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ACADEMIC APPOINTMENTS

- 2016 – Associate Professor, Department of Psychology, Michigan State University
2014 – 2016 Assistant Professor, Department of Psychology, Michigan State University
2009 – 2014 Assistant Professor, Department of Sociology, Michigan State University

EDUCATION

- 2009 PhD in Sociology, University of Illinois at Chicago
2005 MA in Sociology, University of Illinois at Chicago
2001 BA in Philosophy & Classics, University of Arizona, Tucson

EDITORSHIPS (Action/decision editor roles are underlined)

- 2022 – Editor-in-Chief, *Global Networks*
2022 – Editor-in-Chief, *Evidence and Policy*
2020 – Editorial Board, *Journal of Social Structure*
2018 – Editorial Board, *American Journal of Community Psychology*
In progress Special issue editor, "Brokerage Within and Between Regions" in *Regional Studies*
2020 – 2022 Deputy Editor, *City & Community*
2012 – 2022 Associate Editor, *Global Networks*
2007 – 2022 Series Editor, *The Metropolis and Modern Life* (Routledge Book Series)
2021 Special issue editor, "Cities, Networks, and Urban Policy" in *Journal of Urban Affairs*

2017 – 2021 Associate Editor, *Evidence and Policy*
2009 – 2020 Editorial Board, *City & Community*
2015 – 2020 Senior Associate Editor, *Journal of Urban Affairs*
2019 Special issue editor, "Complexity and the City" in *Applied Network Science*
2018 Special issue editor, "Intersections Between Urban Studies and Network Science" in *Networks and Spatial Economics*, 18(3)
2017 Special issue editor, "Diversity and Sense of Community" in *American Journal of Community Psychology*, 59(3-4)
2003 – 2009 Managing Editor, *City & Community*

FELLOWSHIPS

2019 – 2020 Fellow, MSU Hub for Innovation in Learning and Technology
2015 – 2016 Senior Fellow, Brookings Metropolitan Policy program

AUTHORED BOOKS

1. Neal, Z. P. (2013). *The Connected City: How Networks are Shaping the Modern Metropolis*. New York: Routledge.

EDITED BOOKS

3. Neal, Z. P. & Rozenblat, C., eds. (2021). *Handbook of Cities and Networks*. Northampton, MA: Edward Elgar.
2. Neal, Z. P., ed. (2016). *The Handbook of Applied Systems Science*. New York: Routledge.
1. Orum, A. M., & Neal, Z. P., eds. (2010). *Common Ground? Readings and Reflections on Public Space*. New York: Routledge.

PEER-REVIEWED ARTICLES (📄 link to replication materials, when available)

95. Neal, Z. P. (In press). Constructing legislative networks in R using incidentally and backbone. *Connections*. (📄 <https://osf.io/kjgrz/>)
94. Neal, Z. P., Neal, J. W., Forbes, M. K., Brusco, M., Krueger, R., Markon, K. E., Steinley, D., Wasserman, S., and Wright, A. G. C. (In press). Critiques of network analysis of multivariate data in psychological science. *Nature Reviews Method Primers*. (📄 annotated bibliography available at <https://doi.org/10.31234/osf.io/ke6qn>)
93. Bao, H., Neal, Z. P., & Banzhaf, W. (In press). Coevolutionary Opinion Dynamics with Sparse Interactions in Open-ended Societies. *Complex and Intelligent Systems*. <https://doi.org/10.1007/s40747-022-00810-w>
92. Sigler, T. Neal, Z. P., & Martinus, K. (In press). Brokerage as an urban and regional process between systems and scales. *Regional Studies*. <https://doi.org/10.1080/00343404.2022.2093343>
91. Lawlor, J. A., Metta, K. R., & Neal, Z. P. (In press). When community change theory meets practice: Exploring some of the challenges to information sharing networks for community change. *Translational Issues in Psychological Science*. <https://doi.org/10.1037/tps0000318>
90. Neal, J. W. & Neal, Z. P. (In press). Collecting, Modeling, and Visualizing Network Data from Educators: A Tutorial. *School Psychology*. <https://doi.org/10.1037/spq0000479> (📄 <https://osf.io/unyxh/>)
89. Neal, Z. P., & Neal, J. W. (In press). Out of bounds? The boundary specification problem for centrality in psychological networks. *Psychological Methods*. <https://doi.org/10.1037/met0000426> (📄 <https://osf.io/x4nbj/>)
88. Sigler, T., Neal, Z. P., & Martinus, K. (In press). The Brokerage Roles of City-Regions in Global Corporate Networks. *Regional Studies*. <https://doi.org/10.1080/00343404.2021.1950914> (📄 <https://osf.io/p3sc8/>)
87. Lawlor, J., Neal, Z. P., & Metta, K. (In press). What is a coalition? A systematic review of coalitions in community psychology. *Journal of Community and Applied Social Psychology*. <http://doi.org/10.1002/casp.2554>
86. Neal, Z. P. and Neal, J. W. (2022). Neighborhood satisfaction and reproductive statuses. *PLOS ONE*, 17, e0273082. <https://doi.org/10.1371/journal.pone.0273082> (📄 <https://osf.io/k2w5c/>)

