



UCLA Sustainability Action Research

Graduate Housing Team 2017 Midterm Report

Team Leaders:

Chris Hunter

Mark Biedlingmaier

Team Members:

Chiara Phillips

Sarah Paset

Chloe Ney

Elias Platte Bermeo

Stakeholders:

Daisy Oliver

Residential Coordinator, Residential Life at University Apartments

Addae Jahdai-Brown

Assistant Director, Graduate and Family Housing of Residential Life at University Apartments

Abstract:

This year the SAR 2017 Graduate Housing Team has begun the design and implementation of a “Zero-Waste Pilot Program” within the two UCLA Hilgard Graduate Housing University Apartments that will begin in Spring Quarter. This pilot program is a collaborative project that has been made possible by the generous efforts and participation of Athens Services, Global Green, and EcoSafe. Our project will focus on waste diversion, specifically by seeking to: 1) improve the diversion of recyclable waste that Hilgard Residents produce; 2) establish a food scrap and compostables collection service; and 3) serve as an educational tool for residents to understand the importance of implementing ecologically sound behaviors by reducing residential waste. Our team feels as though this waste reduction initiative greatly complements the community gardens and free produce collections in University Apartments South by serving as the final piece in creating a closed loop food system. By succeeding in these project goals, we hope to help the University as a whole reach its Zero Waste by 2020 goal.

Introduction and Background

This year, the Sustainability Action Research program has had the unique opportunity to work within the Graduate Housing department of University Apartments. Our team, appropriately named the Graduate Housing Team, is unique in the sense that we are composed of underclassmen with stakeholders who do not hold an environmental-sustainability specific position within their department. Having this learning curve has challenged us with being first team to establish a sustainability program with Weyburn and Hilgard Residential Life Services. However, one former project that was conducted through ART (the previous version of SAR) provided a significant amount of guidance and influence regarding the direction in which our project is now headed. This project was conducted by the University Apartments Team in 2014 and focused on creating a more efficient recycling program for UCLA's University Village Graduate Apartments on Sawtelle Boulevard and Sepulveda Boulevard.

Their plan was to design an experiment that would monitor the diversion rate of recyclable materials to recycling facilities through 4 experimental groups and one control group. The components of their experiment consisted of dividing University Village into 5 sections with the experimental groups consisting of: "(1) providing residents with personal recycling bins, (2) providing residents with door hangers that listed recyclables, (3) replacing the text-based trash enclosure signs with image-based signage, and (4) sending out weekly reminder emails" (Pastor et al, 2014: 3). They ultimately experienced major challenges in actually increasing diversion and found that this was because the majority of waste being produced by the apartments was not recyclable materials but was primarily food scraps and compostables.

In their final report, the team explicitly advocated for the establishment of a food scrap and compostables collection program that they predicted would significantly increase the rate of waste diversion. This conclusion was backed by their research, experimentation and survey

results which inspired us to commit to a project surrounding improved recycling throughout a suitable location within University Apartments. Their project served as an invaluable resource for our project considering the shared goals between our teams and our ability to learn from what they found to be successful and unsuccessful. In addition, we coupled this report with a proposal for funding by a group of students at Santa Clara University in which the students and several stakeholders planned to implement an apartment-wide composting program in one of the school's undergraduate apartment complexes. The proposal offered suggestions for various composting bins to be put in each unit and provided estimates for total costs of the program. Although we didn't immediately know the direction we wanted to take our project, this report remained in the back of our minds. These reports gave us a solid understanding of composting projects and ultimately gave us confidence in the decision to move forward with our zero-waste pilot program.

Methodology & Challenges

Our team decided to adapt the recycling program that the previous University Apartments' Team had set up in the University Apartments South to the Hilgard Apartments and to simultaneously establish a food scrap and compostables collection program. Through the help of our dedicated Stakeholders, Addae Jahdai-Brown and Daisy Oliver, as well as our generous co-collaborator, Emma Sorrel, our team was able to get in touch with UCLA Facilities, Athens Services, Global Green, and EcoSafe to discuss and ratify the design of our program.

