Reducing Yard Waste Proposal COM 421 – Technical Communication

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Project summary

The proposed program aims to create a healthy community which reduces the work of collecting yard waste. It would also aim to educate people in the importance of properly disposing of yard waste, and would reward those who actively participate in the program.

Project description (technical process)

Introduction

We have come up with a new system to help the residents of Chicago get rid of their unwanted yard waste. The system would consist of a seasonal scheduled collection of yard waste across city. The collected yard waste would then be sent to appropriate facilities for composting.

Additionally, citizens who take an active part in the program, would gain access to benefits such as discounts when purchasing compost.

Rationale and significance

The city of Chicago used to have high collection rates of yard waste in the year 2008, under a weekly collection system. The city changed this approach after some time, because of a lack of resources and a reduced participation from residents.

The current system the city of Chicago utilizes to collect yard waste, is making people collect their yard waste in bags, and then have them call 311, so that the city can send pickup trucks to retrieve the bags. However, out of the 600,000 eligible city households in the city, only 1 percent (around 6000 households) use the program. Another problem that arose with the new system, is that the actual amount of yard waste collected dropped by 76 percent.

These issues could probably be attributed to a lack of information on the system by both the population and appropriate personnel. Part of the population may still think that a weekly garbage truck would be picking up their yard waste, and a waste collector may not know that he is not supposed to pick up yard waste.

Our proposed system tries to alleviate these problems by bringing back the idea of a scheduled collection of yard waste, but executing it in a more efficient way.

As a seasonal schedule to minimize the amount of resources needed over the year. We concluded that a scheduled collection was the best approach due to its prior success.

We also noticed, that the people who produce more yard waste, tend to buy compost. To incentivize their participation in the program, we would offer some sort of discount when purchasing compost. This discount would be proportional to the amount of yard waste they collected over the year.

Finally, to promote and inform the population about the program, we would maintain a Facebook page that would regularly post seasonal schedules, share encouraging facts about yard waste, and inform the population about the possible rewards they could qualify for. We decided Facebook was the right platform for our program, since Facebook is widely used nowadays.

Plan of the work

o Scope

This proposal should be executed in the city of Chicago, all expenses and venues are calculated based on information within the city of Chicago.

Methods

We would get in contact with the department of sanitization, interview the citizens of Chicago about the plan of schedule and do research on how much compost is required by the community.

Implement a seasonal scheduled collection of yard waste, During the seasons where there is a larger amount of yard waste (Spring and Fall), large trucks would be deployed weekly. For the rest of the year, smaller pickup trucks would be deployed every two or three weeks.

Eventually, we would like to determine which neighborhoods produce larger numbers of yard waste during the low seasons, and deploy trucks accordingly.

Task Breakdown

- 1. Set up a yard waste pickup crew
- 2. A public social media account to share and incentivize the program
- 3. Hand out brochures
- 4. Set up a reward system

Problem Analysis

- 1. Convince the department of sanitization to use this program can be challenging, considering that previous plans have failed.
- 2. Effectively handle the compost market. Require the pickup crew to keep track of which houses are collaborating to issue the discounts accordingly.

Facilities and Equipment

We need assistance of the sanitization department, the composting facility and the support from the community.

We need trucks for yard waste pickup.

We need to provide Lawn & Leaf Bags to the citizens.

Personnel (management proposal)

To make sure the system works smoothly, we need:

- 1. A pickup crew with drivers and workers.
- 2. A management team to organize the different crews and pickups schedules
- 3. We need support from the local authorities to advertise and supervise the community about the program.
- 4. A team that manages the social media accounts, continuously raising awareness about the program.

Budget (cost proposal)

Employee cost: \$37,690 * 30 = \$1,130,700

Yard waste collector salary: \$37,690 per person per year

Estimated number of employees: 30

Truck cost: \$129,900 * 15 / 5 = \$389,700

Garbage trucks: \$129,900 each
Estimated number of trucks: 15
Average life of a truck: 5 years

Disposal cost: ~\$112,000 per year

Gasoline cost: ~\$43,000 per year

Revenue: \$845,000 + \$50,000 - \$1,636,700 = -\$741,700

Sales of stickers and bags: \$845,000

Sales of compost: \$50,000

o Total cost: \$50,000

Conclusion

We believe that this program has all the tools to be successful. It is a simple program with possible benefits. Additionally, the use of social media could provide effective advertisement without being too overbearing in the population.

Sources

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