

## **Proposal**

My mentee for the African futures program will focus on enhancing her scholarly capacity to conduct scientific research and disseminate these findings to both academic and policy audiences. It will also focus on the networking and management aspects of scholarly work.

**Research Activities:** In terms of research activities, my mentee will be involved in writing peer-reviewed scholarly journal articles and white papers to disseminate findings to the policy community. I am a co-PI on a Socio-Environmental Synthesis Center (SESYNC) grant with Dr. Erin Bunting about water scarcity and conflict in Africa which provides funding for a network of U.S. and African-based scholars and policymakers to work collaboratively. The research activities associated with the SESYNC grant fall into multiple AAP priority areas through most prominently: water, energy, and environment. The objectives of the SESYNC grant would be the focal point of research with my mentee. She will synthesize, analyze and write publications and related grants on the themes listed below:

- Multi-scaler analysis of drivers of water scarcity (e.g. physical, political, socioeconomic, and demographic factors).
- Strategies for mitigating the risk of conflict in times of water scarcity

**Grants, Collaboration, and Travel:** I will also work with her to present work at academic conferences and write major grant proposals to entities including the National Science Foundation (NSF) and USAID. I have connections to scholarly organizations (e.g. the Regional Studies Association and the Association of American Geographers) who have scholarships and funding for scholars from this region of the world.

**Networking:** Via work on the SESYNC grant, which has a specific mentoring element for post-doctoral scholars and graduate students, my mentee will be able to participate in cross-disciplinary research and build her network of collaborators.

**Training:** During visits to MSU, she will receive training about responsible research conduct, data management practices, and the daily operations of a research laboratory. In this latter respect, she will learn about budgeting and managing lab personnel. She will have the opportunity to participate in lab meetings and other lab activities.

**Mentor meetings:** Meetings with my mentee will be noted in terms of frequency and general meeting topics. These meetings will be to discuss research goals and results and her career trajectory. Advice will be provided about pursuing desired careers and achieving specific research outcomes (publications and grants).

In summary, my goal as a mentor will be to provide my mentee with a well-rounded experience in research, collaboration, and lab management activities that will enhance her scholarly capacity in the research area of water, energy, and environment.

**ELIZABETH A. MACK**

[emack@msu.edu](mailto:emack@msu.edu)

[www.elizabethmack.com](http://www.elizabethmack.com)

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**Office**

Michigan State University  
Department of Geography, Environment and Spatial Sciences  
Geography Bldg  
673 Auditorium Rd, Rm 232  
East Lansing, MI 48824  
Phone: (517) 432-7058

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**Teaching and Research Interests**

*Topical:* sustainability, telecommunications policy, entrepreneurship and regional innovation systems, urban water systems, water affordability, water access

*Methodological:* spatio-temporal methods, spatial analysis, econometrics, geographic information systems (GIS), input-output analysis

**Education**

2010 Ph.D. Department of Geography, Indiana University, Bloomington, Indiana.  
(Minor: Economic Development, School of Public and Environmental Affairs)  
2006 M.A. Department of Economics, University of Cincinnati, Cincinnati, Ohio.  
2002 B.S. Department of Finance, Virginia Polytechnic Institute and State University, Blacksburg, Virginia.  
2002 B.A. Department of Spanish, Virginia Polytechnic Institute and State University, Blacksburg, Virginia.

**Academic Appointments**

Associate Professor- Department of Geography, Environment and Spatial Sciences (July 2018-present)  
Michigan State University

Adjust Faculty Center for Global Change and Earth Observations (CGCEO), (Nov 2015-present)  
Michigan State University

Assistant Professor-Department of Geography, Environment and Spatial Sciences (August 2015-June 2018)  
Michigan State University

Affiliate/Adjunct Faculty School of Geographical Sciences and Urban Planning, (November 2015-present)  
Arizona State University

Assistant Professor-School of Geographical Sciences and Urban Planning (August 2011-June 2015)  
Arizona State University

Research Scientist-GeoDa Center for Geospatial Analysis and Computation, (August 2011-2015)  
Arizona State University

**Students Advised**

*Doctoral (Advisor)*

-Laura Medwid, Michigan State University, (2019-present)  
-Kyle Redican, Michigan State University, (2016-present)  
-Lisa Marie Pierre, Michigan State University, (2014-present)  
-Kevin Credit, Michigan State University, (2014-2018)

