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2/9/18

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MTSU Clean Energy Initiative Project Funding Request

There are five (5) sections of the request to complete before submitting. See <http://www.mtsu.edu/sga/cleanenergy.shtml> for funding guidelines. Save completed form and email to cee@mtsu.edu or mail to MTSU Box 57.

| 1. General Information | |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| Name of Person Submitting Request | |
| Karen Petersen, Interim Dean of Liberal Arts & Josh Stone, Associate Director of Campus Recreation Programs | |
| Department/Office | Phone # (Office) 2534 & 8484 |
| College of Liberal Arts, Todd 231 MTSU Box # 97 | Phone # (Cell) 615-579-6605 |
| E-mail karen.petersen@mtsu.edu Josh.stone@mtsu.edu | Submittal Date 2/9/18 |
| | |

| 2. Project Categories (Select One) | |
|--------------------------------------------------------------------|---------------------------------------------|
| Select the category that best describes the project. | |
| <input checked="" type="checkbox"/> Energy Conservation/Efficiency | <input type="checkbox"/> Sustainable Design |
| <input type="checkbox"/> Alternative Fuels | <input type="checkbox"/> Other |
| <input type="checkbox"/> Renewable Energy | |

| 3. Project Information |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>a. Please provide a brief descriptive title for the project.</p> <p>b. The project cost estimate is the expected cost of the project to be considered by the committee for approval, which may differ from the total project cost in the case of matching funding opportunities. Any funding request is a 'not-to-exceed' amount. Any proposed expenditure above the requested amount will require a resubmission.</p> <p>c. List the source of project cost estimates.</p> <p>d. Provide a brief explanation in response to question regarding previous funding.</p> |
| 3a. Project Title |
| Bike Shelters (2) for Peck Hall |

3b. Project Cost Estimate

\$31,550 (\$15,775 each)

3c. Source of Estimate:

Josh Stone, Jamie Brewer (Campus Planning)

3d. If previous funding from this source was awarded, explain how this request differs? N/A

4. Project Description

(Completed in as much detail as possible.)

- a. The scope of the work to be accomplished is a detailed description of project activities.
- b. The benefit statement describes the advantages of the project as relates to the selected project category.
- c. The location of the project includes the name of the building, department, and/or specific location of where the project will be conducted on campus.
- d. List any departments you anticipate to be involved. Were any departments consulted in preparation of this request? Who? A listing may be attached to this form when submitted.
- e. Provide specific information on anticipated student involvement or benefit.
- f. Provide information for anticipated future operating and/or maintenance requirements occurring as a result of the proposed project.
- g. Provide any additional comments or information that may be pertinent to approval of the project funding request.

4a. Scope: Work to be accomplished

All bike racks in the courtyard of Peck Hall will be removed in Summer 2018. We would like to add covered bike racks on two sides of the building (likely North and South) to provide better access for users and better storage.

4b. Scope: Benefit Statement

The existing covered facilities offer storage away from the pedestrian areas of the building but convenient to the access points used by cyclists. Substantial pedestrian, automobile, and bicycle traffic occurs around Peck, making modifications to traffic flow a high priority for the safety of all users. The existing bike racks force users onto sidewalks and accessible ramps in order to gain access. Shelters would be located in such a way as to minimize the need for cyclists to interact with pedestrians.

Almost every student on campus will take at least one class in Peck Hall, and many students take multiple classes in the building. Thousands of students use the building every day each semester. A substantial number of faculty and staff are housed in the building as well. The heavy use of existing bike racks indicates a need for better storage and replacement of the existing storage which will no longer be available after summer 2018.

| 4. Project Description (continued) |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>4c. Location of Project (Building, etc.)</p> <p>Outdoor areas around Peck Hall. Likely to be the North and South side, but possible West and South. To be determined in consultation with Facilities Services.</p> |
| <p>4d. Participants and Roles</p> <p>Facilities services would oversee construction and purchase equipment. Campus Planning will be involved in designating the areas for the bike racks as well as aesthetic compliance.</p> |
| <p>4e. Student participation and/or student benefit</p> <p>As noted above, thousands of students use Peck Hall daily. Providing an aesthetically pleasing and functional bicycle storage option for students will encourage cycling as a mode of transport to and on campus and be attractive to the potential students and families who tour campus and walk through Peck Hall.</p> |
| <p>4f. Future Operating and/or Maintenance Requirements</p> <p>Campus recreation maintains the bike shelters.</p> |
| <p>4g. Additional Comments or Information Pertinent to the Proposed Project</p> <p>Increasing and improving our cycling infrastructure will reduce vehicle traffic to and on campus, saving fuel and reducing the potential for accidents. Placement of the pavilions also encourages cyclists to use the roadways rather than sidewalks, improving the pedestrian experience on campus.</p> |

5. Project Performance Information

Provide information if applicable.

- a. Provide information on estimated annual energy savings stated in units such as kW, kWh, Btu, gallons, etc.
- b. Provide information on estimated annual energy cost savings in monetary terms.
- c. Provide information on any annual operating or other cost savings in monetary terms. Be specific.
- d. Provide information about any matching or supplementary funding opportunities that are available. Identify all sources and explain.

5a. Estimated Annual Energy Savings (Estimated in kW, kWh, Btu, etc.)

Energy savings can be calculated through reduction of greenhouse gases through the reduced consumption of gas when students have an option to ride a bike instead of driving a vehicle. This is especially important for cars at low or idle speeds, which increases the emission of greenhouse gases. This could reduce CO₂ emissions by 30,700 lbs of CO₂ annually. By supplying a built environment for bicycle commuters, we are greatly increasing the opportunity for people to ride their bikes instead of driving on campus.

5b. Annual Energy COST Savings (\$)

The League of American Bicyclists data shows that at U.S. Universities, on average, 6% of the school population commutes via bike. In addition, the average annual mileage of a student commuter is 387 miles. With the addition of 24 spaces for bicycle parking, it can be estimated 9,288 miles will be used by students commuting by bikes instead of cars. This is a savings of 396 gallons of gas, or close to \$1200 in fuel savings. Other savings include less wear and tear on road infrastructure as well as the added benefit of increased health. Lastly, by increasing the number of students on bikes, MTSU will ultimately save on having to find more space for the creation of parking spots on campus.

5c. Annual Operating or Other Cost Savings. Specify. (\$)

There is no additional annual operation cost with this structure. Ultimately, through this long-range master plan, the university will save money by not having to create as many parking spaces as well as by reducing vehicular impact on roads and automobile infrastructure.

5d. Matching or Supplementary Funding (Identify and Explain)

Supplementary funding comes from Campus Recreation in supporting the long range vision of making MTSU more bike friendly. Campus Recreation provides funding for student mechanic wages, space for housing a bike shop, and all tools and parts necessary for upkeep and maintenance of rental bikes.