

## DR. DANA (ROWAN) ROWANGOULD

Research Assistant Professor, Civil and Environmental Engineering  
University of Vermont, Burlington, VT  
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### EDUCATION

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**Ph.D., University of California, Davis,** Ecology Graduate Group (Environmental Science and Policy Emphasis), 2013.

**M.S., University of California, Davis,** Agricultural and Resource Economics (Environmental and Resource Economics Emphasis), 2009.

**B.S., Rice University,** Civil and Environmental Engineering (Environmental Engineering Emphasis), 2002. Honors: *cum laude*.

### PROFESSIONAL EXPERIENCE

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**Assistant Professor, University of Vermont.** Department of Civil and Environmental Engineering. Fall 2022 – Present.

**Research Assistant Professor, University of Vermont.** Department of Civil and Environmental Engineering. Fall 2019 – Summer 2022.

**Affiliate Assistant Professor, University of Washington.** Masters of Sustainable Transportation Program, Department of Civil and Environmental Engineering. Fall 2013 – Spring 2019.

**Co-Founder and Principal, Sustainable Systems Research, LLC.** June 2012 – Present.

**Post-doctoral scholar, University of California Davis.** Center for Regional Change. January 2014 – August 2014.

**Teaching Assistant, University of California Davis.** Civil and Environmental Engineering Department. January 2012 – June 2013. Courses taught:  
ECI 162: Transportation engineering and land use planning (lab section)  
Sustainable Design Academy

**Graduate Research Assistant, University of California Davis.** Dr. Deb Niemeier, Civil and Environmental Engineering Department. August 2005 – December 2011.

**Environmental Scientist, Groundwater Services, Inc.** Houston Texas. February 2002 – July 2004.

**Teaching Assistant, Rice University.** Environmental Engineering Department. Jan 2002 – May 2002. Course taught:

CEVE 412: Hydrology & Water Resource Engineering (lab section)

**Research Assistant, Rice University.** Dr. Phil Bedient, Environmental Engineering Department. June 2001 – December 2001.

**Research Assistant, Rice University.** Dr. Bill Llope, Physics Department. Fall 1999.

**Research Assistant, Florida State University.** Dr. Roy Odom, National High Magnetic Field Laboratory, Geochemistry Department. Summer 1997 and 1999.

## PEER REVIEWED JOURNAL ARTICLES

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- He, Qian, **Rowangould, D.**, Karner, A., Palm M., LaRue, S. (2022). Covid-19 pandemic impacts on essential transit riders: Findings from a U.S. survey. *Transportation Research Part D: Transport and the Environment*. 105, 103217
- Klumpenhower, W., Allen, J., Li, L., Liu, R., Robinson, M., Silva, D., Farber, S., Karner, A., **Rowangould, D.**, Shalaby, A., Buchanan, M., Higashide, S. (2021). A Comprehensive Transit Accessibility and Equity Dashboard. *Findings*. July.
- Karner, A., **Rowangould, D.** (2021) Access to Secure Ballot Drop-off Locations in Texas. *Findings*. May.
- Karner, A., London, J., **Rowangould, D.**, & Manaugh, K. (2020). From Transportation Equity to Transportation Justice: Within, Through, and Beyond the State. *Journal of Planning Literature*. 35 (4), 440-459
- Wu, Y. **D. Rowangould**, J.K. London, A. Karner. (2019). Modeling health equity in active transportation planning. *Transportation Research Part D: Transport and Environment* 67, 528-540.
- Rowangould, D.**, Rowangould, G., Craft E., Niemeier, D. (2019). Validating and Refining EPA's Traffic Exposure Screening Measure. *International Journal of Environmental Research and Public Health*. 16(1), 3.
- Rowangould, D.**, Rowangould, G., Niemeier, D. (2018) Evaluation of the Health Impacts of Rolling Back a Port Clean Trucks Program. *Transportation Research Record* 2672(11) 53-64.
- Rowangould, D.**, Karner, A., London, J. (2016). Identifying Environmental Justice Communities for Transportation Analysis. *Transportation Research Part A: Policy and Practice*, 88:151-162.
- Rowan, D.**, M. Eldridge, D. Niemeier. (2013). Incorporating Regional Growth into Forecasts of Greenhouse Gas Emissions From Project-Level Residential and Commercial Development. *Energy Policy*, 62:1288-1300.
- London, J. A. Karner, J. Sze, **D. Rowan**, G. Gambirazzio, D. Niemeier. (2013). Racing Climate Change: Collaboration and conflict in California's global climate change policy arena. *Global Environmental Change*. 23 (4), 791-799
- Rowan, D.** A. Karner, D. Niemeier. (2010). Miles per Gallon illusions and Corporate Average Fuel Economy distortions: When Even the Transport Experts Have Trouble. *Transportation Research Record: Journal of the Transportation Research Board*. February 2010, 2191: 8-15.
- Sze, J., G. Gambirazzio, A. Karner, **D. Rowan**, J. London, D. Niemeier. (2009). Best in Show? Climate and Environmental Justice Policy in California. *Environmental Justice*. December 2009, 2(4):179-184.
- Niemeier, D., **D. Rowan**. (2009). From kiosks to megastores: The evolving carbon market. *California Agriculture*. April 2009, 63(2): 96-103.

