

AED40 – Geographic Information Science
Chairs' Report
January 6, 2025
5 minutes

Year in Review

- Co-sponsored Workshops
 - Synergizing Sensing and Artificial Intelligence Data into Digital Twin Models
 - Powering Change: Shaping the Future of Zero-Emission Bus Transportation
 - Artificial Intelligence–Empowered and Quantum Technologies for Transforming Transportation
 - Mixed Methods in Bicycle and Active Transport Equity and Safety Research
- Sponsored Event
 - Sensing Technologies, AED30(1), Joint Subcommittee of AED30, AED40
- Lectern Sessions
 - Advances in Geospatial Data Analytics
 - Geographic Information Systems in Traffic Flow Analysis
 - Toward Effective and Sustainable Data Management and Governance (co-sponsor)
- Poster Session
 - Transportation Research Board Minority Student Fellows (co-sponsor)
- We hold Monthly leadership calls
 - Welcome volunteers!
- No more Call for Papers at this time

Paper Review:

- Assessing Flood-Induced Accessibility Disruptions to Critical Facilities Using Remote Sensing and GIS: A Case Study of Yueyang City, China
- FlowHC: A Major Flow Trends Extraction Method Applied to Broad-Scale Mobility Data
- Combining Geospatial Tools and Traffic Models to Evaluate Flood Effects on Rural Transportation.
- Spatial Weight Matrices: A Scoping Review of Methods and Applications
- An Offline Map Matching Algorithm Based on Depth-First Search for Urban Networks: Travel Behavior Study Perspective*
- Identifying and Locating Roadway Intersections Using Third-Party Data

*Nominated for Pyke Johnson Award and recommended for publication

Newsletter:

- We hold monthly communications calls
 - Contact Derald (OST) Derald.Dudley@dot.gov to join!
- Newsletter is sent out monthly
- Send content to us early in the month to be considered

Committee Membership Rotation:

- Completed committee rotation in 2023
- Will need to address members from the same agency next time
- International members needed!

Focus Topics 2024-2026

- BIM/Linkage
- Planning*
- Geo-Enrichment of Real Time Data*
- Data Governance
- Research and Innovation*
- Safety and Analysis

*Leads needed

Write-ups in Attachments folder

Volunteers needed! (see [Volunteer for AED40](#))

Member Profile (myTRB)

Membership Rotation (1/3 will rotate off April 15th 2026)

Friends Rotation (2025)