

# Antonio Paez

## PROFESSOR

School of Earth, Environment and Society  
McMaster University

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## About me

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- 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

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### Tohoku University

PHD Sendai, Japan

1997-2000

- Thesis Title: Applied Statistical Analysis of Geographically Detailed Data with Emphasis on Spatial Effects

### Tohoku University

M.Sc. Sendai, Japan

1995-1997

- Thesis Title: Evaluation of Environmental Changes Caused by Urbanization

### Instituto Tecnológico y de Estudios Superiores de Monterrey

B.ENG. Monterrey, Mexico

1989-1993

## Current Status at McMaster

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

## Employment History

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### ACADEMIC

#### School of Earth, Society and Environment, McMaster University

PROFESSOR Hamilton, Canada

July 2014-present

#### School of Geography and Earth Sciences, McMaster University

ASSOCIATE PROFESSOR Hamilton, Canada

July 2007-June 2014

#### School of Geography and Geology, McMaster University

ASSISTANT PROFESSOR Hamilton, Canada

July 2002-June 2007

#### Center for Northeast Asian Studies, Tohoku University

RESEARCH FELLOW-LECTURER Sendai, Japan

October 2000-March 2002

#### Dept. of Civil Engineering, Instituto Tecnológico y de Estudios Superiores de Monterrey

INSTRUCTOR-TOPOGRAPHICAL SURVEY LABORATORY Monterrey, Mexico

January 1993-December 1993

## Editorial Activities

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### Editor-in-Chief

JOURNAL OF GEOGRAPHICAL SYSTEMS January 2008-present

### Associate Editor

PAPERS IN REGIONAL SCIENCE November 2016-August 2019

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| <b>Editorial Board Member</b><br>COMPUTERS, ENVIRONMENT, AND URBAN SYSTEMS               | January 2012-December 2017 |
| <b>Editorial Board Member</b><br>DECISION SUPPORT SYSTEMS                                | April 2014-March 2017      |
| <b>Editorial Board Member</b><br>ECONOMIC AND BUSINESS LETTERS                           | January 2014-present       |
| <b>Editorial Board Member</b><br>ENVIRONMENT AND PLANNING A                              | January 2010-December 2017 |
| <b>Editorial Board Member</b><br>GEOGRAPHICAL ANALYSIS                                   | 2018-present               |
| <b>Editorial Board Member</b><br>INGENIERÍA DE TRANSPORTE                                | 2015-present               |
| <b>Editorial Board Member</b><br>INTERNATIONAL JOURNAL OF GEOGRAPHIC INFORMATION SCIENCE | January 2019-present       |
| <b>Editorial Board Member</b><br>JOURNAL OF TRANSPORT GEOGRAPHY                          | 2018-present               |
| <b>Editorial Board Member</b><br>OPEN ENVIRONMENTAL JOURNAL                              | January, 2008-May, 2012    |
| <b>Editorial Board Member</b><br>OPEN GEOGRAPHY JOURNAL                                  | January, 2008-May, 2012    |
| <b>Editorial Board Member</b><br>OPEN URBAN STUDIES JOURNAL                              | January, 2008-May, 2012    |
| <b>Editorial Board Member</b><br>PAPERS IN REGIONAL SCIENCE                              | January 2015-December 2020 |
| <b>Editorial Board Member</b><br>TRANSPORTATION  | January 2012-present       |

