CITY OF CHARLOTTE SOLID WASTE SERVICES



# HEALTHY MICHAELEN COMMUNITIES





SWANA 2017 Excellence Award Entry Educational Program City of Charlotte Solid Waste Services Victoria O. Johnson, Director Denada Jackson, Public Information Officer 704.363.5104, djackson@charlottenc.gov Healthy Communities Charlotte, North Carolina Population: 800,000 Cost per Household: \$0.08 Approximate Budget: \$64,800

# **Executive Summary**

The City of Charlotte, as a part of their <u>Environmental Focus Area Plan</u>, seeks to divert waste from the landfill, increase composting and promote waste options. To reach this goal the City must work with the community to reduce the waste they produce.

City of Charlotte Solid Waste Services (SWS) is leading an effort to support this goal by helping to change the way communities think about waste reduction. Through the lifestyle-based program, <u>Healthy Communities</u>, SWS makes waste reduction personal by showing residents that there is a direct connection between the environment and their personal health.

Since the start of FY2016, SWS has reached more than 5,000 people through presentations at schools, neighborhood association meetings, community presentations and through community partnerships with nonprofits, other government agencies and corporations. Additionally, the Healthy Communities message has been shared through traditional and social media, reaching more than two million people.

# Research

The City of Charlotte's environmental goals, as noted in the Environmental Focus Area Plan, are:

- Divert waste from the landfill
- Increase composting
- Promote waste options

SWS is working to support these efforts through the Healthy Communities program. Healthy Communities classes and events educate residents on the health impacts of mismanaging waste while showing how to make small lifestyle changes that support better waste reduction

#### How much waste are Charlotte residents generating?

Currently Charlotte residents are producing 16 pounds per week of waste per residential curbside unit. That totals over 89,000 tons of garbage per year for the 216,000 curbside residents serviced by SWS.

#### Why should citizens care?

There is a relationship between the health of the environment and personal health.

Environmental factors contribute to 23% of all deaths worldwide and 36% of all deaths among children 0-14 years old (<u>Global Results of the Analysis</u>).Cancer, heart disease, stroke, diabetes and kidney disease are taking over communities. In fact, according to the 2014 State of the

County Health report, these diseases are the top chronic diseases impacting minorities in Mecklenburg County, of which 84% is the City of Charlotte.

There are 22,400 self-reported cases of kidney disease in Mecklenburg County. There are studies that show long-term exposure to air pollution can cause kidney disease.

For some residents air pollution has already impacted their health. A resident in a community SWS worked with closely shared her experiences with health and environmental pollution. During the conversation, she explained she never had asthma, but the air is smoky near her Clanton Park home. As a result, she now uses an inhaler. Her house isn't built on a slab; so, it's easy for outside air to get in her home through vents at the base. This continues to allow polluted air into her home daily, which she believes has caused her to develop asthma as an adult and continues to have the potential to negatively impact her health.

Telling these stats and stories help to create a dialogue and promote the Healthy Communities' message.

# What can we do to strengthen the health of the environment and decrease the negative impact of an unhealthy environment on these communities?

There are many things that can be done, including carpooling, riding bikes, creating gardens to help improve diet and soil quality, but people can also divert waste from the landfill. This will help reduce air pollution as decomposing waste creates methane gas, which is a greenhouse gas. Greenhouse gases impact the air quality and cause climate change.

Solid Waste Services developed and launched free educational programming, events and classes that align with the Healthy Communities' goal of making health a motivator to change waste behavior. Through these classes residents learn how the environment is directly linked to people's personal health and chronic diseases like diabetes and cancer. Classes teach residents how to manage their waste through upcycling, composting, reusing and recycling to better the environment and their own health. Residents also learn strategies for eating more live foods which reduces waste and are better for the body.

Healthy Communities uses research from the <u>Environment Protection Agency</u> to implement the <u>Food Too Good To Waste program</u> to reduce organic waste in landfills which produce <u>methane</u> <u>gas</u>. This greenhouse gas traps heat in the atmosphere which is causes global warming.

Before this program, City of Charlotte only used recycling education efforts at community events and classroom talks. Healthy Communities has widened the recycling message to include other waste management efforts to slow the filling of the landfill. With over 50 people per week moving into Charlotte, the City is growing quickly and needs to control landfill growth.

# Planning & Goal Setting

#### Who is the target audience(s) and how does this program reach the intended target?

There are 25 communities in Charlotte that have consistently been high waste producers with little recycling participation. These neighborhoods, in general, have largely minority populations. Many of them are low-income communities without access to grocery stores or healthy food options. SWS' education efforts started in these areas.

