Antonio **Paez**

Professor

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About me

- I trained in civil engineering before being adopted into geography.
- My areas of interest include spatial analysis, spatial statistics, transportation, travel behavior, cities.
- Also, too, mathematics, computer languages, science fiction, poetry, and memes.
- I have been known to look professorial on occasion.
- At this rate my only hope of being recognized is as the most promising oldest researcher in my discipline.

Education

Tohoku Unversity   *Sendai, Japan*
PhD   *1997-2000*
- Thesis Title: Applied Statistical Analysis of Geographically Detailed Data with Emphasis on Spatial Effects

Tohoku Unversity   *Sendai, Japan*
M.Sc.   *1995-1997*
- Thesis Title: Evaluation of Environmental Changes Caused by Urbanization

Instituto Tecnológico y de Estudios Superiores de Monterrey   *Monterrey, Mexico*
B.Eng.   *1989-1993*

Current Status at McMaster

Full Professor in the School of Earth, Environment and Society since 2014. Tenured since 2007.

Employment History

Academic

School of Earth, Society and Environment, McMaster University   *Hamilton, Canada*
Professor   *July 2014-present*

School of Geography and Earth Sciences, McMaster University   *Hamilton, Canada*
Associate Professor   *July 2007-June 2014*

School of Geography and Geology, McMaster University   *Hamilton, Canada*
Assistant Professor   *July 2002-June 2007*

Center for Northeast Asian Studies, Tohoku University   *Sendai, Japan*
Research Fellow-Lecturer   *October 2000-March 2002*

Dept. of Civil Engineering, Instituto Tecnológico y de Estudios Superiores de Monterrey   *Monterrey, Mexico*
Instructor-Topographical Survey Laboratory   *January 1993-December 1993*

Editorial Activities

Editor-in-Chief   *January 2008-present*
Journal of Geographical Systems

Associate Editor   *November 2016-August 2019*
Papers in Regional Science

Scholarly and Professional Activities

Journal Referee

0.0.1 Number of Total Lifetime Reviews

326

0.0.2 Number of Reviews in 2024

0

Areas of Interest

Spatial data analysis and statistics; transportation modeling; travel behavior; health geography; Geographic Information Systems.

Research Impact

Fig. 1 is a summary of research impact according to Google Scholar.

Lifetime Publications

0.0.3 Books

1. Páez, A., & Boisjoly, G. (2023). *Discrete choice analysis with R*. Springer Cham. `https://doi.org/10.1007/978-3-031-20719-8`
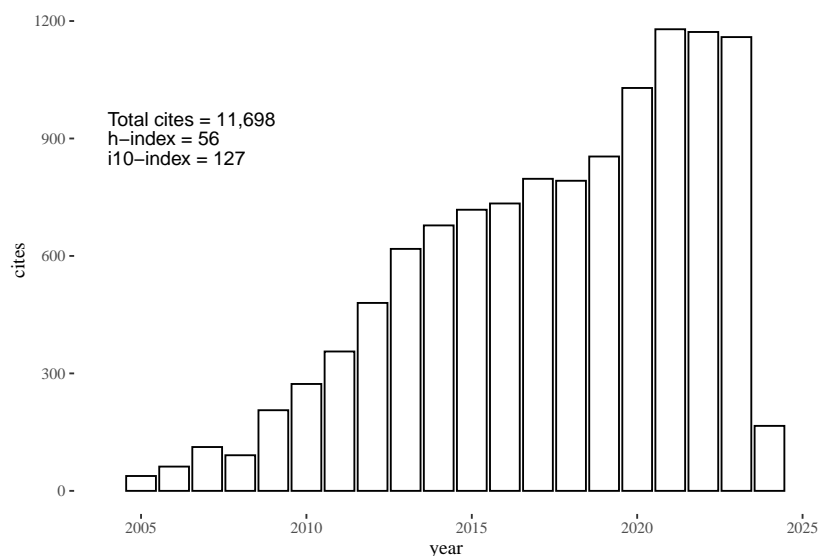
Figure 1: Citations per year according to Google Scholar

0.0.4 Edited Books

1. Franklin, R. S., Leeuwen, E. S. van, & Paez, A. (2018). *Population loss: The role of transportation and other issues*. Academic Press.

2. Kanaroglou, P., Delmelle, E., & Páez, A. (2015). *Spatial analysis in health geography*. Ashgate Publishing, Ltd.

3. Páez, A., Gallo, J., Buliung, R. N., & Dall'erba, S. (2009). *Progress in spatial analysis: Methods and applications*. Springer Science & Business Media.