## SCHOLARLY PRESENTATIONS

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- Espeland, S., **Rowangould, D.** (2022). Traven Burdens in Rural US Households. *16<sup>th</sup> International Network on European Communications and Transport Activity Research (NECTAR) Conference*. Toronto, Canada. July 20 – 22, 2022.
- Karner, A., LaRue, S., Klumpenhower, W., **Rowangould, D.** (2022). Public transit agency responses to the Covid-19 pandemic in seven U.S. regions. *Transportation Research Board's 101<sup>st</sup> Annual Meeting*. Washington D.C. January 9 - 13, 2022.

## Dr. Dana Rowangould

- He, Q., Larue, S., **Rowangould, D.**, Palm, M., Karner, A. (2021). Covid-19 Impacts on Public Transit Riders: Findings from a US Survey. *Association of Collegiate Schools of Planning 61<sup>st</sup> Annual Conference*. Miami, FL / Virtual. October 7 – 9 and 21 – 23, 2021.
- Rowangould, D.**, He, Q., Larue, S., Karner, A., Palm, M. (2021). What happens to transit users during the Covid-19 pandemic? Findings from a US Survey. *Transportation Research Board Conference on Advancing Transportation Equity*. Virtual. September 8 – 10, 2021.
- Espeland, S., **Rowangould, D.** (2021). Mode-Constrained Travel: Characteristics, barriers, outcomes, and satisfaction of commuters using their non-preferred mode. *Transportation Research Board Conference on Advancing Transportation Equity*. Virtual. September 8 – 10, 2021.
- McCullough, S., Brozen, M., Douglas, G., Erasmus, S., Lee, D., Tinoco, A.M., **Rowangould, D.** (2021). Mobility Justice: Concepts and Applications. *Transportation Research Board Conference on Advancing Transportation Equity*. Virtual. September 8 – 10, 2021.
- Allen, J., Buchanan, M., Farber, S., Higashide, Karner, A., Klumpenhower, W., Li, L., Liu, R., Robinson, M., **Rowangould, D.**, Shalaby, A., Silva, D. (2021). TransitCenter Equity Pulse. *Transportation Research Board Conference on Advancing Transportation Equity*. Virtual. September 8 – 10, 2021.
- He, Q., Larue, S., **Rowangould, D.**, Palm, M., Karner, A. (2021). Covid-19 Impacts on Public Transit Riders: Findings from a US Survey. *Association of Collegiate Schools of Planning 61<sup>st</sup> Annual Conference*. Miami, FL / Virtual. October 7 – 9 and 21 – 23, 2021.
- He, Q., **Rowangould, D.**, Karner, A., Palm, M., Larue, S. (2021). The Impacts of the Covid-19 Pandemic on U.S. Transit Riders: Who left, and Who was Left Behind? *Bridging Transportation Researchers*. Virtual. August 5 - 6, 2021.
- Karner, A., London, J., **Rowangould, D.**, & Manaugh, K. (2021). Practical Strategies for Achieving Transportation Justice: Seeing Beyond State-Sponsored Approaches. *Transportation Research Board's 100<sup>th</sup> Annual Meeting*. Virtual. January 2021.
- D. Rowangould** (2020). A Justice-oriented approach to equitable transportation planning. *Invited presentation at the National Sustainable Transportation Center Caltrans Equity Workshop*. Virtual. November 16, 2020.
- Karner, A., London, J., **Rowangould, D.**, & Manaugh, K. (2020). Strategies for achieving transportation justice: Seeing beyond the state. *60<sup>th</sup> Annual Association of Collegiate Schools of Planning Annual Conference*, online, November 5 – 8, 2020.
- Lin, M. **Rowangould, D.** (2020), Evaluating changes in active travel in response to electric scooter sharing services in Oakland, CA. *Active Living Conference*. Orlando, FL. February 2 – 5, 2020
- Lin, M., **Rowangould, D.** (2019). Evaluating Modal Shift in Response to Electric Scooter Sharing Services in Oakland, California. *Transportation Research Board Specialty Conference on Health and Active Transportation*. Washington, D.C. December 11 – 12, 2019
- Wu, Y., Igbinedion, O., **Rowangould, D.**, London, J., Karner, A. (2019). Modeling neighborhood-level health outcomes of transportation plans. *Active Living Conference*. Charleston, S.C. February 17 – 20, 2019
- Rowangould, D.**, Rowangould, G., Niemeier, D. (2018) Evaluation of the Health Impacts of Rolling Back a Port Clean Trucks Program. *Transportation Research Board's 97<sup>th</sup> Annual Meeting*. Washington, DC. January 7-11, 2018.

