

Caroline Cloud
Minsun Lee
Chris Landram
Jacqui Dailey

Surprise Recycling

The City of Surprise has been consecutively failing their recycling audits since May of 2015. Failing these audits can be detrimental for the city, as they are losing out on approximately \$16,000 to 18,000 per month due to the contract they have with Waste Management. We have found a few options the city can explore to increase their waste diversion and reduce recycling contamination. The cheapest and easiest option to begin with is using social media.

Social media is a free and easy way to access the public with today's issues and local events that will take place in Surprise, Arizona. Many of today's municipalities, businesses, and non-profits benefit from this use of social media. One example of this is Sustainable Surprise, operated by the City of Surprise. While the City of Surprise has their government-run Facebook page called Surprise City Gov, the recycling and solid waste department needs to reach a more direct audience. With the recent campaign, "Recycle wise in Surprise", now is the prime time to send the message out via social media. Perhaps the communications major who is new to Surprise's team can create, manage, and add to the Facebook, Twitter, Google, LinkedIn, Pinterest, and Instagram pages.

Although Surprise's Recycling and Solid Waste Department is not a business, it can reach a large amount of people through a social network, such as Facebook. According to "Facebook", the Sleep Store, a small family-owned business in Australia, experimented with Facebook and had an incredible turn out. They found some of the advantages Facebook are that it's free, quick to set up, and there is no need to have specialized internet skills. The Sleep Store also did several things to promote their Facebook page. They wrote a bi-monthly e-mail

newsletter, launched a competition where the first 500 members to “like” the Facebook page were entered in a prize drawing, they put an advertising banner for the Facebook page on their home website, added the Facebook logo to all of their stationary, and added a link to the Facebook page on their e-mail signatures. After a year, the Sleep Store found that their Facebook page had almost 10,000 “likes”, gross sales had doubled, and they employed three new staff members to manage the increase of demand (2013). Although The Sleep Store is a business, it goes to show that social media is a great way to expand the intended audience.

Surprise’s recycling and solid waste department either need to have their own Facebook page, or need to work with the City of Surprise’s other Facebook page, Sustainable Surprise to send out the message of sustainability. Another example of a non-profit taking advantage of social media is Surprise Community for All Ages (CFAA), a collaboration between Benevilla, the West Valley’s premier human resources nonprofit, and the City of Surprise and Rio Salado College. Once the City of Surprise has a Facebook page set up, representatives should continuously market their services to the public every chance that becomes available.

Participating in annual events that are focused on sustainability is one simple step the city’s recycling and solid waste department can take. One example is the 3rd Annual Recycle Arts and Youth Festival, an event in April that includes a Recycle Arts Exhibit and Fashion Show, an arts display which exhibits the possibilities of reusable post-consumer materials (Recycle, n.d.). This exhibit can be a great place to educate the public with recycling statistics and familiarize locals with the benefits of recycling. One creative incentive idea is to have citizens “like” and “share” a post from Surprise’s Facebook page about recycling or sustainability to be entered into a drawing to receive 20% off a local restaurant that gives back to

the community in a positive way. This familiarizes the public with the department's online social media pages, and encourages them to become involved.

A prime example of this incentive would be contributing to Birt's Bistro, a Surprise restaurant that makes everything from scratch using fresh ingredients (Birt's, n.d.). When someone purchases a meal from Birt's Bistro, they are contributing back to the community by funding Benevilla's programs and services. Benevilla is a non-profit human services organization run by more than 950 volunteers and 100 employees whom are dedicated to community residents by providing programs and services for older adults, intellectually disabled adults, children, and families" (Benevilla, n.d.). Just a few of Benevilla's programs include Home Delivered Meals on Wheels, Group Supported Employment Program, and Wirtzie's Preschool and Child Care and Art's Center for All Ages, where children from 1 to 5 years old have the unique opportunity to share space and experiences with older adults (Benevilla, n.d.). By supporting this non-profit, you are supporting local businesses along with the community of all ages.