85. Neal, J. W., Neal, Z.P., and Durbin, C. E. (2022). Inferring Signed Networks from Preschoolers' Observed Parallel and Social Play. *Social Networks*, 71, 80-86.
<https://doi.org/10.1016/j.socnet.2022.07.002> (📄 <https://osf.io/q7nh6/>)
84. Neal, Z. P., Domagalski, R., & Sagan, B. (2022). Analysis of spatial networks from bipartite projections using the R backbone package. *Geographical Analysis*, 54, 623-647.
<https://doi.org/10.1111/gean.12275> (📄 <https://osf.io/r2evn/>)
83. Neal, Z. P. and Neal, J. W. (2022). Prevalence, Age of Decision, and Interpersonal Warmth Judgements of Childfree Adults. *Scientific Reports*, 12, 11907.
<https://doi.org/10.1038/s41598-022-15728-z> (📄 <https://osf.io/8avrd/>)
82. Neal, Z. P. (2022). backbone: An R package to extract network backbones. *PLOS ONE*, 17, e0269137. <https://doi.org/10.1371/journal.pone.0269137> (📄 <https://osf.io/8tuc7/>)
81. Anderson-Carpenter, K. D., & Neal, Z. P. (2022). Racial disparities in COVID-19 impacts in Michigan, USA. *Journal of Racial and Ethnic Health Disparities*, 9, 156-164.
<https://doi.org/10.1007/s40615-020-00939-9> (📄 <https://osf.io/rv4p3/>)
80. Neal, J. W., Neal, Z. P., & Brutzman, B. (2022). Defining Brokers, Intermediaries, and Boundary Spanners: A Systematic Review. *Evidence and Policy*, 18, 7-24.
<https://doi.org/10.1332/174426420X16083745764324> (📄 <https://osf.io/nuhg8/>)
79. Neal, Z. P. and Neal, J. W. (2022). That'll move the chains: Collecting network chain data. *Social Networks*, 69, 35-44. <https://doi.org/10.1016/j.socnet.2019.10.007>
78. Neal, Z. P., Domagalski, R., Yan, X. (2022). Homophily in Collaborations among US House Representatives, 1981 -- 2015. *Social Networks*, 68, 97-106.
<https://doi.org/10.1016/j.socnet.2021.04.007> (📄 <https://osf.io/xba82/>)
77. Lobo, J., Alberti, M., Allen-Dumas, M., Bettencourt, L., Beukes, A., Tapia, L. B., Chen, W.-Q., Dodge, A., Neal, Z., Perreira, A., Pfeiffer, D., Revi, A., Roberts, D., Rozenblat, C., Shutters, S., Smith, M., Stokes, E., Strumsky, D., & Wu, J. (2021). A Convergence Research Perspective on Graduate Education for Sustainable Urban Systems Science. *Nature Urban Sustainability*, 1, 39.
76. Aref, S., & Neal, Z. P. (2021). Identifying hidden coalitions in the US House of Representatives by optimally partitioning signed networks based on generalized balance. *Scientific Reports*, 11, 19939. <https://doi.org/10.1038/s41598-021-98139-w> (📄 <https://osf.io/3qtfb/>)
75. Neal, Z. P., Domagalski, R., and Sagan, B. (2021). Comparing Alternatives to the Fixed Degree Sequence Model for Extracting the Backbone of Bipartite Projections. *Scientific Reports*, 11, 23929. <https://doi.org/10.1038/s41598-021-03238-3> (📄 <https://osf.io/m4yfd/>)
74. Oh, J., & Neal, Z. P. (2021). Two's company, but four's a crowd: The relationship among COVID-19 stress, household size, and life satisfaction. *Collabra*, 7(1), 24923.
<https://doi.org/10.1525/collabra.24923> (📄 <https://osf.io/683bp/>)
73. Neal, Z. P. (2021). Does the neighbourhood matter for neighbourhood satisfaction? A meta-analysis. *Urban Studies*, 58, 1775-1791. <https://doi.org/10.1177/0042098020926091> (📄 <http://www.doi.org/10.6084/m9.figshare.12164127>)
72. Neal, J. W., & Neal, Z. P. (2021). Prevalence and characteristics of childfree adults in Michigan (USA). *PLoS ONE*, 16(6), e0252528. <https://doi.org/10.1371/journal.pone.0252528> (📄 <https://osf.io/45v6b/>)
71. Neal, Z. P. (2021). Fallacies in world city network measurement. *Geographical Analysis*, 53, 377-382. <https://doi.org/10.1111/gean.12230>
70. Domagalski, R., Neal, Z., & Sagan, B. (2021). backbone: An R package for extracting the backbone of bipartite projections. *PLoS ONE*, 16, e0244363.
<https://doi.org/10.1371/journal.pone.0244363> (📄 <https://osf.io/myje5/>)

