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Assistant Professor (Teaching, Clinic, & Practice)
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Education

University of California, Berkeley <i>Ph.D., Energy and Resources</i>	2012 Berkeley, CA
University of California, Berkeley <i>M.S., Energy and Resources</i>	2008 Berkeley, CA
University of California, Berkeley <i>M.P.P., Goldman School of Public Policy</i>	2007 Berkeley, CA
Harvard University <i>A.B., Physics and Math</i>	2003 Cambridge, MA

Research, Policy, and Practice Experience

University of California, Berkeley, Turner Center for Housing Innovation <i>Associate Research Director</i>	2023–present Oakland, CA
Rocky Mountain Institute (RMI), US & Urban Transformation Programs <i>Senior Associate</i>	2020–2023 Oakland, CA
Energy + Environmental Economics (E3) <i>Consultant, Senior Consultant, & Managing Consultant</i>	2016–2020 San Francisco, CA
Lawrence Berkeley National Laboratory, Earth Sciences Division <i>Postdoctoral Fellow</i>	2014–2016 Berkeley, CA
Princeton University, Environmental Institute <i>Postdoctoral Fellow</i>	2012–2014 Princeton, NJ
Lawrence Berkeley National Laboratory, Earth Sciences Division <i>Graduate Student Researcher</i>	2008–2012 Berkeley, CA

Teaching Experience

University of California, Berkeley <i>Graduate Student Instructor</i>	2006–2008 Berkeley, CA
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- Physics 10, “Physics for Future Presidents,” Prof. Richard Muller: Spring 2006, Fall 2006, and Spring 2007.
- Energy and Resources 100, “Energy and Society,” Prof. Dan Kammen: Fall 2008.

Harvard University

Teaching Assistant

2003-2004
Cambridge, MA

- Science A-39, “Time,” Prof. Gary Feldman: Spring 2004.
- Science A-49, “Physics of Music,” Prof. Eric Heller: Spring 2004.
- Physics 11a, Introductory Classical Mechanics, Prof. Melissa Franklin: Fall 2003.

Awards

Harold T. White Prize for Excellence in the Teaching of Physics: Harvard University, 2004.

Masters Project Supervision

Rachel Strangeway, 2024. Supervised capstone project with Prof. Dan Chatman, subsequently published as Turner Center report “Aligning Housing with Climate Goals: The Importance of Measuring VMT” (below).

Publications

Peer-Reviewed Publications

Subin, Z. M., Lombardi, J., Muralidharan, R., Korn, J., Malik, J., Pullen, T., Wei, M., & Hong, T. (2024). US urban land-use reform: A strategy for energy sufficiency. *Buildings & Cities*, 5(1). <https://doi.org/10.5334/bc.434>

Lawrence, D. M., Fisher, R. A., Koven, C. D., et al. (2019). The Community Land Model Version 5: Description of New Features, Benchmarking, and Impact of Forcing Uncertainty. *Journal of Advances in Modeling Earth Systems*, 11(12), 4245–4287. <https://doi.org/10.1029/2018ms001583>

Mahone, A., **Subin, Z.**, Orans, R., Miller, M., Regan, L., Calviou, M., Saenz, M., & Bacalao, N. (2018). On the Path to Decarbonization: Electrification and Renewables in California and the Northeast United States. *IEEE Power and Energy Magazine*, 16(4), 58–68. <https://doi.org/10.1109/mpe.2018.2822865>

Liu, Y., Bisht, G., **Subin, Z. M.**, Riley, W. J., & Pau, G. S. H. (2015). A Hybrid Reduced-Order Model of Fine-Resolution Hydrologic Simulations at a Polygonal Tundra Site. *Vadose Zone Journal*, 15(2), 1–14. <https://doi.org/10.2136/vzj2015.05.0068>

Bohn, T. J., J. R. Melton, A. Ito, et al. “WETCHIMP-WSL: Intercomparison of Wetland Methane Emissions Models over West Siberia.” *Biogeosciences* 12, no. 11 (2015): 3321–49. <https://doi.org/10.5194/bg-12-3321-2015>