Throughout the quarter, our team faced several challenges to clarifying how exactly we would execute our new goal of waste reduction. Having graduate housing being our team's main concern, it was important for us to understand what the residents wanted to see improved throughout their community. During the beginning of the quarter, we accomplished this goal by thoroughly reviewing a needs-assessment provided by Daisy and Addae. With graduate

housing located off-campus and being composed of several complexes as far as 5 miles away, it is clear that many residents lack a sense of community and want something to bring them all together. With this in mind, our team was originally interested in creating a community garden. After a bit of research, we found that there is a similar system already in place at University Village, one of the graduate housing locations, which has over a hundred thriving plots. We figured that by giving students the ability to get outside, talk to new people and learn how to grow and cook their own food, we would be able to provide a space that could foster healthy relationships and build a sense of responsibility to the environment. However, after a discussion with our stakeholders we decided against following through with this idea mainly due to the fact that there is a pilot program already in the works that involves implementing a community garden within Weyburn Terrace Apartments. Daisy and Addae suggested that we could start a garden for the undergraduate apartments but this was also ruled out due to space concerns and the fact that many undergraduates are planning to apply for community garden plots in the Living Amphitheater Garden at the Sunset Recreation Center.

As our team faced these roadblocks, we continued to brainstorm ideas that could lead us into a concrete direction for making an impact within Graduate Housing. We concluded that the best plan is to move forward with a waste reduction project that might involve increasing recycling efforts and implementing a composting system. This decision was largely based off of knowledge acquired from the previously mentioned SAR report in 2014. The University Apartments Team conducted research on the state of waste diversion within University Village which concluded that simply improving recycling standards was not enough to create substantial impacts on waste diversion. What they and many of the residents suggested was implementing a composting program keep organics out of the landfill and stay within the nutrient cycle.

With their input, we decided to invite Emma Sorrell and her assistant, Pamela Lim, to our

stakeholder meetings with hopes to better understand the green waste movement currently happening on The Hill. Throughout our meetings we looked at the two major ways to go about waste reduction. One approach would be to evaluate infrastructure such as waste receptacles and loading docks for removal to off site facilities. Although on and off-site living facilities across University Apartments are all unique, Emma reassured us by discussing how Athens Services was interested in expanding green waste services at University Apartments.

In addition, Emma explained her team's second major approach to reducing waste, using communications to instill environmental responsibility within the individual. Some of these solutions revolved around creating dialogue through online pledges via the "My Last Trash" campaign or perhaps merging environmental-sustainability education with art through visual displays of how to sort waste. It became clear that installing infrastructure was only part of the process and providing necessary educational tools such as signage and direction is vital in making lasting impacts. Moving forward, we decided to implement new and improved recycling and compost programs in Hilgard to further establish UCLA's Zero-Waste by 2020 goal.

In addition to the logistics of our project, we were challenged with making zero-waste events and sustainable lifestyle choices accessible to graduate students to serve as an opportunity to familiarize ourselves with the waste behaviors of UCLA's diverse graduate student body. At the Weyburn-Hilgard Residential Association social we attended, we set up two sets of trash cans, recycling bins and compost bins along with basic signage. During the event we introduced ourselves, our mission and how we planned on using a short survey to further our research. Of the 56 people that filled out our survey, only 81.82% felt that the signage was easy to follow. In addition, many people did not sort out their waste and others that were confused and had to ask where items should be placed. Although 81.82% is a large majority, we hope to design improved signage that will bring that number closer to 100%.

Understanding how to create waste diversion programs in a way that best serves the community has posed considerable challenges for us. Initially, we were interested in introducing more outdoor receptacles to public spaces in Weyburn and Hilgard. We soon learned, however, that fire codes restrict this and UCLA has a policy against having outdoor trash cans in these areas.

Our next option was to provide compost, recycling, and trash bins for each room involved in our pilot. Initially, we were worried that introducing new streams of compostables and recyclables would be difficult for Athens to collect, but we decided to reach out to them anyways. Fortunately, the representatives from Athens were enthusiastic about starting a compost pilot in the Hilgard apartments and offered to provide bins and compostable can liners as well as suggestions for signage, waste audits, and a general timeline for what should be done to get the pilot started. For the recycling program, we were able to request enough bins from what graduate housing has in stock already for each unit in Hilgard. With that in mind, we plan to use Spring Break as an opportunity to gather materials for that will be used during the outreach phase for our improved recycling program, compost pilot, bin distribution, and waste audits which will be discussed in more detail at a later time.

Spring Goals

At this moment, Hilgard Residents are currently poised to receive three informational emails from Weyburn and Hilgard ResLife that will notify them about the general establishment of the program, about their expected participation in the program, and about social events that they can attend to get to know the “Zero-Waste Pilot Program” better. The pilot program itself is planned to start during week one of Spring Quarter which will mainly be focused on outreach and infrastructure dispersion. In addition, we will be running a waste audit to measure and analyze the general amounts and types of waste produced by Hilgard Residents in order to

establish a baseline to measure the success of our program in terms of efficient waste diversion.