## Dr. Dana Rowangould

- Wu, Y., **Rowangould, D.**, London, J., Karner, A. (2018) Modeling Health Equity in Active Transportation Planning. *Transportation Research Board's 97<sup>th</sup> Annual Meeting*. Washington, DC. January 7-11, 2018.
- Rowangould, D.**, Karner, A., London, J. (2015). Identifying Environmental Justice Communities for Transportation Analysis. *Transportation Research Board's 94<sup>th</sup> Annual Meeting*. Washington, DC. January 11-15, 2015.
- Karner, A., London, J., **Rowangould, D.**, Garoupa White, C., (2015). "Putting Data Into Action for Regional Equity in California's San Joaquin Valley." *Book Launch Forum: What Counts: Harnessing Data for America's Communities*. Davis, California. February 13, 2015.
- Rowangould, D.**, Niemeier, D. (2014). Smart growth policy and practice: Retrospective evaluation of residential development in the Sacramento region. *Transportation Research Board's 93<sup>rd</sup> Annual Meeting*. Washington, DC. January 12-16, 2014.
- Rowan, D.** (2012). Land Use Planning in Practice: A Retrospective Analysis of Greenhouse Gas Reduction and Regional Equity Objectives. *Presented to the Sacramento Metropolitan Air Quality Management District*. 6/6/12.
- Rowan, D.**, Karner, A. (2011). Moving toward equity: The ongoing struggle for environmental justice in California. Session co-organizer and moderator. *Interdisciplinary Graduate and Professional Symposium*, UC Davis, Davis, CA. April 23, 2011.
- Karner, A., **Rowan, D.**, London, J., Sze, J., Niemeier, D. (2009). Environmental justice, gender, and conflict in California climate policy. 4th *International Conference on Women's Issues in Transportation*. Irvine, CA, Oct. 27 – 30, 2009.
- Rowan, D.**, C. Kirk, V. Girn, K. Stasio, T. Stillwater, C. Vassilian, S. Gunda, T. Hsieh. (2009). Campus Energy Solutions: Innovations and Results from a Collaborative Program. *International Energy Program Evaluation Conference*. Portland, OR. August 12 – 14, 2009.
- Niemeier, D., J. Silvis, **D. Rowan**. (2007). Private Funding of High Profile Climate Change Skeptics: A Dense Network. *Energy Crossroads Conference, Roosevelt Institute*. Stanford, CA. March 1-2, 2007.
- Madani, K., **D. Rowan**, J. Lund. (2007). The Next Step in Central Valley Flood Management: Connecting Costs and Benefits. *Proceedings of the University Council on Water Resources Annual Conference*, Boise, ID. July 24-26, 2007.
- Newell, C.J., C.E. Aziz, S.K. Farhat, J.M. McDade, **D.L. Rowan**, D. Adamson, and J.B. Hughes. (2003). Low Volume Pulsed Hydrogen Biosparging in an Experimental Controlled Release System. *Battelle Seventh International In Situ and On-Site Bioremediation Symposium*. Orlando, FL. June 2-5, 2003.