Frolking, S., Talbot, J., & **Subin, Z. M.** (2014). Exploring the relationship between peatland net carbon balance and apparent carbon accumulation rate at century to millennial time scales. *The Holocene*, 24(9), 1167–1173. <https://doi.org/10.1177/0959683614538078>

Stepanenko, V., Jöhnk, K. D., Machulskaya, E., Perroud, M., **Subin, Z.**, Nordbo, A., Mammarella, I., & Mironov, D. (2014). Simulation of surface energy fluxes and stratification of a small boreal lake by a

- set of one-dimensional models. *Tellus A: Dynamic Meteorology and Oceanography*, 66(1), 21389. <https://doi.org/10.3402/tellusa.v66.21389>
- Thiery, W., Stepanenko, V. M., Fang, X., Jöhnk, K. D., Li, Z., Martynov, A., Perroud, M., **Subin, Z. M.**, Darchambeau, F., Mironov, D., & Van Lipzig, N. P. M. (2014). LakeMIP Kivu: Evaluating the representation of a large, deep tropical lake by a set of one-dimensional lake models. *Tellus A: Dynamic Meteorology and Oceanography*, 66(1), 21390. <https://doi.org/10.3402/tellusa.v66.21390>
- Gu, H., Jin, J., Wu, Y., Ek, M. B., & **Subin, Z. M.** (2013). Calibration and validation of lake surface temperature simulations with the coupled WRF-lake model. *Climatic Change*, 129(3–4), 471–483. <https://doi.org/10.1007/s10584-013-0978-y>
- Koven, C. D., Riley, W. J., **Subin, Z. M.**, Tang, J. Y., Torn, M. S., Collins, W. D., Bonan, G. B., Lawrence, D. M., & Swenson, S. C. (2013). The effect of vertically resolved soil biogeochemistry and alternate soil C and N models on C dynamics of CLM4. *Biogeosciences*, 10(11), 7109–7131. <https://doi.org/10.5194/bg-10-7109-2013>
- Melton, J. R., Wania, R., Hodson, E. L., Poulter, B., Ringeval, B., Spahni, R., Bohn, T., Avis, C. A., Beerling, D. J., Chen, G., Eliseev, A. V., Denisov, S. N., Hopcroft, P. O., Lettenmaier, D. P., Riley, W. J., Singarayer, J. S., **Subin, Z. M.**, Tian, H., Zürcher, S., ... Kaplan, J. O. (2013). Present state of global wetland extent and wetland methane modelling: Conclusions from a model inter-comparison project (WETCHIMP). *Biogeosciences*, 10(2), 753–788. <https://doi.org/10.5194/bg-10-753-2013>
- Schuur, E. A. G., Abbott, B. W., Bowden, W. B., et al. (2013). Expert assessment of vulnerability of permafrost carbon to climate change. *Climatic Change*, 119(2), 359–374. <https://doi.org/10.1007/s10584-013-0730-7>
- Shi, M., Yang, Z.-L., Lawrence, D. M., Dickinson, R. E., & **Subin, Z. M.** (2013). Spin-up processes in the Community Land Model version 4 with explicit carbon and nitrogen components. *Ecological Modelling*, 263, 308–325. <https://doi.org/10.1016/j.ecolmodel.2013.04.008>
- Stepanenko, V. M., Martynov, A., Jöhnk, K. D., **Subin, Z. M.**, Perroud, M., Fang, X., Beyrich, F., Mironov, D., & Goyette, S. (2013). A one-dimensional model intercomparison study of thermal regime of a shallow, turbid midlatitude lake. *Geoscientific Model Development*, 6(4), 1337–1352. <https://doi.org/10.5194/gmd-6-1337-2013>
- Subin, Z. M.**, Koven, C. D., Riley, W. J., Torn, M. S., Lawrence, D. M., & Swenson, S. C. (2013). Effects of Soil Moisture on the Responses of Soil Temperatures to Climate Change in Cold Regions. *Journal of Climate*, 26(10), 3139–3158. <https://doi.org/10.1175/jcli-d-12-00305.1>
- Wania, R., Melton, J. R., Hodson, E. L., Poulter, B., Ringeval, B., Spahni, R., Bohn, T., Avis, C. A., Chen, G., Eliseev, A. V., Hopcroft, P. O., Riley, W. J., **Subin, Z. M.**, Tian, H., van Bodegom, P. M., Kleinen, T., Yu, Z. C., Singarayer, J. S., Zürcher, S., ... Kaplan, J. O. (2013). Present state of global wetland extent and wetland methane modelling: Methodology of a model inter-comparison project (WETCHIMP). *Geoscientific Model Development*, 6(3), 617–641. <https://doi.org/10.5194/gmd-6-617-2013>
- Bonfils, C. J. W., Phillips, T. J., Lawrence, D. M., Cameron-Smith, P., Riley, W. J., & **Subin, Z. M.** (2012). On the influence of shrub height and expansion on northern high latitude climate. *Environmental Research Letters*, 7(1), 015503. <https://doi.org/10.1088/1748-9326/7/1/015503>
- Meng, L., Hess, P. G. M., Mahowald, N. M., Yavitt, J. B., Riley, W. J., **Subin, Z. M.**, Lawrence, D. M., Swenson, S. C., Jauhiainen, J., & Fuka, D. R. (2012). Sensitivity of wetland methane emissions to model assumptions: Application and model testing against site observations. *Biogeosciences*, 9(7), 2793–2819. <https://doi.org/10.5194/bg-9-2793-2012>
- Subin, Z. M.**, Murphy, L. N., Li, F., Bonfils, C., & Riley, W. J. (2012). Boreal lakes moderate seasonal and diurnal temperature variation and perturb atmospheric circulation: Analyses in the Community

