

Nate Wessel

University of Toronto
Department of Geography & Planning
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Education

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| PhD. Cand. | University of Toronto Department of Geography and Planning
Supervised by Dr. Steven Farber; Dissertation: <i>Accessibility Beyond the Schedule</i> ;
Expected graduation in summer 2019 |
| M.A. | University of Cincinnati Department of Geography
Supervised by Dr. Michael Widener; Thesis: <i>Discovering the Spacetime Dimensions of Schedule Padding and Delay From GTFS and Real-time Transit Data</i> |
| B.U.P. | University of Cincinnati College of Design, Architecture, Art & Planning
Bachelor of Urban Planning |

Teaching

As Course Instructor

Fall 2018 | *Essential Spatial Analysis* at U of T Scarborough

As Teaching Assistant

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| Spring 2019 | <i>GIS and Empirical Reasoning</i> , with Dr. JieLan Xu |
| Spring 2018 | <i>GIS and Empirical Reasoning</i> , with Dr. Glenn Brauen |
| Fall 2017 | <i>Essential Spatial Analysis</i> - Dr. Steven Farber |
| Fall 2017 | <i>Issues in Planning History, Thought, & Practice</i> , Dr. Anna Kramer |
| Spring 2015 | <i>Natural Disasters</i> , Dr. Honxing Liu |
| Fall 2014 | <i>People and the Environment I: Ecosystems and Population</i> , Dr. Wendy Eisner |
| Spring 2014 | <i>Introduction to Human Geography</i> , Dr. Michael Widener |
| Fall 2013 | <i>People and the Environment I: Ecosystems and Population</i> , Dr. Wendy Eisner |

Peer Reviewed Publications

- 2019 Nate Wessel and Steven Farber (2019). “On the Accuracy of Schedule-Based GTFS for Measuring Accessibility”. In: *Journal of Transport and Land Use*. DOI: [10.31235/osf.io/hzgpdp](https://doi.org/10.31235/osf.io/hzgpdp). URL: <https://osf.io/preprints/socarxiv/hzgpdp/>
- 2018 Nate Wessel and Steven Farber (2018). “Are Workers Attracted to Social Interaction Opportunities? A study of Face-to-Face Contact Opportunities by Occupation and Industry”. In: *Professional Geographer*. URL: <https://www.tandfonline.com/doi/abs/10.1080/00330124.2018.1466715>
- 2018 Rafael HM Pereira et al. (2018). “Distributional Effects of Transport Policies on Inequalities in Access to Opportunities in Rio De Janeiro”. In: *SSRN Electronic Journal*. DOI: [10.2139/ssrn.3040844](https://doi.org/10.2139/ssrn.3040844)
- 2017 Nate Wessel, Jeff Allen, and Steven Farber (2017). “Constructing a Routable Retrospective Transit Timetable from a Real-time Vehicle Location Feed and GTFS”. in: *Journal of Transport Geography* 62, pp. 92–97. URL: <http://saussy.ca/wp-content/uploads/2017/11/retro-GTFS-paper.pdf>
- 2017 Trudy Ledsham, Steven Farber, and Nate Wessel (2017). “Dwelling Type Matters: Untangling the Paradox of Intensification and Bicycle Mode Choice”. In: *Transportation Research Record: Journal of the Transportation Research Board* 2662, pp. 67–74. URL: <https://trrjournalonline.trb.org/doi/abs/10.3141/2662-08>
- 2016 Nate Wessel and Michael Widener (2016). “Discovering the space–time dimensions of schedule padding and delay from GTFS and real-time transit data”. In: *Journal of Geographical Systems*, pp. 1–15. ISSN: 1435-5949. DOI: [10.1007/s10109-016-0244-8](https://doi.org/10.1007/s10109-016-0244-8). URL: <http://dx.doi.org/10.1007/s10109-016-0244-8>
- 2015 Nate Wessel and Michael Widener (2015). “Rethinking the Urban Bike Map for the 21st Century”. In: *Cartographic Perspectives* 81, pp. 6–22. URL: <http://cartographicperspectives.org/index.php/journal/article/view/1243/1414>

Maps

- 2014 **Cincinnati Bike Map**
9,000 copies printed and distributed. Winner of the 2014 Student Map Award by the North American Cartographic Information Society.
- 2011 **Cincinnati Transit Map**
Three editions and a total of 56,000 maps printed. Featured in the *Design Activist’s Handbook: How to Change the World with Socially Conscious Design*. HOW Books, 2012. And in the 2012-13 CityBeat Annual Manual.