## Scholarly and Professional Activities

### JOURNAL REFEREE

#### 0.0.1 Number of Total Lifetime Reviews

330

#### 0.0.2 Number of Reviews in 2024

4

## 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>

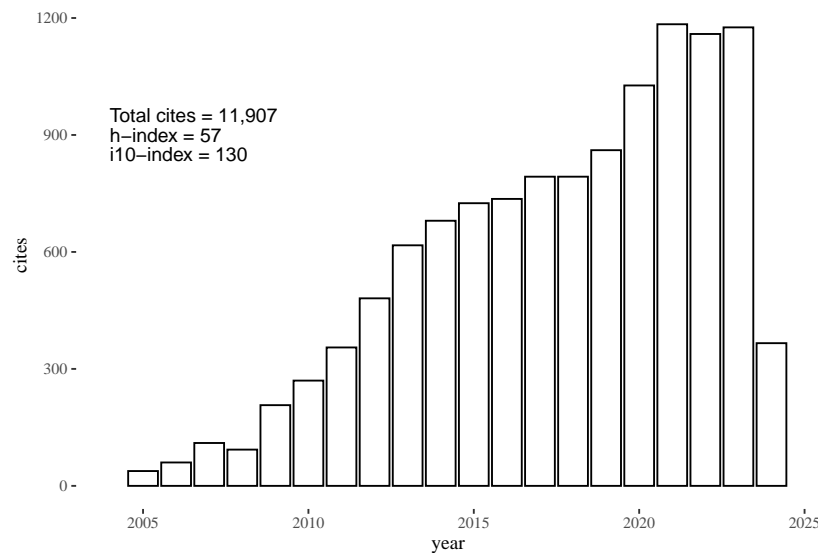


Figure 1: Citations per year according to Google Scholar

#### 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'ërba, 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. Soukhov, A., Tarriño-Ortiz, J., Soria-Lara, J. A., & Páez, A. (2024). Multimodal spatial availability: A singly-constrained measure of accessibility considering multiple modes. *PLOS ONE*, 19(2), e0299077. <https://doi.org/10.1371/journal.pone.0299077>
3. 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>
4. Jamal, S., & Paez, A. (2024). Exploring modal shift in non-active sustainable transport modes during the first wave of COVID-19 in bangladesh. *Multimodal Transportation*, 3(2), 100130. <https://doi.org/https://doi.org/10.1016/j.multra.2024.100130>
5. 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>
6. 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>
7. Soukhov, A., & Páez, A. (2023). TTS2016R: A data set to study population and employment patterns from the 2016 Transportation Tomorrow 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>
8. 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>
9. 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>
10. 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>

11. 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>
12. 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>
13. 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>
14. 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>
15. 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>
16. 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>
17. 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/10.1016/j.trd.2021.103091>
18. Demitry, 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>
19. 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>
20. 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>
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. 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>
23. 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>
24. 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>
25. 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>
26. 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>
27. 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>
28. 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>
29. 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>
30. 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>

31. 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]. *Economía*, 22(3), 214–224. <https://doi.org/10.1016/j.econ.2021.11.007>
32. 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>
33. 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>
34. 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>
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**

PLANNING AND TRANSPORT RESEARCH CENTRE, THE UNIVERSITY OF WESTERN AUSTRALIA

- John Taplin Memorial Lecture, Keynote Speaker

*Perth, Australia*

*March 21-2024*

### **Collaborative Reproducible Research using R and GitHub Illustrated with a Spatial Analysis Project**

BUSINESS DATA ANALYTICS, THE UNIVERSITY OF WESTERN AUSTRALIA

- Workshop, Instructor

*Perth, Australia*

*March 20 and 22-2024*

### **Introducing spatial availability, a singly-constrained accessibility measure**

KARLSRUHE INSTITUTE OF TECHNOLOGY-ITAS

- Workshop, Instructor

*Karlsruhe, Germany*

*February 20-2024*

### **Hägerstrand meets big data: time-geography in the age of mobility analytics**

INSTITUTO NACIONAL DE PESQUISAS ESPACIAIS

- GEOINFO 2023, Keynote Speaker

*São José dos Campos, Brazil*

*December 4-2023*

### **Open Science for All**

MCMASTER REPRODUCIBILI TEA

- Invited Talk, Speaker

*Hamilton, Canada*

*October 17-2023*

### **Introducing spatial availability, a singly-constrained accessibility measure**

POLYTECHIQUE MONTRÉAL

- Workshop, Instructor

*Montréal, Canada*

*October 7-2023*

### **Ciencia Abierta para Todos (Open Science for All)**

UNIVERSIDAD DE MURCIA

- VIII Jornadas Doctorales, Keynote Speaker

*Murcia, Spain*

*June 27-2023*

### **Reality or wishful thinking: Network attributes of 15-minute neighbourhoods**

UNIVERSIDADE DE COIMBRA

- NECTAR Joint Workshop Clusters 6 and 7 on Urban and Transport Planning for Sustainable Urban Living, Presenter

*Coimbra, Portugal*

*June 22-2023*

### **Profiling the 15-min pedshed from the perspective of network attributes**

POLYTECHIQUE MONTRÉAL

- Colloque Annuel de la Chaire Mobilité, Presenter

*Montréal, Canada*

*June 14-2023*

### **How is active school travel (AST) framed in Ontario**

NEW YORK UNIVERSITY, CENTER FOR URBAN SCIENCE AND PROGRESS

- Invited Seminar, Presenter

*New York City*

*April 7-2023*

### **Spatial availability: a way to measure accessibility to competitive opportunities**

NORTHERN ILLINOIS UNIVERSITY

- Invited Seminar, Presenter

*DeKalb, Illinois, USA*

*February 17-2023*

### **Reproducible Research Workflow**

RESEARCH DATA MANAGEMENT COMMUNITY OF PRACTICE - MCMASTER UNIVERSITY

- Invited Talk, Speaker

*Hamilton, Canada*

*January 26-2023*