- Earth System Model 1 (CESM1). *Tellus A: Dynamic Meteorology and Oceanography*, 64(1), 15639. <https://doi.org/10.3402/tellusa.v64i0.15639>
- Subin, Z. M.**, Riley, W. J., & Mironov, D. (2012). An improved lake model for climate simulations: Model structure, evaluation, and sensitivity analyses in CESM1. *Journal of Advances in Modeling Earth Systems*, 4(1). <https://doi.org/10.1029/2011ms000072>
- Tang, J. Y., W. J. Riley, C. D. Koven, and **Z. M. Subin**. “CLM4-BeTR, a Generic Biogeochemical Transport and Reaction Module for CLM4: Model Development, Evaluation, and Application.” *Geoscientific Model Development* 6, no. 1 (2013): 127–40. <https://doi.org/10.5194/gmd-6-127-2013>
- Riley, W. J., **Subin, Z. M.**, Lawrence, D. M., Swenson, S. C., Torn, M. S., Meng, L., Mahowald, N. M., & Hess, P. (2011). Barriers to predicting changes in global terrestrial methane fluxes: Analyses using CLM4Me, a methane biogeochemistry model integrated in CESM. *Biogeosciences*, 8(7), 1925–1953. <https://doi.org/10.5194/bg-8-1925-2011>
- Subin, Z. M.**, Riley, W. J., Jin, J., Christianson, D. S., Torn, M. S., & Kueppers, L. M. (2011). Ecosystem Feedbacks to Climate Change in California: Development, Testing, and Analysis Using a Coupled Regional Atmosphere and Land Surface Model (WRF3–CLM3.5). *Earth Interactions*, 15(15), 1–38. <https://doi.org/10.1175/2010ei331.1>

