

Sustainable Campus Fund Recommendations

Spring 2021

Submitted by the Socially Responsible Investment Advisory Council to Richard Cate, VP for Finance and Administration

Executive Summary

During the call for proposals, the Sustainable Campus Fund (SCF) received ten proposals. Seven proposers were invited to present at the SCF Forum in late March. Projects totaling \$109,744 were proposed and the SRI Advisory Council is recommending that the SCF fund a total of \$58,210. One project (Public Transportation for College Students) is under revision for reapplication in the fall and one project is recommended for partial funding as Phase 1 of a two-phase project (Transition to a Greener UVM Fleet). The group recommends no funding for the Vermont Climate Assessment Campus and Community Outreach Project.

Three projects received funding earlier this semester after requests to fast track decisions were approved by the VP for Finance and Administration. The projects that have already received funding are: Fleet Sharing Pilot (\$5,400), Emerald Ash Borer Internship (\$1,950) and Energy Star Portfolio Manager Internship (\$8,000). These funding amounts are included in the totals calculated above. Summaries of these project are included in the last section of this report under Approved Proposal Recommendations.

New Recommendations

Campus Salt Reduction Pilot Studies

Proposed by: Courtney Giles, Faculty member in Civil and Environmental Engineering (CEE), Member of UVM Salt Reduction Task Force

Funding request: \$40,050

This proposal aims to address the impacts of de-icing and salting practices on campus in the winter. These practices, while necessary, have contributed to an estimated \$650,000 in damages to UVM facilities in the past five years. This pilot includes the purchase of equipment and materials for conducting tests on alternative methods of de-icing. Students will be engaged in multiple ways through course work, data analysis and pilot assessment. This project will create new opportunities for learning and support new curriculum in CEE, supported by faculty.

Recommendation: The council voted to recommend full funding of this proposal at \$40,050.

Carbon Offsets Internship Phase III

Proposed by: Emma Cripps, Undergraduate student; Amy Seidl, Faculty in RSEN

Funding request: \$900

This project proposal introduced the third phase of research on a carbon offset program and a transition to program development. This work is developing a framework for the first University sponsored offset program to address UVM's scope 3 carbon emissions associated with travel and identified in UVM's Climate Action Plan. Market offsets are likely to be offered by the Study Abroad Office at UVM and this work would help to develop localized offset source like the Burlington Intervale Foundation. The first two phases have created valuable experiences for students and useful outputs for the University.

Recommendation: The group easily approved this project and recommends funding this project at \$810, integrating the new hourly rate structure for internships.

Vermont Climate Assessment Campus and Community Outreach

Proposed by: Hanusia Higgins and George Ni, Graduate students; supported by Gillian Galford, Faculty in the Gund Institute

Funding request: \$26,739

This proposal requested support to fund outreach and education related to the second publication of the Vermont Climate Assessment. It included funding for food, an hourly UVM employee, undergraduate and graduate student researchers, outreach materials and publications and a podcast series. The group asked for a revised budget and deliberated on this idea at some length. Ultimately, they voted not to provide funding based on the lack of a clearly articulate outcome and the perception that this proposal was not planned sufficiently to award funding.

Recommendation: The SRIAC recommends not funding this proposal. The proposers are welcome to resubmit in the fall.

Transition to a Greener UVM Fleet

Proposed by: Clare Nelson, Undergraduate student and Sustainable Transportation Intern; submitted with Abby Bleything's support in Transportation and Parking Services

Funding request: \$705

This is a proposal to decrease the cost differential between internal combustion vehicles and electric/hybrid vehicles on campus. The concept includes a research internship to support this work and the creation of an electric vehicle (EV) incentive bank to help departments fund new vehicle purchases. After extensive deliberations, the members voted to recommend funding for the internship as Phase 1 of this project. This allows more time and the resources to build a stronger case for an EV incentive pool. The group recommends funding an undergraduate and graduate internship to support the research requested to move this forward. The SRIAC members are especially interested in the benefits of EVs versus increased energy efficiency in buildings on campus and other tradeoffs. They have requested further research on the mitigative potential of greenhouse gas emissions and would like to see a new proposal for Phase 2, following additional research.

Recommendation: The members voted to recommend funding two internships at \$2,000.

Previously Approved Recommendations

Energy Star Portfolio Manager Intern

Proposed by: Lynn Wood, Physical Plant

Funding request: \$ 7,200

This proposal requests funding for an internship to support data collection and entry for the Energy Star Portfolio Manager. This would help to reduce UVM's \$14M utility bills by replacing the current utility data collection system that does not include sufficient analysis capabilities. This also supports analysis that would contribute to carbon reduction goals. Students would gain valuable experience with data collection and analysis. This is a one-time need.

Recommendation: The SRI Advisory Council recommends funding this project up to \$8,000, allowing for the hiring of two student interns to accomplish this task.

Emerald Ash Borer

Proposed by: Mathew Walker, Staff at Physical Plant

Funding request: \$ 1,950

This proposal requests funding for an internship to research options to address the invasive Emerald Ash Borer. The Emerald Ash Borer is an invasive insect that poses significant risk to Ash trees in Vermont, including those on UVM's campus. This intern would collect relevant data, outcomes and cost implications for different solutions to this problem, including insecticides, natural deterrents and removing Ash trees. This intern will work directly with Matt Walker within the Physical Plant Department.

Recommendation: The SRI Advisory Council recommends full funding for this project at \$1,950.

Fleet Sharing Pilot

Proposed by: Hannah November, undergraduate student with Vermont Clean Cities Coalition at UVM's Transportation Research Center

Funding request: \$ 5,400

This project works with VTCCC and TPS to conduct research about the feasibility of fleet sharing and the strongest approach. These funds are to hire three student interns to conduct the requisite research and make recommendations. The interdisciplinary team will include associates from the Grossman School of Business and the Rubenstein School. The three main components of this research project are:

- 1) Software - Which shared fleet tracking software will most effectively meet our needs? The intern team will work with UVM administrators to understand options currently available.
- 2) Operations – The interns will meet with interested departments to understand needs and develop a plan for fleet maintenance over time including Covid relevant safety measures.
- 3) Process – The interns will identify best practices for user access to vehicles and sharing and conduct a literature review to understand behavioral sciences and attitudinal changes in relation to transportation options.

If successful, this research will set the foundation for a model campus-wide fleet sharing program that prioritizes safety and convenience for users, cost efficiencies, and low-carbon transportation. It will also reduce UVM's dependence on fossil fuels, which is a central priority of the Sustainable Campus Fund

Recommendation: The SRI Advisory Council is pleased to recommend funding this idea following the modifications made in response to their original feedback that strengthened this proposal significantly.