69. Neal, Z., Neal, J. W., & Domagalski, R. (2021). False positives using social cognitive mapping to identify children's peer groups. *Collabra*, 7, 17969. <https://doi.org/10.1525/collabra.17969> (📄 <https://osf.io/txgph/>)
68. Neal, Z. P., Derudder, B., & Liu, X. (2021). Using Urban Networks to Gain New Insight into Old Questions: Community, Economy, Bureaucracy. *Journal of Urban Affairs*, 43, 2-15. <https://doi.org/10.1080/07352166.2020.1770606>
67. Mills, K. J., Lawlor, J. A., Neal, J. W., Neal, Z. P., & McAlindon, K. (2020). What is research? Educators' conceptions and alignment with U.S. federal policies. *Evidence and Policy*, 16, 337-358. <https://doi.org/10.1332/174426419X15468576296175>
66. Neal, Z. P., Derudder, B., & Taylor, P. J. (2020). Forecasting the world city network. *Habitat International*, 106, 104146. <https://doi.org/10.1016/j.habitatint.2020.102146>
65. Neal, J. W., Neal, Z. P., Barrett, C. A., & Brutzman, B. (2020). Are principals' social networks associated with interventions' social validity? *School Mental Health*, 12, 812-825. <https://doi.org/10.1007/s12310-020-09388-5>
64. Neal, Z. P., Neal, J. W., & Piteo, A. (2020). Call me maybe: Using incentives and follow-ups to increase principals' survey response rates. *Journal of Research on Educational Effectiveness*, 13, 784-793. <https://doi.org/10.1080/19345747.2020.1772423> (📄 <https://osf.io/86vwa/>)
63. Neal, Z. P. (2020). Comparing urban sociology's human ecology and community psychology's ecological metaphor. *Journal of Urban Affairs*, 42, 786-799. <https://doi.org/10.1080/07352166.2019.1691444>
62. Aref, S. and Neal, Z. P. (2020). Detecting coalitions by optimally partitioning signed networks of political collaboration. *Scientific Reports*, 10, 1506. <https://doi.org/10.1038/s41598-020-58471-z> (📄 <https://www.nature.com/articles/s41598-020-58471-z#Sec17>)
61. Neal, Z. P. (2020). A sign of the times? Weak and strong polarization in the U.S. Congress, 1973 – 2016. *Social Networks*, 60, 103-112. <https://doi.org/10.1016/j.socnet.2018.07.007> (📄 <https://doi.org/10.6084/m9.figshare.8096429.v2>)
- Chinese translation: *International Politics Scholars*, <https://mp.weixin.qq.com/s/EKXz1rAdU8HI-VRe-W8PQ>
60. Neal, J. W., Neal, Z. P., Mills, K. J., Lawlor, J. A., & McAlindon, K. (2019). What types of brokerage bridge the research-practice gap? The case of public school educators. *Social Networks*, 59, 41-49. <https://doi.org/10.1016/j.socnet.2019.05.006>
59. Lawlor, J. A., Mills, K. J., Neal, Z. P., Neal, J. W., Wilson, C., & McAlindon, K. (2019). Approaches to measuring use of research evidence in K-12 settings: A systematic review. *Educational Research Review*, 27, 218-228. <https://doi.org/10.1016/j.edurev.2019.04.002>
58. McAlindon, K., Neal, J. W., Neal, Z. P., Mills, K. J., & Lawlor, J. A. (2019) The BOND framework: A practical application of design and communication theories to advance evaluation reporting. *American Journal of Evaluation*, 40, 291-305. <https://doi.org/10.1177/1098214018771219>
57. Neal, Z. P., Lawlor, J., Neal, J. W., Mills, K., & McAlindon, K. (2019). Just google it: Measuring schools' use of research evidence with internet search results. *Evidence and Policy*, 15, 103-123. <https://doi.org/10.1332/174426418X15172392413087>
56. Neal, J. W. & Neal, Z. P. (2019). Implementation capital: merging frameworks of implementation outcomes and social capital to support the use of evidence-based practices. *Implementation Science*, 14, 16. <https://doi.org/10.1186/s13012-019-0860-z>
55. Neal, J. W., Mills, K. J., McAlindon, K., Neal, Z. P., & Lawlor, J. A. (2019). Multiple audiences for encouraging research use: Uncovering a typology of educators. *Educational Administration Quarterly*, 55, 154-181. <https://doi.org/10.1177/0013161X18785867>

54. Neal, Z. P., Derudder, B., & Taylor, P. J. (2019). Should I stay or should I go: Predicting advanced producer services firm expansion and contraction. *International Regional Science Review*, 42, 207-229. <https://doi.org/10.1177/0160017618784739>
53. Derudder, B. & Neal, Z. P. (2018). Uncovering links between urban studies and network science. *Networks and Spatial Economics*, 18, 441-446. <https://doi.org/10.1007/s11067-019-09453-w>
52. Neal, Z. P. (2018). Is the urban world small? The evidence for small world structure in urban networks. *Networks and Spatial Economics*, 18, 615-631. <https://doi.org/10.1007/s11067-018-9417-y>
51. Neal, Z. P., Neal, J. W., Mills, K. J., & Lawlor, J. A. (2018). Making or buying evidence: Using transaction cost economics to understand decision-making in public school districts. *Evidence and Policy*, 14, 707-724. <https://doi.org/10.1332/174426416X14778277473701>
50. Neal, J. W., Neal, Z. P., Lawlor, J. A., Mills, K. J., & McAlindon, K. (2018). What makes research useful for public school educators? *Administration and Policy in Mental Health and Mental Health Services Research*, 45, 432-446. <https://doi.org/10.1007/s10488-017-0834-x>
49. Neal, Z. P. (2018). The urban metabolism of airline passengers: Scaling and sustainability. *Urban Studies*, 55, 212-225. <https://doi.org/10.1177/0042098016686535>
48. Neal, Z. P., & Neal, J. W. (2017). "We didn't say that": Challenges in the public dissemination of a research finding with controversial implications. *American Journal of Community Psychology*, 60, 424-429. <https://doi.org/10.1002/ajcp.12175>
47. Neal, Z. P. (2017). Well connected compared to what? Rethinking frames of reference in world city network research. *Environment and Planning A*, 49, 2859-2877. <https://doi.org/10.1177/0308518X16631339>
46. Neal, Z. P., & Neal, J. W. (2017). Network analysis in community psychology: Looking forward, looking back. *American Journal of Community Psychology*, 60, 279-295. <https://doi.org/10.1002/ajcp.12158>
45. Neal, Z. P. (2017). Taking stock of the Diversity and Sense of Community Debate. *American Journal of Community Psychology*, 59, 255-260. <https://doi.org/10.1002/ajcp.12132>
44. Neal, Z. P. (2017). How small is it? Comparing indices of small worldliness. *Network Science*, 5, 30-44. <https://doi.org/10.1017/nws.2017.5>
43. Collins, C., Neal, Z. P., & Neal, J. W. (2017). Transforming Social Cohesion into Informal Social Control: Deconstructing Collective Efficacy and the Moderating Role of Neighborhood Racial Homogeneity. *Journal of Urban Affairs*, 3, 307-322. <https://doi.org/10.1080/07352166.2016.1245079>
42. Lawlor, J. A., Neal, Z. P. (2016). Networked community change: Understanding community systems change through the lens of social network analysis. *American Journal of Community Psychology*, 57, 426-436. <https://doi.org/10.1002/ajcp.12052>
41. Van Meeteren, M., Neal, Z. P., & Derudder, B. (2016). Disentangling agglomeration and network externalities: A conceptual typology. *Papers in Regional Science*, 95, 61-80. <https://doi.org/10.1111/pirs.12214>
40. Neal, J. W., Neal, Z. P., & Cappella, E. (2016). Seeing and being seen: Predictors of accurate perceptions about classmates' relationships. *Social Networks*, 44, 1 – 8. <https://doi.org/10.1016/j.socnet.2015.07.002>
39. Johansen, R., Neal, Z. P., & Gasteyer, S. (2015). The view from a broken window: How residents make sense of neighbourhood disorder in Flint. *Urban Studies*, 52, 3054-3069. <https://doi.org/10.1177/0042098014552768>