Reports

- Subin, Zack**, Aaron Barrall, and Quinn Underriner. (2026, Aug). Transportation Impacts of California Housing Plans. *Terner Center*. <https://ternercenter.berkeley.edu/blog/projected-transportation-impacts-of-california-housing-plans/>
- Walter, E., **Subin, Z.**, Elkind, E., & Buddhavarapu, S. (2026). Housing Solutions for Climate and Equity – Literature Review. *UC Berkeley Center for Law, Energy, and the Environment*. <https://www.law.berkeley.edu/research/clee/research/land-use/urban-infill/housing-literature-review/>
- Subin, Zack**. (2026). Issue Brief: Housing and Climate. *UC Berkeley Center for Law, Energy, and the Environment*. <https://www.climatevote.org/s/Housing-and-Climate-March-13.pdf>
- Dong, Hongwei, Carolina Reid, **Zack Subin**, and Quinn Underriner. (2025). The California Home Insurance Challenge in Eight Charts. *Terner Center*. <https://ternercenter.berkeley.edu/blog/the-california-home-insurance-challenge-in-eight-charts/>
- Strangeway, R., & **Subin, Z.** (2025). Aligning Housing with Climate Goals: The Importance of Measuring VMT. *Terner Center*. <https://ternercenter.berkeley.edu/research-and-policy/aligning-housing-with-climate-goals-the-importance-of-measuring-vmt/>
- Subin, Z.**, & Underriner, Q. (2025, May 22). Building Housing in Walkable Neighborhoods: Are U.S. Cities and States Making Progress? *Terner Center*. <https://ternercenter.berkeley.edu/blog/building-housing-in-walkable-neighborhoods-are-u-s-cities-and-states-making-progress/>
- Korn, J., Lombardi, J., Muralidharan, R., **Subin, Z.**, Zetkulis, A., House, H., & Nanavatty, R. (2024, February 16). Why State Land Use Reform Should Be a Priority Climate Lever for America. *RMI*. <https://rmi.org/why-state-land-use-reform-should-be-a-priority-climate-lever-for-america/>

- Reid, C., **Subin, Z.**, & McCall, J. (2024). *Housing + Climate Policy: Building Equitable Pathways to Sustainability and Affordability*. Turner Center for Housing Innovation.
<https://turnercenter.berkeley.edu/research-and-policy/climate-housing-overview/>
- Subin, Z.** (2024a, March 12). Understanding the Role of New Housing in Reducing Climate Pollution. *Turner Center*.
<https://turnercenter.berkeley.edu/research-and-policy/role-of-new-housing-in-reducing-climate-pollution/>
- Subin, Z.** (2024b, October 9). How much can new housing contribute to state climate action? *Turner Center*.
<https://turnercenter.berkeley.edu/blog/how-much-can-new-housing-contribute-to-state-climate-action/>
- Bradbury, J., **Subin, Z.**, Holland, B., & Levandowski, R. (2023, March 24). Issue Brief: States Are in the Driver's Seat on Transportation Carbon Pollution - Georgetown Climate Center. *Georgetown Climate Center*. <https://www.georgetownclimate.org/blog/states-in-the-driver-eyes-seat.html>
- Corvidae, J., Iyer, N., Aggarwal, A., **Subin, Z.**, Clark-Sutton, K., & Jaglom-Kurtz, W. (2023, February 6). Five Key Climate Solutions. *RMI*. <https://rmi.org/five-key-climate-solutions/>
- Holland, B., **Subin, Z.**, Kay, D., & Grunwald, B. (2023). *Urban Land Use Reform*. *RMI*.
<https://rmi.org/insight/urban-land-use-reform/>
- Moravec, M., Perkins, H., & **Subin, Z.** (2023, April 17). Analysis: Minnesotans Would Save up to \$91 Billion from Climate-Smart Transportation. *RMI*.
<https://rmi.org/analysis-minnesotans-would-save-up-to-91-billion-from-climate-smart-transportation/>
- Subin, Z.**, Holland, B., & Veysey, D. (2023, April 5). A Fork in the Road: States Will Determine the Future of US Transportation Pollution. *RMI*.
<https://rmi.org/states-will-determine-the-future-of-us-transportation/>
- Clark-Sutton, K., Corvidae, J., Glassman, J., Jaglom-Kurtz, W., **Subin, Z.**, Iyer, N., Bourgoïn, C., & Aggarwal, A. (2022, June 30). To Help US Reach Climate Goals, Front-Runner States Are Setting Examples for Others to Follow. *RMI*.
<https://rmi.org/climate-goals-states-are-setting-for-others-to-follow/>
- Subin, Z.**, & Zetkovic, A. (2022). *Good Housing Policy is Good Climate Policy* (Housing Underproduction in the U.S.). Up for Growth.
https://upforgrowth.org/wp-content/uploads/2022/09/CLIMATE_Good-Housing-Policy.pdf
- Ashmoore, O., Orvis, R., Clark-Sutton, K., Shepard, J., **Subin, Z.**, & Iyer, N. (2021a). *Colorado Energy Policy Simulator Insights: Current Emissions Trajectory, 1.5°C Scenario*. Energy Innovation.
<https://energyinnovation.org/report/colorado-energy-policy-simulator-insights-current-emissions-trajectory-1-5c-scenario/>
- Ashmoore, O., Orvis, R., Clark-Sutton, K., Shepard, J., **Subin, Z.**, Iyer, N., & Rowland, L. (2021b). *Louisiana Energy Policy Simulator Insights: Current Emissions Trajectory, NDC Scenario*. Energy Innovation.
<https://energyinnovation.org/report/louisiana-energy-policy-simulator-insights-current-emissions-trajectory-ndc-scenario/>

