

LARGE GRANT ABSTRACT 2022-2023

SEJF large grants requests are for projects that require funding over \$35,000. The large grant abstract is designed to introduce a project idea that requires significant funding to the SEJF Committee. Abstract approval is required before submitting a large grant application. For detailed abstract instructions and further information about the program, ask a program representative.

Submit the completed application by emailing a scanned version (including signatures) to Zinta Lucans, the SEJF Grant Program Coordinator. Email: <u>lucansz@wwu.edu.</u>

SECTION 1: Project Concept.

1) Project Title:

Campus Bike Counter Installation

2) Describe your proposed project:

- a) We propose installing three sets of bike-counting devices throughout Western's campus to procure accurate and continuous bike and micromobility device count data. This involves installing three lengths of inductive loop along with three count displays. These counters would be installed at the locations provided in figure 1. These locations are the locations used for previous data counting and capture all the recommended pathways into campus in the official <u>WWU Micromobility Map</u>. The team chose the location in front of the Student Rec Center to house the largest and most prominent display as this is the main entrance to campus for visitors and much of the campus community.
- b) Automated counters reduce the amount of staff time required for manual counts, which can only be completed at most every quarter and during peak hours. Installing automated counters provides real-time displays of how many people ride to campus to encourage micromobility usage, captures trips made outside of peak hours, and provides data for every day of the year.

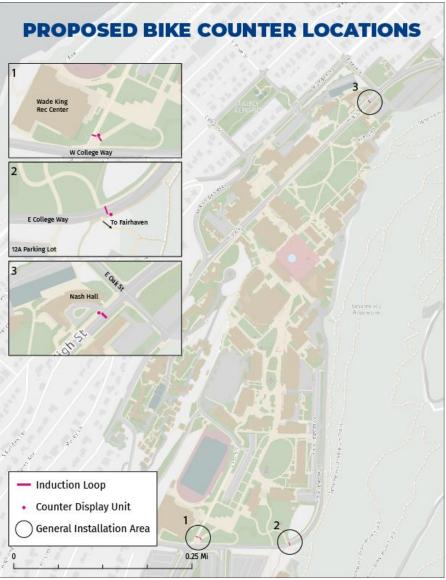


Figure 1: Proposed bike counter locations.

3) Who is the intended audience?

- a) Transportation Services, Facilities Management, and Capital Planning and Development
 - i) Planning infrastructure such as bike racks, circulation, storage for mobility devices, vehicle parking capacity
 - ii) Goal setting and outcomes evaluation
 - iii) Public relations and accountability
- b) Future project teams (Ex: students working on other SEJF grants) for project justification, goal setting, and outcomes evaluation
- c) People passing the bike counter display who will be more aware of the number of non-drivers on campus

4) How does this project directly impact the Western student community?

- a) This project directly impacts Western students in three ways:
 - i) The displays will provide real-time reinforcement of mobility choices and raise awareness of the importance of micromobility devices in Western students' mobility and access to campus

- ii) All three counters are an investment in infrastructure which will support future decision-making and ensure efficient use of student and state resources
- iii) Access to data for student research and projects

5) What are the goals and desired outcomes of your project?

- a) Goals:
 - i) Install three permanent bike/micromobility counters on Western's campus by spring 2024
 - ii) Secure commitments to fund subscription (including counts at 15-minute intervals) and maintenance costs for the first five years after installation
 - iii) Establish automated data sharing with Washington Department of Transportation
 - iv) Provide real-time (or near real-time) API access to data for Western students connected to the Sustainability Dashboard
 - v) Assure Western students and employees are accurately represented in bicycle and micromobility device counts at a city and state level
- b) Outcomes:
 - i) Promote mode shift toward micromobility
 - ii) Future infrastructure and programming development at Western and in Bellingham has adequate quantitative data to support project funding

6) How will your project positively impact sustainability at Western?