*Doctoral (committee member)*

- Yifan Zhang-School of Computing Information and Decision Systems Engineering, Arizona State University. (2014-2016)
- Ran Wei- Addressing Geographic Uncertainty in Spatial Optimization. Arizona State University. (2011-2013)

*Masters thesis advisor*

- Michael Bochnovic. An Analysis of Bid-Rent Curve Variations Across American Cities. Arizona State University. (2014)
- Anthony DeLuca. Exploring Definitional, Spatial, and Temporal Issues Associated with the Creative Class and Related Variations In Creative Centers. Arizona State University. (2013-2014)

*Masters thesis reader*

- Louise Willard. "Exploring the Role of Urban Municipal Governments in Broadband Planning." University of Toronto (2017)
- Thomas Hayden. Cluster Metrics and Temporal Coherency in Pixel Based Matrices. Arizona State University. (2014)

*Applied project advisor*

- Charles Felder. "Harbor Subdivision Transit Corridor." Arizona State University. (2014-2015).

*Honors thesis (chair)*

- Mitchell Bobman. "Effects of Smart City Infrastructure on Millennial Migration." Arizona State University. (2014-2015)

*Honors thesis (reader)*

- Jose Ibarra Visual Analytic Tools for Geo-Genealogy and Geo-Demographics. Arizona State University. (2014)
- Lucie Anselin. Geographies of Technology: GIS, Open Source and the Digital Divide. Arizona State University. (2012)
- Sarah Aagard, The Vitality of Neighborhood Revitalization. Arizona State University. (2012).

*Undergraduate research*

- Isabella Catalano (2019-present)
- Zack Argo, Michigan State University (2018)
- Samyuktha Iyer, Michigan State University (2018)
- Alex Brown, Michigan State University (2018)
- Matt Chiavatta, Michigan State University (2018)
- Alex Lafler, Michigan State University (2018)
- Tatum Cho, Michigan State University (2018-present)
- Madison Wimberly, Michigan State University (2018-present)
- Vincent Black, Michigan State University (2017-2018)
- Mikaela Czupski, Michigan State University (2017-present)
- Benjamin Dougherty, Michigan State University (2017-2018)
- Marlene Guzman, Lewis and Clark College (Summer 2017)
- Sarah Wrase, Michigan State University Honors Program (2016-present)
- Babs Hough, Michigan State University Honors Program (2016-2017)
- Joe Vacante, Michigan State University (2016-2017)
- Matthew Goeman, Michigan State University (2016-2017)
- Grace Hough, Michigan State University Honors Program (2015-2017)
- Matthew Suandi, Michigan State University Honors Program (2015-2017)

*Faculty Mentor*

- Hannah Szabo (MUEP Student Arizona State University (2012-2014)
- Amanda Straight (MUEP Student): Arizona State University (2012-2013)

- 4 students (Bryn Heemsoth, Bailey DuBois, Hasaan Alahdal, Rui Wen, Saud Alkahled). (2014-2015)
- 5 students (Ariane Burson, Yichuan Shi, Kelly Kirtley, Kimberly Feldbauer, Lauren Campbell). (2013-2014)
- 2 students (Hannah Szabo and Andrew Ruegg). (2012-2013)

### **External Grants Received**

8. *A socio-environmental synthesis of the linkages between water scarcity induced conflict and land use/land cover change in Africa to enhance multi-scalar decision making.* National Socio-Environmental Synthesis Center (SESYNC) under funding received from the National Science Foundation DBI-1639145 PI: E. Bunting. **Mack Co-PI**  
Travel funds for 16 people for 8 pursuit meetings. February 2019-February 2021.

7. Urban Water Innovation Network (U-WIN): Transitioning Toward Sustainable Urban Water Systems.

Funding Agency and Program: National Science Foundation

Grant Number: Supplement #1444758

Grant Amount: \$597,836 **Mack Amount: \$336, 296.**

Funding Period: November 1, 2016-December 31, 2019

Role: Institutional PI (**E.A Mack**), lead PI (Mazdak Arabi, Colorado State University), Institutional PI (Sharon Harlan, Northeastern University)

6. A Comparative Analysis of Firm Dynamics in Rustbelt and Sunbelt Entrepreneurial Ecosystems.

Funding Agency: Ewing Marion Kauffman Foundation for Entrepreneurship

Grant Number: 20150940

Funding Period: October 1, 2015-December 1, 2018 (in no cost extension until October 2019)

Total Amount: \$87,400

Role: PI (**E.A Mack**), Co-PI (Heike Mayer, University of Bern, Switzerland)