38. Neal, J. W., Neal, Z. P., Kornbluh, M., Mills, K., & Lawlor, J. (2015). Brokering the research-practice gap: A typology. *American Journal of Community Psychology*, *56*, 422-435. <https://doi.org/10.1007/s10464-015-9745-8>
37. Neal, Z. P., Neal, J. W., Lawlor, J., & Mills, K. (2015). Small worlds or worlds apart? Using network theory to understand the research-practice gap. *Psychosocial Interventions*, *24*, 177-184. <https://doi.org/10.1016/j.psi.2015.07.006>
36. Neal, Z. P. (2015). Making big communities small: Using network science to understand the ecological and behavioral requirements for community social capital. *American Journal of Community Psychology*, *55*, 369 – 380. <https://doi.org/10.1007/s10464-015-9720-4>
35. Olson, R. S. & Neal, Z. P. (2015). Navigating the massive world of reddit: using backbone networks to map user interests in social media. *PeerJ Computer Science*, *1*, e4. <https://doi.org/10.7717/peerj-cs.4>
34. Neal, J. W., Neal, Z. P., VanDyke, E., & Kornbluh, M. (2015). Expediting the analysis of qualitative data in evaluation: A procedure for the rapid identification of themes from audio recordings (RITA). *American Journal of Evaluation*, *36*, 118 – 132. <https://doi.org/10.1177/1098214014536601>
33. Collins, C., Neal, J. W., & Neal, Z. P. (2014). Transforming Individual Civic Engagement into Community Collective Efficacy: The Role of Bonding Social Capital. *American Journal of Community Psychology*, *54*, 328 – 336. <https://doi.org/10.1007/s10464-014-9675-x>
32. Neal, Z. P. (2014). Validity in world city network measurements. *Tijdschrift voor economische en sociale geografie*, *105*, 427 – 443. <https://doi.org/10.1111/tesg.12094>
31. Neal, Z. P. (2014). The backbone of bipartite networks: Inferring relationships from co-authorship, co-sponsorship, co-attendance and other co-behaviors. *Social Networks*, *39*, 84 – 97. <https://doi.org/10.1016/j.socnet.2014.06.001>
30. Neal, J. W., Neal, Z. P., & Cappella, E. (2014). I know who my friends are, but do you? Predictors of self-reported and peer inferred relationships. *Child Development*, *85*, 1366 – 1372. <https://doi.org/10.1111/cdev.12194>
29. Neal, Z. P. (2014). A network perspective on the processes of empowered organizations. *American Journal of Community Psychology*, *53*, 407 – 418. <https://doi.org/10.1007/s10464-013-9623-1>
28. Neal, Z. P. (2014). The devil is in the details: Differences in air traffic networks by scale, species, and season. *Social Networks*, *38*, 63 – 73. <https://doi.org/10.1016/j.socnet.2014.03.003>
27. Neal, Z. P., & Neal, J. W. (2014). The in(compatibility) of diversity and sense of community. *American Journal of Community Psychology*, *53*, 1 – 12. <https://doi.org/10.1007/s10464-013-9608-0>
26. Neal, Z. P. (2014). AIRNET: a program for generating intercity networks. *Urban Studies*, *51*, 136 – 152. <https://doi.org/10.1177/0042098013484537>
25. Neal, Z. P. (2013). Identifying statistically significant edges in one-mode projections. *Social Network Analysis and Mining*, *3*, 915 – 924. <https://doi.org/10.1007/s13278-013-0107-y>
24. Neal, Z. P. (2013). Evolution of the business air travel network in the US from 1993 – 2011: A descriptive analysis using AIRNET. *Research in Transportation Business and Management*, *9*, 5 – 11. <https://doi.org/10.1016/j.rtbm.2013.05.002>
23. Neal, J. W., & Neal, Z. P. (2013). Nested or networked? Future directions for ecological systems theory. *Social Development*, *22*, 722 – 737. <https://doi.org/10.1111/sode.12018>
22. Neal, Z. P., & Neal, J. W. (2013). Opening the black box of social cognitive mapping. *Social Development*, *22*, 604 – 608. <https://doi.org/10.1111/j.1467-9507.2012.00668.x>