- Ashmoore, O., Orvis, R., **Subin, Z.**, & Shah, A. (2021). *Minnesota Energy Policy Simulator Insights: Current Emissions Trajectory, 1.5°C Scenario*. Energy Innovation.
<https://energyinnovation.org/report/minnesota-energy-policy-simulator-insights-current-emissions-trajectory-1-5c-scenario/>
- Orvis, R., Ashmoore, O., **Subin, Z.**, Iyer, N., & Shepard, J. (2021). *Nevada Energy Policy Simulator Insights: Current Emissions Trajectory, 1.5°C Scenario*. Energy Innovation.
<https://energyinnovation.org/report/nevada-energy-policy-simulator-insights-current-emissions-trajectory-1-5c-scenario/>
- Rowland, L., **Subin, Z.**, & Holland, B. (2021, April 21). If You Build It, the Cars (and the Pollution) Will Come. RMI. <https://rmi.org/if-you-build-it-the-cars-and-the-pollution-will-come/>
- Subin, Z.** (2021, June 29). Build Mixed-Income Housing in Wealthy Urban Neighborhoods. RMI.
<https://rmi.org/building-mixed-income-housing-in-wealthy-urban-neighborhoods-can-improve-climate-and-equity/>
- Subin, Z.**, Teplin, C., & Massey-Green, T. (2021, April 27). What Is Needed to Meet US Climate Commitments. RMI. <https://rmi.org/what-is-needed-to-meet-us-climate-commitments/>
- Teplin, C., **Subin, Z.**, Corvidae, J., Guccione, L., Hansen, L., Jhaveri, K., Mulvaney, K., & Rea, J. (2021). *Scaling US Climate Ambitions to Meet the Science and Arithmetic of 1.5°C Warming*. RMI.
<https://rmi.org/insight/scaling-us-climate-ambitions/>
- Aas, D., Mahone, A., **Subin, Z.**, Kinnon, M. M., Lane, B., & Price, S. (2020). *The Challenge of Retail Gas in California's Low-Carbon Future*. California Energy Commission.
<https://www.energy.ca.gov/sites/default/files/2021-06/CEC-500-2019-055-F.pdf>
- Mahone, A., **Subin, Z.**, Mantegna, G., Loken, R., Kolster, C., & Lintmeijer, N. (2020). *Achieving Carbon Neutrality in California PATHWAYS Scenarios Developed for the California Air Resources Board*. California Air Resources Board.
<https://ww2.arb.ca.gov/resources/documents/achieving-carbon-neutrality-california-final-report-e3>
- Orvis, R., & **Subin, Z.** (2020). *Virginia Energy Policy Simulator Insights: Virginia Clean Economy Act, 1.5°C Pathway Scenario*. Energy Innovation.
<https://energyinnovation.org/report/virginia-energy-policy-simulator-insights-virginia-clean-economy-act-1-5c-pathway-scenario/>
- Subin, Z.** (2020, July 30). Building Urbanism into Climate Policy. RMI.
<https://rmi.org/building-urbanism-into-climate-policy/>
- Subin, Z.**, De Moor, G., Gold-Parker, A., Loken, R., Kolster, C., Bharadwaj, S., & Clark, T. (2020). *Appendix B: Literature Review of Economy-Wide Deep Decarbonization and Highly Renewable Energy Systems*. New York State Energy Research and Development Authority.
<https://climate.ny.gov/-/media/Project/Climate/Files/2020-06-24-NYS-Decarbonization-Pathways-Appendix-B.pdf>
- Mahone, A., **Subin, Z.**, Li, C., Sontag, M., Mantegna, G., Karolides, A., German, A., & Morris, P. (2019). *Residential Building Electrification in California: Consumer economics, greenhouse gases and grid impact*. Energy + Environmental Economics.

