

Roll! Recycle! Roll!

Daniel Community Scholars Environmental Project

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Background:

Alabama is losing money by failing to implement efficient recycling programs. A report by the Alabama Department of Environmental Management (ADEM)¹ went through a series of calculations using exemplar data from other southeastern states and from landfill and recycling operations in Alabama. The department concluded that Alabama buries a total of \$218,841,734 worth of recyclable materials annually in landfills. This is highly counterintuitive as recyclable materials are in high demand.

Alabama does not produce significantly less trash than other states, so it should be able to supply its recycled plastic manufacturers with more material than it currently does. In fact, Alabamians on average produce 9.94 pounds of solid waste per capita. This weight includes municipal construction and industrial waste streams and divides those sources among citizens. Even with those sources of waste removed from the per capita generation rate, each person on average generates 6.3 pounds of solid waste per day.² Of that waste, Alabamians currently recycle 16%.³ This number has doubled since 2008, but it has not yet reached the goal of 25% recycled solid waste defined by the ADEM Administrative Code r. 335-13-13-.02.⁴ In order to comply with this regulation, municipalities in Alabama need to improve recycling access and efficiency.

Ashley Chambers, our community partner from Tuscaloosa Recycling, informed us that garbage is going to be considered a renewable energy resource. This can either be through recycling or landfills having the capacity to generate 550 megawatts of electricity.⁵ Finally, the UN Report on Climate Change urges us to act before we irreparably harm the planet by 2030, meaning we only have 12 years to act. These startling facts show that this is a pressing problem that requires an immediate significant change in attitude if we can ever hope for real progress.

Introduction:

Due to the City of Tuscaloosa Recycling Center's inability to partner with apartment complexes, as they are not private residences, on increasing recycling efforts, our project has looked toward creating pamphlets that can be given out to apartment complex centers which can then distribute the materials to residents. Moreover, we are looking to have an informative day in which community members will learn the importance of recycling, as well as the options available to them in the city of Tuscaloosa. This green day will include recycling games and fun activities for children, as well as an appearance by Big Al. Hopefully, in making this event both

¹ (Alabama Department of Environmental Management 2012) <<http://www.adem.state.al.us/programs/land/landforms/CompleteEconomicsOfRecyclingAlabamaReport.pdf>>

² (Alabama Department of Environmental Management 2012)

³ (ADEM Land Division 2016)

⁴ (ADEM n.d.) *335-13-13-.02 Statewide Solid Waste Reduction Goal. There is hereby established a statewide solid waste reduction goal of 25%. Attainment of this goal (G) shall be determined on an annual percentage basis by use of the following formula:*

$$G = (R/(R + W)) \times 100$$

where the amount of annual waste reduction (R) shall be calculated by aggregating all reported quantities of recovered materials in tons processed for recycling or beneficial reuse, and the total annual statewide solid waste generation (W) shall be determined in tons by data reported to the Department in accordance with 335-13-4-.22(2)(g) or 335-13-4-.23(2)(f) less any reported out of state waste accepted for disposal.

⁵ (Waste Management 2017) <<http://www.wm.com/sustainability/renewable-energy.jsp>>

⁶ (The Guardian 2018) <<https://www.theguardian.com/environment/2018/oct/08/global-warming-must-not-exceed-15c-warns-landmark-un-report>>

informative and kid-friendly intergenerational networking will occur as people from all different age groups and backgrounds will join together on this day. Through these two means of disseminating information, this project should effect an increase in recycling in the city of Tuscaloosa, as well as on the University of Alabama campus.

Our initial plan was to post flyers around the city of Tuscaloosa and campus, but we recognized that this was not a sustainable practice. Ashley Chambers, our community partner from Tuscaloosa recycling, encouraged us instead to create an intense social media presence and campaign. She offered support in posting to the Tuscaloosa social media sites as well. She also suggested that we create a Snapchat geofilter for the Green Day event, buy sponsored ads on Instagram, and create a hashtag for the day. As our community partner, she has shown great confidence in our plan and has even guaranteed a letter of support from Mayor Walt Maddox. Tony Chambers, our secondary community partner from UA Recycling, has also shown great support for our project and is working closely with Ms. Chambers on information they would like disseminated.

Goals:

1. To get people to throw away less garbage, hence the reusable straws and bags.
2. To get more people on campus to recycle with our awareness campaign.
3. To get more people off campus to recycle by attempting to educate apartment complexes.

Methods:

Green Day Event:

The Green Day Event will be held on campus on Friday, March 22, 2019, following World Recycling Day on Monday, March 18, 2019. This will be a prime time to host the event as students will be fresh off spring break, and we can capitalize on the nice weather with slogans like, “Go green, for spring!” etc. The event will be held from 10 a.m. to 3 p.m. Furthermore, because it is on campus, transportation will not need to be provided, and it will hopefully attract a large group of people as students walk by.

