

Introduction

The city of San Antonio, Texas is facing a significant problem with trash waste in its rivers, drainage systems, creeks, and parks. The San Antonio river authority has graded the litter section with an F in its yearly evaluations, indicating a pressing need for action. Our proposed solution is to incentivize the community to collect and properly dispose of trash in these areas through a range of incentives, including community service hours, direct payments to trash collectors, challenges with prizes, and monthly appreciation events.

Our goal is to raise the litter section grade given by the San Antonio river authority from an F to eventually an A. If funding permits, we also hope to target the homeless population in San Antonio and provide them with an opportunity to earn money by collecting trash, effectively giving themselves a job. Through this project, we aim to make a positive impact on the health of our rivers, parks, and other public spaces, and engage the community in the process.

Background and context

The population of San Antonio has increased significantly over the past few decades, from just under 1 million in 1990 to 1.45 million in 2021. The San Antonio River runs through the city and is an important source of tourism, recreation, and flood control. However, the runoff from the city can bring trash directly into the river and its connecting creeks.

To combat this problem, several organizations such as the San Antonio River Authority and the Center Ambassador have worked to maintain the cleanliness of the river and the city. Despite their efforts, the San Antonio River Authority graded the litter along the river with an F.

To address this issue, our program focuses on engaging the community to reduce and collect litter. By raising awareness about plastic use and litter, we hope to decrease the amount of trash entering the river and its surrounding areas. Additionally, by increasing the number of people collecting trash alongside larger organizations, we can make a bigger impact on the cleanliness of the river.

To gain community involvement, our program incentivizes the youth, families, businesses, and citizens with prizes, competitions, community service hours, appreciation events, and eventually direct payments based on volume and time spent collecting. This bottom-up approach focuses on building communities that value a clean

and connected city, rather than relying on large amounts of money to fund big corporations.

The impact of this program would be significant, not only in terms of the cleanliness of the river and surrounding areas, but also in terms of fostering a sense of community and responsibility among the people of San Antonio. By working together, we can create a cleaner, more sustainable city for all to enjoy.

Project description

The proposed project is a recurring monthly competition to encourage individuals, schools, and businesses to collect trash and dispose of it properly. Before launching the competition, the organizers will canvas the city to recruit participants and businesses to help with trash disposal. The organizers will also document trash hotspots where participants can collect trash. Once enough schools and businesses have agreed to participate, the organizers will focus on promoting the competition through media outlets to reach a wider audience.

The competition will be concluded with an event to celebrate and reward the volunteers. Sponsors of the event can be the same businesses that compete, and schools can eventually take on the role of organizers, giving students real-world exposure to event planning, obtaining permits, hiring vendors, and promoting the event. Schools and businesses can also buy booth space to promote themselves and fund the competition. Other sources of revenue for the competition will include raffle tickets, merchandise, and event tickets. Participants who reach certain levels of trash collection will be rewarded with food truck vouchers, raffle ticket entries, and prizes for the top collectors.

Evaluation and assessment

To evaluate the success of our project, we will use the app Litterati to document the trash collection efforts of our volunteers. San Antonio river authority has had success using this app for their challenges, and we will adopt a similar approach for our competition. Users can join the competition and log any trash they collect in the designated area of the city. The Litterati app has a built-in leaderboard to track the top collectors throughout the challenge.

Our baseline goal will be to collect at least 25,000 pieces of trash, similar to the goal set by the San Antonio river authority in their one-year competition. However, we will aim to exceed this goal and make a significant impact on the cleanliness of our city.

One potential challenge with using Litterati is the time-consuming nature of the app, which requires a picture to be taken of every piece of trash collected. This may be a

deterrent for some volunteers, but we will work to mitigate this issue by providing training and support to ensure that the process is as efficient as possible.

The impacts of this program will be wide-ranging and include increased public awareness of environmental issues, improved cleanliness in the city, improved water quality in the river, and the fostering of a community focused on the environment. However, there may be limitations to the program, such as the difficulty in collecting larger items of trash like shopping carts and mattresses, as well as build-up of trash in hard-to-reach areas along the river.

To assess the success of the program, we will use the annual assessment of the river's health conducted by the river authority. Our goal will be to raise the previous year's grade of an "F" to a higher score, indicating a positive impact on the health of the river and the success of our program. We will also gather feedback from volunteers and community members to gauge the effectiveness of the program and identify areas for improvement.

