**Memo:** Outdoor Bin Project

The intent of this memo is to provide a summary of the costs and timelines associated with the project to right-size and enable recycling for the outdoor bin collection infrastructure on campus. The current collection infrastructure incentivizes waste disposal without recycling and requires a substantial staffing commitment.

The plan proposes to replace the 382 single outdoor bins with 130 strategically placed dual bin stations. Above the direct benefits that come with increasing recycling access on campus, this proposed plan reduces the total number of stops required to be made and thus provide efficiency benefits to our operation. The new proposed locations were selected to reflect current foot traffic, high waste generation spaces. These new locations were selected through a process led by the Facilities & Services Sustainability Department along with representatives from Grounds, Capital Programs, and various student volunteers.

The following costs were calculated based on the collective experiences and learning of departments within Facilities & Services involved in the dual bin rollout for the MCORE project.

**Bin Station Procurement, Fabrication and Installation:** The three main cost segments for the dual bin stations are the procurement of the individual bins, the labor involved in fabricating the attachments to create the dual bin stations, and the final paint and powder coat to weatherize the bins. Additionally, an estimated 2 hrs. would be required to install the bin. The unit cost for a dual bin station are as follows, note that to create a dual bin station 2 individual bins are procured:

 Bin procurement (2) $1235

 Fabrication labor (10hrs) $700

 Weatherizing $160

 Installation labor (2hrs) $140

 **Total $2,235**

The total cost for the procurement, fabrication, and installation of an individual bins would be **$2,235/bin** and **$290,550** for the 130 locations identified.

**Removal of Current Bins:** The removal of the 282 single bins on campus would need to be carried out to realize the benefit of the dual bin stations. It is estimated that each bin will require 0.5hrs of labor to manage, remove and safely store, with a total cost of **$13,250**. At this point the cost to recycle these bins has not been considered, as preference will be given to find a secondary use for these bins.

Thus the total cost for the project would be $303,800. The project costs does not include the cost for promotional outreach, new signage, and staff training associated with the transition.

**Timeline:** Although the final timeline is subject to staff capacity and weather conditions at the time of each phase of the project, the following is the proposed timeline for the project. As fabrication can commence even before the bins arrive, the project assumes two staff members working on the project for a period of 4 month and send to vendor for weatherization before installation.

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| --- | --- | --- |
| Project phase | Months from project launch  | Cost |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Bin Procurement  |  |  |  |  |  |  |  | $ 160,550 |
| Fabrication  |  |  |  |  |  |  |  | $ 91,000 |
| Weatherization |  |  |  |  |  |  |  | $ 20,800 |
| Installation  |  |  |  |  |  |  |  | $ 18,200 |
| Removal of current bins  |  |  |  |  |  |  |  | $ 13,250 |
| **Total**  | **$ 303,800** |