Open* (2014)
National Academies Board on Environmental Change and Society (2023)
    Member of Planning Committee for the workshop "Integrating the Human Sciences to Scale Societal Responses to Environmental Change"
NAS Advisory Panel member for
    TRB/American Association of Motor Vehicle Administrators: Project 19-01 Demographic and Technological Trends Impacting the DMV of the Future (2019–2020)
NSF review panels:
    Civic Innovation Challenge (2021), Coastlines and People Hubs for Research and Broadening Participation (2022), Engineering Research Centers (2015), Geography and Spatial Sciences (2013), Human, Disaster, and the Built Environment (2022), Human Networks and Data Science–Infrastructure (2021, 2023), Methodology, Measurement, and Statistics (2014, 2020), NSF Research Traineeship (2020), Smart & Connected Communities (2018), Sociology (2018, 2020, 2023)
NIH review panels:
    COBRE P20 Centers of Biomedical Research Excellence (2023), NICHD P2C Population Dynamics Research Infrastructure Program (2023), Social Science and Population Studies B (2015), ZRG1 PSE-C 04 (2016), ZRG1 RPHB-R (2018), ZAG1 ZIJ-5 (2017)
Occasional reviewer for:
    NASA: Postdoctoral Program (2016)
    European Research Council (ERC): Advanced Grant (2017)
    Trans-Atlantic Platform (T-AP) for Social Sciences and Humanities (2021)
    U.S.-Israel Binational Science Foundation (2019)
    UCLA Institute of Transportation Studies (2020)
    USDA Forest Service project reports (2013)
Ad hoc reviewer for journals
    American Journal of Agricultural Economics; *American Journal of Public Health*; *American Journal of Preventive Medicine*; *Annals of the American Association of Geographers*; *Annals of Operations Research*; *Annals of Regional Science*; *Applied Ecology and Environmental Research*; *Applied Spatial Analysis and Policy*; *BMC Public Health*; *Bulletin of Geography, Socio-economic Series*; *Climate Risk Management*; *Computers, Environment and Urban Systems*; *Demographic Research*; *Demography*; *Ecological Economics*; *Ecological Processes*; *Economic Papers*; *Environment and Planning A*; *Environmental Research Letters*; *Environmental Monitoring and Assessment*; *Geographical Analysis*; *Growth and Change*; *Habitat International*; *International Journal of Digital Earth*; *International Journal of Geographical Information Science*; *Jahrbuch für Regionalwissenschaft (Review of Regional Research)*; *International Migration Review*; *Journal of Appalachian Studies*; *Journal of Environmental Planning and Management*; *Journal of Geographical Systems*; *Journal of Healthcare Informatics Research*; *Journal of Maps*; *Journal of Regional Analysis and Policy*; *Journal of Transport and Land Use*; *Journal of Urban Technology*; *Land*; *Land Use Policy*; *Landscape and Urban Planning*; *Mathematical Population Studies: An International Journal of Mathematical Demography*; *Nature Communications*; *Papers in Regional Science*; *Population and Environment*; *Population Research and Policy Review*; *Population, Space and Place*; *Preventive Medicine*; *Review of Regional Studies*; *Regional Studies*; *Rural Sociology*; *Social Forces*; *Social Science and Medicine*; *Social Science Research*; *Sociological Inquiry*; *Sociological Perspectives*; *Spatial Demography*; *Spatial Economic Analysis*; *Scientific Reports*; *Sustainability*; *The Rangeland Journal*; *Theory, Culture & Society*; *Transport Findings*;

> *Transport Policy*; *Transportation Research Part A: Policy and Practice*; *Transportation Research Record*; *Urban Studies*

Review books for publisher: *Routledge* (2013); *Springer* (2022); *Peter Lang Group* (2023)

US Bureau of the Census 2014–2015
> Member, Federal-State Cooperative Program for Population Estimates; Member, 2020 Census Redistricting Data Program

Invited Participant, Towards Scenarios of U.S. Demographic Change, the Scenarios and Interpretive Science Coordinating Group, U.S. Global Change Research Program, 2014

Population Association of America: Annual Meeting Program Committee Member, 2022, 2018; Session Organizer, 2018, 2017; Session Chair, 2018, 2017; Session Discussant, 2017, 2010

Rural Sociology Society: Publication Committee Chair-Elect, 2022–2023; Council Member, 2022–; Panelist, 2016; Session Chair, 2009

Southern Demographic Association: Member, Walter E. Terrie Award Committee, 2009, 2010, 2012

University Service

Member, Research Computing and Cyberinfrastructure (RCCI) Governance Council's Executive Committee, 2022–

Member, Advisory Board, Data-to-Policy and Evidence-to-Impact Collaborative, 2019–

Member, Steering Committee, Social Science Research Institute, 2017–

Member, Steering Committee, Institute for CyberScience, 2017–2018

At-Large Representative, Internal Advisory Board, Population Research Institute, 2016–2019

Member, Advisory Board, Graduate Program in Demography, 2016–

Delegate of Population Research Institute and Social Science Research Institute to the University Consortium for Geographic Information Science (UCGIS), 2015–2020

Member, The Scientific Advisory Committee for the Community Sciences and Health Outcomes Shared Resources, Penn State Cancer Institute, 2016–2018

Chair, Graduate Faculty Review Committee, College of Agricultural Sciences, 2019–2020

Liaison, ME John Seminars Committee, AESE, 2018–2020

Member, Promotion and Tenure Committee, AESE, 2016–2020, 2021–2023

Member, Faculty Search Committee, AESE, 2015–2016, 2017–2018

MEDIA COVERAGE

ABC, Aberdeen News, American Thinker, BNET, Christian Science Monitor, Chron, Forbes, Fortune, Fox 5 News, Huffington Post, Kiplinger's Personal Finance, Money, National Public Radio, Star Tribune, South Dakota Public Broadcasting, The Conversation, The Oregonian, The Weather Channel, U.S. News and World Reports, VOAnews, WalletHub, and WAMC Northeast Public Radio, among over 2,000 media appearances.

AWARDS AND HONORS (selected)

E. Walter Terrie Best Paper Award in Applied Demography (2017), Southern Demographic Association (with Donghui Wang)

Faculty Research Award in Social and Behavioral Sciences (2013), College of Arts and Sciences, Mississippi State University

2nd Place Award (2012), Transportation Workshop, Mississippi State University (with Jamie Boydstun)

Cherri M. Musser State Pride Faculty Award (2011), Mississippi State University

Researcher of the Month (February 2011), College of Arts and Sciences, Mississippi State University

William N. Clark State Pride Faculty Award (2010), Mississippi State University

Research Fellow (2008), Social Science Research Center, Mississippi State University

E. Walter Terrie Best Paper Award in Applied Demography (2007), Southern Demographic Association