<https://www.ethree.com/e3-quantifies-the-consumer-and-emissions-impacts-of-electrifying-california-homes/>

Mahone, A., **Subin, Z.**, Kahn-Lang, J., Allen, D., Li, V., De Moor, G., Ryan, N., & Price, S. (2018). *Deep Decarbonization in a High Renewables Future: Updated Results from the California PATHWAYS Model* (No. CEC-500-2018-012). California Energy Commission.

<https://www.energy.ca.gov/publications/2018/deep-decarbonization-high-renewables-future-updated-results-california-pathways>

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<https://www.oregon.gov/deq/filterdocs/app2litreview.pdf>

Public Scholarship

Op-eds

Subin, Z. (2025, September 12). Op-Ed: S.F. Can't Afford to Build Safe Streets so Slowly - Streetsblog San Francisco. *Streetsblog SF*.

<https://sf.streetsblog.org/2025/09/12/op-ed-s-f-cant-afford-to-build-safe-streets-so-slowly>

Popkin, M., & **Subin, Z.** (2022, October 27). The one-two climate solutions punch: Community solar and clean energy tax credits. *San Francisco Examiner*.

https://www.sfexaminer.com/our_sections/forum/the-one-two-climate-solutions-punch-community-solar-and-clean-energy-tax-credits/article_2c2a9d32-563a-11ed-b171-0b2702f201b9.html

Manville, M., & **Subin, Z.** (2022, September 8). Here's the one thing San Francisco can teach California about building new housing. *San Francisco Chronicle*.

<https://www.sfchronicle.com/opinion/openforum/article/san-francisco-parking-17425484.php>

Kocher, J., & **Subin, Z.** (2022, May 2). Don't be fooled: 'Renewable natural gas' is a pipe dream. *San Francisco Examiner*.

https://www.sfexaminer.com/archives/don-t-be-fooled-renewable-natural-gas-is-a-pipe-dream/article_e7422b54-d69f-5d7b-add9-6369284cff6b.html

Louis-Prescott, L., & **Subin, Z.** (2022, April 25). Opinion: No time to waste. Building electrification is a fight for the planet. *San Francisco Examiner*.

https://www.sfexaminer.com/archives/opinion-no-time-to-waste-building-electrification-is-a-fight-for-the-planet/article_4fcc96f2-9f8a-5e8d-a1b3-e4b462c64d4d.html

Grab, D., & **Subin, Z.** (2022, April 18). Opinion: What the gas industry doesn't want you to know about your appliances. *San Francisco Examiner*.

