

**Greg Rybarczyk, Ph.D.**  
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## EDUCATION

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- Ph.D.** University of Wisconsin-Milwaukee, Geography, 2010  
*Dissertation: Bicycle Travel Demand Forecasting Using Geographic Information Systems and Agent Based Modeling*  
Advisor: Dr. Changshan Wu
- M.S.** University of Wisconsin-Milwaukee, Geography, 2005  
*Thesis: Using GIS and Multi-Criteria Decision Analysis for Bicycle Facility Planning: A Case Study in Milwaukee, Wisconsin*
- GIS Certificate** University of Wisconsin-Milwaukee, 2004, *Urban Geographic Information Systems*
- B.S.** University of Wisconsin-Milwaukee, Biological Aspects of Conservation. 1997

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## CURRENT POSITIONS

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- Associate Professor** University of Michigan-Flint, Department of Math and Natural Science, 2015-
- Fellow** The Centre for Urban Design and Mental Health, London, UK, 2019-
- Faculty Affiliate** University of Michigan, Michigan Institute for Data & AI in Society, (MIDAS), 2015-

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## PREVIOUS PROFESSIONAL EXPERIENCE

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- Assistant Professor** University of Michigan-Flint, Department of Geography, Planning, and Environment, 2010-2015
- Instructor** University of Wisconsin-Milwaukee, Department of Geography, 2010
- Instructor** Carthage College, Department of Geospatial Science, 2009

## VISITING APPOINTMENTS

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- Visiting Professor** Collegium Civitas (Warsaw, Poland), Institute of Sociology, Spring, 2023
- Visiting Professor** Bochum University of Applied Sciences (Germany), Department of Civil and Environmental Engineering, Spring, 2020, *cancelled due to Covid-19*
- Visiting Professor** Bergische University Wuppertal (Germany), Department of Urban Studies & Sustainable Infrastructure Planning, Fall, 2016

## REFEREED PUBLICATIONS

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- Li, Xiao, S. Qiao, and **G. Rybarczyk**. (2024) "E-scooter safety under scrutiny: Examining crash patterns and injuries in the UK," *Journal of Safety Research* (in-press)
- Yin, Zehui, **G. Rybarczyk**, A. Zheng, L. Su, and X. Yan. (2024) "Shared micromobility as a first - and last-mile transit solution? Spatiotemporal insights from a new dataset," *Journal of Transport Geography*, <https://doi.org/10.1016/j.jtrangeo.2023.103778>
- Li, Xiao, **G. Rybarczyk**, W. Li., M. Usman, J. Bian, A. Chen, X.Ye. (2023) "How do people perceive driving risks in small towns? A case study in Central Texas," *Accident Analysis and Prevention*, 193, <https://doi.org/10.1016/j.aap.2023.107285>
- Rybarczyk, G.**, A. Ozbil, D. Yesiltepe, and A. Gorsev. (2023) "Walking alone or walking together: A spatial evaluation of children's travel behavior to school," *Environment and Planning B: Urban Analytics and City Science*; 50(9), 2560–2578, <https://doi.org/10.1177/23998083231161612>
- Rybarczyk, G.**, and R.R. Shaker. (2021) "Predicting bicycle-on-board transit choice in a university environment" *Sustainability*, 13(2): 512, <https://doi.org/10.3390/su13020512>
- Ozbil, A. E., D. Yesiltepe. G. Argin, and **G. Rybarczyk**. (2021) "Children's active school travel: Examining the combined perceived and objective built-environment factors from space syntax" *International Journal of Environmental Research and Public Health*, 18(1): 286, <https://doi.org/10.3390/ijerph18010286>
- Platt, L. and **G. Rybarczyk**. (2020) "Skateboarder and scooter rider perceptions of the urban environment: A qualitative analysis of user generated content," *Urban Geography*, DOI: 10.1080/02723638.2020.1811554
- Medland, S.J., R.R. Shaker, B.R. Mackay, K. Wayne Forsythe, and **G. Rybarczyk**. (2020) "A multi-criteria wetland suitability index for restoration across Ontario's Mixedwood Plains," *Sustainability*, 12(23): 9953, DOI: <https://doi.org/10.3390/su12239953>
- Rybarczyk, G.**, A. Ozbil, E. Andresen, and Z. Hayes. (2020) "Physiological responses to urban design during bicycling: A naturalistic investigation," *Transportation Research Part F: Psychology and Behaviour*, 68: 79-93, <https://doi.org/10.1016/j.trf.2019.12.001>

