

PROCESS

OVERVIEW

Vermont Climate Assessment (VCA) 2025 is the third edition of a statewide climate assessment designed to provide actionable, Vermont-specific information to decision-makers, communities, and organizations across the state. Since national climate assessments can underrepresent small, rural states like Vermont, locally relevant climate information is essential in responding to climate change. VCA 2025 was developed through a collaborative process involving graduate and undergraduate students, researchers, and almost 200 knowledge brokers representing government agencies, universities, municipalities, and businesses across Vermont. Authors synthesized statewide datasets, peer-reviewed research, and local knowledge to examine climate impacts at state, county, municipal, and watershed scales. The report was guided by four core principles: credibility, salience, legitimacy, and accessibility.



3rd

Edition of the VCA
(following 2014 and 2021)



101

Knowledge brokers responded
to needs assessment



42

Co-authors



70%

Topics covered from the
needs assessment



42%

Topics quantified with metrics

STUDENTS LED VCA 2025

VCA 2025 was led by the Vermont Climate Corps, made up of graduate and undergraduate students, who participated in a year-long interdisciplinary practicum at the University of Vermont (Figure 1). Students worked in chapter teams to synthesize scientific literature, analyze statewide datasets, collaborate with knowledge brokers, and communicate climate risks to public audiences. Authors had diverse backgrounds spanning natural and social sciences (e.g., environmental science, engineering, food systems, and community development). Students received training in team-based science, science communication, systems thinking, accessibility, and data visualization.



Figure 1 Photo of the Vermont Climate Corps (VCC) and Climate Measurements Center of Excellence (CMeC) Director, Dr. Gillian Galford, CMeC Postdoctoral Researcher, Dr. Jessica Balerna, and CMeC Program Manager, Lola Chen

Source: Lauren Milideo (2025)

KNOWLEDGE BROKERS SHAPED THE REPORT

Knowledge brokers are people who represent large groups of individuals and can speak to the needs and challenges of those groups. The VCA 2025 research agenda was developed through a statewide needs assessment involving 101 knowledge brokers from government agencies, nonprofit organizations, universities, municipalities, and businesses across Vermont (Figure 2). They represented every Vermont county and all sectors included in the assessment. Survey responses identified priority information needs related to climate impacts, adaptation, policy, and planning. Respondents also described how they planned to use and share VCA findings with their communities. Students collaborated with an additional 94 knowledge brokers beyond those who completed the needs assessment, during the chapter writing process.

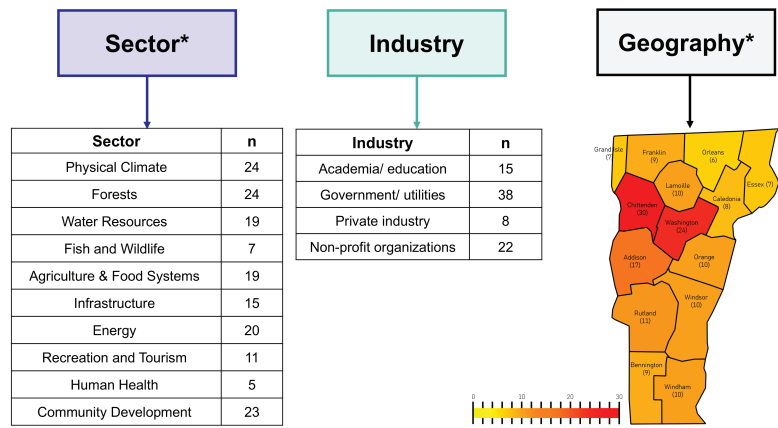


Figure 2 We recruited a diversity of knowledge brokers across these three aspects (sector, industry, and geography)

Source: Needs Assessment Survey (2025)

Note: *For sector and geography, knowledge brokers were allowed to select more than one option. For geography, the 14 knowledge brokers that reported working outside of Vermont and the 42 knowledge brokers that reported they worked across the state are not visualized.

IMPROVING TRANSPARENCY AND ACCESSIBILITY

Feedback from participants who engaged with VCA 2021 informed several changes in the 2025 assessment process. While most respondents viewed the previous assessment as believable and relevant, only half agreed it was transparent or fair (Figure 3). To improve transparency, VCA 2025 includes a dedicated “Process” chapter and expanded engagement with knowledge brokers throughout report development. Further, VCA 2025 partnered with the UVM Office of Accessibility Services to provide alternative text guidance and colorblind-friendly visualizations. These additions alongside executive summaries and chapter briefs will help increase VCA 2025 accessibility to diverse audiences.

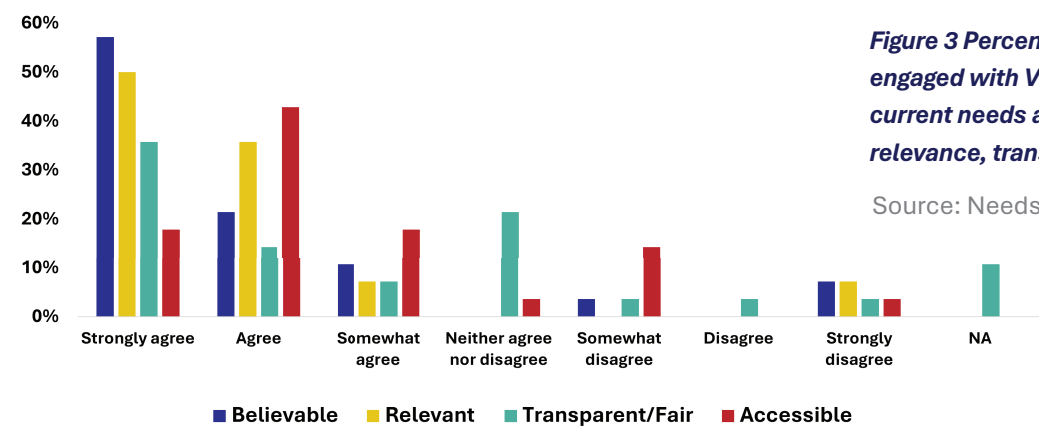


Figure 3 Percent (%) of knowledge brokers that engaged with VCA 2021 and evaluated it in the current needs assessment for its believability, relevance, transparency, and accessibility (n=28)

Source: Needs Assessment Survey (2025)

FUTURE CLIMATE ASSESSMENTS

Authors identified several barriers that limited the scope of VCA 2025: constrained timelines, seasonal availability of stakeholders, incomplete statewide datasets, and discontinued federal monitoring programs. These limitations affected the ability of chapters to address all requested topics. Across chapters, authors estimated they addressed ~70% of requested topics, with 42% of those topics supported with quantitative metrics. Goals for future assessments are to further expand stakeholder engagement, strengthen long-term monitoring efforts, and develop more region-specific climate products to support local adaptation planning across Vermont.