



## STUDENT SUSTAINABILITY COMMITTEE

### Final Report

*Thank you for your commitment to green initiatives at the University of Illinois. One of the final steps in completing the terms of the funding agreement for your project is the submission of a Final Report with key information about your project. You will also need to submit a detailed report of expenses (if you don't list it within this document) as well as supporting photos to showcase your project.*

*Please be as accurate as possible in describing the project (including possible setbacks or challenges in meeting the initial goals of the project). Not fully meeting your project's goals will not disqualify you from making future funding requests as long as your reports are as complete and accurate as possible. If you have any questions, please contact the Student Sustainability Committee, at [sustainability-committee@illinois.edu](mailto:sustainability-committee@illinois.edu).*

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**Project Name:** Bike and Ped Counters

**Date of Report Submission:** 5/31/2022

**Project Purpose:**

**Bike and Ped Counters**

The Champaign Urbana Urbanized Area Transportation Study (CUUATS) had been awarded \$35,000 by IDOT (for the MCORE project) to purchase and install counters (to automatically count pedestrian and bike traffic) along the identified MCORE corridors. This project proposal is to collaborate with CUUATS to install these counters, which will support future research, projects, and policy. There are 12 predetermined locations where the counters need to be installed. Three locations have been identified to install the Eco-Counters:

1. Illini Union (one at North of Green Street and one at South of Green Street) – Installed and online since March 2020
2. Intersection of Armory Avenue and Sixth Street – Planned installation date of August 2021
3. Intersection of Wright Street and Healey Street – Planned installation date of August 2021

This SSC funding will be used for the installation of the Eco-Counter installation at these two locations. The remaining funds will be used to purchase and install additional bicycle and pedestrian counters for the other pre-determined MCORE corridors.

**Project Summary:**

In 2017, SSC awarded \$25,207 to develop an opt-in bike tracking system for all registered campus bikes working toward two goals: (1) Collecting information on where the bicyclists are riding their bikes on-campus; (2) Providing incentives for those who biked on-campus. This project proposed the development of a new in-house system by a team of women student engineers, the RolyPoly team. However, due scheduling issues and school workload, the team was not able to work on this project.

In 2019, the Student Sustainability Committee (SSC) approved the scope to purchase and install bicycle and pedestrian counters from Eco-Counter, which would support the MCORE project requirement.

CUUATS had purchased six Eco-Counters (for 3 locations) in 2019, and the University of Illinois were responsible for their installation. The University was also responsible to purchase and install bicycle and pedestrian counters at the other nine MCORE corridor locations because the MCORE project mostly impacted the University District and the campus community (our students, faculty, and staff).

In early March 2020, we installed the first set of Eco-Counter at the Illini Union along Green Street (installation cost ~\$5,500). Due to the pandemic, we were unable to install Eco-Counters at the other two locations that year.

In summer 2021, a new CFOAPAL, with remaining funds, was created for Bike and Ped Counters: 1-304479-701-SSC Bike and Ped Counters. These funds were used to purchase two new counters for the fourth corridor location (in summer/fall 2021). The remaining funds were expected to be used to install the Eco-Counters at two other locations (intersection of Armory and Sixth, and intersection of Wright and Healey).

However, in August 2021, the actual cost to install a set of Eco-Counters at the intersection of Wright Street and Healey Street was much higher than the estimate. Because of this, our expenditure exceeded the allotted SSC funding.

In fall 2021, we balanced this account using the F&S TDM funds. In spring 2021, we used the F&S TDM funds to install Eco-Counters at the (1) intersection of Armory Avenue and Sixth Street; and (2) intersection of Green Street and Goodwin Avenue.

We have auto data transmission for all Eco-Counters and we are reporting monthly data on the [iCAP Portal](#), the [F&S Biking website](#) and [F&S Walking & Running website](#). We also display the monthly data for bicycle counts at these locations (and others, when available) on the [Bike at Illinois website](#).

Thanks to the generous contributions and patience from SSC, we were able to install Eco-Counters at four campus locations. These counters have the ability to show 15-minute data for pedestrians and cyclists that pass through them. I would also like to thank the F&S Electrical Shop and Labor Shop for their effort in the installation.

We have shared the access to Eco-Counter's data dashboard (Eco-Visio) with SSC Transportation Working Group, so they can view the bicycle and pedestrian behavior at these locations at their convenience.

### **Summary of Project Expenditures:**

In March 2020, we installed 2 Eco-Counters (1 set) at Green Street by the Illini Union. The installation cost was nearly \$5,500.

In summer 2021, a new CFOAPAL, with remaining funds, was created for Bike and Ped Counters: 1-304479-701-SSC Bike and Ped Counters.

We installed 2 Eco-Counters (1 set) at the intersection of Wright Street and Healey Street. The cost for installation came out to be \$6,345.17.

We also purchased 2 new Eco-Counters (1 set) in fall 2021 for \$14,149.

We spent \$666.90 more from the allotted SSC funding. This over expenditure has been paid using the F&S TDM account.

We used the F&S TDM account to install the Eco-Counters at:

1. Intersection of Armory Avenue and Sixth Street – Installed in April 2022
2. Intersection of Green Street and Goodwin Ave – Installed in May 2022

### **Problems/Challenges Encountered**

There were several challenges encountered during this project. However, these challenges have helped us identify aspects that we need to consider for future projects.

1. Staff changes that occurred during the timeline of this project. – In 2018, Lily Wilcock left this position and Sarthak Prasad replaced her in 2019.
2. We could have supported the RolyPoly team more.
3. High course-load on the students of the RolyPoly team, which resulted in the team's inability to work on the project (from 2017 – 2019).
4. Scope changes that had to be made to use these funds for Eco-Counters.
5. Covid-19
6. High installation cost of Eco-Counters (higher than the estimated cost)

We have also encountered some maintenance issues. F&S TDM department is responsible for the maintenance and yearly subscription fee.

### **Student Involvement and Outreach to Date:**

Students were involved in identifying the need for this project as well as determining the locations to place the Eco-Counters. The data collected from Eco-Counter will help us make our streets better for pedestrians, bicyclists, and all other modes of transportation.

We have auto data transmission for all Eco-Counters and we are reporting monthly data on the [iCAP Portal](#), the [F&S Biking website](#), and [F&S Walking & Running website](#). We also display the monthly data for bicycle counts at these locations (and others, when available) on the [Bike at Illinois website](#). We have access to 15-minute interval data from Eco-Counter that is available (on request) for any student, faculty, and staff to analyze the walking and biking behavior of our campus community at these corridors.

The Eco-Counter at Illini Union (North and South of Green St) was installed in March 2020, and F&S had published it in the Customer Relations E-Update newsletter. F&S had also reported this project in the [2022 progress report on the 2014 Campus Bicycle Plan](#) and published the report on the F&S website, Bike at Illinois website, and the iCAP Portal. F&S has also included the Eco-Counter in the Bicycle Initiatives section of the [Biking page on the F&S website](#).

**Additional Comments:**

We are very grateful for SSC's generosity and continued support to enhance our students' transportation experience on campus as well as SSC's continued patience with this project.