By January 22, 2019, we will need to submit a grounds use permit to ensure that the event will have a space to be hosted. We will also reach out to the University of Alabama Panhellenic Association to potentially create a Greek point for this event. Partnerships with local food trucks and businesses should be made to provide the opportunity for food. Moreover, the request form for Big Al’s attendance at the event will be completed at this time. Once all of this information is known, advertisements will have to be created and distributed to the Tuscaloosa community by February 22, 2019. With these promotional materials ready, we will reach out to various organizations’ social media teams to have our event promoted - City of Tuscaloosa, UA Recycling, Tuscaloosa Recycling, Blackburn, Blount List-Serv, New College, and Environmental Council, among others. Students can also reach out to professors and encourage them to bring their children to the event. There will also be contact made with Capstone Village

to invite the senior citizens to our event. We will also reach out to University Relations and local news sources to advertise the event and disseminate information afterwards.

Shirts for the Blackburn student volunteers will need to be designed by January 18, 2019, and ordered in time for two training sessions, held on February 11th and 12th, 2019. These shirts are necessary for volunteers so that participants in the Green Day Event can recognize who is organizing the event should they need any help. The shirts will be the bulk of the budget as much of the budget comes from small items, such as temporary tattoos and other promotional materials. Overall, however, the budget will remain fairly minimal and will not require any fundraising. The training will communicate to Blackburn students what is expected of them, and how they will lead the games and activities involved. They will also be made more knowledgeable as to recycling efforts on and off campus, as well as the importance of recycling. A sign-up genius will be created for each activity and Blackburn students will be able to sign up for the slot they would like to work by March 1, 2019.

The month leading up to the event, supplies for games will need to be purchased and brought to campus. All of this will need to be collected by the start of University of Alabama Spring Break, March 8, 2019. Because the nature of the games (see in appendix) requires running, liability release fliers will need to be printed by March 20, 2019 and distributed on the day of the day of the event.

By March 1, 2019, Blackburn will need to have reached out to the university to see about the utilization of an ACT card scanner at the event. This will enable Blackburn students to quickly check in students at the event, as well as providing emails to help send out a thank you email after the event which will also remind people about where recycling centers in Tuscaloosa are. For community members without ACT cards, two tables will be required to check people in - receiving names and emails. There will also be a geofilter created at this time for participants to use on the day of the event.

Blackburn students will need to arrive by 8 a.m. to begin setup. Information tables for University of Alabama Recycling and Tuscaloosa Recycling will need to be setup, as well as all of the game stations. Blackburn students will be able to participate by manning the games and booths, and in the creation of the flyers/advertising materials and media. Through creating advertisements, participating in the Green Day Event, and delivering flyers to off campus advertisements, Blackburn volunteers will feel as though they have had a role in educating the community. Big Al will make an appearance and participate in some of the activities/demonstrate recycling. To increase presence at the event, we will have giveaways that people can be entered in to win if they take a picture and post it to social media. Because this event is open to the public, intergenerational networking will occur between college students, adults, children, and senior citizens.

One week before the event, community partners will need to be contacted to ensure they are still available for the event. The night before the event, group 1 will ensure that all materials are in order and ready to go for the event the following day.

In order to know the success of the event, some students will be asking those who come to our event if they have learned new information as a result of participating. There will also be a central location for giveaways in which participants will have to answer questions correctly about recycling in order to get the prize. This will ensure that participants are walking away having learned something. Finally, the night of the event, a survey will be sent to those who participated to ask how our event impacted participants views/attitudes about recycling, as well as if they will increase their recycling efforts in the future. Through this questionnaire and survey, we will be able to demonstrate that residents have learned about the issue and whether or not it has changed attitudes toward recycling in Tuscaloosa. Should this event be a success, we also could send this to the Student Government Association to do as part of the Green Week in future years, with partnerships including Environmental Council, the Sustainability Coalition, and other environmental groups on campus. These groups would be able to provide the funding and manpower necessary to accomplish this event.

Pamphlets for Recycling:

Pamphlets will need to be designed, printed, and distributed to the local apartment complexes to be attached to the packet of information given to new residents when they sign their lease. These will be the same ones utilized at the Green Day Event. Blackburn students can participate by helping to distribute flyers. This will need to occur two weeks following the Green Day Event, the week of April 1st. We can encourage the complexes that are receptive to contact Tony Johnson who will provide them with recycling bins and pickup services.