5. Urban Water Innovation Network (U-WIN): Fostering Transitions Toward Resilient Water Systems

Funding Agency and Program: National Science Foundation, Environmental Engineering CR, Earth System Models Sustainability Research Networks

Grant Number: #1444758

Grant Amount: ~\$12,000,000, ASU estimated share: \$1,191,572. **Mack share \$345,556**

Funding Period: 2015- 2020

Role: ASU Institutional Co-PI (**E.A.Mack**); ASU PI Matei Georgescu; Lead PI Mazdak Arabi, Colorado State University

4. EASM-3: Collaborative Research: Physics-Based Predictive Modeling for Integrated Agricultural and Urban Applications

Funding Agency and Program: National Science Foundation, Earth Systems Models Program/United States Department of Agriculture, National Institute of Food and Agriculture (NIFA) program

Grant Number: NSF # 1419593/ USDA# 2015-67003-23508

Grant Amount: \$2,204,667 **Mack share \$396,840 from NSF; \$135, 336 from USDA**

Funding Period: 2014-2019, Mack involvement 9/15/2014-8/31/2015

Role: Co-PI (**E.A. Mack**), PI (Alex Mahalov, Arizona State University), Co-PIs (Matei Georgescu, Billie Lee Turner, Mohamed Moustouai, Carola Grebitus, Arizona State University)

3. Spatio-Temporal Analytical Perspectives on Intra-Metropolitan Entrepreneurial Activity: A Comparative Case Study of the Kansas City and Phoenix Metropolitan Areas.

Funding Agency: Ewing Marion Kauffman Foundation for Entrepreneurship

Grant Number: 20130782

Grant Amount: \$31, 479

Funding Period: July 18, 2013-May 31,2015

Role: PI (E.A Mack)

2. Entrepreneurship and Technological Change: Understanding Entrepreneurial Usage of the Internet, Social Media, and Virtual Reality Technologies.

Funding Agency: Regional Studies Association (RSA)

Grant Number: 13054132

Grant Amount: \$13, 657

Funding Period: February 22, 2013-September 1, 2014

Role: PI (E.A Mack)

1. Broadband Enabled Innovation and Entrepreneurship: A Research and Policy Agenda.

Funding Agency: Time Warner

Grant Number: N/A

Grant Amount: \$5,000

Funding Period: January 7, 2013-March 31, 2013

Role: PI (E.A Mack)

### **Internal Grants Received**

-Science, Society, and State (S3) Grant “Technostress and the Health of Working Older Adults”. Michigan State University. (Amount \$10,000). Role **PI**, co-PIs Shelia Cotton, Daisy Chang, and Amber Pearson.

-International Business Center (MSU-CIBER) “Identifying industrial complexes in Mexico: Implications for regional industrial policy.” Date: July 2015 (Amount \$1,500)

-Institute for Social Science Research (ISSR). Arizona State University Date: 2011 (Amount: \$36,000)

### **Books**

**Mack, E.** and Qian, H. (2016) (Eds.) Geographies of Entrepreneurship. Routledge. 198 pages  
ISBN-13: 978-1138921061

Grubestic, T.H. and **Mack, E.** (2015). Broadband and Regional Development. Routledge. 206 pages  
ISBN-13: 978-1138013919

### **Papers in Review** (student co-authors underlined)

White, J. and **E.A. Mack**. The Geographic Context of Institutional Mix: Exploring the Links between University Types and Regional Employment Growth. Submitted to *International Regional Science Review*

E.A. Mack, S.Wrase, J. Dahme, M. Wright, and R. Muhammad. Making Water Affordable: A Case Study of Philadelphia’s Tiered Assistance Program (TAP). Submitted to *Journal of the American Water Resources Association*

Harlan, S., M. Sarango, E.A. Mack, and T. Stephens. A Survey-Based Assessment of Perceived Flood Risk in Urban Areas of the United States. Submitted to *Anthropocene*

### **Peer-Reviewed Journal Articles**

-First or corresponding author indicates the majority contribution in the discipline of geography

-Student co-authors are underlined

-\*\*Indicates corresponding author

48. White, J. **Mack, E.A.** \*\*, Harlan, S., Krayenhoff, S. Georgescu, M. and K. Redican. Regional Multivariate Indices of Water Use Potential for the Continental United States. *Sustainability*. Accepted for publication.

47. Credit, K. and **E.A. Mack**. (2019). A Multi-Regional Input-Output (MRIO) Analytical Framework For Assessing The Regional Economic Impacts of Rising Water Prices. *The Review of Regional Studies*. Accepted for publication.