0.0.5 Journal Articles (35 most recent)

1. Desjardins, E., Lam, J., Reynard, D., Collins, D., Waygood, E. O. D., & Paez, A. (2024). Framing active school travel in Ontario, or how spinach is good for you. *Transportation Research Part A: Policy and Practice*, *180*, 103953. `https://doi.org/10.1016/j.tra.2024.103953`

2. Rey-Blanco, D., Arbués, P., López, F. A., & Páez, A. (2024). Using machine learning to identify spatial market segments. A reproducible study of major Spanish markets. *Environment and Planning B: Urban Analytics and City Science*, *51*(1), 89–108. `https://doi.org/10.1177/23998083231166952`

3. Jamal, S., & Paez, A. (2024). Socio-economic and demographic differences in the impact of COVID-19 on personal travel in the global south. *Transport Reviews*, *44*(2), 272–298. `https://doi.org/10.1080/01441647.2023.2295377`

4. Soukhov, A., Páez, A., Higgins, C. D., & Mohamed, M. (2023). Introducing spatial availability, a singly-constrained measure of competitive accessibility [Journal Article]. *PLOS ONE*, *18*(1), e0278468. `https://doi.org/10.1371/journal.pone.0278468`

5. Soukhov, A., & Páez, A. (2023). TTS2016R: A data set to study population and employment patterns from the 2016 Transportation To-morrow Survey in the Greater Golden Horseshoe Area, Ontario, Canada [Journal Article]. *Environment and Planning B: Urban Analytics and City Science*, *50*(2), 556–563. `https://doi.org/10.1177/23998083221146781`

6. Santos, B. D. dos dos, Ribeiro, R. M., Paez, A., Kampel, M., Pinho, C. M. D. de, & Amaral, S. (2023). State-of-the-art and framework for identifying urban patterns by remote sensing data [Journal Article]. *Revista Brasileira de Cartografia*, *75*. `https://doi.org/10.14393/rbcv75n0a-67966`

7. Santos, B. D. dos, Pinho, C. M. D. de, Páez, A., & Amaral, S. (2023). Identifying urban and socio-environmental patterns of Brazilian Amazonian cities by remote sensing and machine learning [Journal Article]. *Remote Sensing*, *15*(12), 3102. `https://www.mdpi.com/2072-4292/15/12/3102`

8. Cheng, L., Wang, J., & Paez, A. (2023). Mobility of older adults and the living environment: introduction [Journal Article]. *Journal of Transport Geography*, *106*, 103525. https://doi.org/`https://doi.org/10.1016/j.jtrangeo.2022.103525`

9. Brum-Bastos, V., & Páez, A. (2023). Hägerstrand meets big data: Time-geography in the age of mobility analytics [Journal Article]. *Journal of Geographical Systems*, *25*(3), 327–336. `https://doi.org/10.1007/s10109-023-00421-0`

10. Whalen, K., & Paez, A. (2022). Reliability of the reflective learning framework for assessing higher-order thinking in geography and sustainability courses [Journal Article]. *Journal of Geography*, *121*(1), 18–33. `https://doi.org/10.1080/00221341.2021.2003848`

11. Sears, S., Moataz, M., Ferguson, M., Razavi, S., & Páez, A. (2022). Perceived barriers to the movement of goods in Canada: A grounded theory investigation [Journal Article]. *Transportation Research Part A: Policy and Practice*, *162*, 27–45. `https://doi.org/10.1016/j.tra.2022.05.011`

12. Paez, A. (2022). Reproducibility of research during COVID-19: Examining the case of population density and the basic reproductive rate from the perspective of spatial analysis [Journal Article]. *Geographical Analysis*, *54*(4), 860–880. `https://doi.org/10.1111/gean.12307`

13. Desjardins, E., Tavakoli, Z., Páez, A., & Waygood, E. O. (2022). Children's access to non-school destinations by active or independent travel: A scoping review. In *International Journal of Environmental Research and Public Health* (Electronic Article No. 19; Vol. 19). `https://doi.org/10.3390/ijerph191912345`

14. Desjardins, E., Higgins, C. D., Scott, D. M., Apatu, E., & Páez, A. (2022). Correlates of bicycling trip flows in hamilton, Ontario: Fastest, quietest, or balanced routes? [Journal Article]. *Transportation*, *49*(3), 867–895. `https://doi.org/10.1007/s11116-021-10197-1`