In order to complete a successful audit, we will be dividing into two teams for each Hilgard building. Necessary materials include hefty measuring scales, roughly 20 5-gallon buckets, tarps, canopies, and suitable clothing for measuring a week's worth of waste. Throughout the quarter and then during week nine we will conduct another waste audit to measure how successful the program is at diverting waste. If the program is successful in Hilgard, our ultimate goal for this program will be to tailor and expand it to include the rest of the Graduate Housing living communities in Westwood Village that are part of Weyburn Terrace,

Working off of the results obtained from our WHRA Social survey, we plan on making clear signage with pictures of the items that should be placed in each bin at events and the bins that we distribute to the units in Hilgard. Despite the challenges we faced in creating our project and making effective signage, we now know what does not work and what could work which will be incorporated in our plan to implement proper procedures in the next few weeks.

Looking to Spring, the centerpiece of our project will be the Hilgard compost pilot, supplemented with the new recycling efforts. Our goal is to push residents of the two University Apartment buildings at 720 and 824 Hilgard towards 100% waste diversion rates. There are 83 units total, which should give us a large enough sample size to analyze the program's success and make recommendations for expansion to the roughly 500 units within Weyburn Terrace, along with UA South and the Undergraduate apartments.

When we suggested a pilot to Jessica Aldridge, the Sustainability Director at Athens, she expressed enthusiasm and explained how past compost pilots they've ran have worked. Other pilots sponsored by Athens have been a partnership with two Los Angeles-based nonprofits, Global Green USA and EcoSafe Zero Waste, who all work together to provide funding,

materials, and guidance. Jessica explained that generally, they like to do two weeks of outreach before officially beginning the pilot then run the pilot for 2-3 months with an audit at each end.

Given our short timeframe to work with, we plan to start the outreach during spring break with emails and flyers throughout the buildings and continue through the first week of Spring Quarter by conducting a baseline audit during week one. On Wednesday of the following week (4/12), we will have a team from Facilities distribute the kitchen compost caddies, along with blue recycling bins. The caddies will come with a liner and a guide giving instructions on how to use it along with general program information. That night, we will host a small kickoff event in each building to answer any questions the residents have about how to sort their waste, who to notify for any issues, or why we are doing the pilot. Any resident who would also like to pick up a small trash bin to go along with the other two will be able to do so then. In order to encourage attendance, we plan to raffle away dining hall meal tickets or other UCLA swag and provide pizza.

Over the next two months, we will work with a resident and UA employee to closely monitor the central bins and field questions or concerns from residents, making sure to address any issues as quickly as possible. We also plan to distribute a survey during week five to gauge the popularity of the program and hear from residents what they would like to change. Then, during week nine we will run a second audit and compare the results to the baseline audit to come up with recommendations going forward.

As mentioned above, we will be distributing blue recycling bins to Hilgard residents and will provide trash bins to those who request them. We expect that few trash bins will be requested as most residents have already been living in these units for the past two quarters, but this pilot will essentially set the precedent for all three (i.e. compost, recycling, and trash) receptacles being provided for future terms. After speaking with housing staff, we established

that only providing some receptacles would be ineffective. When housing provided only blue recycling bins and not trash receptacles, many students either used the recycling bins for all trash and did not sort recycling or did not use the bin provided at all. In addition to improving recycling access within the apartment units, we plan to increase outdoor recycling and trash receptacles. Again, while the goal is to improve recycling and reach zero waste, we determined that providing only recycling receptacles outdoors would lead to misuse and be counterproductive to our ultimate goal of waste diversion.

Another large component of our Spring quarter goals involves creating and/or improving signage for our compost and recycling programs. The Grad Housing team is working with signage from UCLA initiatives on the Hill as well as signage provided by Global Green from previous projects. At the beginning of Spring quarter, we will implement new signage in the trash rooms to provide clear instructions as well as informational fliers in the bulletin boards to inform residents about the recycling and compost programs. In addition to signage throughout the common spaces, we will also distribute compost and recycling instructions to each apartment unit. This information will be provided in paper handouts as well as refrigerator magnets and door hangers for accessibility.

At the end of Spring quarter, we will host a move out event in the graduate apartments. We will work with Daisy Oliver and Josh O'Connor to coordinate and plan how the event will go, but our primary goal is to increase donation and recycling of items left behind by students moving out of the apartments. We predict move-out week results to be much higher than average weekly waste and we want to encourage sustainable practices by making alternatives to trash convenient and fun for the residents.

Works Cited

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