46. Huang, Zhaosong; Lu, Yafeng; **Mack, E**; Chen, Wei; Maciejewski, Ross. (2019). Exploring the Impact of Attribute Uncertainty in Choropleths. *Transactions on Visualization and Computer Graphics*. Accepted for publication.

45. **Mack, E.A.**, Dutton, W.H., Rikard, R.V., and A. Yankelevich. (2019). Mapping and Measuring the Information Society: A Social Science Perspective on the Opportunities, Problems, and Prospects of Broadband Internet Data in the United States. *The Information Society*. Accepted for publication

44. **Mack, E.A.** (2019). Geographic Dimensions of Uncertainty in the Broadband-Business Nexus. *The Information Society*. Accepted for publication

43. **Credit, K., Mack, E.A.,** and Mayer, H. (2018). State of the Field: Data and Metrics for Geographic Analyses of Entrepreneurial Ecosystems. *Geography Compass* 12(9) e12380 DOI: 10.1111/gec3.12380
42. **E.A. Mack** and R. Wei. (2018). Geographic Dimensions of Relocation Activity: A Comparative Analysis of Intra Metropolitan and Out-of-State Relocation Activity. *The Professional Geographer*.70(1): 103-113.  
DOI:
41. **E. Mack, K. Credit,** and **M. Suandi.** (2018). A Comparative Analysis of Firm Co-location Behaviour in the Detroit Metropolitan Area. *Industry and Innovation*. 25(3), 264-281 DOI 10.1080/13662716.2017.1334539
40. **E. A. Mack** and **K. Credit.** (2017). New Business Activity and Employment Dynamics in the Inner City: The Case of Phoenix, AZ” *Urban Affairs Review*. DOI: 10.1177/1078087417709600
39. **Mack, E.A.,** Tong, D. and **K. Credit.** (2017). Gardening in the Desert: A Spatial Optimization Approach to Locating Urban Gardens in Rapidly Expanding Urban Environments. *International Journal of Health Geographics*. 16:37  
DOI: 10.1186/s12942-017-0110-z
38. **Credit, K.** and **E. A. Mack.** (2017). Place-making and Performance: The Impact of Walkable Built Environments on Business Performance in Phoenix and Boston. *Environment and Planning B* DOI: 10.1177/2399808317710466
37. Gertner, D. and **E. A. Mack\*\*.** (2017). The Entrepreneurial Orientation (EO) of Incubators, Accelerators, and Coworking Spaces. *International Journal of Regional Development*. 4(2): 1-25. DOI: <https://doi.org/10.5296/ijrd.v4i2.10210>
36. Pearson, A., **E. Mack,** and **J. Namanya.** (2017). Mobile Phones and Mental Well-Being: The Importance of Staying Connected to Family in Rural, Remote Communities in Uganda. *PlosOne* 12(1): e0169819  
DOI: <https://doi.org/10.1371/journal.pone.0169819>
35. **Mack, E.A.,** Talen, E. and J. Koschinsky. (2017). Walkable Art: An Empirical Investigation of Art-Related Businesses and Walkable Neighborhoods. *Economic Development Quarterly* 31(2): 149-163. DOI: 10.1177/0891242417690804
34. **E. Mack** and **Wrase, S.** (2017). A Burgeoning Crisis? A Nationwide Assessment of the Geography of Water Affordability in the United States. *PlosOne*. 12(1): e0169488 DOI: <https://doi.org/10.1371/journal.pone.0169488>
33. **Mack, E., Pierre, L.** and **K. Redican.** (2017). Entrepreneurs' Use of Internet and Social Media Applications. *Telecommunications Policy* 41(2): 120-139 DOI: 10.1016/j.telpol.2016.12.001
32. **E. Mack** and L. Wentz. (2017). Industry Variations in the Broadband Business Nexus. *Socio-Economic Planning Sciences* 58: 51-62. DOI:10.1016/j.seps.2016.10.007
31. **Wang, F. Mack, E.A.\*\*** and R. Maciejewski. (2017). Analyzing Entrepreneurial Social Networks with Big Data. *Annals of the Association of American Geographers* 107(1): 130-150 DOI: 10.1080/24694452.2016.1222263
30. Villareal, A., **Mack, E.A.\*\*** and M. Flores. (2017). Industrial Complexes in Mexico: Implications for Regional Industrial Policy Based on Related Variety and Smart Specialization. *Regional Studies* 51(4): 537-547.  
DOI: 10.1080/00343404.2015.1114174
29. **Yifan Zhang,** Wei Luo, **E. Mack,** Ross Maciejewski. (2016). Visualizing the Impact of Geographical Variations on Multivariate Clustering. *Computer Graphics Forum*, 35(3): 101-110. DOI: 10.1111/cgf.12886
28. Tranos, E. and **E. A. Mack.** (2016). Broadband Provision and Knowledge Intensive Firms: A Causal Relationship? *Regional Studies* 50(7): 1113-1126. DOI: <http://dx.doi.org/10.1080/00343404.2014.965136>
27. **Mack, E.A.** and H. Mayer. (2016). The Evolutionary Dynamics of Entrepreneurial Ecosystems. *Urban Studies* 53(10): 2118-2133. DOI: <https://doi.org/10.1177/0042098015586547>
26. **Mack, E.A.** (2015). Variations in the Broadband-Business Connection Across the Urban Hierarchy. *Growth and Change* 46(3): 400-423. DOI: 10.1111/grow.12095