- Rybarczyk, G.**, D. Taylor, S. Brines, and R. Wetzel. (2019) "A geospatial a-analysis of ethnic food access in two Michigan cities: Investigating the importance of outlet type within active travel neighborhoods," *International Journal of Environmental Research and Public Health*, 17(1): 166, <https://doi.org/10.3390/ijerph17010166>
- Shaker, R.R., **G. Rybarczyk**, C. Brown, V. Papp, and S. Alkins. (2019) "(Re)emphasizing urban infrastructure resilience via scoping review and content analysis," *Urban Science*, 3(2): 44
- Rybarczyk, G.**, S. Banerjee, M. Starking-Szymanski, and R.R. Shaker. (2018) "Travel and us: The impact of mode share on sentiment using geosocial media data and GIS," *Journal of Location-Based Services*, 12(1): 40-62
- Rybarczyk, G.** (2018) "Toward a spatial understanding of active transportation modes among a university population," *International Journal of Sustainable Transportation*, 12(9): 625-636
- Morckel, V., and **G. Rybarczyk**. (2018) "The effects of the water crisis on population dynamics in the city of Flint," *Cities & Health*, 2(1): 69-81
- Starking-Szymanski, M., T. Yoder, **G. Rybarczyk**, and H. Dawson. (2018) "Movement and habitat use of headstarted blanding's turtles in Michigan," *Journal of Wildlife Management*, 82(7): 1516–1527
- Grant, Marcus, C. Brown, M. Acuto, R. Aldridge, H. Badland, C. Brown, E. Cosgrave, B. Giles-Corti, L. F. Gomez, W. Hatton, H. Jordan, B. Marques, J. McIntosh, C. Millett, V. Morckel, M. Murphy, D. C. Parra, H. Pineo, J. D. Pinzon, H. Rutter, **G. Rybarczyk**, and N. Zimmermann. (2018) "City know-how." *Cities & Health* 2 (1): 1-10, <https://doi.org/10.1080/23748834.2018.1546834>
- Rybarczyk, G.**, A. Maguffee, and D. Kruger. (2015) "The impact of public health, environmental quality, and neighborhood character on crime rates," *Citiescape: A Journal of Policy Development and Research*, 17(1): 21-38
- Morckel, V.C. and **G. Rybarczyk**. (2015) "Improving downtown in a shrinking city: A case study of Flint, Michigan," *Community Development*, 46(4): 341-360
- Rybarczyk, G.**, and L. Gallagher. (2014) "Measuring the potential for bicycling and walking at a metropolitan commuter university," *Journal of Transport Geography*, 39: 1-10
- Rybarczyk, G.** (2014) "Simulating bicycle wayfinding mechanisms in an urban environment," *Journal of Urban, Planning and Transport Research*, 2(1): 89-104
- Rybarczyk, G.** and C. Wu. (2014) "Examining the impact of urban morphology on bicycle mode choice" *Environment and Planning B: Planning and Design*, 41(2): 272-288
- Kodjebacheva, G., D. Kruger, **G. Rybarczyk**, and S. Cupal. (2014) "Racial/ethnic and gender differences in the association between depressive symptoms and higher body mass index among US adults," *Journal of Public Health*, 37(3): 419-426
- Rybarczyk, G.** and R.P. Mohaprata, R. P. (2013) "Estimating neighborhood quality using empirical analysis and geographic information systems" *Journal of Urban and Regional Information Science Association*, 1: 63-76

- Rybarczyk, G.** (2012) "Forecasting bicycling risk factors within neighborhoods: A spatial autoregressive approach" *Papers of the Applied Geography Conference*, 35: 230-239
- Rybarczyk, G.** and C. Wu. (2010) "Bicycle facility planning using GIS and multi-criteria decision analysis" *Applied Geography*, 10: 282–293
- Shaker, R. and **G. Rybarczyk.** (2009) "Relating environmental and socioeconomic stressors to violent crime: Evaluating three major cities in the United States" *Papers of the Applied Geography Conference*, 32: 411-419

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### PAPERS IN PROGRESS

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- Taylor, D.E., A. Bell, A. Saherwala, S. Lewis, **G. Rybarczyk**, and R. Wetzel. "Assessing the Existence of Food Deserts, Food Swamps, and Supermarket Redlining in Saginaw – A Small, Racially Segregated Mid-Michigan City," *Journal of Agriculture, Food Systems, and Community Development*. (under review)
- Rybarczyk, G.,** A. Sklar, L. Platt, and X. Yan. "Analyzing e-bicyclist experiences in Detroit, Michigan: A natural language processing approach, *Transportation Research Part D: Transport and Environment*. (under review)
- Rybarczyk, G.** and R.R. Shaker. "Urban Foraging as a Pathway to Food Security: Integrative Approaches with Biophilic Design and Enhanced Walkability," *Landscape and Urban Planning* (to be submitted fall 2024)
- Rybarczyk, G.,** K. Iwinski., and N. Frary. "Evaluating Transportation Sustainability: Data-Driven Insights from a Warsaw Commuter Study, *Health and Place* (to be submitted fall 2024)
- Rybarczyk, G.** and K. Zhou. "Exploring Environmental and Behavioral Factors in Micromobility Injuries: A Text Mining Approach to NEISS Narratives," *Journal of Safety Research* (to be submitted winter 2025)
- Rybarczyk, G.** and L. Xiao. "Spatial Patterns and Temporal Trends: A Decade-Long Analysis of E-Scooter and E-Bicycle Crashes in Michigan," *Cities* (to be submitted spring 2025)
- Rybarczyk, G.,** A. Sklar, and F. Feng. "Emotional Wellbeing of Cyclists: A Survey on the Psychological Impact of E-Bike Versus Traditional Bicycle Usage," *Transportation Research Record* (to be submitted summer 2025)