These communities represent approximately 15,700 homes, which receive garbage collection services from the City of Charlotte Solid Waste Services. Each of these households produces 20 pounds of garbage per week, meaning for every pound of waste recycled, on average, each of these household sends four pounds to the landfill.

Initially, SWS partnered with local schools, churches, neighborhood associations and other local groups to host classes and the first Food Too Good To Waste Challenge. The program now is open to all of Charlotte through television, radio, newspaper and blog promotion as well as partnerships with stores and nonprofits.

# What are the education program goals and objectives, described in SMART terms, and the tactics to meet the goals?

Goals:

- Divert waste from the landfill
- Increase composting
- Promote waste options

Objective: 1,512 tons of garbage will be diverted from the landfill if each household serviced reduces their garbage by the benchmarked target of 14 pounds per year by 2020.

Tactics: To meet the goals and objective SWS hosted programs, events and classes with targeted audiences.

# What was the timeline for the education program, in terms of objectives and benchmarks you planned to complete?

Fiscal Year 2016 was used to establish benchmark tonnage and spread the word about the program's events.

Date	Event	People Reached
July 2016	Waste Tour	12
August 2016	Goodie Ideation, Challenge App Building, Community Presentation	109
September 2016	School Visits	530
October 2016	School Visits and Food Too Good To Waste Challenge	1,177

November 2016	No Waste Dinner, School Visits and Food Too Good To Waste Challenge	1,755
January 2017	School Visits	316
February 2017	Upcycle Fashion Show	270 attendees (2 million via news stories and social engagement)
April 2017	Waste Wizard and Bruns Academy Partnership	2,700

#### Budget

\$64,800 spent in Fiscal Year 2016 (\$0.08 per household)

SWS projects to spend \$190,000 over the next three years (\$0.24 per household).

# Implementation

Programming, events and classes held in Fiscal Year 2016 and Fiscal Year 2017 were part of

SWS' efforts to establish the program, secure community partnerships and set a benchmark for future programs and success measurement.

# FY16: Goodie Ideation [Health] Lab

Goodie Ideation is a process that teaches participants how to come up with big, tech-enabled ideas to help solve community problems. The Goodie Ideation [Health] Lab, hosted in April 2016, gave the more than 50 participants an opportunity to develop a



solution for waste reduction while teaching them how to improve their personal health through better waste management. Attendees included community activists, neighborhood leaders, entrepreneurs, City staff, faith leaders and elected officials. Participants also included employees from Carolinas Healthcare, Wells Fargo, Ingersoll Rand and Johnson C. Smith University.

Participants were divided into teams and were taught a process for how to solve complex problems. They used this process to develop a solution prototype of someone in the community impacted by the problem. These key insights were shared with groups:

- Processed and packaged foods have a large impact on the amount of waste produced
- Opportunity: Drawing a line to healthy *lifestyles* as a way to reduce waste. This includes exercise as much as food choices.

A few examples of ideas that teams created included:

- An app that provide inexpensive recipes with foods that create little to no waste
- A campaign for mobile phone device stores to encourage customers to recycle their new phone and accessory packaging onsite
- Drive-thru food banks with neighborhood chefs

#### **Results/Outcome**

We used the key insights from the Ideation to talk to Healthy Communities participants about buying less packaged food. Eating fresh fruits and vegetables was not only better for consumption, it also created less waste.

### FY16: Reduced Waste Dinners

Citizens were asked to eat their hearts to health during no waste dinner parties with holiday themes like Fourth of July, Christmas and more. Attendees ate savory food and listened to soulful music while learning creative ways to not only eat healthy, but how to make the environment healthy as well.

Approximately 120 people have enjoyed this new way to party and reduce waste.

City staff and vegan chef, Jasiatic created a social love affair of good food, community and the environment with City staff. Vegetables were the meal's entree as eating fresh fruits and vegetables are good for you and create less waste. Attendees were instructed on shopping the perimeter of the grocery store to avoid packaged foods that pollute the environment and our bodies.



Dinners further reduced waste by using glasses, real plates and cloth napkins, to show the importance of reusing items through washing them. Staff also displayed ways to use utilize different sets of non-matching dishes to create fun dinner parties without the use of disposable paper products.

#### **Results/Outcome**

Attendees were surveyed and responded, that the most enjoyable thing about the dinner party was the education and advice they received, followed by the delicious vegan food. Many responded said they would definitely incorporate more live food into their diets and daily meals which would result in less waste in landfills.

The guests said that they loved learning about the waste cycle and not create as much waste throwing parties. They learned better waste management and would make some type of positive impact on the environment.

# FY17: Facility Tours

In July 2016, the City of Charlotte Solid Waste Services took 12 citizens on a tour of Mecklenburg County's waste disposal facilities to see just how much the City throws away. On the tour, citizens learned more about how simple changes in our daily routine can improve local air quality.