Another one of the problems that the City of Surprise is facing in recycling is the high contamination rate. Plastic bags, plastic wrap, food, and Styrofoam were pointed out as major contributors to it, according to the recycling spread from Surprise. The plastic bags, disturbing the achievement of the goal of Surprise, are not included in the Curbside Recycling. Then, the question of what the residents could do with their tons of the plastic bags remains to be resolved. If the decent way to cope with the plastic bags is devised, the City of Surprise can make steps forward to its goal to lower the contamination rate of recyclables.

It is said that the average American family takes home almost 1,500 plastic shopping bags a year (NRDC, 2008). Moreover Americans use and dispose of 100 billion plastic shopping

bags every year, according to the Wall Street Journal, an estimated 12 million of barrels of oil being needed to manufacture that many bags. The usage of plastic bags not only can be an obstacle to recycling but also files the issue of environment destruction in global dimension. In detail, at least 267 different species are known to have suffered from entanglement or ingestion of plastic marine debris (World Watch Institute, n.d.). Based on this information, there are lots of controversies surrounding whether using the plastic bags in grocery stores should be banned or not. California became the first state legislature to enact legislation imposing a statewide ban on single-use plastic bags at large retail stores in August, 2014 (NCSL, 2015). Additionally the fee of 10 cents (suggested as the minimum) will be charged for buying recycled paper bags, reusable plastic bags, and compostable bags at certain locations. Moreover all grocery stores in the state of Hawaii have been banned from distributing plastic bags since July, 2015. However in Arizona, unlike the states trying to discourage the use of plastic bags, it is protected by Senate Bill 1241 to ban or tax the use of plastic bags, Styrofoam and other containers that may be used in grocery or retail stores. Lauren Kuby, the council member of the City of Tempe, has filed a lawsuit against the State. Quoting her saying, “Local control is a long-held value in Arizona, and this ban on plastic bag bans hurts the ability of cities and towns to make thoughtful choices that best represent the values and ideals of their residents.” (Darren DaRonco, 2015) Banning or taxing on the plastic bag usage in grocery stores would be the direct and effective way to contribute to making a vibrant and sustainable community for a green Surprise. The Irish case of levying tax on the use of plastic bags in retail outlets can support it, with usage falling by more than 90% and annual revenues being in the order of €12–14 million (Frank Convery, 2007).

However, as long as the state law prevents cities and counties from banning the usage of plastic bags, the City of Surprise has to find alternative methods to recycle plastic bags

‘properly’, and here are some suggestions. Firstly, benchmarking the case of the City of Tucson would be the way. The Mayor and City Council of Tucson implemented the Plastic Bag Ordinance that requires retailers in Tucson to work with the community to reduce the consumption and use of single-use plastic bags, and to increase the number of plastic bags being returned to the retailers for recycling. (Website of the City of Tucson, n.d.) Through the website of the city, the statistical reports on plastic bags recycling every 3 months are presented. If the city of Surprise starts to regulate or work with local retailers (e.g. Safeway, Fry’s, Walmart, Sprouts, and Bashas’) sharing the same goals of ‘the less use of plastic bags and the more recycling of them’, the typical cause of high contamination rate in recycling would be alleviated. On top of that, entering into the partnership with Bag Central Station (i.e. the campaign launched by the Arizona Food Alliance to cover the issue of recycling plastic bags) would be another possible solution. This program is trying to provide consumers with a choice and the ability to correctly recycling plastic bags, so it will be a great help to the City of Surprise. It already recognized the negative effects that the plastic bags may impose to when mixed up with other curbside recyclables and has been working out to find the solutions with other cities such as Avondale, Flagstaff, Glendale, Kingman, Mesa and etc. Therefore by being one of the partner cities, Surprise can refer to the precedents of other cities and also can develop its own recycling system too. If the two suggestions are enough feasible and going to be conducted, simultaneously with the doggy bag program that is currently implemented in the city, the City of Surprise can be in the situation where it doesn’t have to concern about the high recycling contamination rate no more.