https://www.sfexaminer.com/archives/opinion-what-the-gas-industry-doesn-t-want-you-to-know-about-your-appliances/article_285ecbec-50d1-5718-bd46-ff3b7fd8901e.html

Subin, Z. (2022, February 7). Opinion: How S.F. can achieve its transportation climate goals and become a model for the country. *San Francisco Examiner*.

https://www.sfexaminer.com/archives/opinion-how-s-f-can-achieve-its-transportation-climate-goals-and-become-a-model-for/article_18372d28-a9aa-5d5a-a559-7ec3a5272f49.html

Subin, Z., & Siegel, Z. (2020, December 18). Infill housing is critical for a healthy region and climate. *San Francisco Chronicle*.

<https://www.sfchronicle.com/opinion/openforum/article/Infill-housing-is-critical-for-a-healthy-region-15812757.php>

Subin, Z. (2020, October 21). Op-Ed: Let's Get Serious About Housing - Streetsblog San Francisco. *Streetsblog SF*. <https://sf.streetsblog.org/2020/10/21/lets-get-serious-about-housing>

Interviews

Pontecorvo, E. (2026, April 9). Even the Midwest Wants to Encourage More Housing Density—Heatmap News. *Heatmap News*. <https://heatmap.news/politics/illinois-michigan-housing>

Walzer, P. (2026, January 30). Saying 'Yes' to Housing | Princeton Alumni Weekly. *Princeton Alumni Weekly*. <https://paw.princeton.edu/article/saying-yes-housing>

Mahadevan, M. (2025, September 14). Enviro YIMBYs Pitch A New Paradigm. *New Haven Independent*. https://www.newhavenindependent.org/2025/09/14/environmental_yimbys_make_their_case_at_yimbytown_2025/

Rhoades, C. (2025, July 26). Newsom changed CEQA to promote housing and development. What could it mean for Oakland? *The Oaklandside*. <https://oaklandside.org/2025/07/25/newsom-changed-ceqa-to-promote-housing-and-development-what-could-it-mean-for-oakland/>

Grabar, H. (2025, June 3). New Housing Doesn't Have to Create New Traffic. *Slate*. <https://slate.com/business/2025/06/american-housing-sprawl-commute-cities.html>

Pohl, J., Manke, K., Thulin, L., Brice, A., & Sanders, R. (2025, January 11). Health, housing and the path ahead: UC Berkeley researchers on the Los Angeles fires. *Berkeley News*. <https://news.berkeley.edu/2025/01/10/health-housing-and-the-path-ahead-uc-berkeley-researchers-on-the-los-angeles-fires/>

Hu, A. (2024, July 18). Canada makes an unprecedented push for multifamily housing. *Grist*. <https://grist.org/housing/canada-makes-an-unprecedented-push-for-multifamily-housing/>

Replica. (2024, April 4). Using Replica to Study Housing and Climate Policy at the Turner Center for Housing Innovation. *Replica*. <https://www.replicahq.com/post/using-replica-to-study-housing-and-climate-policy-at-the-turner-center-for-housing-innovation>

Wood, J. (2023, September 14). Better Land Use Reduces Transportation Emissions! *Talking Headways Podcast* (No. 450) [Broadcast]. <https://usa.streetsblog.org/2023/09/14/talking-headways-podcast-better-land-use-reduces-transportation-emissions>

Castleman, T. (2023, August 25). Californians move inland for safety, cheaper housing—But find extreme heat that's getting worse. *Los Angeles Times*.

<https://www.latimes.com/california/story/2023-08-25/californians-move-inland-for-safety-affordability-many-find-extreme-heat-thats-getting-worse>

Popovich, N., Rojanasakul, M., & Plumer, B. (2022, December 13). The Climate Impact of Your Neighborhood, Mapped. *The New York Times*.

<https://www.nytimes.com/interactive/2022/12/13/climate/climate-footprint-map-neighborhood.html>

Selected Invited Presentations and Guest Lectures

Infill Housing to Reduce VMT: Potential, Progress, & Land Use Policy Strategies for US Cities & States. School of Cities, University of Toronto. Jul 15, 2026.