The tour included a trip to the landfill, recycling and composting centers. In between bus stops staff presented interactive activities to explain how the landfill works, how to compost and how to recycle at home with ease.

The bus tour was complete with breakfast and healthy snacks. At the conclusion of the tour, attendees were given edible landfills as gifts.

Based on the surveys conducted, participants learned a lot useful information during the tour that they will share with others. Most agreed that they would make changes in their lives based on what they learned that day and do what they can to reduce their waste. Some reached out afterwards and said they would like another tour to be able to invite others, because of the type of impact it had on them.FY17: School Presentations

SWS staff visited nine schools and taught more than 3.500 students in 23 days. At schools, 30minute to onehour presentations connect students' health to their environment. Students are



2017 Excellence Award entry, Educational Program, City of Charlotte Solid Waste Services taught four ways for students to improve their health by managing waste better: composting, reusing, upcycling and recycling. At the end of the presentation students are treated to various

#### Results/Outcome

It was important to teach students about waste management as they are the City's future. We wanted students of all ages to learn new waste behaviors to help divert waste from the landfill. "[The program taught students] how they treat the Earth will affect them in the future," said Denise Gerst an elementary school science teacher. "They definitely rethink not only what they eat but what they throw away. [The program] also gave us the idea to start composting in the class as well," said Bethany Darnley a high school science teacher.

fresh fruits and learn how eating fruits and vegetables reduce waste and are good for the body.

### FY17: Partnerships

Solid Waste developed a partnership with **Pop Up Produce**, a local non-profit that empowers families and individuals to grow their own food while educating on the benefits of fresh produce. The department purchased 50 **Pop Up Produce** Fresh Start Kits to Bruns Academy, a **Title 1** kindergarten through eighth grade school. The herbs and greens were planted in a grant funded garden from the USDA's Office of Civil Rights. **During FY18, Solid Waste and Pop Up Produce will continue to work with the school to grow, harvest, distribute and compost food and food waste from the garden.** 

#### **Results/Outcome**

Teachers are able to utilize planting, gardening and harvesting for math, science and language arts lessons. The garden was planted in April 2017 and food is growing. Students are composting and learning how to make better meal options.

# FY17: Food Too Good To Waste Challenge

According to research conducted by the <u>Environmental Protection Agency (EPA)</u>, food waste is the "largest stream of materials in American trash."



Food waste is a huge environmental, economic and social problem. Once wasted food reaches landfills, it produces methane gas, which is detrimental to the ozone layer.

The City of Charlotte Solid Waste Services Department would like to be part of the solution.

The Food Too Good To Waste Challenge consists of residents competing to see who can eliminate the most food waste from their garbage over the course of six weeks. Every household receives a food scale and a food waste trash to separate, weigh and record their food waste weekly.

#### **Results/Outcome**

The first challenge was held from October 31 - November 10, 2016. Below are the findings from the six week challenge:

- The neighborhood winner generated 37.73 pounds of garbage, winning the challenge and a grant to execute a green project in their community.
- The neighborhood runner up generated 43.37 pounds of garbage.
- The individual resident winner reduced their household waste by 1.8 pounds. This individual won the household challenge and a floor seat game experience at a Charlotte Hornets NBA basketball game.

#### If each household in Charlotte reduced their waste every six weeks by 1.8 pounds, like the household winner, it would reduce household garbage by 14 pounds per year. This reduction would eliminate about 1,500 tons of garbage from the landfill each year!

The next challenge is scheduled for October 2017 and will be timed with the release of our Food Too Good To

Waste app that will make it easier for participants to log their weights. Shopping, food prep and food storage tips will be included in the app to encourage users. The app will also showcase the amount of money families save by reducing their food waste



through better shopping and storage.

The challenge serves as our success measure to learn how much waste residents are diverting or eliminating from the landfill.

# FY17: Cooking Classes

The Department used a vegan chef to add more flavor and color to citizens' diets with cooking lessons. Since eating live fruits and vegetables is better for the body and they create less waste,

2017 Excellence Award entry, Educational Program, City of Charlotte Solid Waste Services the classes were a great way to build citizen's recipe libraries. The classes are hands on and opened attendees minds and taste buds to new ideas.

#### **Results/Outcome**

To date more than 50 people have attended the cooking classes, hosted by Solid Waste Services.

# FY17: Upcycle Fashion Show

The City of Charlotte partnered with CrownKeepers, fashion experts, to execute REPURPOSED as an education for local residents on upcycling and encourage them to consider this option as a way to reduce waste. More than 20 local designers competed for prizes and bragging rights during REPURPOSED: An Upcycle Fashion Show + Auction. Designers sorted through inventory at Goodwill Industries and Value Village looking for pieces to create upcycled masterpieces. The result was a tremendous display of fashion and interior design with the purpose of giving discarded items a second chance. More than 270 people attended the show, and the event garnered more than two million media impressions.