Appendix

Community Partners

- Ashley Chambers
 - City of Tuscaloosa
 - 205-248-4900
 - ESD@tuscaloosa.com
- Tony Johnson
 - University of Alabama Recycling - Under the Office of Sustainability
 - 205-348-5700

Materials

- Paper for Brochure
- Temporary Tattoos/Stickers to attach to pamphlets
 - Effy has website
- Reusable Straws to pass out

- Props for pictures
- Recycling Bin & Trash Can
 - Provided by Tuscaloosa Recycling
- Recyclable items
 - Provided by Tuscaloosa Recycling and Blackburn Students
- Tables
- Bingo set
 - Effy Found \$7 downloadable to be printed
- Pens & Paper
- Liability Forms
- Staff Shirts
 - Potential suppliers: CustomInk, or Ashley recommended 4imprint.com

Preliminary Brainstorm of Games:

1. Recycling Scavenger Hunt
 1. Teams will try to locate the recyclable items on a list.
 2. The player who manages to get the greatest number of recycled items will win.
2. Tumbling Towers
 1. Divide participants into 2-3 teams.
 2. Give each team a recycle bin filled with aluminum cans.
 3. As you say go, participants will stack clean cans on top of the other to create a tower in 2 minutes. Each teammate must take a turn at building the tower.
 4. The player who builds the tallest tower will represent his team in the final match against team stacking competition. The final game will decide the winner.
3. Passing the Trash
 1. Divide participants into teams and tell them to form a straight line. Place a garbage can and a recycling bin at the end of each line.
 2. As you say go, the team members must pass the recyclable items down the line, saying what kind of item it is. Each of the teammates must move the item in a way other than how they got it. They can pass it under the legs, over the head or around the back.
 3. One the trash gets to end of the line; they must put it in the correct waste container.
 4. The team that gets the most items in the proper container in a specific time limit will win.
4. Recycling Bingo
 1. Have several items that can be recycled on a bingo sheet.
 2. The first participant who makes a line wins.

Risk Management:

- Physical: There is a potential for harm during the games, but we will have Blackburn students monitoring them closely, and all participants will sign the liability forms.
- Emotional: There isn't a clear emotional risk at the time.
- Reputational: Even if the event has low attendance, increasing recycling efforts is viewed in a positive light and should not negatively impact any involved party.
- Financial: Our project proposal is fairly low-cost in return for high benefits.
- Environmental: The only potential for waste could be the flyers, but we will make sure they get recycled. This is also the reason for social media push, rather than flyers.
- Communication: If we get our project advertised thoroughly then there should be no communication issues.

Bibliography

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Group Number:	1				
Project Name:	Roll! Recycle! Roll!				
	Quantity	Revenue per Unit	Total	Running Total	Notes / Details
Revenue:					
<i>Daniel Foundation Funds</i>	1	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	
TOTAL REVENUE				\$5,000.00	
	Quantity	Expense per Unit	Total	Running Total	Notes / Details
Expenses:					
<i>Educational flyers</i>	1000	\$ 0.30	\$ 300.00	\$ 300.00	Crimson Copies
<i>Temporary Tattoos</i>	500	\$ 0.17	\$ 85.00	\$ 385.00	Recycle Earth Heart Tattoo at temporarytattoos.com
<i>Recycling Bins</i>		\$ -	\$ -	\$ 385.00	Provided by Tuscaloosa Recycling Center or UA
<i>Trash Cans</i>		\$ -	\$ -	\$ 385.00	UA trash cans
<i>Recyclable Items</i>		\$ -	\$ -	\$ 385.00	brought by Blackburn students, fellows, staff, other UA students
<i>Printable Recycling Games for Kids Bundle</i>	1	\$ 7.00	\$ 7.00	\$ 392.00	adventure-in-a-box.com: Recycling Sorting Game, Recycling Bingo Game, Recycling Scavenger Hunt & I Spy Games (downloadable PDF file)
<i>Pens</i>	5	\$ 6.49	\$ 32.45	\$ 424.45	60 pens per pack, staples.com
<i>Paper</i>	1	\$ 12.49	\$ 12.49	\$ 436.94	staples copy paper, 500 sheets a pack
<i>Liability Forms</i>	300	\$ 0.10	\$ 30.00	\$ 466.94	
<i>Reusable Bags</i>	100	\$ 1.89	\$ 189.00	\$ 655.94	4allpromos.com
<i>Snapchat Geofilter</i>	1	\$ 20.00	\$ 20.00	\$ 675.94	20,000 sq ft for 24 hours
<i>Cutting for flyers</i>	1	\$ 3.96	\$ 3.96	\$ 679.90	Crimson Copies
<i>Student Shirts</i>	50	\$ 8.29	\$ 414.50	\$ 1,094.40	visibility for workers; customink.com
<i>Color Metal Reusable Straws</i>	300	\$ 0.53	\$ 159.00	\$ 1,253.40	to give away; must answer question about recycling after a brief statement from staff workers
<i>Stickers</i>	500	\$ 0.30	\$ 150.00	\$ 1,403.40	stickermule.com; can upload personal design
<i>Sponsored instagram advertisement</i>	10	\$ 6.70	\$ 67.00	\$ 1,470.40	expense per unit=cost per 1,000 views
TOTAL EXPENSES				\$1,470.40	
DIFFERENCE				\$3,529.60	Balanced or Budget Surplus