Panelist, *Why Housing Policy is Climate Policy*. SF Climate Week. San Francisco, CA. Apr 20, 2026.

<https://luma.com/nxt3dyex>

Where California is Building. Common Ground. Greenbelt Alliance. Webinar. Feb 13, 2026.

<https://www.greenbelt.org/blog/learning-to-find-common-ground-together/>

Infill Housing to Reduce State VMT: Potential & Progress. PATH Department Seminar, University of California. Berkeley, CA. Oct 7, 2025.

Panelist, *SB79 & The Future of Housing in California*, Berkeley Abundance Network (Student-led organization). Berkeley, CA. Sep 25, 2025.

Panelist, *Understanding Historical Progress and Estimating Future Environmental, Economic, and Social Benefits of Land Use Reform in US states*. YIMBYTown 2025. New Haven, CT. Sep 15, 2025.

Panelist, *YIMBY Is a Climate Solution*. YIMBYTown 2025. New Haven, CT. Sep 14, 2025.

Intro: Housing Production & Climate Mitigation. Learning Lab, US Climate Alliance. Denver, CO. Jun 25, 2025.

Infill Housing to Reduce State VMT: Potential & Progress. E3 Lunch Talk. San Francisco, CA. Apr 18, 2025.

Housing Policy as Climate Action. City & Regional Planning 120. Fresno, CA. Apr 1, 2025.

Have we Slowed Sprawl? California Environmental Assembly, Planning and Conservation League. Davis, CA. Jan 25, 2025.

Panelist, *Ensuring a Future for Housing: Is it Affordable if it's Not Insurable?*, California Economic Summit, California Forward. Sacramento, CA. Oct 8, 2024.

The Role of Electricity in Decarbonizing CA's Energy System. Integrated Energy Policy Report Workshop, California Energy Commission. Sacramento, CA. Sep 24, 2019.

Representing the Effects of Hillslope-Scale Hydrology on Soil Carbon Distributions within an Earth System Model. AGU Chapman Conference. Tucson, AZ. Oct 21, 2013.

Interactions of Water and Energy Mediate Permafrost Climate Feedbacks. Geophysical Fluid Dynamics Laboratory. Princeton, NJ. Mar 14, 2012.

Interactions of Water and Energy Mediate Permafrost Climate Feedbacks. Institute for the Study of Earth, Oceans, and Space, University of New Hampshire. Durham, NH. Mar 8, 2012.

Interactions of Water and Energy Mediate Permafrost Climate Feedbacks. Geophysical Fluid Dynamics Laboratory. Department of Earth System Science, University of California. Irvine, CA. Feb 6, 2012.

Carbon Emission Reduction Opportunities in California Transportation. Chair's Air Pollution Seminar, California Air Resources Board. Sacramento, CA. Feb 13, 2008.

Research Grants

"Housing Solutions for Climate and Equity," \$715,000. California Air Resources Board, 2024-2026, Contract #23STC018.

Research Advising

- 2025-present. Technical Review Team, CARB California Climate Investments methodology update.
- 2026. California 5th Climate Assessment.
- 2025-present. NUMO Land Use and Housing Initiative, at WRI, led by [Ben Holland](#). Assessing the environmental and economic benefits of infill housing in 10 states.
- 2025. Brookings Institution study on California housing and transportation planning: <https://www.brookings.edu/collection/californias-road-to-climate-progress/>.
- 2024-present. CARB project #22STC019, with PI Jesus M. Barajas, UC-Davis. Impacts and Implications of California Housing and Transportation Costs.
- 2024. CARB project #22STC010-0, with PI Elisa Barbour, UC-Davis. Regional and State-Led Strategies to Improve Local Implementation of Sustainable Communities Strategies.

Committee Service

DEIBJ committee, Turner Center: 2024-2025