25. **Mack, E.A.** and R. Maciejewski. (2015). A Profile of Visual Analytical Toolkits for Understanding the Spatio-Temporal Evolution of Broadband Provision *Telecommunications Policy* 39(3-4): 320-332  
DOI: <https://doi.org/10.1016/j.telpol.2014.06.011>
24. **Mack, E.A.** and T.H. Grubestic. (2014). U.S. Broadband Policy and the Spatio-Temporal Evolution of Broadband Markets. *Regional Science, Policy, and Practice* 6(3): 291-308. DOI: 10.1111/rsp3.12042
23. **Mack, E.A.** and Stolarick, K. (2014). The Gift That Keeps On Giving: Land-Grant Universities and Regional Prosperity. *Environment and Planning C* 32(3): 384-404. DOI: <https://doi.org/10.1068/c11164r>
22. **Mack, E.A.** (2014). Businesses and the Need for Speed: The Impact of Broadband Speed on Business Presence. *Telematics and Informatics* 31(4): 617-627. DOI: <https://doi.org/10.1016/j.tele.2013.12.001>
21. **Mack, E.A.** and Rey, S.J. (2014). An Econometric Approach for Evaluating the Linkages between Broadband and Knowledge Intensive Firms. *Telecommunications Policy* 38(1): 105-118. DOI: <https://doi.org/10.1016/j.telpol.2013.06.003>
20. **Mack, E.A.** (2014). Broadband and Knowledge Intensive Firm Clusters: Essential Link or Auxiliary Connection? *Papers in Regional Science* 93(1): 3-29. DOI: 10.1111/j.1435-5957.2012.00461.x
19. **Mack, E.A.**, Zhang, Y., Maciejewski, R. and S.J. Rey. (2014). Spatio-Temporal Analysis of Industrial Composition with IVIID: An Interactive Visual Analytics Interface for Industrial Diversity. *Journal of Geographical Systems*, 16(2): 183-209  
DOI: 10.1007/s10109-013-0193-4
18. Rey, S.J., Murray, A.T., Grubestic, T.H., **Mack, E.A.**, Wei, R., and Griffin, M. (2014). Sex Offender Residential Movement Patterns: A Markov Chain Analysis. *The Professional Geographer* 66(1): 102-111.  
DOI: <http://dx.doi.org/10.1080/00330124.2013.765293>
17. **Mack, E.A.** and Faggian, A. (2013). Productivity and Broadband: The Human Factor. *International Regional Science Review* 36(3): 392-423. DOI: <https://doi.org/10.1177/0160017612471191>
16. **Mack, E.A.**, N. Malizia and S. J. Rey. (2012). Population Shift Bias in Tests for Spatio-Temporal Interaction. *Computers, Environment, and Urban Systems*. 36(6): 500-512. DOI: <https://doi.org/10.1016/j.compenvurbsys.2012.05.001>
15. **Mack, E.A.** and T.H. Grubestic. (2012). All Jobs Are Not Created Equal: Divergent Indicators in the Information Economy. *Applied Geography*. 32(1): 88-101. DOI: <https://doi.org/10.1016/j.apgeog.2010.05.009>
14. Malizia, N. and **Mack, E.A.** (2012). Enhancing the Jacquez k Nearest Neighbor Test for Space-Time Interaction. *Statistics in Medicine*. 31(21): 2318-2334. DOI: 10.1002/sim.5348
13. Grubestic, T.H., **Mack, E.A.**, and Kaylen, M. (2012). Comparative Modeling Approaches for Understanding Urban Violence. *Social Science Research* 14(1): 92-109. DOI: <https://doi.org/10.1016/j.ssresearch.2011.07.004>
12. Buckman, S. and **Mack, E.A.** (2012). The Impact of Urban Form on Downtown Stadium Redevelopment Projects: A Comparative Analysis of Phoenix and Denver. *Journal of Urbanism* 5(1): 1-22. DOI: <http://dx.doi.org/10.1080/17549175.2012.659071>
11. Rey, S.J., **Mack, E.A.**, and Koschinsky, J. (2011). Exploratory Space-Time Analysis of Burglary Patterns. *Journal of Quantitative Criminology* 28(3): 509-531. DOI: 10.1007/s10940-011-9151-9
10. Murray, A.T., Grubestic, T.H., Wei, R., and **Mack, E.A.** (2011). A Hybrid Geocoding Methodology for Spatio-Temporal Data. *Transactions in GIS* 15(6): 795-809. DOI: 10.1111/j.1467-9671.2011.01289.x
9. Grubestic, T.H., Murray, A.T. and **E.A. Mack**. (2011). Sex Offenders, Residence Restrictions, Housing and Urban Morphology: A Review and Synthesis. *Cityscape* 13(3): 7-31. DOI: 10.2307/41426673
8. **Mack, E.A.**, Anselin, L. and T.H. Grubestic. (2011). The Importance of Broadband Provision to Knowledge Intensive Firm Location. *Regional Science Policy and Practice*. 3(1): 17-35. DOI: 10.1111/j.1757-7802.2011.01026.x
7. **Mack, E. A.** and Grubestic, T.H. (2010). Sex Offenders and Residential Location: A Predictive Analytical

