

Elías Gálvez-Arango

Education

Stanford University | B.A. Urban Studies with Honors

2021

Minor in Modern Languages (Portuguese and Spanish)

Peer-Reviewed Articles

Gálvez-Arango, E. (2025). Access to public transportation at the regional scale: An analysis of bus services in Minas Gerais State, Brazil. *Case Studies on Transport Policy*, 19, 101348. <https://doi.org/10.1016/j.cstp.2024.101348>

Jennings, W. C., Gálvez-Arango, E., Prieto, A. L., & Boehm, A. B. (2020). CrAssphage for fecal source tracking in Chile: Covariation with norovirus, HF183, and bacterial indicators. *Water Research X*, 9, 100071. <https://doi.org/10.1016/j.wroa.2020.100071>

Kolar, M. A., Goh, A., Gálvez-Arango, E., Morris, B., Romano, A., Turley, S., Colello, S., Penniman, W., Boffa, J., Wang, C., Depaul, G., & Keene, K. (2019). Archaeoacoustics Fieldwork for Aural Heritage Conservation: Collaborative Distributed Sound-Sensing at Chavín de Huántar, Perú. *Change Over Time*, 9(2), 164–191. <https://doi.org/10.1353/cot.2019.0010>

Other Publications

Emmons, C., & Gálvez-Arango, E. (2025). ElectionGuide Codebook, Version 3. International Foundation for Electoral Systems. <https://electionguide.org/p/methodology/>.

Gálvez-Arango, E., Balbuena, N., & Aylward, B. (2022). WASH Access and its Determinants: Population Growth, Water Scarcity, and Foreign Aid. Mercy Corps Working Paper.

Gálvez-Arango, E. (2021). An Atlas of Urban Latin America. In *Stanford University Urban Studies Capstone Projects and Theses*. <https://purl.stanford.edu/bp765sr9968>

Selecting Comparison Districts. (2020). Stanford Program on Water, Health & Development. Conrad N. Hilton Foundation Safe Water Initiative Briefing Series. <https://water.stanford.edu/selecting-comparison-districts>.

Research Experience

- Research Fellow – Brazil* | Fulbright Program 2022
- Performed first statewide study of intermunicipal bus access in Brazil
 - Identified municipal characteristics associated with high or low bus access using spatial, demographic, economic data and non-parametric statistics
 - Reviewed academic literature, transportation law and policy documents

- Research Assistant* | Jenna Davis Research Group (Stanford Engineering) 2019-2020
- Collected and visualized infrastructure accessibility and poverty data in QGIS, Excel
 - Developed site selection criteria for multi-country piped water experiment
 - Designed maps and infographics for broad audience of international stakeholders

- Research Assistant* | Boehm Research Group (Stanford Engineering) 2019
- Mapped land use, informal settlement, and hydrologic resources in Santiago de Chile
 - Planned water quality sampling campaign in consultation with local stakeholders
 - Processed sample data and designed maps for journal article in *Water Research X*

- Research Assistant* | Salinas History Project - Dr. Carol McKibben 2018
- Analyzed census data with spatial statistics to identify residential segregation
 - Coordinated field visits and work assignments for team of 10 research assistants
 - Presented findings to Salinas City Council and Human Cities Expo

- Research Assistant* | Chavín de Huántar Archaeological Project 2018
- Excavated, identified, and organized artifacts throughout World Heritage Site
 - Designed and conducted acoustic pilot experiment in ceremonial plaza
 - Provided GIS support for specimen inventory and landslide preparedness project

Professional Experience

- Bus Performance Analyst* | Washington Metropolitan Area Transit Authority 2025 – present
- Analyzes time-series bus service and fleet data to identify performance trends
 - Conducts ad hoc quantitative analyses via SQL and R
 - Designs automated, user-friendly Power BI reports to inform agency leaders

- Democracy Data Officer* | International Foundation for Electoral Systems 2023 - 2025
- Analyzed survey data on democratic governance in R and electoral laws
 - Maintained global election database and tracked 120+ national elections each year
 - Created data visualizations (dashboards, apps, maps) and technical documentation
 - Liaised with donors, government and civil society partners, and database users

- Water Resources and WASH Intern* | Mercy Corps 2021-2022
- Analyzed secondary data on water services and foreign aid in 148 countries
 - Conducted hydrologic analysis of proposed well and dam projects in Jordan

- Provided GIS support: spatial analysis, cartography, QGIS tutorials

Conference Participation

Análise da Acessibilidade do Sistema de Ônibus Intermunicipal de Minas Gerais [Accessibility Analysis of the Intermunicipal Bus System of Minas Gerais]. Elías Gálvez-Arango & Daniela Antunes Lessa. ANPET Congresso de Pesquisa e Ensino em Transportes. *Poster Presentation*. Fortaleza, Brazil. November, 2022.

Mapping the Public Bus System of Minas Gerais, Brazil: Processing Difficult Datasets with OpenStreetMap. Elías Gálvez-Arango. OpenStreetMap State of the Map 2022. *Selected Poster Exhibition*. Virtual. August, 2022.

Awards and Grants

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| <i>Fulbright US Student Research Grant</i> Fulbright Commission in Brazil | 2022 |
| <i>Outstanding Thesis Presentation</i> Stanford Program on Urban Studies | 2021 |
| <i>Phi Beta Kappa</i> Stanford University | 2020 |
| <i>Stanford Major Grant</i> Stanford University | 2020 |
| <i>Chavín de Huántar Field Grant</i> Stanford Archaeological Center | 2018 |
| <i>General Henry H. Arnold Education Grant</i> Air Force Aid Society | 2017-2021 |

Service

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| Fulbright Applicant Mentor Stanford Office of Global Scholarships | 2022 – present |
| Model Scholar Selection Committee Stanford Program on Urban Studies | 2020 |
| Citizenship Exam Tutor Immigration Institute of the Bay Area | 2018 |

Computational Skills

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| Programming | R, SQL, Git, DAX |
| Geographic Information Systems | QGIS, ArcGIS, GeoDa, Google Earth |
| Data Visualization | Power BI, Excel, Looker Studio, ArcGIS Storymaps |

Languages

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| English | Native |
| Portuguese | Professional: read, write, listen, speak |
| Spanish | Professional: read, write, listen, speak |
| French | Professional: read, listen Intermediate: write, speak |