# ARCOSANTI



## GREENLIGHT GREENPAPER

Fall 2017- Fall 2018





Facilitating a circular economy at Arcosantiduring their Convergence and FORM festivals, and for their community at large.

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Arcosanti's recycling slab and materials yard was in need of organization, which presented an opportunity to create greater accountability and utilization of these materials. The Convergence and FORM festivals at Arcosanti had goals to create less waste, which presented an opportunity for GreenLight to meet these sustainability goals creatively for the community.

### Fall 2017:

Solutioneers created a system in which Arcosanti would organize and inventory their recycling slab and materials yard into a data sheet and promote awareness of the existing materials to be utilized by community members. The team formed a relationship with RISN (the Resource Innovation & Solutions Network), which led to the creation of an educational webinar about the circular economy. This webinar was featured at the Ellen MacArthur Disruption Innovation Festival. The team brought gamification to the Convergence Festival to enhance the circular economy at the event. This game featured the 'Golden Trash Can', which challenged the 300+ event attendees to limit their waste to only one trash can of waste for the entire three day weekend. The game was a success!

## **Spring 2018:**

The team was awarded the Civic Engagement Grant from ASU's Changemaker Central and purchased a plastic shredder and injection molder to divert dilapidated plastic items on their way to the landfill; shredding the items to create the filament for 3D printers, contributing to the circular economy. The Solutioneers also shifted their focus to Arcosanti's largest event, FORM Festival. During the event, Solutioneers conducted a collective consciousness study and rewarded sustainable behaviors with prizes.

#### Fall 2018:

Solutioneers volunteered at another Convergence Festival, this time giving demonstrations of the plastic shredder and injection molder. The team also upcycled forgotten parachutes, tents, and tarps from FORM into clothing and bags.

#### BENEFITS TO PROJECT PARTNER

By creating less waste at the festivals, Arcosanti saved on labor costs for trash hauling, and a culture of sustainability thrived. Waste diversion rates of this magnitude at an event with high traffic was a great win for sustainability, raising awareness among all event attendees. The new plastic shredder and injection molder provided Arcosanti with new revenue sources. Our team helped Arcosanti to decrease their contribution to landfills by advancing the circular economy within the community. Arcosanti was also able to gain insight on events attendees' user experience and participation through the collective consciousness study.

#### BENEFITS TO SOLUTIONEERS

Solutioneers were able to learn how a large event can be made sustainable and learned best practices in sustainability engagement through gamification, surveys, and demonstrations. They were also able to network with the Arcosanti community and form connections with residents. Students who participated in the webinar for the Disruption Innovation Festival gained public speaking experience.

#### BENEFITS TO THE COMMUNITY

Festival attendees learned how to produce less waste, learned about how technology can advance the circular economy, and were rewarded for sustainable behaviors. The residents of Arcosanti benefitted from a newly organized recycling slab and materials yard and saved time and money on waste hauling. With decreased waste at festivals, Arcosanti residents can live in a less polluted, cleaner, and healthier community.

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