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### CONFERENCE PRECEEDINGS

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- Rybarczyk, G.** (2018). "Characterizing the activity-friendly built environment using space syntax: The role of urban design in the decision to commute by bicycle: An application using space syntax." *Journal of Physical Activity & Health* 15(10): 40
- Rybarczyk, G.** and G. Melis. (2017) "Linking human health and neighborhood using Big Data: A case study in Torino, Italy" *Journal of Transport and Health*, 5 (supplement): 74-75

**Rybarczyk, G.** and S. Banerjee. (2015) “Visualizing active travel sentiment in an urban context” *Journal of Transport and Health*, 2(2): 30

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### OTHER PUBLICATIONS

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Henthorn, T., **G. Rybarczyk**, (2013) “Historical resource survey for the City of Grand Blanc, Michigan”

Morckel, V., **G. Rybarczyk**. (2013) “Preliminary results from UM-Flint’s downtown study” City of Flint Downtown Development Authority

Harris, A., **G. Rybarczyk**, V. Lukasavitz. (2012) “Promoting active living through the implementation of an educational bicycle skills course at the University of Michigan-Flint” *Michigan Bicyclist Magazine*, (November edition)

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### PEER REVIEWED PRESENTATIONS

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Sklar, A., **G. Rybarczyk**, and L. Platt. “E-Bike Rider Sentiments: A Spatial Analysis of Textual Data.” FOSS4G NA 2024, September 9-11, 2024

**Rybarczyk, G.** and A. Ozbil Torun. “Navigating the School Journey: Unraveling the Complexities of Children's Walking Behavior in Istanbul.” Annual Association of American Geographers Meeting, April 16 – April 20, 2024

Yin, Zehui, **G. Rybarczyk**, A. Zheng, L. Su, and X. Yan. “Shared micromobility as a first- and last-mile transit solution? Spatiotemporal insights from a novel dataset.” TRB Annual Meeting, January 7-11, 2024

**Rybarczyk, G.** “Predictors of children's excess walking to school: A case study in Turkey.” Annual Association of American Geographers Meeting, March 23 - March 27, 2023

**Rybarczyk, G.** “Bicycle-on-board feasibility: A spatial investigation in Flint, Michigan.” Annual Association of American Geographers Meeting, February 25 - March 1, 2022

**Rybarczyk, G.** “Alternative foodscapes in Detroit: Exploring urban foraging behavior using GIS.” Detroit GIS Day, November 16, 2021

**Rybarczyk, G.** “Assessing the potential for increasing intermodal transportation travel in a university town.” Annual Association of American Geographers Meeting, April 7-11, 2021

Shaker, R.R., S. Medland, K. Wayne, B. Mackay, and **G. Rybarczyk**. “A multi-criteria wetland suitability index for restoration across Ontario’s Mixedwood Plains.” Annual Association of American Geographers Meeting, April 7-11, 2021

**Rybarczyk, G.** “Can efficient urban design increase cycling comfortability?” Annual Association of American Geographers Meeting, Denver, CO, April 6-10, 2020. *Cancelled due to COVID-19*

- Rybarczyk, G.** and S. Banerjee. "Coupling Twitter syntax with GIS operations: The benefits and costs of extending sentiment analysis to travel mode and geography." #UMTweeCon2019, Ann Arbor, Michigan, May 23, 2019
- Rybarczyk, G.** "Does cycling stress you out? Examining cyclist comfort using real-time data, empirical analysis, and GIS." Annual Association of American Geographers Meeting, Washington D.C., April 3-7, 2019
- Rybarczyk, G.** "The role of urban design in the decision to commute by bicycle: An application using space syntax." 7th ISPAH Congress, London, United Kingdom, October 15-17, 2018
- Rybarczyk, G.** and S. Banerjee. "A spatiotemporal trend analysis of mode-choice happiness using Twitter and GIS." Annual Association of American Geographers Meeting, New Orleans, LA, April 10-14, 2018
- Melis, G. and **G. Rybarczyk.** "Moving Towards Happiness? \*\*International Cycling Conference, Mannheim, Germany, September 19-21, 2017
- Rybarczyk, G.** and G. Melis. "Linking human health and neighborhood using Big Data: A case study in Torino, Italy." International Conference on Transport and Health, Barcelona, Spain, June 27-29, 2017
- Rybarczyk, G.** "Neighborhood environment links to food access: A case study in Flint, Michigan, USA." Annual Association of American Geographers Meeting, Boston, MA, April 5-9, 2017
- Rybarczyk, G.,** S. Banerjee, and M. Szymanski \*\*. "Pathways to happiness: A comparative study linking Twitter and contextual factors." Mobile Tartu, 2016. Tartu, Estonia, June 29-July 3, 2016
- Rybarczyk, G.** "Spatiality and food access: Measuring geographic access to ethnic restaurants and grocers." Annual Association of American Geographers Meeting, San Francisco, CA, April 29-March 2, 2016
- Rybarczyk, G.** "Enhancing spatial thinking through the use of learning technology." Paper presented at the 5<sup>th</sup> Annual SoTL Academy, Grand Rapids, Michigan, May 19-21, 2013
- Rybarczyk, G.,** and M. Kaufman. "Space: The Final Frontier: The challenges and rewards of incorporating spatial thinking in your discipline." Thompson Center for Learning and Teaching, Cloth-Bag Series, March, 2012
- Worth-Nelson, J., **G. Rybarczyk,** C. Waites. "Findings from a clickers clique: Report of an interdisciplinary project to implement and examine the effectiveness of student response systems." Paper co-presented at the Lilly Conference on University and College Teaching, Washington D.C., May 31 - June 3, 2012
- Worth-Nelson, J., E. Cavusgil, **G. Rybarczyk,** and R. Barnes. "Clickers & student learning." 2012 University of Michigan-Flint 6th Annual Assessment of Student Learning Summit, Embracing Experiential Learning: Implications & Provocations, February, 2012
- Rybarczyk, G.** and S. Banerjee. "Visualizing active travel sentiment in an urban context." 1<sup>st</sup> International Conference on Transport and Health, London, United Kingdom, July 6<sup>th</sup>-8<sup>th</sup>, 2016