The show occurred during Charlotte's Fashion Week to engage and inform a diverse audience in the awareness and importance of reusing, upcycling, recycling and composting. To further the impact, environmentally-focused organizations Sustain Charlotte, Hip Hop Caucus and Pop Up Produce received 100% of the proceeds from fashion and furniture sales at the show and auction.

#### **Results/Outcome**

The show was designed to raise awareness about upcycling and reusing and how it can be applied in their homes. Based on attendance numbers, secured media, social media buzz and attendee feedback the event reached its goal of raising awareness.



# FY17: Gamification & Apps

According to Mecklenburg County Solid Waste nearly 40 percent of residential garbage during FY15 could have been recycled. SWS introduced an online tool to help residents determine the best way to dispose of unwanted items.

Citizens can now trash check items on <u>Waste Wizard</u> and play<u>The Toss Is Right</u> on their mobile devices or desktops. The Waste Wizard and Toss is Right teaches residents how to properly dispose of mattresses, wood, old paint, furniture, light bulbs and much more.

#### Waste Wizard allows

citizens to search for instructions on how to dispose of items they no longer want. With one search, citizens learn how to prepare wood, leaves and tree trimmings for yard waste collection. They can also learn that paint can be recycled at full service facilities and should not be placed in trash carts.

The tool provides monthly reports that assist SWS in the creation of targeted education for upcoming campaigns.

# Monthly Report - April 2017

Waste Wizard

All Time Usage

			2,7	99		7-	
Top 10 Materials Searched		Top 10 Suggested Materials		Top 10 Waste Streams Found		Top 10 Depots Clicked	
Mattress	95	Lawn mower	2	1 7 11 17		Foxhole Recycling Center	
Wood	76	leans	2	Garbage	825	West Mecklenburg	
		toothpaste tubes		Bulk Waste Collection	634	Recycling Center	
Paint - latex (full or partially 74 full)			2	Recycling Collection	549	Hickory Grove Recycling	
Furniture	73	electronics	2	Drop-off - Household	366	Center	
		Toys	i	Hazardous Waste		North Mecklenburg	23
felevision	61		1	Donate	228	Recycling Center	
Yard and garden trimmings	57	Credit card	1				
Tree trimmings	51			Yard Waste Collection	223		
Battery (disposable)	47	Gift card	1	Drop-off - Electronics	204		
		Leather Chair	1	Donate - Mattress	95		
Styrofoam	47	Plastic code 5	t	Landfill	82		
Aluminum foli	45						
				No collection	34		

<u>The Toss Is Right</u> game tests waste management knowledge and allows players to complete multiple game levels. As players win, they build their own virtual park complete with fountains, slides and dinosaurs!

#### **Results/Outcome**

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The game was officially launched in late April. During the soft internal launch and presentations more than 2,700 items had been searched on Waste Wizard and the game has been played more than 200 times.



# Lessons Learned

- It was a challenge to begin programming in low recycling communities. These families face competing priorities so health and waste management may not be as important. Attendance was low for our first programs but grew once we opened up the program to various demographics.
- The health message was a strong attention getter; however, using money savings message was more effective. Citizens seem to care about saving dollars through meal planning and prepping as well as proper grocery shopping.
- At first SWS taught the add-as-you-go pile composting method. Attendees seemed interested in an easier method. SWS taught the paper bag method which has earned more interest and the SWS team is looking at more vivid ways to teach it.

# Replication

Healthy Communities requires an understanding of a community's waste stream; residents waste habits and motivating factors; and strong partnerships. An organization that wishes to partner must do a lot of research to create a goal or benchmark for change; fully understand what will motivate the residents and create classes and programs that will serve as a catalyst for change; and create partnerships that will allow them to reach more people and have a deep impact.

# **Supplemental Materials**

https://nextcity.org/daily/entry/charlottewaste-reduction-program-low-income-

#### Charlotte Waste Reduction Project Concentrates on Food

BY SHERRELL DORSEY | AUGUST 17, 2016



Residents at a recycling center (Credit: City of Charlotte Solid Waste Services)

### Read the article: https://www.charlotteagenda.com/46980/heres-can-help-

#### GREEN CITY

Read the article:

residents

Here's how you can help solve Charlotte's waste problem in 4 hours this Saturday

solve-charlotteswaste-problem-4hours-less-saturday/





By Sherrell Dorsey | April 15, 2016 Views: 1,332

(Note: Our "Green City" series is brought to you by Sealed Air, creating a better way for life. Sealed Air Re-imagines the industries they serve to create a world that feels, tastes and works better.)



