Final Report: Sustainability Bike Project

Team Lead: Mook, Deborah, DAR Associate Director

Amount awarded: \$3000 Amount expended: \$2800

Department: Division of Animal Resources, SOM
Department Head: Michael Huerkamp, DAR director
PI for grant: Deborah Mook, DAR associate director

Project Personnel/Co-I: Maya Meeks, Research Specialist Senior

Green lab PI: Wai Hanson, clinical veterinarian

Departmental Information: The Division of Animal Resources (DAR) supports Emory researchers and provides veterinary and husbandry care for animals in 10 buildings along the Clifton Corridor, requiring employees to travel between buildings daily. Aligned with DAR's commitment to exemplary animal care and in harmony with Emory's sustainability objectives, the leadership of DAR embarked on the quest for sustainable commuting solutions for our campus-based staff.

Project Overview: The Sustainability Bike Project, led by Dr. Deborah Mook and Maya Meeks, aimed to provide sustainable commuting options for employees within the DAR at Emory University. The project aligned with Emory's sustainability goals while enhancing employee mobility and well-being on campus. This report presents the progress, achievements, and impact of the initiative.

Project Objectives:

- 1. Establish a sustainable bike commuting program for DAR employees while engaging in clinical activities across campus.
- 2. Reduce carbon emissions and promote eco-friendly transportation.
- 3. Enhance campus mobility, employee health, and well-being.
- 4. Foster collaboration between DAR, university sustainability initiatives, and external partners.

Initial Steps and Collaborations: The project was initiated in March 2022 through collaboration between DAR, Emory Transportation Services (ETS), and Emory Risk Management. ETS provided two bikes as part of a pilot project, which DAR staff used to commute between buildings on campus. Dr. Mook and Maya Meeks played instrumental roles in negotiating funding, ensuring feasibility, and coordinating the program.

Phase I: Pilot Program and Initial Success: The pilot program involved six members of the DAR team, who utilized the provided bikes for commuting between buildings. These bikes were made available to qualified staff to travel between buildings in lieu of walking, using their personal vehicles or a vehicle in the DAR fleet. The success of the pilot phase led to increased interest and a growing number of staff members wishing to join the bike program. Initial data collection indicated reduced carbon emissions and increased efficiency in transit.

Project Expansion and Implementation: DAR Contribution of \$500 per fiscal year to purchase helmets for new riders and provide bicycle maintenance. OSI grant of \$3000 awarded to support program expansion by purchasing four bikes in different sizes, along with locks, baskets, pumps, mirrors, and

reflective straps. An Outlook calendar was established for staff to reserve bikes, and safety guidelines were implemented in collaboration with Emory's Risk Management.

Impact and Benefits: The Sustainability Bike Project yielded significant benefits:

- 1. **Carbon Emissions Reduction:** The project contributed to a reduction in carbon emissions by encouraging bike commuting over conventional vehicle use.
- 2. **Health and Well-being:** Participating staff members reported improved physical health and well-being due to increased physical activity from biking.
- 3. **Efficiency and Time Savings:** Biking between buildings improved efficiency and saved time compared to walking or using other transportation methods.
- 4. **Sustainability Integration:** The project aligned well with Emory's sustainability vision and strategic plan, supporting the university's goals of promoting sustainable transportation and reducing pollution.

Benefits for a single employee choosing to commute via bike across campus since pilot implementation 54 weeks ago:

Additional life expectancy is 4.5 days.

CO₂ emissions reduction by 947.8 lbs.

NO_x emissions reduction by 0.46 lbs.

Planted the equivalent of 19 trees.

Szyk, B. "Car vs. Bike Calculator". Available at: https://www.omnicalculator.com/ecology/car-vs-bike. Accessed: 10 August 2023.

Employee Testimonial: Franz Hippolyte, a DAR employee, shared his positive experience with the bike program: "Using the bike makes moving from building to building much faster... I love it! I used to take the bus, but now I just ride the bike everywhere I go. I spend less time traveling and I have much more energy than before."

Challenges and Future Opportunities: While the program achieved moderate success, challenges included sizing limitations for some participants and durability issues with initially chosen baskets. Future opportunities include:

- 1. **Program Expansion:** The program could be expanded to include more participants and departments, encouraging broader adoption of sustainable commuting.
- 2. **Technological Integration:** Exploring digital tools or apps could enhance the program's convenience and incentivize participation.
- 3. **Collaboration and Outreach:** Strengthening partnerships with external organizations and engaging the wider campus community could further promote sustainable transportation.

Conclusion: The Sustainability Bike Project, led by Dr. Deborah Mook and Maya Meeks, successfully introduced a sustainable commuting option for DAR employees at Emory University. By prioritizing eco-

friendly transportation, the project contributed to Emory's sustainability goals while promoting employee health and well-being. The project's achievements demonstrate the potential for wider adoption of sustainable transportation practices across the university campus. As the program continues to evolve, it will pave the way for further innovative sustainability initiatives and collaborations, creating a positive impact on both the campus and the environment.



Franz Hippolyte regularly rides between the Woodruff Memorial Research Building, the Emory Childrens Center, the Whitehead Biomedical Research building, and Winship Clinic B.



Marveia Daniel regularly rides between the Rollins Research Building and the Peavine Kennel.



Deborah Mook and Maya Meeks ride between the Whitehead Biomedical research building and the Peavine Kennel and the Health Sciences Research Building complex.