- Rybarczyk, G.** and R. Wetzel, "Examining the revealed accessibility of ethnic food resources using a multivariate spatial modeling approach and GIS." Annual Association of American Geographers Meeting, Chicago, Illinois, April 22-26, 2015
- Syagnik Banerjee, and **G. Rybarczyk.** "When is the boat in Chicago more fun than the bus in Boston? mining social media to assess the impact of travel mode and context on commuter emotions." Direct/Interactive Marketing Research Summit, San Diego, CA, October 25-26, 2014
- Kodjebacheva, G., S. Parker, **G. Rybarczyk.** "Physical activity patterns among children with asthma: Results from the 2012 National Youth Fitness Survey." American Public Health Association Conference, New Orleans, LA, November 15-18, 2014
- Rybarczyk, G.** "Visualizing neighborhood development through a historical GIS lens: A pedagogical approach." Applied Geography Conference, Annapolis, Maryland, October 30, 2013
- Rybarczyk, G.** "Bicycling and walking renaissance at the University of Michigan-Flint? Evidence from a stated preference survey." University of Michigan-Flint Faculty Research and Creative Activity Summit (FRACAS), October, 18<sup>th</sup>, 2013
- Rybarczyk, G.** "Mapping food resources in Flint, Michigan." Genesee County Health Department's 2013 Public Health Week Conference, Flint, Michigan, May 7, 2013
- Rybarczyk, G.** "Forecasting bicycling risk factors within neighborhoods: A spatial autoregressive approach." Applied Geography Conference, Minneapolis, Minnesota, October 10-13, 2012
- Worth-Nelson, J., **Rybarczyk, G.**, C. Waites. "Findings from a "clickers clique": Report of an interdisciplinary project to implement and examine the effectiveness of student response systems." Lilly Conference on University and College Teaching, Washington D.C., May 31 - June 3, 2012
- Henthorn, T., and **G. Rybarczyk.** "Practicing public scholarship using history and geographic Information Systems." University of Michigan-Flint Research Spotlight event. April, 4, 2012
- Rybarczyk, G.** "Instituting an agent based modeling framework to assess bicyclist behavior." Annual Association of American Geographers Meeting, New York, New York, February 24-28, 2012
- Rybarczyk, G.** "Supporting visual cues to assess bicycle mobility." Annual Association of American Geographers Meeting, Seattle, Washington, April 12-16, 2011
- Rybarczyk, G.** and R. Mohapatra. "Mapping neighborhood quality: An integration of GIS and data reduction techniques." Annual Association of American Geographers Meeting, Seattle, Washington, April 12-16, 2011
- Rybarczyk, G.** "Examining predictive factors of bicycle mode choice." Annual Association of American Geographers Meeting, Washington D.C., April 12-18, 2010
- Shaker, R. and **G. Rybarczyk.** "Relating environmental and socio-economic stressors to violent crime: evaluating three major cities in the United States." Tenth Annual Crime Mapping Research Conference, New Orleans, LA, August 17-22, 2009

**Rybarczyk, G.** “A network topological approach to forecasting bicycle travel.” Annual American Planning Association Meeting, Minneapolis, MN, April 26-28, 2009

**Rybarczyk, G.** and C. Wu. “Quantifying the human perception of bicycle travel.” Annual Association of American Geographers Meeting, Las Vegas, NV, March 23-27, 2009

**Rybarczyk, G.** “Assessing the impact of network topology on recreation and utilitarian bicycle travel.” Joint Meeting of Eastern and Western Great Lake Regions of American Society for Photogrammetry and Remote Sensing (ASPRS), Waukesha, WI, June 13, 2008

**Rybarczyk, G.** “Bicycle travel demand using urban morphological indicators.” Annual Association of American Geographers Meeting, San Francisco, CA, April 17-21, 2007

**Rybarczyk, G.** “Using GIS and a multi-criteria decision analysis for bicycle facility planning: a case study in Milwaukee, Wisconsin.” Annual Association of American Geographers Meeting, Chicago, IL, March 8-11, 2006

**Rybarczyk, G.** “The integration of multi-criteria evaluation and least cost path analysis for bicycle facility planning.” National Pro Bike/Walk Conference, Madison, WI, Sept. 5-8, 2006