Sustainability and future plans

To sustain the project once funding has been completed, we plan to continue organizing recurring competitions and events on a monthly or bi-monthly basis. The first event will require the most funding, but we expect that future events will be self-sustaining through revenue generated by ticket sales and sponsorships.

To make the events more efficient and scalable, we plan to create our own app instead of relying on Litterati. The custom app that will be developed as part of this project will not only allow participants to track and document the weight, number of bags, and number of individual pieces of trash they collect, but it will also provide them with information on the location of trash hotspots in the city and locations where they can dispose of their collected trash. This feature will allow participants to see which areas have already been targeted for trash collection and which ones are in need of attention, encouraging them to focus their efforts on areas that may have been overlooked. Additionally, the app will provide a map that shows the progress of the competition and allows participants to see where others are collecting trash, helping them to coordinate their efforts and work together to keep the city clean. Overall, the custom app will be a key tool for the success of this project, helping to streamline the collection and documentation process and engage participants in a more interactive and collaborative way.

In the future, we plan to involve schools in the planning and organization of the events, providing real-life experience for student council and business clubs. We will also offer

opportunities for high school theater clubs and AV clubs to gain experience in sound and lighting.

Once we have generated sufficient revenue and reserves from events and sponsorships, we plan to offer the option for volunteers to choose between community service or direct payments for their trash collection efforts. This will provide an opportunity for homeless individuals to earn money through the program, and we will work with homeless shelters to provide in-person payments for those who do not have a phone. However, volunteers who choose payments will be restricted from participating in incentives at the monthly events.

Budget

1. Recruitment of participants: \$500 (including marketing and outreach efforts to target schools and businesses)
2. Supplies for participants: \$1,000 (including bags, gloves, safety vests, and five gallon buckets for 100 participants)
3. Custom app development: \$10,000 (including design, development, and testing)
4. Event planning: \$5,000 (including venue rental, sound equipment rental, DJ fees, stage rental, permit fees, and live music)
5. Prizes: \$500 (including awards for the top collectors in each category)
6. Miscellaneous expenses: \$500 (including any unexpected costs that may arise)

Total budget: \$17,500

This budget is based on the assumption that the event will host at least 100 participants and that the organizers will be able to secure at least 15 schools and 5-10 businesses as participants. The budget may need to be adjusted depending on the actual number of participants and the specific costs of the event. It is also worth noting that this budget does not include any potential revenue from sponsorships, booth rentals, raffle ticket sales, or merchandise sales, which may offset some of the costs.

To reduce the budget for the project, there are several strategies that could be considered:

1. Seek donations of supplies from businesses: By reaching out to businesses such as Lowe's, Home Depot, Walmart, Target, and HEB, it may be possible to secure donations of supplies like trash bags, gloves, and five gallon buckets. This could significantly reduce the cost of providing these items to participants.
2. Host the event at outdoor parks: By hosting the event at outdoor parks throughout the city, it may be possible to eliminate the cost of renting a venue.

This could be especially appealing if the parks have amenities like restrooms and covered areas that can be used as a base of operations.

3. Involve local colleges and universities: By inviting local colleges and universities to participate in the competition, it may be possible to tap into a pool of talented students who could help with app development. This could potentially be done as a contest, with prizes offered to the team that develops the best app.
4. Seek sponsorships and donations of prizes: By approaching businesses and organizations that are interested in promoting their products or services, it may be possible to secure sponsorships and donations of prizes for the competition. This could be a win-win for both the organizers and the sponsors, as it provides a way for the sponsors to get their name out to a large audience while also supporting a worthwhile cause.
5. Utilize volunteer labor for outreach and marketing: By relying on volunteers to help with outreach and marketing efforts, it may be possible to reduce the cost of these activities. This could be especially useful for organizing and promoting the event, as volunteers may be able to leverage their personal networks and connections to spread the word about the competition.

Conclusion

Our project aims to address the issue of trash waste in the city of San Antonio by engaging the community in the effort to collect and properly dispose of litter in rivers, parks, and other public spaces. We propose to do this through a series of incentives, including opportunities for community service hours, direct payments to collectors, challenges with prizes, and monthly appreciation events. Our ultimate goal is to improve the litter grade given by the San Antonio river authority from an F to an A, and to provide an avenue for homeless individuals to earn income through trash collection.

By bringing together members of the community to work towards a common goal, we hope to make a meaningful impact on the cleanliness of our city and the health of our rivers and public spaces. Our intention is to cultivate community and responsibility among the residents of San Antonio.