Watch the clip: https://youtu.be/XfACW8WoiW4



Read the article: http://goodwillsp.org/goodwill-partners-repurposedupcycled-fashion-show-auction/



#### 2017 Excellence Award entry, Educational Program, City of Charlotte Solid Waste Services

healthycommunitiesclt.com



City of Charlotte Solid Waste Services. Healthy Communities is an initiative of the City of Charlotte Solid Waste Services. All rights reserved.

This is a game SWS plays at community events and during school presentations. Toys, food samples, clothes, old technology, bags, bottles and more are put on the table and people get to decide if items should be reused, upcycled, composted or recycled. Trash is not an option provide to players, the goal is to creative with their disposal options so that items do not end up in the landfill to pollute the environment.

#### **Logo Formats**

The Healthy Community logo is provided in both vertical and horizontal arrangements. This provides for greater flexibility when using the mark in different space applications. The vertical or stacked treatment is considered the first and preferred orientation. However the horizontal treatment is acceptable when dictated by the space requirements such as horizontal web banner ads, etc.

There are also several color options for use depending upon the application requirements. Those options are displayed to the right and include full color (three color PMS), black & white and reversed treatments.



THREE COLOR LOGO - VERTICAL - PMS 158, 313 & 376 (FILE NAME: HC\_3C\_V)



THREE COLOR LOGO - HORIZONTAL - PMS 158, 313 & 376 (FILE NAME: HC\_3C\_H)

#### **CMYK, RGB & HEX Color Formulas**

СМҮК	PMS 158	C:0	M:60	Y:94	K:0
	PMS 313	C:100	M:0	Y:6	K:18.5
	PMS 376	C:56	M:0	Y:100	K:0
RGB	PMS 158	R:0	G:147	B:95	
	PMS 313	R:245	G:130	B:43	
	PMS 376	R:124	G:194	B:66	
HEX	PMS 158	#0093c3	3		
	PMS 313	#f5822b	)		
	PMS 376	#7cc242	2		

When reproducing the PMS colors in CMYK or RGB values, use the above formulas. Since the results may vary based on the type of equipment used to reproduce these colors, some modifications may be necessary to achieve the desired results.



BLACK & WHITE LOGO - VERTICAL (FILE NAME: HC\_BW\_V)



REVERSED LOGO - VERTICAL (FILE NAME: HC\_REV\_V)





# **Resource Guide**





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# Are You Ready?

Dear Participant,

Thank you for joining the Food Too Good To Waste Challenge! Are you ready to...

- Learn how to save money on your grocery bill each month?
- Improve your health?
- Eat the healthiest, freshest and best food of your life?

We hope so because that is exactly what is going to happen as you matriculate through the Challenge.

For the next six weeks we will teach you how to improve your health by simply eating more fresh fruits and vegetables, shopping more efficiently and implementing waste diversion and reduction strategies into your daily, weekly and monthly routine. This will require a deep personal commitment and strict discipline from you and your family. You will have to exercise a high level of discipline, but the reward for completing the challenge (and winning) is well worth the effort.

Former Congresswoman Shirley Chisholm said, "You don't make progress by standing on the sidelines."

So, get off the sidelines and take control of your health. Get ready because the next six weeks will change your life!

#### Again, we ask, are you ready?!

# Initiative and Challenge Overview

### **Healthy Communities**

Healthy Communities is an educational initiative that uses personal health as a motivator for residents to reduce the waste they throw in the garbage can. It was created by the City of Charlotte Solid Waste Services to help address measures outlined in the City's Environmental Focus Area Plan:

- **Measure I:** reducing tonnage landfilled per curbside residential unit compared to the prior fiscal year.
- Measure 2: increasing composting.
- **Measure 3:** promoting waste options.

The Healthy Communities program has addressed these measures by:

- Educating students in local schools, neighborhood leaders and community members through interactive presentations and classes.
- Hosting community dinner parties, cooking classes and waste tours.
- Partnering with schools, local non-profits, government, and neighborhood organizations to provide fresh fruits and vegetables to neighborhood residents.
- Sponsoring the Food Too Good To Waste Challenge

In FY16, the City of Charlotte landfilled 1,719.9 pounds of garbage from each single-family residential unit. By the end of FY19, Solid Waste Services wants to reduce the amount landfilled from each residential curbside unit by 5 percent. This would bring the total amount landfilled per residential unit to 1,633.9 by the end of FY19. To do this, the City needs to reduce the amount of food going to the landfill, and increase residents' use of other waste diversion and reduction options such as buying in bulk, reusing, upcycling, recycling and composting.