21. Neal, J. W., & Neal, Z. P. (2013). The multiple meanings of peer groups in social cognitive mapping. *Social Development*, 22, 580 – 594. <https://doi.org/10.1111/j.1467-9507.2012.00656.x>
20. Neal, Z. P. (2013). The “AIRNET 2000” data and AIRNET program. *Connections*, 33, 43 – 45.
19. Neal, Z. P. (2013). A computationally efficient approximation of beta centrality. *Connections*, 33, 11 – 17.
18. Neal, Z. P. (2013). Does world city network research need eigenvectors? *Urban Studies*, 50, 1490 – 1501. <https://doi.org/10.1177/0042098013477702>
17. Neal, Z. P. (2013). Brute force and sorting processes: two perspectives on world city network formation. *Urban Studies*, 50, 1277 – 1291. <https://doi.org/10.1177/0042098012460733>
16. Neal, Z. P., & Neal, J. W. (2012). The public school as a public good: direct and indirect pathways to community satisfaction. *Journal of Urban Affairs*, 34, 469 – 485. <https://doi.org/10.1111/j.1467-9906.2011.00595.x>
15. Neal, Z. P. (2012). Creative employment and jet set cities: disentangling causal effects. *Urban Studies*, 49, 2693 – 2709. <https://doi.org/10.1177/0042098011431282>
14. Neal, Z. P. (2012). Structural determinism in the interlocking world city network. *Geographical Analysis*, 44, 162 – 170. <https://doi.org/10.1111/j.1538-4632.2012.00843.x>
13. Liu, X., Neal, Z. P., & Derudder, B. (2012). City networks in the United States: a comparison of four models. *Environment and Planning A*, 44, 255 – 256. <https://doi.org/10.1068/a44496>
12. Neal, J. W., & Neal, Z. P. (2011). Power as a structural phenomenon. *American Journal of Community Psychology*, 48, 157 – 167. <https://doi.org/10.1007/s10464-010-9356-3>
11. Neal, Z. P. (2011). Differentiating centrality and power in the world city network. *Urban Studies*, 48, 2735 – 2750. <https://doi.org/10.1177/0042098010388954>
10. Neal, Z. P., & Kassens-Noor, E. (2011). The business passenger niche: comparing legacy carriers and southwest during a national recession. *Journal of Air Transport Management*, 17, 231 – 232. <https://doi.org/10.1016/j.jairtraman.2010.09.001>
9. Neal, Z. P. (2011). The causal relationship between employment and business networks in US cities. *Journal of Urban Affairs*, 33, 167 – 184. <https://doi.org/10.1111/j.1467-9906.2010.00538.x>
8. Neal, J. W., Neal, Z. P., Atkins, M. S., Henry, D. H., & Frazier, S. L. (2011). Channels of change: contrasting network mechanisms in the use of interventions. *American Journal of Community Psychology*, 47, 277 – 286. <https://doi.org/10.1007/s10464-010-9403-0>
7. Neal, Z. P. (2011). From central places to network bases: a transition in the US urban hierarchy, 1900 – 2000. *City and Community*, 10, 49 – 74. <https://doi.org/10.1111/j.1540-6040.2010.01340.x>
6. Neal, Z. P. (2010). Refining the air traffic approach to city networks. *Urban Studies*, 47, 2195 – 2215. <https://doi.org/10.1177/0042098009357352>
5. Neal, Z. P. (2010). Seeking common ground: three perspectives on public space. *Urban Design and Planning*, 163(DP2), 59 – 66. <https://doi.org/10.1680/udap.2010.163.2.59>
4. Neal, Z. P. (2008). The duality of world cities and firms: comparing networks, hierarchies, and inequality in the global economy. *Global Networks*, 8, 94 – 115. <https://doi.org/10.1111/j.1471-0374.2008.00187.x>
3. Popielarz, P., & Neal, Z. P. (2007). The niche as a theoretical tool. *Annual Review of Sociology*, 33, 65 – 84. <https://doi.org/10.1146/annurev.soc.32.061604.123118>
2. Neal, Z. P. (2006). Culinary deserts, gastronomic oases: a classification of US cities. *Urban Studies*, 43, 1 – 21. <https://doi.org/10.1080/00420980500388728>

1. Neal, Z. P. (2001). The coherence of value. *STOA: International Undergraduate Journal of Philosophy*, 2, 86 – 93.

NON-REVIEWED PREPRINTS

1. Godard, K. and Neal, Z. P. (2021) fastball: A fast algorithm to sample binary matrices with fixed. *arXiv*. <https://doi.org/10.48550/arXiv.2112.04017>
2. Neal, Z. P. and Brutzman, B. (2022). The role of personality in neighborhood satisfaction. *PsyArXiv*. <https://doi.org/10.31234/osf.io/kna8f>
3. Neal, Z. P. (2022). incidentally: An R package for generating incidence matrices and bipartite graphs. *OSF Preprints*. <https://doi.org/10.31219/osf.io/ectms>
4. Li, X. and Neal, Z. P. (2022). Are larger cities more central in urban networks: A meta-analysis. *OSF Preprints*. <https://doi.org/10.31219/osf.io/y3s69>
5. Neal, J. W. and Neal, Z. P. (2022). The Stereotypes About Childfree Adults (SACHA) Scale: Development, Validation, and Demographic Correlates. *PsyArXiv*. <https://doi.org/10.31234/osf.io/8u2mp>