#### **INTERNATIONAL INVITED TALKS**

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“Transportation sustainability in Michigan: A geospatial analysis of intermodal mobility and access,” Research Seminar Series, Collegium Civitas, Warsaw, Poland, April, 2023

“Bicycling, visibility, and wayfinding ability in an urban area,” 7<sup>th</sup> International Society for Physical Activity and Health Congress, London, United Kingdom, October, 2018

“Sustainable transportation in the U.S. - policy implications.” Department of Urban Studies & Sustainable Infrastructure Planning, Bergische Universität Wuppertal, December, 2016

“Examining the utility of Big Data in a GIS environment,” Department of Department of Civil Engineering, Bergische Universität Wuppertal, University of Wuppertal, November, 2016

“Does human sentiment influence mode-choice? Estimating the relationship in an urban context,” Social Media & GeoDesign, International Experiences in Urban Planning Symposium. SiTI - Higher Institute on Territorial Systems for Innovation Sala CDA, Turin, Italy, November, 2016

#### **DOMESTIC INVITED TALKS AND PANALS**

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“Smart cities and transportation,” Wayne State University, College of Engineering, May, 2023

“Am stressed must bicycle: Examining bicycling, heart-rate, and urban design,” University of Michigan-Flint, College of Health Sciences Research Lounge, February, 2022

“Linking food access to sustainability objectives,” Ryerson University, Toronto, CA, Department of Geography and Environmental Studies, November, 2021



“Understanding 21st century travel behavior from a spatial data science perspective.” Wayne State University, School of Business, May, 2021

“A GIS Analysis of neighborhood food access in Flint, Michigan.” California State University – Los Angeles, Department of Geosciences and Environment, March, 2021

“Exploring the connections among urban transport, environment, and health: a geospatial approach,” The University of Virginia, Department of Urban and Environmental Planning, April, 2019

“Under what circumstances is travel enjoyed? Modeling transportation sentiment in two U.S. cities,” Department of Geography and Environmental Studies, Central Michigan University, February, 2019

“Mining geo-social media data to assess the impact of mode-share and context on traveler emotion,” Western Michigan University, Department of Geography, April, 2018

“Student and faculty perspectives on international opportunities at the University of Wuppertal, Germany,” International Education Week, The University of Michigan-Flint, December, 2017

“Active travel potential among a university population,” University of Michigan-Flint, Thompson Center for Learning and Technology, April, 2016

“Linking bicyclist wayfinding to urban form and vision.” Iowa State University, College of Design, April, 2014

“Using GIS and spatial modeling to examine active travel potential in a university town,” University of Kansas, Department of Geography and School of Business, Lawrence, Kansas, November, 2014

“Visualizing travel attitudes: The role of GIS and Big Data,” University of Kansas, School of Business, Lawrence, Kansas, November, 2014

Pedestrian & Bicycle University Education Subcommittee, Panel discussion, Transportation Research Board meeting, September, 2014

University of Michigan-Flint, Thompson Center for Learning and Technology Engaged Scholar Faculty Panel, September, 2013

“The nexus between bicycling and urban design,” Minnesota State University, Department of Geography, Presentation for GIS Seminar Series, April, 2012

## **RESEARCH AWARDS, GRANTS, AND CONTRACTS**

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“Safe bicycle infrastructure for all: Understanding users’ comfort and safety perception to prepare for an e-bike future,” NSF 24-519 Strengthening American Infrastructure #2425029 (Yan, X, University of Florida), 2024-2027, National Science Foundation, 2024, (\$610,000), Role: Co-Principal Investigator

“Promoting active travel modes for healthy aging in place: Investigating the physical and mental health benefits of e-bicycling among older populations,” NIH Research Enhancement Award (R15), 2024, (\$375,000), Role: Principal Investigator (*under review*)

“Safety in Motion: A Transatlantic Approach to Understanding and Enhancing Micromobility,” AAA Foundation for Traffic Safety,” Micromobility and Traffic Safety Award, 2024, (\$284,636), Role: Principal Investigator (*not funded*)

University of Michigan-Flint, Office of Research and Economic Development, International Travel Grant, 2023, (\$2,000)

“The e-bike boom: Examining key safety factors on e-bike potential to promote sustainability and equity in Detroit,” 2022, (\$39,866), University of Michigan-Dearborn – University of Michigan-Flint Collaborative Research Grant, Role: Co-Principal Investigator

University of Michigan-Flint, Office of Research and Economic Development, Urban Sustainability and Environmental Health Research Cluster Award, 2021, (\$16,844)

“Monitoring Flint drinking water for elevated heavy metals” 2021, (\$9,440), University of Michigan-Flint, College of Health Sciences, Role: Co-Principal Investigator

University of Michigan-Flint, Scholarly or Creative Achievement Award, 2018 (\$2,000)

“The role of time, space, sentiment, and travel model on food access.” 2016, (\$2,000) University of Michigan-Flint’s 60th Anniversary Research Grant. Role: Principal Investigator

“The effects of the flint water crisis on population dynamics: will residents flee flint?” 2016, (\$10,000) University of Michigan. Role: Co-Principal Investigator