Framework. *Environment and Planning A*. 42(8): 1925-1942. DOI: <https://doi.org/10.1068/a42370>

6. **Mack, E.A.** and T.H. Grubestic. (2009). Forecasting Broadband Provision. *Information Economics and Policy*. 21(4): 297-311. DOI: <https://doi.org/10.1016/j.infoecopol.2009.08.001>

5. **Mack, E.A.** and T. H. Grubestic. (2009). Broadband Provision and Firm Location: An Exploratory Spatial Analysis. *Tijdschrift voor Economische en Sociale Geografie*. 100(3): 298-315. DOI: 10.1111/j.1467-9663.2008.00487.x

4. Grubestic, T.H., Murray, A.T. and **E.A. Mack**. (2008). Sex Offenders, Housing and Spatial Restriction Zones. *GeoJournal*. 73(4): 255-269. DOI: 10.1007/s10708-008-9197-x

3. Grubestic, T. H. and **E. A. Mack**. (2008). Spatio-Temporal Interaction of Urban Crime. *Journal of Quantitative Criminology*. 24(3): 285-306. DOI: 10.1007/s10940-008-9047-5

2. **Mack, E.A.**, Grubestic, T.H. and E. Kessler. (2007). Indices of Industrial Diversity and Regional Economic Composition. *Growth and Change*. 38(3): 474-509. DOI: 10.1111/j.1468-2257.2007.00380.x

1. Grubestic, T. H., Murray, A. T. and **E.A. Mack**. (2007). Geographic exclusion: Spatial analysis for evaluating the implications of Megan's Law. *Social Science Computer Review*. 25(2): 143-162. DOI: <https://doi.org/10.1177/0894439307298930>

### **Book Chapters and Other Non-Refereed Publications**

\*Indicates a peer-reviewed book chapter

15. **Mack, E.A.** (2019). History of Broadband. (forthcoming) Book chapter.

14. **Mack, E.A.** (2018). The Economics of Entrepreneurship. By Simon C. Parker. *Regional Science Policy and Practice*. DOI: 10.1111/rsp3.12175

13. Tranos, E. and **E. Mack**. (2018). Big data: A new opportunity for transport geography? *Journal of Transport Geography* <https://doi.org/10.1016/j.jtrangeo.2018.08.003>

12. Yankelevich, A. Rikard, R.V., Kadylak, T., Hall, M.J., **Mack, E.A.**, Verboncoeur, J.P. and S.R. Cotton. Report: Preparing the Workforce for Automated Vehicles. <https://comartsci.msu.edu/sites/default/files/documents/MSU-TTI-Preparing-Workforce-for-AVs-and-Truck-Platooning-Reports%20.pdf>

11. **Mack, E.A.** (2018). Book Review: The Pursuit of Economic Development: Growing Good Jobs in U.S. Cities and States. By Todd Gabe. *Economic Development Quarterly*. DOI: 10.1177/0891242418811165

10. **Mack, E. A.** (2017). Thinking about Urban Infrastructure: A Prospective Look at Water and Telecommunications Infrastructure. *Regions Magazine*, 306(1), p. 11

9. **Mack, E.** Introduction: Geographies of Entrepreneurship. (2016). Mack, E. and Qian, H. (Eds). Taylor and Francis.