- + **Incentives (strengthened the point rewarding program)**

To make a cost-effective recycling program, it is inevitable to prepare for some sort of incentive to encourage the residents' participation. Just a sentence – that is presented in the website of city of surprise, “By being a wise recycler, you not only help the environment, you help yourself!” (The money we earn on recyclables helps stabilize your collection rates!)- is not enough to induce residents to recycle diligently. The way stronger and more clearly defined incentives are required in order to reduce the contamination rate and increase the waste diversion and recycling tonnage.

There are three different incentives suggested, and the first one is to force residents to do recycling by making it as a mandatory rule. Many local government programs that got results in high recycling and diversion rates have already employed a mandatory recycling program.(Incentive Programs for, n.d.) Secondly, adopting a variable rate system by exercising fines or taxes is another way to enhance the incentive of residents. The representative example is ‘Pay-As-You-Throw’, the system that charges users a rate based on how much waste they present for collection to the municipality. In a comprehensive study for the Solid Waste Association of North America, Skumatz Economic Research Associates found that such ‘variable rate’ programs can lead to an additional 8 to 13 percentage points of diversion, even if communities already have mandatory curbside recycling and diversion programs.

Lastly, the program that rewards residents for their recycling efforts by giving them points when they do recycling well can increase their incentives because the rewards are visible and directly given. Residents’ carts are scanned upon each pick-up and points are earned for valuable redemptions. Local businesses are invited to participate in the reward program by offering special discount or free coupon in exchange of the points that recycling residents collected. Local businesses can get new customers from the effect of advertisement by this

program and can also participate in making much greener community. To bring the actual case in the City of Richmond, Virginia, it has adopted the Recycling Perks program. The Recycling Perks provided new recycling carts equipped with a radio frequency identification device (RFID) tag tracking mechanism, then residents will be able to sign up for the program and can receive up to \$25 month of coupons and discounts at participating merchants if they are utilizing their recycling carts.(Website of the City of Richmond) There are 242 rewards that the residents who are doing recycling well can get from local retailers, such as '\$2 Off a \$10 Purchase at Carytown Burgers and Fries'. If residents in City of Surprise are greatly encouraged by the rewarding program like the above one, they would be more passionate in recycling correctly and the high contamination will be reduced. When the contamination rate goes down 25%, Surprise can get \$16000 to \$18000 monthly and the budget can also be contributed to the overall education regarding recycling as well as to stabilizing the collection rates of residents.

Making recycling simple and understandable for everybody is a major component for improving waste management and recycling statistics for the city of Surprise. Doing so is easier said than done, though it is an approachable task at hand. Implementing strategy, innovating ideas within the youth around the city will be greatly beneficial for the long-term success for the city. Minimizing the importance of adult awareness and elderly is not the focus, but rather to instill a common way of thinking for the young and future generations.

Creating a way to convey the message to a great number of the youth at one time can be a challenge, therefore communication at school will be most beneficial. Elementary schools, middle schools, high schools in the city of Surprise will need to have mutual practices so there is a consistent level of teaching. First idea is to distribute trash and recycle bins similar to bins as ASU. Having visuals and words on the bins is greatly beneficial, as many people are not aware

of the do's and don'ts of recycling. Creating such a visual for young students to see and use every day is something that will stick with them and become habits that carry over at home, spread throughout a household. Implementing such bins can be very cost effective; even the same bins can be used or recycled into new bins with simple modification of adding few pictures. Getting schools to participate, be active, show true interest in such a task can be challenging. Therefore, the city of Surprise needs to make effort in working with the school districts and creating waste contracts. Currently in Surprise, the Dysart schools are the only campuses with waste contracts with the City of Surprise; limiting the influence the city can have on garbage procedures. Collaborating with the other schools would create an immediate impact, due to the volume of waste and recyclables that a school produces.

