

Name: Henry Baer-Benson

Is this a project that you will work on alone, or will you collaborate with others? If you are collaborating with others, list their names, their Tufts affiliation, and their contact emails. Please indicate which member of your team will be the principle contact.

I will be communicating with other groups at Tufts and may recruit help for specific tasks, but I will be the only person completely devoted to this project.

Please provide a 300-350 word description of your project

This project will use the Guide to LEED v4.1 Beta for Existing Cities and Communities and other USGBC resources to generate a project proposal for LEED certifying Tufts' Medford campus. The proposal will include step-by-step instructions, a projected budget, a recommended timeline with a Gantt chart, and an annotated list of professional contacts. The proposal will research the basic LEED certification and not LEED Silver, LEED Gold, or LEED Bronze. This will ensure that the project goals are achievable in the proposed timeframe. If it becomes clear that a higher level of certification is attainable then the proposal will include a recommendation to pursue such a certification. The proposal will not include an assessment of the exact energy savings or measure any other benefits to Tufts campus. However, the benefits of LEED certification are summarized by the USGBC for each step of the process, and the proposal will include an analysis of the overall costs and benefits for Tufts. The total cost of this project is \$2125 and includes a research stipend (\$2000) which will allow me to spend my time on this project instead of a job, a USGBC Educational Subscription (\$100) which will give me access to all of the online educational resources for LEED certification, and a USGBC Massachusetts Student Membership (\$25) which will allow me to connect with professionals and build a network of support for the project. The Operations Division supports this project and will decide whether to follow through with the proposal based on the results of the research. During the spring of 2020 I will determine the requirements for certifying Tufts. During the spring and summer of 2020 I will determine how well Tufts is able to meet those requirements. During the summer of 2020 I will determine the steps that Tufts must take to achieve a certification and create the project proposal. In the fall of 2020 I will present the project proposal to the Office of Sustainability and the Operations Division. I also plan to present the complete proposal to environmentally focussed groups on campus, TCU Senate, and Tufts administration in order to gather support for the LEED certification of our campus.

What is the problem that you are looking to solve?

Tufts is already a leader in sustainability among universities in the United States, and this project would not be a revolutionary thing for Tufts to do. But a LEED certification is the next step in a narrative of sustainable action that Tufts has worked to build, and it would give international recognition to the University's achievements. LEED provides a framework for specific and measurable action with demonstrated results. Not only will LEED certification make Tufts a healthier and more sustainable community, but it will

also make Tufts the first full educational campus to receive such a certification. Students will be empowered as leaders in sustainability and our community will inspire other institutions to pursue sustainable action. This project will produce a step-by-step guide for creating lasting change that reflects our community's values.

Has this been done before? How is this project different?

No.

How will you measure success?

This project will be successful if a comprehensive proposal is produced with an estimated budget and timeline. The project will fail if the budget and timeline fail to include important elements for certification.

How many people would this project impact? Please categorize them as students, faculty, staff, and other

This project would not directly impact anyone. However, the Cities and Communities rating system is designed to make spaces more environmentally friendly and health positive, and if Tufts decides to follow through with this proposal then everyone on the Tufts Medford campus will benefit from these effects.

What is the environmental impact?

This project would not directly have an environmental impact. However, it is the first step in a process that would allow Tufts to make smarter and more responsible environmental decisions, and empower the Tufts community to take further action.

What are the educational impacts of this project?

This project would not have any direct educational impact.

What is the social impact (excluding educational aspects)? (e.g. alleviating climate injustice, community resiliency, culture change, equity, etc)

LEED certifying Tufts campus would make Tufts a visible leader in environmental sustainability. It would empower the Tufts community and inspire other institutions to follow our lead.

Will it help Tufts meet its sustainability goals? If so, how?

Tufts University has committed itself to acting in accordance with its environmental policy. This means "conserving natural resources and supporting their sustainable use," "conducting affairs in a manner that safeguards the environmental health and safety of students, faculty, staff and communities," and "fostering an understanding of and a

responsibility for the physical environment.” LEED provides a framework for specific and measurable action with demonstrated results. Not only will LEED certification make Tufts a healthier and more sustainable community, but it will also make Tufts the first full educational campus to receive such a certification. Students will be empowered as leaders in sustainability and our community will inspire other institutions to pursue sustainable action. But Tufts can’t get certified without a plan, and this project will produce a step-by-step guide for creating lasting change that reflects our community’s values.

What are the life cycle cost savings or the immediate cost savings, if applicable?

N/A

How much funding are you requesting from the Green Fund? Are you seeking funding from other places?

I am requesting \$2125 from the Green Fund. I am not seeking funding from anywhere else.

Who would maintain the barrels?

There are three possibilities for maintaining the barrels:

1. Tufts Eco Reps
2. Facilities workers
3. Rain Barrel project team

Ideally, the rain barrels will be maintained by the Tufts Eco Reps. A meeting with the Eco-Rep coordinator will determine the viability of that option. In the event that the Tufts Eco-Reps are unable to maintain the rain barrels, it’s a possibility that Tufts facilities workers will be able to step in. A meeting with Tufts Facilities in the next few weeks (before winter break) will determine the viability of that option.

If both the Tufts Eco-Reps and Tufts Facilities workers are unable to provide maintenance, the rain barrels project team will be able to step in and provide maintenance for at least the first year of operation. This solution would be temporary, and the project team would continue investigating more permanent solutions during that period.

Where would the barrels go in the winter?

Consultation with the civil and environmental engineering departments (specifically professor Anne Marie Desmarais) has led us to conclude that the best year-round strategy for the barrels would be an annual winterization before the first freeze – a relatively simple process. This would entail disconnecting each barrel from the source, opening the spout, draining the water inside, and flipping the barrel upside down. This process would take an estimated 5 minutes for each barrel and could be easily organized as an event by those chosen to maintain the barrels. Barrels will already be situated

directly adjacent to university buildings, a relatively protected location away from plows, etc.

Alternatively, there may be space for the barrels outside the waste facility in the parking lot across from Halligan Hall and the Cousens Athletic Complex. However, this option is significantly less preferable, as it would require much more work on the part of those maintaining the barrels.

i) Please explain why you said the proposal will *not* attempt silver, gold, or platinum certifications or assess energy savings? Are these not a part of the LEED certification?

ii) Can you provide more information on the benefits of the proposed activity?

iii) We would want a letter of support from Tufts to show the impact of the research.

iv) How much staff support would you need?

v) We also suggest researching what it would take to make the SEC or other Tufts buildings LEED O&M certified.

This project is only research and Tufts would not be enacting any of these changes. It's of a guide for enacting the changes in the future if they so choose. My hope is that after this project, others will easily be able to take steps towards full LEED certification.