## CONSULTING REPORTS

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- Sustainable Systems Research (2019). Evaluation of Vulnerability and Stationary Source Pollution in Houston. Prepared for Natural Resources Defense Council.
- Sustainable Systems Research (2018). China Shipping Terminal: Excess Emissions from Modified Final Environmental Impact Report Mitigations. Prepared for Natural Resources Defense Council.
- Sustainable Systems Research (2018). SDG&E Transportation Electrification SB 350: Medium, Heavy Duty Program. Prepared for EarthJustice.
- Sustainable Systems Research (2017). Evaluation of Electrification of Los Angeles Metropolitan Transportation Authority Buses. Prepared for EarthJustice.

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- Sustainable Systems Research (2017). Evaluation of Authorized and Unauthorized Point Source Emissions in the Manchester Neighborhood of Houston, Texas. Prepared for Natural Resources Defense Council.
- Sustainable Systems Research (2017). Review of the 2017 Albuquerque/Bernalillo County Community-Scale Air Toxics Monitoring and Risk Assessment Protocol. Prepared for New Mexico Environmental Law Clinic.
- Sustainable Systems Research (2017). Evaluation of the Port of New York / New Jersey Clean Trucks Program Rollback. Prepared for Coalition for Healthy Ports.
- Sustainable Systems Research (2015). Traffic Impacts of the Proposed Waste Transfer Station in Albuquerque, New Mexico. Prepared for Bernalillo County Commissioner Debbie O'Malley.
- Sustainable Systems Research (2015). Air Quality Impacts of Well Stimulation and Recommendations for the SB4 Draft Environmental Impact Report. 2015. Prepared for Natural Resources Defense Council.
- Sustainable Systems Research (2015). Southern California International Gateway (SCIG) Demographic Analysis. 2015. Prepared for Natural Resources Defense Council.
- Sustainable Systems Research (2015). The Honstein Oil Air Permit, Cumulative Risks, and Equity. Prepared for Southwest Organizing Project.
- Sustainable Systems Research (2014). Central New Mexico Climate Change Report: Transportation and Land Use Climate Resilience. Prepared for Ecosystem Management Inc.
- Sustainable Systems Research (2014). Review of the WesPac Pittsburg Energy Project Recirculated Draft Environmental Impact Report. Prepared for Natural Resources Defense Council.
- Sustainable Systems Research (2013). Kansas City, KS Community Mapping: Air Pollution and Environmental Justice. Prepared for Natural Resources Defense Council.
- Sustainable Systems Research (2013). Review of the Bayonne Bridge Navigational Clearance Program Draft Environmental Assessment: Air Quality and Environmental Justice Impacts of Induced Demand at the Port of NY/NJ. Prepared for Eastern Environmental Law Center and Natural Resources Defense Council.
- Sustainable Systems Research (2013). Port of NY/NJ Area Mapping: Air Pollution, Health, and Environmental Justice Communities. Prepared for Eastern Environmental Law Center and Natural Resources Defense Council.
- Sustainable Systems Research (2012). Review of the Summerhill Homes/Magee Ranch Draft Environmental Impact Report. Prepared for Save Our Creek.
- Sustainable Systems Research (2012). Danville General Plan Review. Prepared for Save Our Creek.
- Sustainable Systems Research (2012). Review of Transportation and Circulation Analysis in the Southern California International Gateway (SCIG) Project Recirculated Draft Environmental Impact Report. Prepared for Natural Resources Defense Council.
- Sustainable Systems Research (2012). Coal Dust and Rail: Impacts of Coal Transport from the Powder River Basin. Prepared for Natural Resources Defense Council.
- Sustainable Systems Research (2012). Review of the Transportation and Air Quality Analysis in the I-710 Draft Environmental Impact Report. Prepared for East Yard Communities for Environmental Justice and Natural Resources Defense Council
- Sustainable Systems Research (2012). Ports and Air Quality: Moving Toward Clean Cargo. Prepared for Natural Resources Defense Council.

