

Abandoned Bicycles on Campus

Methods in Redistribution and our Sustainable Development Goals

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Introduction

Virginia Commonwealth University (VCU) in Richmond, VA and Eastern Mennonite University (EMU) in Harrisonburg, VA are presented with a number of bikes abandoned by students each year. As cycling gains popularity on campuses across the U.S., universities increasingly face this obstacle and must find ways to process these bikes. This poster explores how VCU and EMU recycle, refurbish and redistribute abandoned bicycles and how those methods relate to various Sustainable Development Goals (SDGs).

Eastern Mennonite University

Eastern Mennonite University (EMU), located in Harrisonburg, Virginia is a private liberal arts college that is grounded in the enduring biblical values of Christian discipleship, community, service to others, sustainability, and peacemaking.

EMU enrolls 1,633 students in graduate and undergraduate programs and employs nearly 400 faculty and staff.

Virginia Commonwealth University

Virginia Commonwealth University (VCU), located in Richmond, Virginia, is a public research university that offers 217 degree and certificate programs through its 20 schools and colleges. The VCU Health System supports the university's health care education, research and patient care mission.

VCU enrolls 31,242 students in graduate and undergraduate programs and employs 14,531 faculty and staff.

SDG 11 Sustainable Cities and Communities

By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and all types of waste management.

EMU processes about 20 abandoned bicycles per year. They reduce the amount of abandoned bicycles on campus by sending out reminders and offering a storage program for the summer. The storage program prolongs the life of those bicycles and decreases the number of abandoned ones left in the weather. EMU recycles about 5-10 of those bicycles each year, while donating the rest.

VCU processes about 150 abandoned bicycles each year—about 4500 lbs. of material. Of those, about 70 bicycles are cannibalized for parts and their frames are recycled. 30 bikes are refurbished using those parts and are available to international students for semester long rental. The other 50 bicycles are donated.

SDG 3 Good Health and Well-being

We believe that acclimating students to cycling when they may not have previously been creates a culture where cycling is a viable option for commuting.

EMU donates about 5 bicycles to the **College Street Co-op** in Harrisonburg. This co-op provides a space for students to learn and practice bicycle repair and maintenance. Through bicycle rentals, educational classes, and an available workspace, the co-op is an asset to students who choose the bicycle as their alternative form of transportation.

