

MTSU Sustainable Campus Fee Funding Request Form

The Sustainable Campus Fee (SCF) supports projects that advance sustainability at MTSU. This form allows students, faculty, and staff to propose initiatives that contribute to a greener campus through energy efficiency upgrades, infrastructure improvements, education, research, and efforts to enhance campus biodiversity.

There are 5 sections to the application: Section I: Contact Information, Section II: Project Category, Section III: Project Description, Section IV: Project Cost, and Section V: Project Performance Information (For applicable projects).

The Sustainable Campus Fee is administered through a partnership with the Office of Student Affairs, the Center for Student Involvement & Leadership, and the Center for Energy and Sustainability (CES).

Date Tuesday, September 29, 2026

Request Number **SCFR27000079**

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SECTION II: Project Category

Please note that all proposed projects will have to comply with MTSU campus guidelines and recommendations.

1. Select the category that best describes the project. (Select One - See Descriptions Below)

Research and Innovation

CATEGORY DESCRIPTIONS

Energy Conservation/Efficiency - (e.g. installing LED light bulbs, adding insulation to walls, replacing old appliances with energy-efficient models, installing programmable lighting, etc.)

Renewable Energy - (e.g. implementing projects to harness naturally replenishing sources like wind, water, and sunlight to generate electricity - like solar-powered picnic tables, etc.)

Sustainable Transportation - (e.g. installing covered bike racks, replacing fuel vehicles with electric vehicles, etc.)

Alternative Fuels - (e.g. setting up electric vehicle charging stations, implementing hybrid or electric vehicles, purchasing electric or propane power equipment, etc.)

Recycling - (e.g. purchasing recycling bins, improving signage, recycling difficult materials, etc.)

Waste Reduction - (e.g. establishing a reuseable to-go container program, reducing food waste, installing waterbottle filling stations, etc.)

Water Conservation - (e.g. purchasing rain barrels, creating a rain garden, switching to low-flow water fixtures, installing low-flow water valves, etc.)

Biodiversity - (e.g. planting pollinator garden, tree planting, installing bird boxes, etc.)

Education - (e.g. hosting a sustainability fair to raise awareness about green practices, hosting bike repair and/or safety workshops)

Research and Innovation - (e.g. researching the effects of microplastics, solar feasibility study, etc.)

SECTION III: Project Description

Please include as much detail as possible in this section. The more information you provide, the better equipped the adjudication committee will be to fully understand your request and make an informed decision.

To expand a text box, click and drag the two diagonal lines in the bottom-right corner. This allows you to adjust the size and view of your content as you type.

1. Project Title

Golf Cart Campus Condition Mapping

2. Scope: Work to be accomplished

The project will purchase, assemble, calibrate, and test a portable mapping package designed for a slow-moving golf cart. A lower wide-angle camera will record pavement, curbs, striping, and nearby surface conditions. A separately aimed upper camera will record signs, lights, vegetation, building features, and roadside assets. Distance-based triggering will collect paired images every 5 to 10 feet. Dual-band GNSS, pulse-per-second timing, an orientation sensor, a wheel-distance sensor, and LiDAR will provide a stronger location record than images and basic GPS alone.

3. Scope: Benefit Statement

This pilot will give MTSU a repeatable way to document campus conditions from an existing low-speed vehicle. The two-camera arrangement can collect several kinds of information during one approved route rather than requiring separate visual surveys for pavement, signs, vegetation, and other assets. The resulting record can help staff compare conditions over time and direct attention to locations that need inspection.

The sustainability value is practical. Better condition records can support timely maintenance, help extend the useful life of pavement and campus assets, and reduce avoidable replacement and material waste. Reusing the same collection platform and rechargeable survey battery across routes limits the need for separate equipment. The staged purchasing plan also avoids buying higher-cost positioning or processing hardware until the baseline has been tested. Vegetation captured by the elevated camera can support repeatable documentation of campus trees and planted areas.

4. Location of Project

The equipment will be mounted within the approved perimeter of an MTSU golf cart and used only on approved campus routes. The electronics enclosure should be installed in a shaded, serviceable location. Cameras, antenna, and LiDAR should remain within the roof envelope and clear of the driver, passengers, steering, suspension, tires, brakes, and pinch points.

5. Participants and Roles

coordinate purchasing, approvals, schedule, records, and the final report.

Fleet or facilities representative: approve the mounting method and the campus survey route.

6. Student Participation in the project and/or Student Benefit from the project

Student workers can take part in system setup, measurement, data organization, map checking, and analysis of the pilot results. The project gives students experience with cameras, positioning sensors, field data collection, privacy review, and evidence-based campus planning. The mapped record can also support future class projects or supervised research that examines infrastructure condition, accessible routes,

transportation features, or vegetation, subject to MTSU approval and data-governance requirements.

7. Future Operating and/or Maintenance Requirements

Not Currently

8. Additional Comments or Information Pertinent to the Proposed Project

Any supporting documents or attachments will be on the pages following the SCF Request.

Note, all projects are expected to be completed by December 31, 2026.

SECTION IV: Project Costs

1. Project Cost Estimate 3200

2. Source of Estimate

Parts List

3. Has previous funding from this source been awarded?

No

If Yes, please explain how this request differs from previous funding request.

SECTION V: Project Performance Information

If your project is expected to reduce energy consumption (e.g. through lighting upgrades or HVAC improvements etc.), please provide an estimate of potential savings. Feel free to contact the Center for Energy and Sustainability for help making these calculations at ces@mtsu.edu.

1. Estimated Annual Energy Savings (Estimated in kW, kWh, Btu, etc.)

Direct annual energy savings cannot be estimated in kWh because this project is a monitoring and mapping system rather than an energy-efficiency upgrade. Its environmental benefit comes from regularly documenting pavement, vegetation, signs, lighting, and other campus assets. Consistent monitoring can help MTSU identify problems earlier, target maintenance where it is needed, extend the useful life of infrastructure, and reduce unnecessary replacement materials and repeat inspection trips. The pilot will track these outcomes so future environmental and cost savings can be measured

2. Annual Energy COST Savings (\$)

Cannot currently be measured baseline

3. Annual Operating Cost Savings or Other Cost Savings. Specify in dollar amount, if applicable. (\$)

Cannot be measured without a baseline

4. Matching or Supplementary Funding (Identify and explain, if applicable)

Acknowledgment

I acknowledge that a project summary and photo must be submitted, if I am awarded funding and upon completion of the project.

Supporting Documentation or Attachments if provided.
