Matthew Wigginton Conway
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June 4, 2020

Education

PhD Candidate, Geography September 2017–*present* (ABD)
School of Geographical Sciences and Urban Planning GPA: 4.00/4.00
Arizona State University
Tempe, AZ, USA
Advisor: Deborah Salon
Committee members: Deirdre Pfeiffer, Stewart Fotheringham, Michael van Eggermond

Master of Arts, Geography May 2019
School of Geographical Sciences and Urban Planning GPA: 4.00/4.00
Arizona State University
Advisor: Deborah Salon

Bachelor of Arts, Geography June 2014
University of California, Santa Barbara GPA: 4.00/4.00
Santa Barbara, CA, USA
Highest Honors, Distinction in the Major

Certificate of Achievement in Transfer Studies June 2012
Foothill College GPA: 3.99/4.00
Los Altos Hills, CA, USA

Awards and honors

- TOMNET University Transportation Center Student of the Year (2020), $1,000.
- Graduate College Travel Award, Arizona State University, $500 (2019).
- Third place, Tom McKnight Graduate Paper Award, California Geographical Society (2019), $100, for *Residential parking oversupply: A California case study*.
- Graduate Excellence Award, College of Liberal Arts and Sciences, Arizona State University (2019).
- Brazel Research Award, School of Geographical Sciences and Urban Planning, Arizona State University (2019), $600, for *Trends in taxi usage and the advent of ridehailing, 1995–2017: Evidence from the US National Household Travel Survey*.
- Graduate and Professional Student Association Award Group Travel Award (2019), Arizona State University, with A. Young, B. Goldberg, and D. Lucero, $3,550 (total), $700 (for MWC).

- Dwight David Eisenhower Transportation Graduate Fellow (2018, 2019), $10,000 (total).
- Honorable mention, NSF Graduate Research Fellowship Program (2017, 2018).
- Nexus (SNRF) Research Fellowship, School of Geographical Sciences and Urban Planning, Arizona State University (2017).
- First place, Tom McKnight Undergraduate Paper Award, California Geographical Society (2014), $150, for *Predicting the popularity of bicycle sharing stations: An accessibility-based approach using linear regression and random forests.*
- Grand prize, Tour PDX App Contest (with Chris Smith, 2012).

Employment

- Independent contractor for Conveyal (TransitCenter subcontract) supporting equity analysis of public transit fares (12/2019–present).
- Arizona State University, School of Geographical Sciences and Urban Planning. Graduate Research Assistant (8/2017–*present*). Tempe, AZ, USA.
- Conveyal. Project Manager and Software Developer (10/2014–7/2017). Washington, DC, USA.
- University of Chicago, Data Science for Social Good Program. Fellow (6/2014–8/2014). Chicago, IL, USA.
- University of California, Santa Barbara, Campus Learning Assistance Services. Writing Tutor (9/2013–6/2014). Santa Barbara, CA, USA.
- San Francisco Municipal Transportation Agency. Service Planning Intern (6/2013–8/2013). San Francisco, CA, USA.
- OpenPlans. Software Development Intern (6/2012–8/2012). New York, NY, USA.
- SAIC/Bay Area 511. Data Analyst Intern (6/2011–8/2011). Oakland, CA, USA.

Publications

Peer-reviewed articles

7. King, D. A., **Conway, M. W.**, & Salon, D. (2020). Do for-hire vehicles provide first mile/last mile access to transit? *Transport Findings*. doi:10.32866/001c.12872 (open access).
6. **Conway, M. W.** and Stewart, A. F. (2019). Getting Charlie off the MTA: A multiobjective optimization method to account for cost constraints in public transit accessibility metrics. *International Journal of Geographical Information Science* 33 (9): 1759–1787. doi:10.1080/13658816.2019.1605075 (also available as an open access postprint).
5. Salon, D., **Conway, M. W.**, Wang, K., & Roth, N. (2019). Heterogeneity in the relationship between biking and the built environment. *Journal of Transport and Land Use*, 12(1), 99–126. doi:10.5198/jtlu.2019.1350 (open access).