Beyond procedure and implementing bins with visuals; getting the point across to the youth and doing so in a creative way will be key. For example, throughout my six years of elementary school, a big focus (outside of the regular classroom) was tobacco use and the affects it has on people. We learned about it occasionally in PE class and even had assemblies and the D.A.R.E officer speak to the students. The ultimate result was a greater understanding from the young students on living healthy and the benefits of not using. The same strategy can be implemented in terms of educating on recycling, as well as the issues that occur when it is not being done properly. Creating an annual 'green day' within the schools for students would have a similar benefit, as well as putting together an assembly and field day for the young kids. Including educational recycling games, prizes, t-shirts, other handouts for kids creates a memorable experience for them to hold onto, take back home to their households, give them a beneficial reason to be out of the traditional classroom.

Arizona has forty active landfills across the state. The City of Surprise is contracted with the Northwest Regional Landfill, operated by Waste Management. The landfill is 1,200 acres and can support waste from multiple cities for 80 years and will be able to accommodate Surprise's annual 365,000 tons of garbage until the year 2043. The City of Surprise has a note in their general plan to consider a residential/commercial food waste composting program to help increase their waste diversion (General Plan 2030, n.d.).

In Arizona, currently, there are no active facilities capable of accepting food waste for composting. Private companies specializing in food waste recycling are collaborating with local farmers and community gardens for the land space needed to compost. The City of Phoenix has plans to build a composting facility at the 27th Avenue Transfer Station and it may be in the best interest of Surprise to look at building their own or participate with a local food waste recycling program. Reimagine Phoenix, Phoenix's waste diversion initiative, awarded Recycled City, LLC, a local food waste recycling company based in Tempe, a contract to provide food waste recycling services to three of the city's buildings with possible expansion if the pilot program is a success. Under this program 20 tons of food waste will be diverted from Phoenix's landfill (Reimagine Phoenix, n.d.).

The City of Surprise has contamination issues within its city buildings and starting a program similar to Phoenix's would be a good place to start. It would help with educating the city staff of recycling do's and don'ts, and they will be able to monitor the amount of waste being diverted. They can begin with a few buildings then move to all government buildings then possibly residential. In addition to the increased diversion rate, Surprise will have access to healthy compost, (Recycled City works with a lab to have the compost tested for any possible bacterial contamination), that may be used for their parks. If the city chooses not to use the

compost from their food scraps it can be donated to community gardens or farms. At this time Recycled City is not selling the compost only donating or giving it back to the participants of their program.

Some items to consider for this to succeed are available land and equipment (tractors) for composting to take place. The City of Surprise has over ten vacant lots, depending on zoning, which may be used for composting and they recently acquired new equipment. The City of Surprise may also consider partnering with local farms for composting space if they are unable to use the vacant land.

If the City of Surprise wants to take extreme measures in increasing their waste diversion rate, they can review San Francisco's mandatory recycling and composting ordinance. In October 2012, San Francisco reached a diversion rate of 80%, leading the nation in recycling and composting. They now have a goal of zero waste by 2020 (City and County of San Francisco Office of the Mayor, 2012). The city works with Recology, a residential recycling/composting company, to divert its waste. Recycled City, LLC has similar objectives just on a smaller scale at this time. The City of Surprise in cooperation with Recycled City, LLC can increase their diversion rate, provide healthy nutrients for their landscapes, and increase the overall health of their community.

The City of Surprise can begin to reduce their contamination rate and increase their diversion rate by first implementing education outlets through social media. This will be the easiest and fastest way to educate the public. Incentive programs would be a good way to educate and connect the community. Working with the schools in Surprise to educate the youth and divert waste will create a system that can last for several years. Waste diversion through

food recycling will be the most challenging yet has the most potential for the City of Surprise to meet their goals.

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