D. Neimeier, **D. Rowan**, A. Karner. (2012). Evaluation of the Proposed Plan Bay Area Project Performance and Benefit Cost Assessment. Prepared for TransForm.

## OTHER REPORTS AND PUBLICATIONS

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Karner, A., **Rowangould, D.**, Levine, K., Alcorn, L., Situ, M., Kim, K., Kocatepe, A. (forthcoming). Accessibility measures in practice: Guidance for Transportation Agencies. Final Guidebook. Prepared for National Cooperative Highway Research Program, Project No. 08-121.

Karner, A., **Rowangould, D.**, Levine, K., Alcorn, L., Situ, M., Kim, K., Kocatepe, A. (forthcoming). Accessibility measures in practice: Guidance for Transportation Agencies. Final Report. Prepared for National Cooperative Highway Research Program, Project No. 08-121.

Dowds, J., **Rowangould, D.** (2021) Vermont Transportation Energy Profile. Transportation Research Center at the University of Vermont and Vermont Agency of Transportation.

**D. Rowangould**, Karner, A., Wu, Y., Igbinedion, O., London, J. (2019). Development of Fine-Grained Spatial Resolution for an Integrated Health Impacts Assessment Tool for the Sacramento Region. National Center for Sustainable Transportation. University of California, Davis.

Karner, A., **Rowangould, D.**, Wu, Y., Igbinedion, O., and London, J. (2017). Development and Application of an Integrated Health Impacts Assessment Tool for the Sacramento Region. National Center for Sustainable Transportation. University of California, Davis.

Karner, A., **D. Rowangould, D.**, London, J. (2016). We Can Get There From Here: New Perspectives on Transportation Equity. A White Paper from the National Center for Sustainable Transportation at the University of California, Davis.

Garibay, V., Seaton, P. (with technical assistance from **Rowangould, D.**, Karner, A., Rubin, V., Malekaflzali, S, Flegel, S., Bergstrom, D.) (2014). Health Impact Assessment: California's SB 375 and its Impact on Kern County's Disadvantaged Unincorporated Communities and Low Income Urban Neighborhoods.

Garibay, V., Seaton, P. (with technical assistance from **Rowangould, D.**, Karner, A., Rubin, V., Malekaflzali, S, Flegel, S., Bergstrom, D.) (2014). Health Impact Assessment: California's SB 375 and its Impact on Fresno County's Disadvantaged Unincorporated Communities and Low Income Urban Neighborhoods.

Karner, A., London, J., **Rowangould, D.**, and Garoupa-White, C. (2014). "Putting Data into Action for Regional Equity in California's San Joaquin Valley." What Counts: Harnessing Data for America's Communities. Federal Reserve Bank of San Francisco and the Urban Institute (eds.), pp. 272-276.

Heidersback, T., Helgestad, T., McKenna, A., Singh, K., **Rowangould, D.**, Niemeier, D. (2012). Climate Action Plan Technical Report: City of Woodland.

Heidersback, T., Helgestad, T., McKenna, A., Singh, K., **Rowangould, D.**, Niemeier, D. (2012). Climate Action Plan Technical Report: City of Winters.

Newell, C.J., J.A. Conner, **D.L. Rowan.** (2003). Groundwater Remediation Strategies Tool. American Petroleum Institute Publication Number 4730, December 2003.