Solid Waste Services is leading an effort to support the City's goal by helping to change the way our community thinks about waste and how to manage it. Through the Healthy Communities program, City Solid Waste is making waste reduction personal by showing that there is a direct connection between the environment and personal health.

#### **Consider these facts:**

- Environmental factors contribute to 23 percent of all deaths worldwide. 36 percent of these deaths are children 0-14 years old. (results from World Health Organization's analysis on "Preventing disease through healthy environments)
- Diseases such as cancer, heart disease, stroke, diabetes and kidney disease are taking over minority communities. In fact, according to the 2014 State of the County Health report, these diseases are the top chronic diseases impacting residents in Mecklenburg County.
- These diseases are in many ways connected to air, soil and water pollution.
- Landfilled trash, including food waste, contribute to air and soil pollution.

These facts suggest that air and soil pollution from landfills can have a negative impact on your health that can be improved with proper waste management.

# Waste Management Strategies

Solid Waste recommends managing your waste by practicing one or any combination of these four strategies:

- Reusing
- Upcycling
- Recycling
- Composing

By using these four strategies, the amount of garbage that goes to the landfill is reduced, which decreases of air and soil pollution. These strategies can save you money, provide business opportunities for you, promote creativity, enrich soil quality and conserve natural resources.

#### Reuse



Reusing is the act of using things again, especially in a different way. When you buy a case of water or even a gallon jug, the bottles can be reused. Once you've consumed the water, the bottles can be refilled with more water, the jug could be used as a planter to grow herbs and those single water bottles can be used to water them!

#### Recycle



Recycling is converting waste into reusable material. Everyone thinks of kitchen items to recycle but there are lots of bathroom items that can be recycled like toilet tissue rolls, shampoo bottles, deodorant, toothpaste tubes and lots more! When recycling, remember items should be empty and clean. To learn what can be recycled and how to recycle in the City of Charlotte go to curbit.charlottenc.gov.

#### Upcycle



Upcycling is using discarded objects to create a product of higher value and quality than the original. Old clothes and furniture are great items to upcycle or transform into something better! Your favorite long sleeve winter shirt can turn into your favorite summer halter top. What about that headboard you've had forever? Add some fabric to completely transform the piece into something new that you can keep for another 10 years.

### Composting



Composting is the process of allowing organic matter to decompose as a result of the action of aerobic bacteria or fungi and other organisms. This process produces compost. We've adopted the brown bag composting method. It's four easy steps and it doesn't take much commitment, that's why we love this method. Our Facebook video demonstrates just how to do this. You can view it at http://tiny.cc/bbcompost..

# Lifestyle Shift: Reducing Food Waste

Knowing the waste strategies is just one part of the formula. The other part is integrating them into your daily, weekly and monthly routine. Your first focus should be on reducing the amount of food that you throw away each week.

#### Why?

According to research conducted by the Environmental Protection Agency (EPA), food waste is the largest stream of material in American trash. Food waste is a huge environmental, economic and social problem. Once wasted food reaches landfills, it produces methane gas, which is detrimental to our ozone layer and a form of air pollution.

So, reducing food waste can have a major impact on the environment, your health and your pockets!

The waste diversion and reduction strategies previously mentioned can help you reduce the amount of food you waste. The strategies are broken down into daily, weekly and monthly tasks below. They demonstrate how you can easily integrate the strategies into your lifestyle.

#### Planning

- Check the refrigerator, pantry and cupboards before purchasing food.
- Made shopping list (s) before going to the store.
- Create a menu plan for the week.
- Check the expiration date and ensured dates are appropriate for the type of food.

#### Reuse

- Turn leftovers into other meals to eat.
- Share or exchanged surplus food with friends or neighbors.
- Use reusable plates, cups, and utensils for serving meals.
- Use a reusable bag at the grocery store.

#### Smart Shopping

- Avoid buying bulk promotion food packs.
- Buy smaller amounts of food from the store.

#### Smart Food Storage

- Freeze food that was close to expiry date.
- Store food properly to keep food longer.

#### Composting

Composte food waste (either at home or through a communitybased program or paid service).

#### Upcycling

 Upcycle an item by turning it into something new, different (think HGTV)

#### Recycling

- Recycle glass, aluminum and/or plastic.
- Recycle empty items from the bathroom.
- Recycle cardboard.

#### Other

- Reduce portions of food cooked.
- Communicate with family members about food management.
- Cook/eat entire vegetable or fruit.
- Eat more fresh fruits and vegetables instead of processed food.

### **Shopping Smart**

Shopping smart will help you reduce your food bill AND reduce the amount of food you waste. Use these tips to smart shopping:

- Make a grocery list before going to the store.
- Shop when you don't have much time.
- Compare unit prices.
- Compare packages in general.
- Pay with cash.
- Don't accept free samples.
- Check the circulars.
- Buy store brands.
- Clean your refrigerator and/or pantry before going shopping.
- Remember to tear the coupon off the product.
- Shop the top and the bottom shelves, that's where the less expensive items are.
- Don't use coupons you don't need.