4. **Conway, M. W.**, Salon, D., & King, D. A. (2018). Trends in taxi use and the advent of ridehailing, 1995–2017: Evidence from the US National Household Travel Survey. *Urban Science*, 2(3), 79–23. doi:10.3390/urbansci2030077 (open access).

3. **Conway, M. W.**, Byrd, A., & van Eggermond, M. (2018). Accounting for uncertainty and variation in accessibility metrics for public transport sketch planning. *Journal of Transport and Land Use*, 11(1), 541–558. doi:10.5198/jtlu.2018.1074 (open access).

2. **Conway, M. W.**, Byrd, A., & van der Linden, M. (2017). Evidence-based transit and land use sketch planning using interactive accessibility methods on combined schedule and headway-based networks. *Transportation Research Record*, 2653, 45–53. doi:10.3141/2653-06 (also available as an open access postprint).

1. Green, B., Caro, A., **Conway, M. W.**, Manduca, R., Plagge, T., & Miller, A. (2015). Mining administrative data to spur urban revitalization. *Proceedings of the 21st ACM SIGKDD International Conference on Knowledge Discovery and Data Mining*.

Contributions to reports

2. RideKC Smartmoves 3.0 (2017). Contributor to Job Accessibility via Transit section. http://www.kcsmartmoves.org/plandocuments.htm

1. Planning for a healthier future: Incorporating health, equity and environmental performance measures in regional transportation plans (2016). Contributor to Access to Opportunities section. http://t4america.org/docs/planning-for-a-healthier-future-0616.pdf

Popular press

1. **Conway, M. W.** (2013). Cyberspace classrooms and E-Professors: One laptop learner considers the merits and downfalls of online classes. *Daily Nexus*, 5 March.

Presentations

Interviews

1. Discussion of trends in ridehailing and taxi usage (with D. Salon). 2018. Television interview on *Arizona Horizon*, Arizona PBS.

Conference presentations

17. **Conway, M. W.** (2020 *forthcoming*). Will zoning changes promote transport affordability? Land Use Regulation and Housing Affordability Conference, Manchester, NH, USA.

16. **Conway, M. W.** (2020). Residential self-selection and transit usage around new transit stations. Transportation Research Board Annual Meeting, Washington, DC, USA.

15. **Conway, M. W.**, Harness, N. (presenter), Mirtich, L. (presenter), Ross, A., Hong, S., and Salon, D. 2020. How important are attitudes in travel behavior models? Bridging Transportation Researchers Online Conference.

14. **Conway, M. W.** (2019). Residential parking oversupply: A California case study. Podium session at the California Geographical Society Annual Meeting, Big Bear Lake, CA, USA.

13. **Conway, M. W.** (2019). Whose right to the city? Just negotiations of the right to urban space. Podium session at the American Association of Geographers Annual Meeting, Washington, DC, USA.

12. Salon, D. (presenter) and **Conway, M. W.** (2019). Variation in the cost of car ownership in the United States. Podium session at the Transportation Research Board Annual Meeting, Washington, DC, USA.

11. **Conway, M. W.** and Stewart, A. F. (2019). Getting Charlie off the M.T.A.: A method for including cost constraints in public transit accessibility metrics. Poster presented at the Transportation Research Board Annual Meeting, Washington, DC, USA.

10. **Conway, M. W.**, Salon, D., and King, D. A. (2019). Trends in taxi usage and the advent of ridehailing, 1995-2017. Podium session at the Transportation Research Board Annual Meeting, Washington, DC, USA.

9. **Conway, M. W.** (2019). Utilization rates and fleet sizes for shared autonomous vehicles. Poster presented at the Transportation Research Board Annual Meeting, Washington, DC, USA.