BOOK CHAPTERS, RESEARCH REPORTS, PROCEEDINGS

22. Rozenblat, C. & Neal, Z. P. (2021). The levels and scales of urban networks. Pp. 2 – 15 in *Handbook of Cities and Networks*, edited by Z. P. Neal & C. Rozenblat. Northampton, MA: Edward Elgar.
21. Freeman Anderson, K. & Neal, Z. P. (2021). Cities and Networks. Pp. 311 – 328 in *Companion to Urban and Regional Studies*, edited by A. M. Orum, J. Ruiz-Tagle, & S. V. Haddock. New York: Routledge.
20. Neal, Z. P. (2020). Network communities as urban empires. Pp. 85 – 98 in *Urban Empires: Cities and Global Rulers in the New Urban World*, edited by Edward Glaeser, Karima Kourtif, & Peter Nijkamp. New York: Routledge.
19. Neal, Z. P. (2020). The spatial dimensions of social networks. Pp. 368 – 383 in *The Oxford Handbook of Social Networks*, edited by James Moody & Ryan Light. New York: Oxford University Press.
18. Andris, C. & Neal, Z. P. (2020). Development and governance of smart and connected communities. In *The International Encyclopedia of Geography: People, the Earth, Environment, and Technology*. New York: Wiley-Blackwell.
17. Neal, J. W., & Neal, Z. P. (2020). Network analysis in evaluation research. Pp. 196 – 213 in *Evaluation Research: Partnership Approaches for Community Change*, edited by Jim Cook & Ryan Kilmer. Thousand Oaks, CA: Sage.
16. Lobo, J., Alberti, M., Allen-Duman, M., Bettencourt, L.M.A., Beukes, A., Neal, Z., Pfeiffer, D., Shutters, S., Smith, M. E., Stokes, E., Strumsky, D., Wu, J. (2019). NSF Sustainable Urban Systems (SUS) Conference Report. Arizona State University.
15. Neal, Z. P. (2018). Analyzing cities as networks. In *Doing Global Urban Research*, edited by John Harrison & Michael Hoyler. Thousand Oaks, CA: Sage.
14. Neal, Z. P. (2017). The future of urban networks. Proceedings of the workshop on Leveraging Advanced in Social Network Thinking for National Security. *National Academies of Sciences, Engineering, and Medicine*.
13. Michigan School Program Information Project. (2017). Statewide findings report, Fall.
12. Michigan School Program Information Project. (2017). Statewide findings report, Winter.

11. Barry, J., Lawlor, J. A., Neal, Z. P. (2017). Increasing understanding of the Michigan Good Food Charter network. *Michigan State University, Center for Regional Food Systems*.
10. Michigan School Program Information Project. (2016). Statewide findings report, Fall.
9. Neal, Z. P. (2015). Reflections on *City and Community* and the future of urban studies. *City and Community*, 14, 242 – 244.
8. Neal, Z. P., & Lawlor, J. (2015). Agent based models. Pp. 197 – 206 in *Handbook of methodological approaches to community-based research: Qualitative, quantitative, and mixed methods*, edited by Jason LA & Glenwick DS. New York: Oxford University Press.
7. Neal, Z. P. (2014). Types of hub cities and their effects on urban creative economies. Pp. 203 – 222 In *Hub Cities and the Knowledge Economy*, edited by Conventz, S., Derudder, B., Thierstein, A., & Witlox, F. Ashgate.
6. Tomer, A., Puentes, R., & Neal, Z. P. (2012). Global gateways: international aviation in metropolitan America. *Brookings Institution, Metropolitan Policy Program*.
5. Neal, Z. P. (2012). Community. In *Oxford Bibliographies in Sociology*, edited by Manza, J. New York: Oxford University Press.
4. Neal, Z. P. (2011). Urban Networks. Pp. 911 – 915 in *Encyclopedia of Social Networking*, edited by Barnett GA. Thousand Oaks, CA: Sage.
3. Neal, Z. P. (2011). Proximity/Space. Pp. 721 – 723 in *Encyclopedia of Social Networking*, edited by Barnett GA. Thousand Oaks, CA: Sage.
2. Neal, Z. P. (2010). Public Realm. Pp. 623 – 27 in *Encyclopedia of Urban Studies*, edited by Hutchison R. Thousand Oaks, CA: Sage.
1. Neal, Z. P. (2010). Urban Space. Pp. 927 – 30 in *Encyclopedia of Urban Studies*, edited by Hutchison R. Thousand Oaks, CA: Sage.

BOOK REVIEWS, ESSAYS, AND OTHER PUBLICATIONS

13. Neal, Z. P. (2021). Review of *Multimodal Political Networks*, by David Knoke, Mario Diani, James Hollway, and Dimitris Christopoulos. *Journal of Social Structure*.
12. Neal, Z. P. (2017). Review of *Geomedia: Networked Cities and the Future of Public Space*, by Scott McQuire. *Canadian Journal of Urban Research*, 26, 64.
11. Neal, Z. P. (2016). Review of *Communities and Networks: Using Social Network Analysis to Rethink Urban and Community Studies*, by Katherine Guiffre. *Urban Studies*, 53, 841-844.
10. Neal, Z. P. (2015). Review of *Analyzing Social Networks*, by Stephen Borgatti, Martin Everett, and Jeffrey Johnson. *Journal of Mathematical Sociology*, 39, 221 – 222.
9. Neal, Z. P. (2014). Review of *Networked: The New Social Operating System*, by Lee Rainie and Barry Wellman. *City and Community*, 12, 412 – 414.
8. Neal, Z. P. (2014). Review of *Small Cities USA: Growth, Diversity, and Inequality*, by Jon R. Norman. *American Journal of Sociology*, 119, 1174 – 1176.
7. Neal, Z. P. (2013). Smart Connections. *RSA Journal*, Spring, 26 – 29.
6. Neal, Z. P. (2013). Review of *The Great Inversion and the Future of the American City*, by Alan Ehrenhalt. *City and Community*, 12, 280 – 282.
5. Neal, Z. P. (2012). Review of *International Handbook of Globalization and World Cities*, edited by Derudder B, Hoyler M, Taylor PJ, Witlox F. *Economic Geography*, 89, 101 – 102.

