

ROWLAND AWADAGIN HERBERT-FAULKNER, PH.D

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PROFESSIONAL SUMMARY

Technology strategy and governance professional specializing in the evaluation and implementation of digital infrastructure. Combines technical analysis, institutional research, and stakeholder engagement to assess investment trade-offs, identify operational and governance risks, and inform decisions about technology adoption.

EXPERIENCE

University of California, Berkeley

Researcher

Berkeley, CA

2018-2025

- Led multidisciplinary research involving 50+ government and industry stakeholder interviews examining AI, digital twins, smart-city technologies, and data governance, identifying technical, organizational, and governance requirements affecting implementation.
- Assessed the institutional costs and risks of municipal cybersecurity adoption, identifying procurement, contracting, insurance, compliance, and staffing obligations that agencies must account for when evaluating and sustaining cyber risk management investments. Authored and published the findings in a white paper with the UC Berkeley Center for Long-Term Cybersecurity.
- Evaluated a proposed neighborhood traffic-calming intervention using regional-scale simulation, identifying a modeled 39% reduction in passthrough traffic and potential spillover effects; developed decision-relevant measures of equity and operational trade-offs to inform San José DOT's evaluation of traffic-management strategies.
- Conducted regional-scale simulation research on Bay Area transportation network using Python, R, and geospatial methods; translated modeled traffic redistribution into policy-relevant measures of neighborhood traffic exposure and potential safety and equity benefits. Authored a policy brief and research report and presented findings to San José DOT.
- Studied Metropolitan Transportation Commission regional policy frameworks in relation to local transportation plans, examining how municipal traffic-management decisions intersect with regional objectives and network-wide effects.
- Collaborated with computer scientists, transportation researchers, and public-sector practitioners to develop decision-relevant approaches to transportation-network analysis and local agency capacity.

DB Engineering and Consulting North America, Inc.

Analyst, Technical Consulting

San Francisco, CA

2025-2026

- Developed agreements and implementation guidance for major California passenger-rail initiatives, defining responsibilities across public and private stakeholders and supporting interagency coordination, infrastructure planning, and phased service expansion.
- Coordinated directly with Caltrans staff to identify and resolve project-data discrepancies, reconcile infrastructure information, and refine agency-specific decision-support dashboards.
- Modeled the San Diego Trolley network and analyzed service and operating alternatives to inform medium- and long-term capital decisions involving fleet requirements, infrastructure needs, and viable service frequencies.

Just Cities Institute

Project Manager (Fellow)

Berkeley, CA

2025

- Managed a seven-person cross-organizational research team comprising university researchers, undergraduate researchers, and a community partner; developed workplans, facilitated meetings and office hours, coordinated deliverables, and provided project updates to leadership for a CA Governor's Office-funded initiative.
- Co-authored research on East Oakland traffic safety and mobility justice, examining community concerns and the equity implications of transportation investments; contributed to published analysis of the East Bay Bus Rapid Transit corridor.

- Led a 30-interview program evaluation commissioned by the California Air Resources Board, synthesizing perspectives from state-agency staff, academics, and advocacy organizations into findings on CARB Research Division programs.
- Conducted temporal and geospatial analysis of encampment sweeps and presented findings to the Mayor of Oakland and public- and community-sector stakeholders, translating analysis into evidence supporting advocacy for protections for unhoused populations.
- Developed and executed the scope of work for a comparative study of freeway-relocation projects focused on social and physical restoration in West Oakland.

Compass Education Group	Larkspur, CA
<i>SAT/ACT Tutor, Proctor, Administrative support</i>	2022-Present

- Coordinates, plans, and conducts lessons with tutoring program managers, parents, and students
- Manages and administers in-person and remote standardized test sessions across multiple time zones
- Conducts in-person proctor training at testing sites

SELECTED PAPERS/PUBLICATIONS

Policy Brief: “Mobiliti—A New Tool to Guide Safer, More Equitable Traffic Management Strategies”, UC Berkeley Institute of Transportation Studies, co-authored with Jane Macfarlane, PhD., Karen Trapenberg Frick, PhD., and Joan L. Walker, PhD. September 2025. <https://bit.ly/4bWm8pb>

White Paper: “The Transaction Costs of Municipal Cyber Risk Management”, UC Berkeley Center for Long-Term Cybersecurity, published April 2024. <https://bit.ly/4c3iFV6>

SELECTED PRESENTATIONS AND MEDIA COVERAGE

2024 Intelligent Transportation Society of California (ITSCA) Annual Meeting: “Data-Driven Perspectives: An Exploration of the Impact of Local Transportation Management Strategies on Regional Traffic Dynamics”

“As Smart Cities Expand, So Do the Threats”, by Robert Lemos for Dark Reading, February 6, 2024. <https://www.darkreading.com/ics-ot-security/smart-city-ecosystems-face-cybersecurity-shortfall-as-urban-populations-grow>

EDUCATION

University of California, Berkeley	Berkeley, CA
<i>Ph.D. in City and Regional Planning</i>	2025
<i>Master of City Planning</i>	2018
<i>M.S. in Transportation Engineering</i>	2017
 Massachusetts Institute of Technology	 Cambridge, MA
<i>B.S. in Civil Engineering; concentration in Urban Studies and Planning</i>	2016