

Climate Change

Climate change is one of the world's most pressing problems and presents significant risks to human health, ecosystems, communities, critical infrastructure, corporate value, sustainability, and more. While mitigating (reducing or eliminating) green house gas emissions is critical, it is now also clear that human populations must adapt to a changing climate. Utilizing a multi-disciplinary approach, VECTOR team members focus their research on how to measure and quantify climate change impacts in a variety of sectors, identifying the most salient risks, and developing cost-effective solutions.



We specialize in developing and applying cutting edge assessment, management and communication methods, including stakeholder engagement and outreach, to improve decision-making at the individual, community, and systems level. Current and recent projects include:

- Conducting climate change vulnerability assessments, including developing a statewide methodology to understand the impacts of future extreme weather patterns on critical transportation infrastructure.
- Evaluating infrastructure operations of the inland waterway navigation system under extreme weather conditions.
- Assisting local stakeholders near critical ports understand how specific actions and behaviors can impact the resiliency of waterborne commerce during extreme events.
- Developing methods to predict the occurrence of disruptive events in infrastructure systems and model the recovery process.
- Identifying and mapping economic, social, and environmental indicators to assess community and infrastructure resilience to climate change and extreme weather.
- Performing legal and policy studies of climate law and governance, both domestic and international, including climate risk assessment and disclosure.



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