Candidate for Councilor

Allison Reilly

Curriculum Vitae
ALLISON C. REILLY

University of Maryland
Department of Civil and Environmental Engineering
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EDUCATION

2011 PhD, Civil and Environmental Engineering, Cornell University 2008 MS, Civil and Environmental Engineering, Cornell University 2005 BS, Civil Engineering, Johns Hopkins University

ACADEMIC POSITIONS

Jan 2022 – present The Pedro E. Wasmer Professor in Engineering, University of Maryland, College Park, MD

Aug 2016 – present Assistant Professor, University of Maryland, College Park, MD
Department of Civil and Environmental Engineering

2015 – 2016 Research Fellow, University of Michigan, Ann Arbor, MI
Department of Industrial and Operations Engineering

2012 – 2015 Postdoctoral Researcher, Johns Hopkins University, Baltimore, MD
Department of Geography and Environmental Engineering

PROFESSIONAL EXPERIENCE

2011 – 2012 Senior Associate Analyst
Homeland Security Studies and Analysis Institute, Arlington, VA

RESEARCH INTERESTS AND EXPERTISE

Application Areas: infrastructure system performance and resilience, multi-hazard risk analysis, climate change adaptation, interdependent infrastructure, disaster policy
Methodological: risk and resilience science, network modeling, simulation, data science, agent based simulation models

AWARDS AND HONORS

2022 National Science Foundation CAREER Award

2019 Gulf Research Program's Early-Career Fellow, National Academies of Science

2006-2009 National Science Foundation Graduate Research Fellow

      2006 John E. Perry Teaching Assistant of the Year, Department of Civil and
                Environmental Engineering, Cornell University

2005 Faculty Award, Department of Civil Engineering, Johns Hopkins University 2004

German Travel Fellow, Johns Hopkins University

2004 American Concrete Institute Award

2003 Vredenburg Scholar, Johns Hopkins University

JOURNAL PUBLICATIONS (since 2021)

1. Best, K.B., Q. He, A.C. Reilly, D. Niemeier, M. Anderson, and T. Logan. (2022) "Socioeconomic and Racial Disparity in Isolation Risk due to Sea Level Rise in the United States" *Global Environmental Change* [under 1st review].

2. Best, K.B., S. Kerr, A.C. Reilly, A. Patwardhan, D. Niemeier, and S. Guikema. (2022) "Spatial regression identifies socioeconomic inequality in multi-stage power outage recovery after Hurricane Isaac." *Natural Hazards* [under 1st review].

3. Miao, Q., M. Davlasheridze, A.C. Reilly. (2022) "Assessing Social Equity of Federal Disaster Aid Distribution: A County-level Analysis" *Journal of Policy Analysis and Management* [under 1st review].

4. Alves, P.B.R., M.D. Hendricks, D. McNally, M. Espinoza, H. Ghaedi, A.C. Reilly. (2022) "Navigating the Definition of Urban Flooding: A Conceptual and Systematic Review of the Literature." *Landscape and Urban Planning* [under 1st review].

5. Logan T.M., M. Anderson, A.C. Reilly. (2022) "Risk of isolation: Revising the estimated burden of sea-level rise" *Nature Climate Change* [under 3rd review].

6. Najarkolaie, K., M. Bensi, and A.C. Reilly. (2022) "Near-Term and Long-Term Inundation Risk Insights for Contaminated Sites in the U.S." *ASCE Journal of Hazardous, Toxic, and Radioactive Waste* [accepted].

7. Frimpong E., A.C. Reilly, and D. Niemeier. (2022) "Federal flood mitigation assistance and the community's response to flood risk mitigation." *Risk Analysis* [accepted]. DOI: https://doi.org/10.1111/risa.1402

8. Ghaedi, H., A.C. Reilly, H. Baroud, D.V. Perrucci & C.M. Ferreira. (2022) "Predicting flood damage using the flood peak ratio and Giovanni Flooded Fraction." *Plos One*, *17*(8), e0271230.

9. Zhai, C., A.C. Reilly, and S.D. Guikema. (2022). "Individual learning as a driver of changes in community vulnerability under repeated hurricanes and changing climate." *Risk Analysis*. DOI: 10.1111/risa.13955

10. Jasour, Z.Y., A.C. Reilly, G. Tonn, and C. Ferriera. (2022) "Roadway flooding as a bellwether for household retreat in rural, coastal regions vulnerable to sea-level rise." *Climate Risk Management*. DOI: 10.1016/j.crm.2022.100425

11. Reilly, A.C., H. Baroud, R. Flage, and M. Gerst. (2021) "Sources of uncertainty in interdependent infrastructure and their implications." *Reliability Engineering & System Safety*, 107756. DOI: 10.1016/j.ress.2021.107756

12. Tonn, G., Reilly, A.C., Czajkowski, J., Ghaedi, H., and Kunreuther, H. (2021). "US transportation infrastructure resilience: Influences of insurance, incentives, and Public Assistance." *Transport Policy*, *100*, 108-119. DOI: 10.1016/j.tranpol.2020.10.011

13. Johnson, C.A., A.C. Reilly, R. Flage, and S.D. Guikema. (2021) "Characterizing the robustness of power-law networks that experience spatially-correlated failures." *Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability*, *235*(3), 403-415. DOI: 10.1177/1748006X20974476

14. Reilly, A.C., R. Dillon, and S. Guikema. (2021) "Agent-Based Models as an Integrating Boundary Object for Interdisciplinary Research" *Risk Analysis*, 41(7): 1087-1092. DOI: 10.1111/risa.13134