Taken from: https://money.usnews.com/money/personal-finance/ slideshows/10-ways-to-shop-smarter-at-the-grocery-store

#### Notes:

# Food Preparation and Storage

Knowing how to properly prepare and store your food plays a major role in reducing the amount of food waste that goes into the landfill and the amount of money you can save on your grocery bill. Correct preparation and food storage lengthens the lifespan of your fruits, vegetables and meat.

What you need for food preparation and storage:

- Storage containers
- FreezingStoring produce in refrigerator
- Parchment paper
- Vacuum sealer systems
- Aluminum foil

Plastic bags

Plastic containers

#### Smart food preparation:

Consider this:

Think about how many meals you'll eat at home this week and how long before your next shopping trip.

Canning

Juicing

- Next to fresh items on your shopping list, note the quantity you need or number of meals you're buying for.
- Shop your kitchen first and note items you already have.
- Prepare perishable foods soon after shopping. It will be easier to whip up meals later in the week, saving time, effort and money.
- When you get home from the store, take the time to wash, dry, chop, dice, slice, and place your fresh food items in clear storage containers for snacks and easy cooking.
- Befriend your freezer and visit it often.
- Freeze food such as bread, sliced fruit, or meat that you know you won't be able to eat in time.
- Cut your time in the kitchen by preparing and freezing meals ahead of time.
- Prepare and cook perishable items, then freeze them for use throughout the month. For example, bake and freeze chicken breasts or fry and freeze taco meat.

#### Smart Storage for fruits and veggies:

INSIDE THE FRIDGE • Apples, berries, and cherries • Grapes, kiwi, lemons, and oranges · Melons, nectarines, apricots, peaches, and plums (after ripening at room temperature) · Avocados, pears, tomatoes (after ripening at room temperature) • Almost all vegetables and herbs

OUTSIDE THE FRIDGE • Bananas, mangos, papayas, and pineapples: store in a cool place • Potatoes and onions: store in a cool, dark place • Basil and winter squashes: store at room temperature – once cut, store squashes in fridge

#### More Storage Tips

- If you like your fruit at room temperature, take what you will eat for the day out of the fridge in the morning.
- Many fruits give off natural gases that hasten the spoilage of other nearby produce. Store bananas, apples, and tomatoes by themselves and store fruits and vegetables in different bins.
- Consider storage bags and containers designed to help extend the life of your produce.
- To prevent mold, wash berries just before eating.

#### **Tech Tip:**

The Food Safety app (https://www.foodsafety.gov/keep/foodkeeperapp/) can help you determine the best way to store your food.

#### Notes:

#### Apples

Store apples in the fridge to extend shelf life.

One bad apple can ruin the whole bunch, so eat up the bruised ones first!

For longer storage, store in a cardboard box covered with a damp towel.

#### Artichokes

Place in an airtight container with a damp towel for moisture and store in the fridge.

#### Asparagus

Store asparagus in the fridge.

- . Trim the base of the stalks and place upright in a jar filled with an inch of water.
- . Or, wrap the cut ends of the stalks in a moist paper towel or rag.

#### Avocados

To speed up ripening, place in a paper bag and place an apple in the bag with them.

Once ripe, store avocados in the fridge

Mix avocados or guacamole with a little lemon or lime juice or leave the pit in to slow browning.

#### Bananas

Store bananas on the counter away from other fruit. They give off ethylene gas, which speeds ripening in other produce.

Bananas can be frozen with or without their peel and used later in baked goods or smoothies.

#### Basil

Basil is a warm weather crop and turns black quickly in the fridge. Store on the counter in a glass of water like a cut flower with the stem in the water, or wrapped in a dry pape towel in an airtight container.

#### Beans, cooked/canned

Store unused cooked beans in the fridge in their liquid or water.

You can freeze cooked beans in liquid. Put cooked beans in a can/freeze jar and fill with cooking liquid or water.

### Beans, dry

Store dry, uncooked beans in an airtigh container in a cool, dry place.



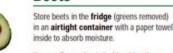
#### Beans, green

Store unwashed green beans in the fridge in an airtight container. Wet beans will develop black spots and decay quickly.

Green beans can be frozen, either raw or

blanched. Freeze on a cookie sheet in a single layer and transfer to an airtight container.

#### Beets



You can freeze beets by blanching them and storing in an airtight container.

Don't forget to eat the beet greens! Check out "Greens, cooking" for more information on how to store them.

#### Berries

Before storing berries, remove any spoiled or crushed fruits, and store unwashed in an airtight container Try not to put them into too many layers because berries are fragile.