8. **Conway, M. W.**, Salon, D., and King, D. A. (2018). Trends in taxi usage and the advent of ridehailing, 1995-2017. Podium session at the National Household Travel Survey (NHTS) Data for Transportation Applications Workshop, Washington, DC, USA.

7. Salon, D. (presenter), **Conway, M. W.**, Wang, K., and Roth, N. (2018). Heterogeneity in the relationship between biking and the built environment. Podium session at the International Association of Travel Behavior Research, Santa Barbara, CA, USA.

6. **Conway, M. W.**, Byrd, A., and van Eggermond, M. (2017). A statistical approach to comparing accessibility results: Including uncertainty in public transport sketch planning. Podium session at the World Symposium on Transport and Land Use Research, Brisbane, Queensland, Australia.

5. **Conway, M. W.**, Byrd, A., and van der Linden, M. (2017). Evidence-based transit and land use sketch planning using interactive accessibility methods on combined schedule and headway-based networks. Podium session at the Transportation Research Board Annual Meeting. Washington, DC, USA.

4. Green, B., Caro, A., **Conway, M. W.**, Manduca, R., Plagge, T., and Miller, A. (2015). Mining administrative data to spur urban revitalization. Poster and lightning talk presented at The 21^{st} ACM SIGKDD International Conference., New York, NY, USA.

3. **Conway, M. W.** (2014). Predicting the popularity of bicycle sharing stations: An accessibility-based approach using linear regression and random forests. Podium session at the Annual Meeting of the California Geographical Society, Los Angeles, CA, USA.

2. **Conway, M. W.** (2013). The death and life of great global cities: Jane Jacobs and global cities theory. Podium session at the Annual Meeting of the California Geographical Society, San Luis Obispo, CA, USA.

1. **Conway, M. W.** (2012). Measuring urban mobility and accessibility using OpenTripPlanner Analyst. Poster presented at the Annual Meeting of the California Geographical Society, Davis, CA, USA.

Panel membership

1. The path to implementation: Innovative tools to make your projects happen. (2016). New Partners for Smart Growth Conference. Portland, OR, USA.

Teaching experience

- Co-instructor, seminar on the relationships between land use and travel behavior (three undergraduates and one graduate student)
- English as a Second Language Teacher, Foundry United Methodist Church (2016–2017)
- Writing Tutor, Campus Learning Assistance Services, UC Santa Barbara (2013–2014)

Service activities

- Colloquium coordinator, Graduate Student Committee, School of Geographical Sciences and Urban Planning, Arizona State University (2017-2018).
- Subcommittee lead, Use Case chapter, Committee on the Transport Accessibility Manual.
- Reviewer for *Transportation, Transportation Research Part A, Journal of Transport Geography, Journal of Planning Education and Research, Journal of Transport and Land Use, Transportation Research Record, ISPRS International Journal of Geo-Information, Transportation Research Board,* and *World Symposium on Transport and Land Use Research.*

Open-source software contributions

- r5: Rapid public transit routing for research and analysis (major contributor)
- Conveyal Analysis: Public transportation scenario planning and accessibility analysis (major contributor)
- eqsormo: library to implement equilibrium sorting models in Python (author)
- OpenTripPlanner: Open-source public transit routing (contributor)
- statsmodels: Statistics and econometrics in Python (minor contributor)
- gtfsrdb: Real time transit data archiving (original author and major contributor)

Professional memberships

- American Association of Geographers
- American Planning Association
- Association of Collegiate Schools of Planning
- Transportation Research Board
- World Society for Transport and Land Use Research
- Zephyr Foundation

Short courses and professional development workshops attended

- Advanced Choice Modelling, with Stephane Hess and Thijs Dekker, University of Leeds. 7/2019.

Skills

- Statistical methods, including spatial statistics
- Network analysis
- Routing algorithms
- Machine learning
- Relational and non-relational databases
- GIS
- LaTeX
- Programming languages: Python, R, Java, Javascript