“Promoting environmental sustainability, health, and well-being by improving the appearance of the Harrison Street parking structure.” 2015, (\$10,000) UM-Flint Innovative Impact Award. Role: Principal Investigator

University of Michigan-Flint, Information and Technology Services Technology Committee, “Academic Software Proposal,” 2013, (\$2,000)

Bicycle & Pedestrian Curriculum Workshop, 2013, (\$900), Initiative for Bicycle & Pedestrian Innovation, Portland State University, 2013

“Examining disparities in food access and enhancing the food security of underserved populations in Michigan” USDA AFRI MICW-2012-01851 (Taylor, D, U. of Michigan), 2012-2016, US Department of Agriculture, (\$4,000,000), Role: Co-Principal Investigator

Safe & Active Genesee for Everyone Mini-Grant for: “UM-Flint Bicycle Skills Course Installation” 2012, (\$1,200), Role: Principal Investigator

“Catalyst course design project” 2012, (\$1,000) University of Michigan-Flint, Thompson Center for Learning and Teaching. Role: Co-Principal Investigator

“City of Flint park equity assessment” 2012, (\$1,000) Crim Fitness Foundation, Role: Lead PI  
“UM-Flint back to school smart commute event” 2011, (\$1,000) Safe & Active Genesee for Everyone Mini-Grant. Role: Principal Investigator

“Academic software proposal,” 2011, (\$3,500) Information and Technology Services, Technology Committee, University of Michigan-Flint. Role: Principal Investigator

“An areal analysis of crime risk in Flint, Michigan,” 2010, (\$8,416) Research and Creative Activity Fund, University of Michigan-Flint. Role: Principal Investigator

“Academic software proposal,” 2010, (\$2,000) Information and Technology Services, Technology Committee, University of Michigan-Flint. Role: Principal Investigator

“Course design catalyst program,” 2010 (\$2,500) Thompson Center for Learning and Research, University of Michigan-Flint. Role: Principal Investigator

“University of Michigan-Flint bicycle program GIS assessment,” 2010, (\$3,040), Auxiliary and Recreational Services, University of Michigan-Flint. Role: Co-Principal Investigator

“City of Grand Blanc 2011-2012 historic preservation plan,” 2010, (\$5,000), City of Grand Blanc, Michigan, Role: Co-Principal Investigator

“Mary Jo Read travel grant” Awarded by the University of Wisconsin-Milwaukee Geography Department for conference presentation, 2009, 2008, 2007, 2006

“Wisconsin Department of Transportation travel grant” Awarded for conference travel to the National ProBike/Walk Conference, 2006

“ESRI Student Travel Grant” Awarded by Environmental Systems Research Institute (ESRI) for conference travel, 2006

## TEACHING EXPERIENCE

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### University of Michigan-Flint, Department of Math and Natural Sciences

#### Undergraduate Geospatial courses

Mapping and Spatial Data Science, (GIS 203), Fall 2010-  
Public Health and GIS, (GIS 270/GIS 401/501), Winter 2012

#### Undergraduate/Graduate Geospatial courses

Introduction to Geographic Information Systems (GIS 452/552), Fall 2010-  
Geographic Information Analysis, (GIS 453/553), Winter 2011-  
GIS Project Management, (GIS 477/577), Winter 2011-  
Geospatial Analytics and Modeling, (GIS 494/594) Fall 2013-  
Remote Sensing of the Environment, (GIS 404/504), Winter 2013-

#### Undergraduate Planning and Geography courses

Human Geography (URP/GEO 116), Winter 2018  
World Regional Geography (URP/GEO 115), Winter 2017  
Food Systems Planning, (ENV 291), Winter 2013, 2014

Transportation Planning and Analysis, (GIS 491/591), Winter 2011-  
Geography of Sustainable Transportation, (URP 490), Winter 2012

### **Carthage College, Department of Geospatial Science**

#### Undergraduate planning courses

Economic Geography, (Geography 215), Summer, 2009

### **University of Wisconsin-Milwaukee, Department of Geography**

#### Undergraduate geospatial courses

Introduction to Geographic Information Science, (Geography 215), Spring 2008-2010

Geographic Information Science, (Geography 525), Fall 2007-2008

Intermediate Geographic Information Systems, (Geography 625), Fall 2006 – 2008

Remote Sensing: Environmental and Land Use Analysis, (Geography 403), Spring 2006

## **STUDENT MENTORING**

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#### Master's Student Advisor

Christopher Roelandt, M.S. (*University of Michigan-Flint*) M.S. Thesis title: “*Using Body-condition of the American Woodcock as an Indicator of Habitat Quality*” In progress

Laura Gallagher (*Michigan Technological University*) M.S., Civil Engineering, completed Fall, 2018

Melissa Szymanski, (*University of Michigan-Flint*) M.S. Thesis title: “*Survival of headstarted Blanding's Turtles (*Emydoidea blandingii*) attributable to habitat factors at release sites in Shiawassee National Wildlife,*” completed Summer, 2016