8. **Mack, E.** and K. Credit. (2016). The Intra-Metropolitan Geography of Entrepreneurship: A Spatial, Temporal, and Industrial Analysis (1989-2010). *Geographies of Entrepreneurship*. Mack, E. and Qian, H. (Eds). Taylor and Francis.

7. **Mack, E.A.** (2015). Book Review: Small Business and the City: The Transformative Potential of Small Scale Entrepreneurship by Rafael Gomez, Andre Isakov, and Matthew Semansky *Journal of Regional Science* 55(5): 874-875.

6. Faggian, A. and **E. Mack**. (2015). Special Issue Introduction: Regional Development in Metropolitan and Non-Metropolitan Regions. *Growth and Change*. 46(3): 351-353.

5. \*A.T. Murray, T.H. Grubestic, **E.A. Mack**, **R. Wei**, S.J. Rey, L. Anselin and M. Griffin. (2013). "Convicted sex offender residential movements." In *Crime Modeling and Mapping Using Geospatial Technologies*, edited by M. Leitner (pgs. 51-71). Springer: Netherlands.

4. Faggian, A., **E. Mack**, and H. Stephens. (2013). Special Issue Introduction: Regional Economic Development.



*International Regional Science Review* 36(3): 263-266.

3. **Mack, E.A.** (2014). Book Review: Sunbelt Capitalism: Phoenix and the Transformation of American Politics by Elizabeth Tandy Shermer. (Philadelphia: University of Pennsylvania Press). *Economic Development Quarterly* 28(2): 185.

2. **Mack, E.A.** (2012). Book Review: *Entrepreneurship and Innovation in Second Tier Regions* by Heike Mayer. (Cheltenham: Edward Elgar). *Review of Regional Studies* 42(2): 177.

1. **Mack, E.A.** (2012). Book Review: *Sustainability in America's Cities: Creating the Green Metropolis* edited by Matthew I. Slavin. (Washington, D.C: Island Press). *Journal of Urbanism* 6(1): 92-93.

### **Invited Talks (last 3 years)**

2018

26. A Retrospective and Prospective Examination of Spatial Dimensions of the Broadband Business Nexus: Implications for Rural Areas. Division of Applied Social Sciences, University of Missouri. May 2, 2018.

25. Human Dimensions of the Urban Water Innovation Network (U-WIN). Earth and Environmental Sciences Seminar Series, Wayne State University. March 7, 2018.

2017

24. A Vulnerability Assessment of Water and Wastewater Affordability for Residential Consumers. Health and Environmental Funders Network (HEFN) Water and Water Affordability Webinar. September 21, 2017.

23. Water and Wastewater Affordability for Residential Consumers. Kiwanis Club, East Lansing. July 24, 2017

22. The Socio-Economics of Water: Thinking Locally and Regionally. U-WIN Webinar Series. April 27, 2017

21. Broadband, Business Location, and Regional Development. Brown Bag. Department of Media and Information. Michigan State University. March 16, 2017

2016

20. The Broadband-Entrepreneurship Nexus. Regional Research Institute (RRI), West Virginia University. February 18, 2016

19. Entrepreneurship and Digital Technology Use. Department of Geography, University of Toledo. January 29, 2016.

18. Topics and Methods in Economic Geography. Center for Global Change and Earth Observation (CGCEO) Michigan State University. January 22, 2016.

### **Professional Presentations (last 3 years)**

2018

50. An Input-Output Framework for Analyzing Consumer Responses to Changing Water Prices. North American Regional Science Association Conference. San Antonio, TX. November 7-10.

49. Serial Entrepreneurs in Small Entrepreneurial Ecosystems. *Global Conference on Economic Geography* Cologne, Germany (July 24-28)

48. Entrepreneurial Diasporas: Migration Tendencies in New Venture Activity. *Association of American Geographers (AAG)* New Orleans, LA (April 10-14, 2018)

2017

47. The Built Environment, Urban Amenities, and New Business Activity. *North American Regional Science Conference (NARSC)* Vancouver, British Columbia (November 8-11).