Professional Experience

2015 - pres.	Research Assistant for Dr. Steven Farber at the University of Toronto Worked on research on Social Interaction Potential, including Wessel and Farber 2018. Led the development of Itinerum tripbreaker codebase, overseeing undergrad development team. Contributed to numerous other projects.
2012 - 2015	Designer at Vesalius Design Worked in cartography, bespoke fashion design, web development, and data visualization.
2012	Office Automation Clerk , Bureau of Transportation Statistics, USDOT Developed data web API and demonstrated JavaScript applications. Led redesign of BTS.gov . Documented inner-office data flow/process from airlines to publicly available data product.
2011	Bike Mechanic , UC Office of Sustainability Maintained bike-share fleet and assisted students with repairs to their own bikes
2011	Planning Intern , MT + Associates Helped write urban development guidelines for Anderson Township, Ohio

Scholarships, Grants, & Awards

2015	\$140,000, Connaught International Scholarship
2015	\$10,000, People's Liberty Project Grant, for the development of a realtime transit app with Dr. Daniel Schleith
2014	\$5,000, Haile/US Bank Foundation grant for production costs of the Cincinnati Bike Map
2014	\$500, Winner of the Student Map and Poster Competition, North American Cartographic Information Society
2011	\$5,000, Haile/US Bank Foundation grant for production costs of the Cincinnati Bike Map
2011	\$2,500, PFLAG Cincinnati Scholarship
2011	\$1,000, Equality Cincinnati Courage Scholarship

Technical Skills

Languages	Python, R, L ^A T _E X, JavaScript, PHP, SQL
GIS	PostGIS, QGIS, GRASS, R, Python, ArcMap, etc.
Design	Inkscape, GIMP, R, QGIS, Adobe products
Web	HTML, CSS, Javascript, PHP, Wordpress, Drupal

Conference Presentations & Posters

2018	On the Accuracy of Schedule-Based GTFS for Measuring Accessibility, TRB, D.C.
2018	Transport Inaccessibility as a Barrier to Participation: The Case of Toronto's Suburban Towers, AAG, New Orleans
2018	On the Accuracy of Schedule-Based Transit Accessibility Measures, AAG, New Orleans (poster)
2017	Necropagnosia: A geography in blood, NACIS Montreal (Poster)
2016	De-emphasizing Deadends: Navigation in Today's Dendritic Cities. NACIS, Colorado Springs
2016	Social Interaction Potential and Employment Patterns Across US MSAs. NARSC, Minneapolis
2016	Social Interaction Potential and Employment Patterns Across US MSAs. NARSC, Minneapolis
2016	Constructing a Routable Transit Network from a Realtime Vehicle Location Feed. GIScience, Montreal
2015	Mapping Dead-ends: How and Where to Consider Noise Reduction. AAG, San Francisco
2015	A Nationwide Comparison of Racial Segregation in Metropolitan Regions: What can be Learned from a Social interaction approach. NARSC, Portland
2015	Discovering Transit Schedule Padding from Publicly Available Data. AAG, Chicago
2014	Rethinking the Urban Bike Map, NACIS, Pittsburgh
2014	The Cincinnati Bike Map, East Lakes AAG, Kalamazoo MI (poster)
2014	The Geometry of Access, TRB Annual Meeting, Washington DC. (poster)

Talks and Panels

2014	<i>The Future of Transit in Cincinnati</i> at the Mercantile Library; presentation and panel discussion
2011	<i>Cincinnati Transit Map Launch</i> at the Contemporary Arts Center; talk followed by panel discussion (audio)

Languages

English	Thoroughly fluent
Latin	Enough to be pedantic about etymology
French	Can pass for Canadian

Non-profit Leadership

2009 - 2012	Board Member GLSEN Greater Cincinnati
2009 - 2011	Volunteer Coordinator GLSEN Greater Cincinnati
2010 - 2012	Operations and Fundraising Committee Chair GLSEN Greater Cincinnati
2011 - 2012	Board Member Cincinnati Gay & Lesbian Community Center
2009	Volunteer Coordinator Cincinnati Pride Parade
2009 - 2010	Vice President Out On Campus (UC student group)

Media Coverage

2017	King St. pilot project has slashed travel times, statistics show , Toronto Star
2014	Mapping Cincinnati Could Help Cyclists Rediscover It , Cincinnati Business Courier
2014	University of Cincinnati Grad Student Blazes Trail with Detailed City Map for Cyclists , WCPO Cincinnati
2014	UC Student Creates a Map for Cincinnati Bikers , WVXU Cincinnati
2014	Five Transit Plans for the Future , Cincinnati Enquirer
2012	Wessel Goes to Washington , Metro Northsider
2011	Make Your Own Transit Maps! A Success Story , Human Transit
2011	UC Student Kickstarts Local Transit Map to Increase Ridership, Attract Businesses , Soapbox Cincinnati
2011	Little Donations Go a Long Way to Get Projects Done , Cincinnati Enquirer (print edition)