#### Undergraduate and Graduate Student Research Supervision:

Natalie Frary, Undergraduate GIS Research Assistant, 2024-

Kristine Zhou, Graduate Student Research Assistant (U of M), 2024-

Alyssa Skyler, Graduate Student Research Assistant (U of M), 2023-

Caitlin Draper, GIS Research Assistant, 2024-2024

Christopher Mayes, GIS Research Assistant, 2024-2024

Hannah Fuentes, GIS Research Assistant, 2023-2024

Justin Franks, GIS Research Assistant, 2022-2023

Norm Engel, GIS Intern, 2022-2022

Marlana Janda, GIS Research Assistant, 2020-2021

Max Lester, Honors Thesis Advisor, 2019-2021

Katie Yates, GIS Research Assistant, 2019

Leslie Phillips, GIS Research Assistant, 2019

Michael Kellar, GIS Research Assistant, 2019

Zachary Hayes, Honors Thesis Advisor 2017-2018

William Gibala, GIS Research Assistant, 2016

Melissa Szymanski, Graduate GIS Research Assistant, 2016  
Krista Bergman, GIS Research Assistant, 2015-2016  
Richard Wetzal, GIS Research Assistant, 2013-2016  
Alex Maguffee Research Assistant, 2013-2014  
Alan Harris Research Assistant, 2012-2014  
Tom Veldman, GIS Technician, 2013-2014  
Carissa Harcz Research Assistant (UROP), 2013  
Genevieve Colon Research Assistant (GSRA), 2012-2013  
Laura Gallagher Research Assistant, 2011-2013  
Katie Klimaszewski Research Assistant (UROP), 2011  
Caitlain Wagner Research Assistant (UROP), 2012  
Rebecca Farr Research Assistant (UROP), 2012  
Kyle Haller Research Assistant (UROP), 2011  
Kathleen McCabe Research Assistant, 2011  
Shane Kelly Research Assistant, 2011-2012  
Danielle Harbin M.S. non-reader, 2011

Teaching Supervision:

Michael Kellar, Teaching Assistant, 2020  
Katie Yates, Teaching Assistant, 2019-2020  
Ahmed Alaiwat, Teaching Assistant, 2018-2019  
Mathew McCloskey, Teaching Assistant, winter, 2018  
Zachary Hayes, Teaching Assistant, winter, 2017  
Melissa Szymanski Teaching Assistant, fall 2014-winter 2016  
Jason Dellamater Teaching Assistant, winter 2014  
Joe Sulfuro Teaching Assistant, winter 2013

## DEPARTMENTAL SERVICE

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**Director**, GIS Program, 2017-  
**Member**, Faculty Affairs Committee, 2021-2022  
**Member**, Junior Faculty Review Committee, 2016-2019  
**Member**, Tenure-track Promotion Committee, 2016  
**Co-coordinator**, Geographic Information Systems Center (GISC), 2013-2018  
**Participant**, CAS Committee of Chairs, 2013  
**Organizer/presenter**, GPE Geographic Information Systems Workshop (3), 2012  
**Member**, Faculty Search Committee (2), 2011, 2013; Co-chair, 2012  
**Member**, TCP Social Studies faculty employment search committee, 2011  
**Member**, Scholarship Committee, 2011-2020

## COLLEGE SERVICE

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**Member**, Executive Committee, 2021-2022  
**Member**, Marketing and Communications Committee, 2019-2020  
**Member**, Lotfi Family Scholarship and Eugene W. Genesee, Sr. Science Committees, 2018-2021  
**Member**, Library Staff Promotion Committee, 2016  
**Member**, College of Arts and Sciences Dean Search Committee, 2015

**Presenter**, CAS Honors Ceremony (2), 2012-2011  
**Member**, (MSLB) Capital Outlay Project, 2011

## UNIVERSITY SERVICE

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**Board Member**, University of Michigan-Flint, Institute of Data Engineering, Analytics, and Science (IDEAS), 2023-  
**Member**, The Urban Sustainability and Environmental Health Research Group, UM-Flint Office of Research and Economic Development, 2022-  
**Member**, University Certificate Task Force Committee, 2022-2023  
**Chair**, The Urban Sustainability and Environmental Health Research Group, UM-Flint Office of Research and Economic Development, 2020-2022  
**Member**, Esri Innovation Program Student of the Year Selection Committee, University of Michigan, 2021-2022  
**Member**, Data Analytics Interdisciplinary Planning Committee, 2020-2022  
**Member**, Faculty Grievance Hearing Panel, 2020-2022  
**Chair**, Administrative Services Advisory Committee, 2019-2020  
**Member**, Administrative Services Advisory Committee, 2017-2019  
**Member**, International Study Abroad Study Group, 2018-2019  
**Global Ambassador**, International Center, 2018-2019  
**Chair**, University Library Committee, 2015-2016  
**Member**, Thompson Library Senior Associate Librarian Promotion Committee, 2015  
**Presenter**, Super Science Friday event (2), 2014, 2011  
**Organizer/presenter**, International Geographic Information Systems Day, 2013  
**Member**, Library Committee, 2013-2016  
**Co-Coordinator**, UM-Flint Spatial Data Repository Project, 2013-2014  
**Member**, UM-Flint Bike and Walk Working Group, 2011-present  
**Participant**, UM-Flint-DPS “Touch-a-Truck” event  
**Participant**, UM-Flint Earth Day event, 2012  
**Participant**, UM-Flint Women’s Night Out event, 2012  
**Co-Presenter**, Michigan Small Cities Organization, 2012  
**Member**, UM-Flint League of American Bicyclists, Bicyclist Friendly University designation committee  
**Participant**, UM-Flint Open House event, 2011  
**Consultant**, UM-Flint-DHS Hazard Mitigation Project, 2010-2012  
**Co-organizer/grant writer**, UM-Flint Smart Commute event/grant, 2011-2012  
**Participant**, UM-Flint State of Michigan Internship Program, 2011  
**Participant**, UM-Flint New Student Orientation, 2010

