

## STUDENT ORGANIZATION SUSTAINABILITY INITIATIVE PROPOSAL FORM

### Part I- General Information:

Name of Student Organization	GUAPA
Contact/Responsible Person	Cat Woodson
Contact Office Held/Title	Member
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### Part II- Project Cost Information

Estimated Cost of this Proposal  See III.C. below

Estimated Savings -  See III.D. below

Net Cost of this Proposal =

### Part III- Supporting Information

**A. Please describe your sustainability initiative and attach supporting documentation.**

Our sustainability initiative is focused on promoting alternative transportation modes, particularly bikes, on the Virginia Tech campus. With the impact of COVID-19 causing a greater influx in off-campus housing and Blacksburg Transit limiting its capacity of passengers, and with the continued impact of COVID-19 on housing and public transit unknown, a more viable option for commuting without relying on SOVs is promoting, facilitating, and encouraging bicycling on campus.

With this in mind, we propose adding more bike racks at highly utilized locations on campus, as identified in the Alternative Transportation Department’s 2019 bike census. A total additional capacity of 36 bikes will meet current utilization needs and help fulfill the Bike Parking Master Plan (BPMP) requirements, as well as continue to encourage students to bike and park responsibly. The table below details the proposed racks.

Building	Utilization	Proposed Racks
Eggleston Hall	93%, plus four substandard racks were recently removed from the dorm	One 8-loop rack
Cowgill Hall	93%	Two 5-loop racks

The installation of these additional bike racks will encourage more students to use bikes as a primary mode of transportation, therefore relieving some of the stress on transit. It will also incentivize students to bike rather than drive to campus, helping reduce emissions and alleviate traffic congestion during class changes.

**B. How does this initiative help to achieve the goals of the Virginia Tech Climate Action Commitment Resolution and Sustainability Plan?**

**CAC Point 1** states that: “Virginia Tech will be a leader in campus sustainability. Sustainability is an integral part of the fabric of the university as it pursues enhanced economic stability and affordability, diversity and inclusion, environmental stewardship expansion of knowledge, and education of future leaders.”

Adding bike racks shows that Virginia Tech recognizes the importance of zero-emission transportation as an important aspect of environmental sustainability. Biking is also economically sustainable and affordable because students do not have to pay for fuel or insurance. Finally, it will help improve Virginia Tech’s status as a Bicycle Friendly University, a national program that “recognizes institutions of higher education for promoting and providing a more bikeable campus for students, staff, [faculty] and visitors.”

**CAC Point 3** states that: “Virginia Tech will establish a target for reduction of campus GHG emissions to 80% below 1990 emission level of 188,000 tons by 2050. Interim targets from 2006 emissions of 316,000 tons will be: for 2012, 295,000 tons (on path to 2025 target); for 2025, 255,000 tons (2000 emission level); and for 2050, 38,000 tons (80% below 1990 emission level).”

Encouraging students to choose a zero-emission transportation mode such as bicycling reduces emissions, traffic congestion, and associated parking problems.

**CAC Point 11** states that: “Virginia Tech will improve transportation energy efficiency on campus through parking, fleet, and alternative transportation policies and practices. The university will continue to implement programs that encourage the use of alternative transportation methods and will continue to implement programs and services that promote eco-responsible fleet management.”

One of the greatest challenges in using a bicycle as a primary mode of transportation is the issue of storing it while it is not in use. Additional, easy-to-access bike racks in high traffic areas encourages bicycle use. More students will be empowered and encouraged to commit to riding bicycles rather driving.

**C. What is the cost of your proposal? Please describe in adequate detail the basis for your cost estimate.**

The total cost of this proposal is \$5,500. A breakdown of the cost is included below.

ITEM DESCRIPTION	UNIT COST	QUANTITY	TOTAL COST
5-loop bike rack	\$650	2	\$1,300
8-loop bike rack	\$1,000	1	\$1,000
Concrete pad	\$2,000	1	\$2,000
Landscaping	\$500	1	\$500
Contingency (~10%)			\$700
<b>Total</b>			<b>\$5,500</b>

**D. Will your proposal produce cost savings for the University? If so, how much? Please describe in adequate detail the basis for your savings estimate.**

Indirect cost savings for the University would include savings from less money being spent on building and maintaining parking lots. Biking also has numerous physical and mental health benefits, which would lead to fewer sick days and an increase in productivity.

E. Is this funding request for a One-Time need or an Ongoing need (**please check one**)?

**One-time**

**Ongoing**

F. Is funding available for this request from another source? If yes, describe the funding (source, amount, etc.)

No.

#### **Part IV- Requestors/Reviewers**

Prepared By Cat Woodson

Date  
11/6/2019

Reviewed By Nick Quint

Date  
11/19/2020

Denny Cochrane  
Reviewed By (Name of Office of Energy and Sustainability Representative)

11/20/20  
Date