4. Neal, Z. P. (2012). Review of *Second Cities: Globalization and Local Politics in Manchester and Philadelphia*, by Jerome I. Hodos. *International Journal of Comparative Sociology*, 53, 237 – 239.
3. Neal, Z. P. (2010). Review of *A Neighborhood that Never Changes: Gentrification, Social Preservation, and the Search for Authenticity*, by Japonica Brown Saracino. *Contemporary Sociology*, 39, 557 – 559.
2. Neal, Z. P. (2009). Managing Editor's Farewell. *City and Community*, 8, 209.
1. Neal, Z. P. (2008). Normality. *Contexts*, 7(2), 4.

SOFTWARE

R packages on CRAN: Backbone, Incidentally
 Stata commands on SSC: Centpow, SCM, Airnet

EXTERNAL FUNDING

- | | |
|-------------|--|
| 2022 – 2023 | PI, Extracting the backbone of unweighted networks. National Science Foundation, \$108,970. |
| 2020 – 2023 | PI, Extracting the backbone of weighted networks. National Science Foundation, \$148,879. |
| 2019 – 2021 | PI, Extracting the backbone of bipartite projections. National Science Foundation, \$119,904. |
| 2018 – 2020 | PI (with J. W. Neal), Social Capital and Educator Social Networks as Facilitators in the Implementation of School-Based Evidence-Based Programs and Practices. Spencer Foundation, \$47,970. |
| 2018 – 2019 | PI (with M. Weber, I. Yanovitzky, & J. W. Neal), Knowledge Brokerage and Evidence-Informed Policymaking and Practitioner Decision Making to Improve Youth Outcomes. William T. Grant Foundation, \$48,899. |
| 2016 | PI (with B. Derudder), The Future of Urban Networks. Urban Studies Foundation, £20,000. |
| 2016 | PI, Michigan Modeling Collaborative. Society for Community Research and Action, \$1,250. |
| 2015 – 2017 | PI (with J. W. Neal), Examining how public school administrators acquire research evidence about mental health programming through social networks. National Institute of Mental Health, \$412,480. |
| 2014 – 2017 | PI (with J. W. Neal), Intermediaries' role in transferring research evidence from "producers" to "consumers": The case of school-based programs. William T. Grant Foundation, \$540,126. |
| 2013 – 2014 | PI (with J. W. Neal), Exploring school district administrators' acquisition and use of research evidence about instructional, health, and social skills programs. William T. Grant Foundation, \$24,998. |
| 2008 | PI, The seeds of collaboration: an examination of graduate student social networks. Midwest Sociological Society Endowment Grant, \$1,100. |

INVITED PRESENTATIONS & WORKSHOPS

22. Neal, Z. P. (2022). Extracting the backbone of bipartite projections: Comparing hard and soft constraints. *Oxford Mathematical Institute, Oxford University, May 10.*

21. Neal, Z. P. (2021). The backbone of the world city network. *Agglomeration and Social Networks (ANET) Lab, Hungarian Academy of Sciences*, October 29.
20. Neal, Z. P. (2021). What really matters in bipartite projections. *University of Manchester Mitchell Center*, March 24.
19. Neal, Z. P. (2021). What are communities in social networks. *Hong Kong Baptist University*, January 27.
18. Neal, Z. P. (2020). How much do gender and party matter when US representatives collaborate? *Max Planck Institute for Demographic Research*, August 18.
17. Neal, Z. P., Domagalski, R., & Sagan, B. (2020). Introduction to bipartite projections with backbone. *INSNA Sunbelt workshop*, July 13.
16. Neal, Z. P. (2019). Looking for political friends and enemies. *Pennsylvania State University Center for Social Data Analytics*, December 2, State College, PA.
15. Neal, Z. P. (2019). Looking for political friends and enemies. *MSU Department of Communication Colloquium Series*, November 8, East Lansing, MI.
14. Neal, Z. P. (2019). Haven't I seen you here before: Using proximity to measure networks in and between cities. *On the Edge Symposium Keynote, University of Western Australia*, July 18, Perth, AUSTRALIA.
13. Neal, Z. P. (2017). National urban policy: Shared space or divided space? *Advanced Brainstorm Carrefour (ABC) "Shared Spaces in Smart Places," Harvard University*. November 6, Cambridge, MA.
12. Neal, Z. P. (2017). The Future of Urban Networks. *Workshop on Leveraging Advances in Social Network Thinking for National Security Purposes, National Academies of Science, Engineering, and Medicine*. October 11, Washington, DC.
11. Neal, Z. P. (2017). Polarization: Do we need to "mind the gap"? *Freeman Award Lecture, International Network for Social Network Analysis (Sunbelt)*, June 2, Beijing, CHINA.
10. Neal, Z. P. & Lawlor, J. A. (2016). *Workshop on agent-based modeling, and zombies. Michigan Modeling Collaborative*, November 4, East Lansing, MI.
9. Neal, Z. P. (2016). Are cohesive, integrated communities possible? *Duke Network Analysis Center*, February 1, Durham, NC.
8. Neal, Z. P. (2014). Comparing real and possible interlocking world city networks. *ARL International Summer School on Global Urban Networks*, September 1, Loughborough, UK.
7. Neal, Z. P. (2014). Making big cities small: behavioral and environmental requirements for the formation of small world networks. *Tinbergen Institute Workshop*, May 19, Amsterdam, NETHERLANDS.
6. Neal, Z. P. (2013). Urban networks at micro- and macro-scales. *Swansea University*, May 15, Swansea, UK.
5. Neal, Z. P. (2013). Are diverse communities possible? *Royal Society for the Encouragement of Arts, Manufactures, and Commerce*, May 13, London, UK
4. Neal, Z. P. (2012). Measurement and metabolism in air traffic networks. *ASU Global Institute of Sustainability Workshop on Urban Networks, Sustainability, and Resilience*, November 1, Tempe, Arizona.
3. Neal, Z. P. (2012). Sustainability and formation of dynamic urban networks. *INSITE Workshop on General Processes of Networks' Emergence and Sustainability*, September 17, Venice, ITALY.