## GRANTS

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- “NCHRP Project 08-159: How to Assess and Address Equity of Access to Essential Goods and Services” *National Cooperative Highway Research Program*. D. Rowangould (co-PI, UVM Lead). 2022 – 2024.
- “Development and Application of a Cost-Benefit Tool for Quantifying External Social Impacts of Small to Mid-Size Transportation Projects” *National Transportation Infrastructure Durability Center at University of Vermont*. D. Rowangould (co-PI). 2022 – 2024.
- “Health Equity and Community Design Technical Assistance Pilot” *Vermont Department of Health*. D. Rowangould (Key Personnel, UVM Lead). 2022 – 2023.
- “Evaluation of travel and the built environment in small and rural communities” *National Center for Sustainable Transportation at University of Vermont*. D. Rowangould (PI). 2022 – 2023.
- “Voting Accessibility and Voter Suppression: Building Capacity to Quickly Evaluate the Effects of Changes in Voting Locations” *Democracy Fund*. D. Rowangould (co-PI, UVM Lead). 2021 – 2022.
- “Traffic Safety Toolbox – Addressing Speeds” *Vermont Agency of Transportation*. D. Rowangould (PI). 2021 – 2022.
- “Evaluation of travel constraints and travel burdens in the US and in rural zero-car households” *National Center for Sustainable Transportation at University of Vermont*. D. Rowangould (PI). 2020 – 2022.
- “Effectiveness of Rectangular Rapid Flashing Beacons (RRFBs) at Mid-Block Crosswalks” *Vermont Agency of Transportation*. D. Rowangould (co-PI). 2020 – 2022.
- “Accessibility analysis to determine transit equity in major US Cities” *TransitCenter*. D. Rowangould (co-PI, UVM lead) 2020 – 2021.
- “NCHRP 08-121 Accessibility Measures in Practice: Guidance for Transportation Agencies” *National Cooperative Highway Research Program*. D. Rowangould (co-PI and SSR lead). 2019 – 2021.
- “Development of Fine-Grained Spatial Resolution for an Integrated Health Impacts Assessment Tool for the Sacramento Region” *UC Davis National Center for Sustainable Transportation*. D. Rowangould (Key Personnel and SSR lead). 2017 – 2018.
- “Development and Application of an Integrated Health Impacts Assessment Tool for Sacramento Transportation Plans” *UC Davis National Center for Sustainable Transportation*. D. Rowangould (co-PI and SSR lead). 2016 – 2017.
- “You Can Get There from Here: New Perspectives on Transportation Equity” *UC Davis National Center for Sustainable Transportation*. D. Rowangould (Key Personnel and SSR lead). 2015 – 2016.

## STUDENT MENTORING

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### Graduate, University of Vermont

Parsa Pezeshknejad (current), Ph.D., Advisor  
Sierra Espeland (current), M.S., Advisor  
Harrison Schukei (current), M.S., Advisor  
Stephen Montañó (2022), M.S., Comprehensive Comm. Member  
Erica Quallen (2022), M.S., Comprehensive Comm. Member

### Undergraduate, University of Vermont

Holly Foster (Summer 2022 – present), Research Assistant  
Julia LanzDuret-Hernandez (Summer 2022 – present), Research Assistant

## Dr. Dana Rowangould

Maisie Melican (Summer 2022 – present), Research Assistant  
Danica Dytioco (Spring 2022 - present), REU  
Aubrey Ferris (Summer 2021), Barrett Scholar  
Lindsay Navickis (Summer 2021), Research Assistant  
Sierra Espeland (Spring 2020 – Spring 2021), REU, NCST, and Honor's College Thesis Advisor  
Alex Reilly (Spring 2021), REU  
Anastasia Allen (Fall 2020 – Spring 2021), REU  
Sharwari Salvi (Fall 2020 – Spring 2021), REU  
Audrey Ladd (Spring 2020), REU  
Lauren Snow (Spring 2020), REU

### **Graduate, University of Washington**

Melody Lin (2019), “How have Mode Choice Behaviors Changed for E-Scooter Riders in Oakland?” MS Capstone Project Advisor  
Brad Reed (2017), “Addressing Sustainable Community Goals in Virginia: Scenario Planning at the Local Level.” MS Capstone Project Advisor  
Adrienne Mairs (2017), “Evaluation of Sustainable Transportation Performance Measures for Metro Vancouver Municipalities.” MS Capstone Project Advisor