46. Growing Local Business: An Analysis of Spinoff Activity in Burlington, Vermont. *Association of Collegiate Schools of Planning (ACSP) Conference* Denver, CO (October 12-15).

45. A Burgeoning Crisis? A Nationwide Assessment of the Geography of Water Affordability in the United States *Association of American Geographers (AAG)* Boston, MA (April 5-9).

2016

44. New Venture Activity and Broadband Provision. *North American Regional Science (NARSC)* Minneapolis, Minnesota. (November 9-12).

43. Firm Colocation in the Detroit Automobile Cluster. *Association of Collegiate Schools of Planning (ACSP) Conference* Portland, Oregon (November 3-6).

42. Do Startups Diversify the Economic Base? An Evolutionary Perspective. *Association of American Geographers (AAG)* San Francisco, CA (March 29-April 2).

## TEACHING

### Student Awards

2018

11. Provost Undergraduate Research Initiative (PURI). Michigan State University.  
Student supported: Benjamin Dougherty. Amount: \$975

2017

10. Michigan State Graduate School Dissertation Completion Fellowship. Student Supported: Kevin Credit.  
Amount: \$7,000.00

9. Provost Undergraduate Research Initiative (PURI). Michigan State University.  
Student supported: Benjamin Dougherty. Amount: \$975

8. National Science Foundation Graduate Fellowship: Matthew Suandi

7. First Prize Oral Presentation, Undergraduate Research Forum. Michigan State University.  
"Underground and Overlooked: America's Wastewater Infrastructure Crisis": Sarah Wrase

6. Cole Excellence Award. Michigan State University. Student: Sarah Wrase  
Amount: \$2,500

2016

5. First Prize Oral Presentation, Undergraduate Research Forum. Michigan State University. "Do Startups Diversify the Economic Base? An Evolutionary Perspective": Matthew Suandi

4. First Place Graduate Research Presentation Competition. Department of Geography, Michigan State University:  
Kevin Credit

3. Dean's Assistantship. Michigan State University. Student supported: Grace Hough.  
Amount: \$4,000

2. Provost Undergraduate Research Initiative (PURI). Student supported: Grace Hough. Michigan State University  
Amount: \$1,200

2015

1. Provost Undergraduate Research Initiative (PURI). Michigan State University. Student supported: Matthew Suandi.  
Amount: \$1,000

### **Undergraduate and Graduate Credit Instruction**

Introduction to Economic Geography: GEO 113  
Global Diversity: ISS 315  
Location Theory and Land Use Analysis: GEO 415  
Urban and Regional Analysis: PUP 642  
Socio-Economic Impact Analysis: PUP 571  
Economic Development Planning: PUP 434/598  
Economic Impact Analysis: PUP 598  
Quantitative Methods in Geography: GCU 495 (Spring)

### **SERVICE**

#### **Editorial Appointments**

##### *Associate Editor*

Telematics and Informatics (2019-present)

##### *Editorial Board Member*

-Computers, Environment, and Urban Systems (2019)  
-Review of Regional Studies (2018-present)  
-Regional Science Policy and Practice (2017-present)

##### *Guest Editor*

-Guest Editor, Special Issue of Environmental Research Letters: Urban Sustainability and Desired Outcomes (2018-2019)  
-Guest Editor, Special Issue of International Regional Science Review: Universities and Regional Development (2018-2019)  
-Guest Editor, Special Issue of the Journal of Transport Geography: Big Data: A New Opportunity for Transport Geography? (2017)  
-Guest Editor, Special Issue of Growth and Change: Regional Development In-Metropolitan and Non-Metropolitan Regions Volume 46 Issue 3 (2015)  
-Guest Editor, Special Issue of the International Regional Science Review: Current Issues in Regional Development Volume 36 Issue 3 (2013)

#### **Professional Society Service**

-Councilor, North American Regional Science Association Council (Fall 2017-present)  
-Benjamin Stevens Fellowship Selection Committee, North American Regional Science Association (Spring 2017-present)  
-Regional Studies Association (RSA) Ambassador to the United States (2016-present)  
-Network on European Communications and Transport Activities Research (NECTAR) ICT Cluster Co-Chair (2014-present)  
-Newsletter Co-Editor, North American Regional Science Association (2013-2018)  
-Regional Science Academy Service, chair Support Activities Task Force (2015-2016)  
-Student Paper Competition Co-Chair, North American Regional Science Conference (NARSC). Atlanta, Georgia (2013)