- a) Reduce pollution: ICE Vehicle trips are responsible for 30% of carbon emissions in Bellingham. Mode shift to micromobility and pedestrian modes is a central goal in <u>Western's Sustainability Action Plan</u> and the City of Bellingham's Climate Protection Action Plan (chapter 5, section 2). Shifting to micro modes also dramatically reduces water and noise pollution and reduces required impervious surface area and associated stormwater runoff. Measuring mode share is key in evaluating the success of any initiative toward these goals, and real-time feedback is an important motivator for change.
- b) Reduce costs: vehicle parking on Western's campus requires \$1,119,571 in operating expenses and \$1,193,951 of parking maintenance and construction expenses. This cost is paid for through parking revenue, however, parking revenue is money that students and employees pay to use these facilities, which could be spent on more beneficial goods and services. This also consumes Facilities Management's time, which could be spent differently, and it occupies valuable land, which could be repurposed.
- c) Health: research has found that people who commute to work on a bike are at lower risk of cancer and cardiovascular disease, and are 40% less likely to die over a five year <u>period</u>. Mode shift to active modes directly contributes to the health and wellbeing of Western's community.

SECTION 2: Project Participants.

a. Team Information: A team should consist of two to five individuals, including the advisor.

<u>Team Advisor Information (Faculty or Staff)</u> Student proposals must include a staff or faculty advisor. The role of the advisor is to provide assistance and guidance to the team during the development, implementation, and post-implementation stages of the proposal process.

<u>Team Lead</u>: There must be at least one team lead designated for the project. This individual is expected to serve as the communication liaison for the project.

Name	Department/School Students provide major/minor	Position: Faculty/staff/student Students provide expected graduation quarter/year	Western email address
<i>Team Advisor:</i> Beth Hartsoch	Office of Institutional Effectiveness	Staff	hartsoe@wwu.edu
<i>Team Advisor:</i> Steve Hollenhorst	ENVS/UEPP	Faculty	hollens@wwu.edu
<i>Team Lead:</i> James Detke	Transportation Services, UPSD, GIS Cert., Sustainable Design.	Active Transportation Coordinator, graduating June 2023	atc@wwu.edu
<i>Team Member:</i> Seb Genge	Business & Sustainability	AS VP for Sustainability, graduating June 2024	AS.VP.Sustainability@wwu.edu
<i>Team Member:</i> Pierce Bock	Urban Planning & Sustainable Development (UPSD)	College of the Environment Senator	bockp@wwu.edu
Team Member: TBD	Transportation Services	Active Transportation Coordinator 2023-2024 starting spring quarter 2023	atc@wwu.edu

b. Potential Project Stakeholders:

Will your project potentially involve labor, include involvement, or require permission from organizations, departments, or individuals on campus or in the community? If so, these will be your stakeholders; please list them below. *Communication with stakeholders is not required for abstract approval.*

Stakeholder	Involvement in Project
Amanda Cambre - Facilities Management	Facilities Management will be responsible for project installation and maintenance. Amanda will aid us in communicating with FM and is one of the employees the team is in contact with.
Shelby Zimmerman – Transportation Services	Financial agent
Commute Options Program Manager – Transportation Services	Unfilled position, will aid in managing the project and the data provided by the counters
City of Bellingham	Use the data provided by the counters
Washington Department of Transportation	Use the data provided by the counters

SECTION 3: Project Budget.

- a. Provide a realistic budget estimate for the project, based upon research into all anticipated costs. Do not itemize estimated costs within the four categories.
- b. ADD INFO ON WHERE COST ESTIMATES COME FROM

Item	Cost
Materials	\$59,785
Labor/contracts	\$15,000 – 25,000
Promotion	\$0
Other - ongoing	\$1260 / year
Total budget estimate	\$76,045 - \$86,045 for one year \$81,085 - \$91,085 over 5 years

c. The SEJF program encourages the use of additional funding sources to create a collaboratively funded project; include potential funding sources beyond the SEJF that you will seek.

Funding Source	Connection to project	Potential Funds

Is there any additional information about the project that you would like to share?

n/a



LARGE GRANT ABSTRACT PROPOSAL REVIEW PROCESS

Please arrange a meeting with Zinta Lucans, the SEJF Program Coordinator for the Sustainability Engagement Institute, to review your drafted proposal. Once your project proposal is complete, it must be signed and emailed to: www.edu.

Your completed large grant abstract will be presented to the SEJF Committee for consideration. The SEJF Program Team will provide you with information on the committee's response and decision regarding your request.

Zinta Lucans

SEJF Program Coordinator, Sustainability Engagement Institute, Western Washington University

Signa	ture
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Date: _____

This signature confirms that the application has been accepted for SEJF committee review; it does not indicate funding approval.

Grace Wang Director, Sustainability Engagement Institute, Western Washington University

Signature: ______

Date:

This signature confirms that the application has been accepted for SEJF committee review; it does not indicate funding approval.