15. Desjardins, E., Higgins, C. D., & Páez, A. (2022). Examining equity in accessibility to bike share: A balanced floating catchment area approach. *Transportation Research Part D: Transport and Environment*, *102*, 103091. https://doi.org/`https://doi.org/10.1016/j.trd.2021.103091`

16. Demitiry, M., Higgins, C. D., Páez, A., & Miller, E. J. (2022). Accessibility to primary care physicians: Comparing floating catchments with a utility-based approach. *Journal of Transport Geography*, *101*, 103356. `https://doi.org/10.1016/j.jtrangeo.2022.103356`

17. Brown, M. J., Scott, D. M., & Páez, A. (2022). A spatial modeling approach to estimating bike share traffic volume from GPS data [Journal Article]. *Sustainable Cities and Society*, *76*, 103401. `https://doi.org/10.1016/j.scs.2021.103401`

18. Whalen, K., & Paez, A. (2021). Student perceptions of reflection and the acquisition of higher-order thinking skills in a university sustainability course [Journal Article]. *Journal of Geography in Higher Education*, *45*(1), 108–127. `https://doi.org/10.1080/03098265.2020.1804843`

19. Pereira, R. H. M., Braga, C. K. V., Servo, L. M., Serra, B., Amaral, P., Gouveia, N., & Paez, A. (2021). Geographic access to COVID-19 healthcare in Brazil using a balanced float catchment area approach [Journal Article]. *Social Science & Medicine*, *273*. `https://doi.org/10.1016/j.socscimed.2021.113773`

20. Paez, A., Lopez, F. A., Menezes, T., Cavalcanti, R., & Rocha Pitta, M. G. da. (2021). A spatio-temporal analysis of the environmental correlates of COVID-19 incidence in spain [Journal Article]. *Geographical Analysis*, *53*(3), 397–421. `https://doi.org/10.1111/gean.12241`

21. Páez, A., & Higgins, C. D. (2021). An examination of the accessibility implications of a pilot COVID-19 vaccination program in hamilton, ontario [Journal Article]. *Findings*. `https://doi.org/10.32866/001c.24082`

22. Paez, A. (2021). Open spatial sciences: An introduction [Journal Article]. *Journal of Geographical Systems*, *23*(4), 467–476. `https://doi.org/10.1007/s10109-021-00364-4`

23. Lira, B. M., & Paez, A. (2021). Do drivers dream of walking? An investigation of travel mode dissonance from the perspective of affective values [Journal Article]. *Journal of Transport & Health*, *20*. `https://doi.org/10.1016/j.jth.2021.101015`

24. Higgins, C. D., Paez, A., Kim, G., & Wang, J. (2021). Changes in accessibility to emergency and community food services during COVID-19 and implications for low income populations in hamilton, ontario [Journal Article]. *Social Science & Medicine*, *291*. `https://doi.org/10.1016/j.socscimed.2021.114442`

25. Eldeeb, G., Mohamed, M., & Paez, A. (2021). Built for active travel? Investigating the contextual effects of the built environment on transportation mode choice [Journal Article]. *Journal of Transport Geography*, *96*. `https://doi.org/10.1016/j.jtrangeo.2021.103158`

26. Doulabi, S., Hassan, H. M., Ferguson, M. R., Razavi, S., & Paez, A. (2021). Exploring the determinants of older adults' susceptibility to pedestrians' incidents [Journal Article]. *Accident Analysis and Prevention*, *155*. `https://doi.org/10.1016/j.aap.2021.106100`

27. Desjardins, E., Higgins, C. D., Scott, D. M., Apatu, E., & Paez, A. (2021). Using environmental audits and photo-journeys to compare objective attributes and bicyclists' perceptions of bicycle routes [Journal Article]. *Journal of Transport & Health*, *22*. `https://doi.org/10.1016/j.jth.2021.101092`

28. Desjardins, E., Apatu, E., Razavi, S. D., Higgins, C. D., Scott, D. M., & Paez, A. (2021). "Going through a little bit of growing pains": A qualitative study of the factors that influence the route choice of regular bicyclists in a developing cycling city [Journal Article]. *Transportation Research Part F-Traffic Psychology and Behaviour*, *81*, 431–444. `https://doi.org/10.1016/j.trf.2021.06.005`

29. de Arruda, R. G., de Menezes, T. A., dos Santos, J. M. A., Paez, A., & Lopes, F. (2021). The effect of politician denialist approach on COVID-19 cases and deaths [Journal Article]. *EconomiA*, *22*(3), 214–224. `https://doi.org/10.1016/j.econ.2021.11.007`