## COMMUNITY SERVICE

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**Member**, Regional Transit Authority (RTA) Citizen Advisory Committee, 2019-  
**Member**, Steering Prevention Reducing Obesity Utilizing Teamwork, 2017-2020  
**Member**, Michigan Bay Region Bike and Ped Committee, 2016-  
**Member**, Speak to Your Health! Community Survey-Data Analysis Team, 2016-2018  
**Member**, Safe and Active Genesee County for Everyone (SAGE), 2010-2016  
**Member**, Safe and Active Genesee County for Everyone (SAGE) Policy Committee, 2016-2018  
**Coordinator**, City School (Grand Blanc, MI) student Geography poster exposition, 2014

**Participant**, City of Flint, Grand Traverse Greenway stakeholder meeting, 2014  
**Coordinator**, UM-Flint International GIS Day, 2013  
**Member**, Flint/Fenton Bicycle Race Organizing Committee, 2010-2012  
**Member**, Crim Fitness Foundation, Tour of Flint Committee, 2011-2012  
**Consultant**, Flint Farmer's Market mapping project, 2011  
**Grant writer**, Flint Bicycle Share System, Crim Fitness Foundation, 2011  
**Co-Presenter**, Michigan Historic Resource Community Forum, 2011  
**Co-Presenter**, Grand Blanc, Michigan City Council Meeting, 2011

## PROFESSIONAL SERVICE

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**Member**: Arrangements Committee, Association of American Geographers 2025 Annual Meeting in Detroit, 2024-

**Senior Editor**, *Cities & Health*, Taylor & Francis, 2024-

**Associate Editor**, *Cities & Health*, Taylor & Francis, 2023-2024

**Editorial Advisor**, *Cities & Health*, Taylor & Francis, 2016-2023

**Co-Editor**, *Journal of Urban Design and Mental Health*, 2024-

**Board member**, International Professional Association for Transport & Health (IPATH), 2017-2021

**Member**, Association of Pedestrian and Bicycle Professionals, 2006-2016; 2023-

**Member**, Transport and Health Study Group, 2016-

**Member**, Transportation Research Board, Joint Subcommittee on Pedestrian and Bicycle University Education, 2013-

**Member**, League of Michigan Bicyclists, 2010-

**Member**, Association of American Geographers, 2005-

**Manuscript reviewer**, *Journal of Urban Design* (1), *Cities & Health* (5), *Cities* (1), *Social Science and Medicine* (1); *Environment and Behavior* (1); *Transportation Research Part C* (1); *Transportation Research Part D* (3); *Applied Geography* (3); *Papers of the Applied Geography Conference* (1); *Transportation Research Record* (3); *International Journal of Sustainable Transportation* (2); *Journal of Transport Geography* (3); *International Journal of Information Technology & Decision Making* (1); *Wisconsin Geographer* (1); *Journal of Transport & Health* (2); *Environment and Planning B: Urban Analytics and City Science* (1); *Operations Research For Health Care* (1); *Health and Place* (1); *International Journal of Geospatial and Environmental Research* (2); *International Journal of Geographical Information Science* (1); *Sustainability* (4); *American Journal of Preventative Medicine* (1); *PlosOne* (1); *Urban Design International* (1); *Journal of Engineering and Applied Science* (1); *Environmental Impact Assessment* (1); *Transport Policy* (1), *Transportation* (1), *Landscape and Urban Planning* (1), *Journal of Planning Education and Research* (1), *Scientific Reports* (2), *Accident Analysis and Prevention* (1), and *Nature* (1)

**Conference Moderator and International Representative**, International Conference on Urban Health, Marrakesh, Morocco, November, 2024

**Conference session co-organizer**, Association of American Geographers Annual Conference, titled: "Emerging Geo-Data Applications in Road Safety Studies," Denver, Colorado, March, 2023

**Conference session co-organizer**, Association of American Geographers Annual Conference, titled: "Sustainability Science and Applied Geography: A New Research Paradigm for Geographers," New York NY, February, 2011

**Conference session chair**, for the Association of American Geographers Annual Conference, titled: "The Underappreciated Mode: Bicycling as Transportation," Seattle, Washington, April, 2011

**Conference session chair**, Association of American Geographers Annual Conference, titled: "Transportation Modeling and Analysis," Washington D.C., April, 2010

**Conference session co-organizer**, American Planning Association National Conference, titled: "Mobility in the 21st Century," Minneapolis, MN, April, 2009