2. Neal, Z. P. (2011). Secret gardens: locating and understanding hidden public spaces. Great Cities/Ordinary Lives Conference, September 16 – 17, Chicago, IL.
1. Neal, Z. P. (2008). Why networks matter for cities: some historical and methodological considerations. City as System conference, Martin Prosperity Institute (University of Toronto), October 10, Toronto, ON.

CONFERENCE PRESENTATIONS

For a complete list, see: <https://www.zacharyneal.com/resources>

COURSES TAUGHT

Undergraduate

Agent-based Modeling
 Complex Organizations
 Introductory Statistics
 Urban Sociology
 Urban Social Networks

Graduate

Agent-based Modeling
 Globalization
 Network Analysis
 Research Methods
 Urban Social Networks
 Urban Sociology

STUDENTS SUPERVISED OR CO-SUPERVISED

In progress	Brian Brutzman, PhD in Social Psychology, MSU
2021	Rachel Domagalski, PhD in Mathematics, MSU
2019	Jennifer Lawlor, PhD in Community Psychology, MSU
2019	Camren Wilson, MA in Community Psychology, MSU
2018	Sophie Simon, MA in Urban Management & Development, Erasmus University
2017	Cortney Vandegriff, MA in Community Psychology, MSU

HONORS & AWARDS

2019	Carol Weiss Prize for “What is research? Educators’ conceptions and alignment with U.S. federal policies,” published in <i>Evidence and Policy</i>
2019	MSU Social Science Data Analytics Visualization Challenge, First Place for “Waves of Polarization in the US Senate”
2019	<i>Urban Studies</i> Best Article Award, Honorable Mention for “The urban metabolism of airline passengers: Scaling and sustainability”
2017	Early Career Award, American Psychological Association Division 27, Society for Community Research and Action (SCRA)
2016	Freeman Early Career Award, International Network for Social Network Analysis (INSNA)
2015	Distinguished Graduate Alumnus, University of Illinois at Chicago
2010	Outstanding Dissertation Award, University of Illinois at Chicago
2009	David P. Street Dissertation Prize for Engaged Sociology
2009	2 nd Place, Midwest Sociological Society Paper Competition for “From Central Places to Network Bases: The Emergence of a New Urban Hierarchy, 1900 – 2000.”

- 2006 2nd Place, Midwest Sociological Society Paper Competition for “Building a Blauurban Space”
- 2006 David P. Street Research Award for “Culinary Deserts, Gastronomic Oases: A Classification of U.S. Cities”

PROFESSIONAL SERVICE

- 2022 – Chair, Social-Personality Psychology program
- 2021 Program Committee, 10th International Conference on Complex Networks and their applications (Madrid)
- 2020 – Member, MSU College of Social Science Faculty Advisory Committee
- 2020 Organizer, INSNA Sunbelt symposium on bipartite networks
- 2020 Organizer, AAG Cities & Networks Miniconference
- 2020 Program Committee, 9th International Conference on Complex Networks and their applications (Madrid)
- 2020 Program Committee, 12th International Congress on Social Informatics (Pisa)
- 2019 Organizer, 2nd International Symposium on Urban Networks (Perth)
- 2019 Program Committee, 8th International Conference on Complex Networks and their applications (Lisbon)
- 2019 Organizer, Sunbelt Signed Ties Miniconference (Montreal)
- 2019 Program Committee, 11th International Congress on Social Informatics (Doha)
- 2019 Organizer, AAG Cities & Networks Miniconference
- 2019 Ecological-Community Psychology Brownbag Committee
- 2018 INSNA Freeman Award Committee
- 2017 – 2020 Psychology Department Undergraduate Curriculum Committee
- 2017 – 2019 Psychology Department Advisory Committee
- 2017 Organizer, 1st International Symposium on Urban Networks (Ghent)
- 2015 – 2018 SCRA Council of Educational Programs
- 2015 – 2016 Ecological-Community Psychology Search Committee
- 2014 – 2015 Ecological-Community Psychology Admissions Committee
- 2013 – 2014 Organizer, Global Urban Studies Program Workshop Series
- 2012 Jane Addams Article Award Committee, Community & Urban Sociology Section
- 2011 University Committee on Faculty Affairs, Michigan State University
- 2010 – 2011 Organizer, Global Urban Studies Program Workshop Series

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