30. Victoriano, R., Paez, A., & Carrasco, J.-A. (2020). Time, space, money, and social interaction: Using machine learning to classify people's mobility strategies through four key dimensions [Journal Article]. *Travel Behaviour and Society*, *20*, 1–11. `https://doi.org/10.1016/j.tbs.2020.02.004`

31. Sarlas, G., Paez, A., & Axhausen, K. W. (2020). Betweenness-accessibility: Estimating impacts of accessibility on networks [Journal Article]. *Journal of Transport Geography*, *84*. `https://doi.org/10.1016/j.jtrangeo.2020.102680`

32. Romero, F., Gomez, J., Paez, A., & Manuel Vassallo, J. (2020). Toll roads vs. Public transportation: A study on the acceptance of congestion-calming measures in Madrid [Journal Article]. *Transportation Research Part a-Policy and Practice*, *142*, 319–342. `https://doi.org/10.1016/j.tra.2020.11.001`

33. Paez, A., Hassan, H., Ferguson, M., & Razavi, S. (2020). A systematic assessment of the use of opponent variables, data subsetting and hierarchical specification in two-party crash severity analysis [Journal Article]. *Accident Analysis and Prevention*, *144*. `https://doi.org/10.1016/j.aap.2020.105666`

34. Paez, A., Anjum, Z., Dickson-Anderson, S. E., Schuster-Wallace, C. J., Martin Ramos, B., & Higgins, C. D. (2020). Comparing distance, time, and metabolic energy cost functions for walking accessibility in infrastructure-poor regions [Journal Article]. *Journal of Transport Geography*, *82*. `https://doi.org/10.1016/j.jtrangeo.2019.102564`

35. Páez, A. (2020). Using google community mobility reports to investigate the growth of COVID-19 in the united states [Journal Article]. *Findings*. `https://doi.org/10.32866/001c.12976`

Invited Talks, Seminars, Workshops, Courses, and Panels (2022-2023) ___

Hägerstrand meets big data: time-geography in the age of mobility analytics *São José dos Campos, Brazil*
INSTITUTO NACIONAL DE PESQUISAS ESPACIAIS *December 4-2023*
- GEOINFO 2023, Keynote Speaker

Open Science for All *Hamilton, Canada*
MCMASTER REPRODUCIBILITEA *October 17-2023*
- Invited Talk, Speaker

Introducing spatial availability, a singly-constrained accessibility measure *Montréal, Canada*
POLYTECHIQUE MONTRÉAL *October 7-2023*
- Workshop, Instructor

Ciencia Abierta para Todos (Open Science for All) *Murcia, Spain*
UNIVERSIDAD DE MURCIA *June 27-2023*
- VIII Jornadas Doctorales, Keynote Speaker

Reality or wishful thinking: Network attributes of 15-minute neighbourhoods *Coimbra, Portugal*
UNIVERSIDADE DE COIMBRA *June 22-2023*
- NECTAR Joint Workshop Clusters 6 and 7 on Urban and Transport Planning for Sustainable Urban Living, Presenter

Profiling the 15-min pedshed from the perspective of network attributes *Montréal, Canada*
POLYTECHIQUE MONTRÉAL *June 14-2023*
- Colloque Annuel de la Chaire Mobilité, Presenter

How is active school travel (AST) framed in Ontario *New York City*
NEW YORK UNIVERSITY, CENTER FOR URBAN SCIENCE AND PROGRESS *April 7-2023*
- Invited Seminar, Presenter

Spatial availability: a way to measure accessibility to competitive opportunities *DeKalb, Illinois, USA*
NORTHERN ILLINOIS UNIVERSITY *February 17-2023*
- Invited Seminar, Presenter

Reproducible Research Workflow *Hamilton, Canada*
RESEARCH DATA MANAGEMENT COMMUNITY OF PRACTICE - MCMASTER UNIVERSITY *January 26-2023*
- Invited Talk, Speaker

An introduction to exploratory data analysis in R *Rimini, Italy*
ALMA MATER STUDIORUM - UNIVERSITÀ DI BOLOGNA IN RIMINI *November 14, 17, and 18-2022*
- Invited workshop, Instructor

An introduction to exploratory data analysis in R *L'Aquila, Italy*
GRAN SASSO SCIENCE INSTITUTE *June 10, 20, 24, 27 and 29-2022*
- Invited workshop, Instructor

Framing Active School Travel in Ontario, Canada *Montréal, Canada*
POLYTECHIQUE MONTRÉAL *May 19-2022*
- Colloque Annuel de la Chaire Mobilité, Presenter