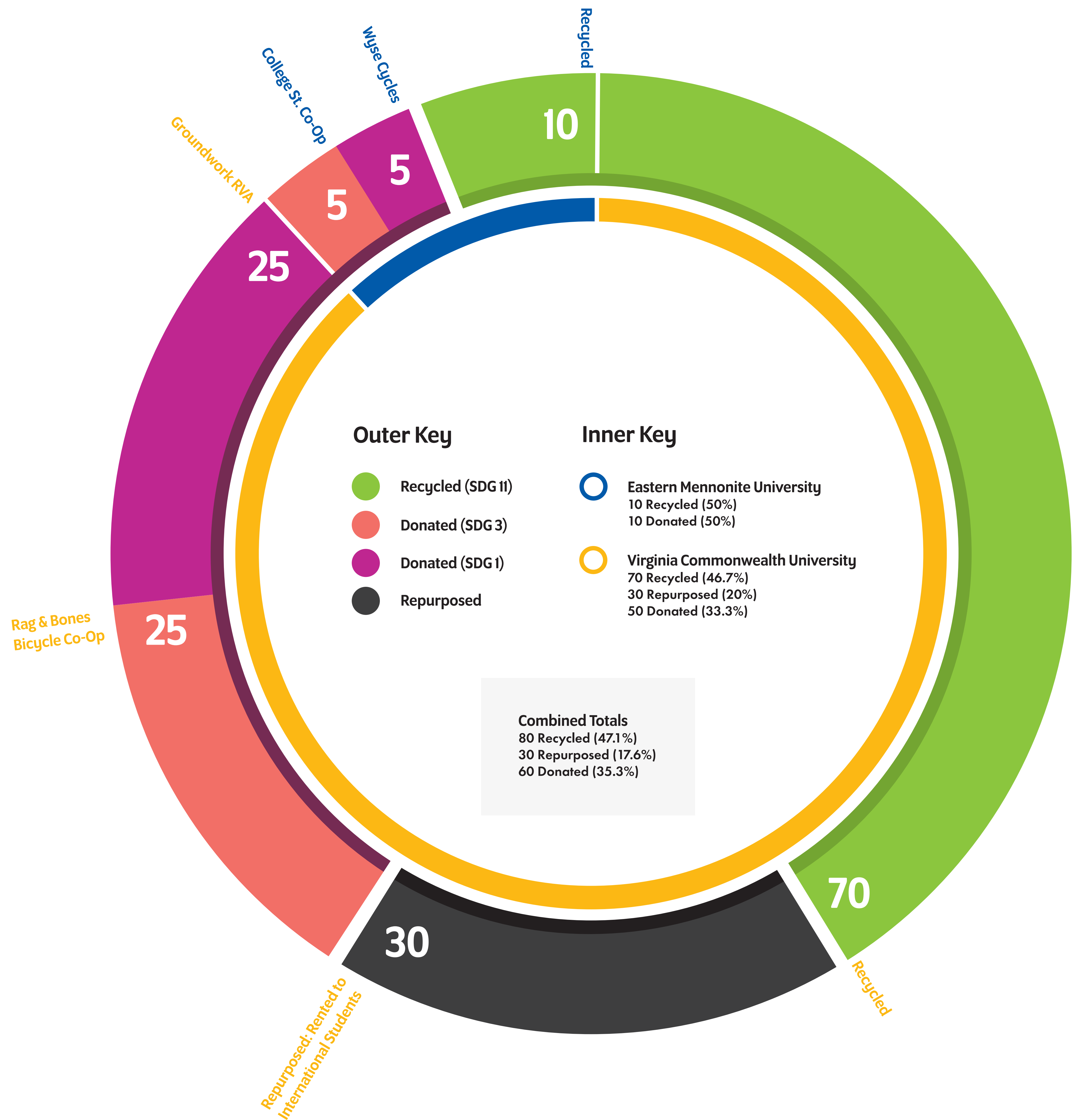
VCU donates about 25 bicycles to **Rag & Bones Bicycle Cooperative**. This public non-profit organization sets out to provide near universal access to bicycle repair and technical knowledge, affordable bicycles and parts, and space within which to feel safe and welcome while learning and repairing. Rag & Bones bicycle co-op refurbishes and sells affordable adult bicycles, offers a work trade program and always distributes kids bicycles for free.

SDG 1 No Poverty

By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions.

EMU donates about 5 bicycles to be refurbished by **Wyse Cycles**, a local mobile bicycle mechanic and given to the local Church World Service office for use by their refugee resettlement program.

VCU donates about 25 to **Groundwork RVA**, a non-profit organization that works with Richmond youth to facilitate environmental, economic, and social well-being in neighborhoods. Youth participants help achieve this well-being by transforming blighted and neglected open spaces into public assets.



Current Progress Summary

Together we recycle 2,550 lbs of metal and divert it from dumps, contributing to more effective waste management process. We save 2,850 lbs of material from any landfill or recycling facility by rebuilding and donating bicycles.

Through the College Street Co-op and Rag & Bones Bicycle Cooperative, EMU and VCU contribute to the encouragement of cycling and good health and well-being.

Harrisonburg, VA has a poverty rate of 11.5% for families, 31.8% for the population. Richmond, VA has a poverty rate of 17.1% for families and 21.4% for the population. Included in this, 19.6% and 32.9% of those under the age of 18 were living in poverty in Harrisonburg and Richmond, respectively. Access to transportation is a fundamental component of poverty and inequality reduction. Donating bicycles to organizations that help families access transportation and support themselves helps address certain aspects of inequality.

Takeaways

Cannibalizing parts from frames that will be scrapped and forming a used parts library will help immensely in diverting from the waste stream. With used parts you can fix many more bicycles at a much lower cost as compared to using new parts.

Forming partnerships with organizations already serving marginalized communities will help your university take part in the reduction of poverty and inequity.



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