Don't wash until ready to eat-any added moisture encourages mold. If you must wash them, we have heard that adding a little white vinegar to the water helps keep them from deteriorating as quickly.

Store excess berries in the freezer in an airtight container. Freeze them on a cookie sheet first before transferring to a container to avoid sticking.







# What Is The F2G2W Challenge?

The Food Too Good To Waste Challenge is a six-week challenge that allows you to put what you've learned into action. Through the challenge you will compete against other residents, organizations and neighborhoods to see who can eliminate the most food waste from their garbage, thus reducing your overall waste footprint. The lower your food waste number the higher your chance for winning a prize!

# **Challenge Logistics and Rules**

#### **Challenge Logistics**

#### Your goal:

Reduce the amount of waste you generate weekly by reducing the amount of food you throw way.

#### What you'll need:

- Two trash cans one for food waste and one for regular garbage.
- A kitchen scale

#### What we supply:

- A grey 10-gallon trash can specifically for your food waste
- A kitchen scale to weigh your food waste and regular trash

#### What you need to do:

- Line your grey 10-gallon food waste trash can with a trash bag.
- Separate your food waste (food from all meals and unwanted food in the refrigerator) from your regular garbage, by putting all food waste in your grey 10-gallon trash can.
- Weigh your food waste daily or weekly. To weigh your food waste, remove the plastic bag from the trash can. Place the plastic bag with food waste on top of the scale.
- Record your food waste weight in the F2G2W app. Weights must be recorded every Sunday during the challenge (see Important Dates chart on page 17).
- Weigh and record your regular garbage weight in the F2G2W app. Weights must be recorded every Sunday during the challenge (see Important Dates chart on page 23).
- Place the plastic bag with food waste in your regular garbage can.
- Place a new plastic bag in the grey food waste trash can provided.
- Repeat process for the duration of the challenge.

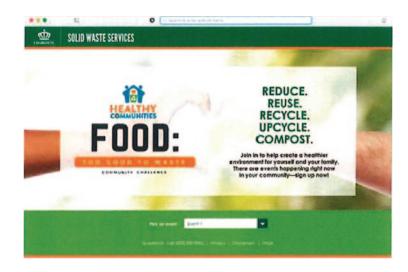


#### How To Log Your Weights Using The F2G2W App

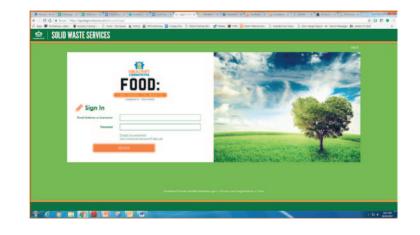
Go to the following link to add the app to your device: https://tgw.charlottenc.gov



Once you've gone to the link, you'll see this home page:



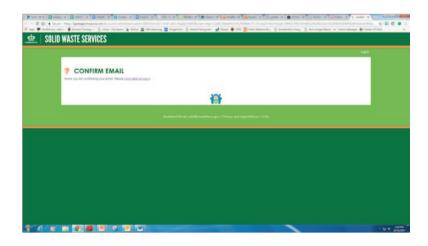
From this screen, select login located at the top right corner. Select don't have an account, sign up.



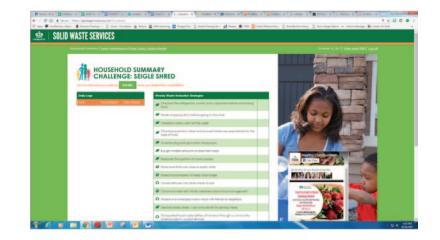
Create an account.



You will receive a confirmation email at the email address associated with your login. From the email, select the link to confirm. Once confirmation is received, you'll see this screen.



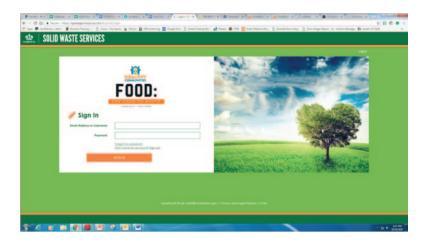
Once signed in, you'll see this screen:



You're now successfully signed in and can use the app. At the bottom right of the page, select Record Daily Waste Weight.



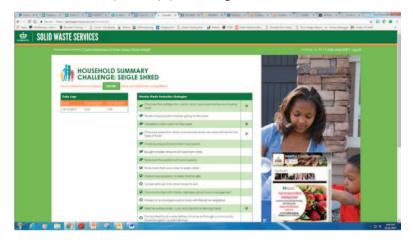
Select click here to sign in and sign in.



You'll now see this screen.

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		100		

Enter your weights, making sure you've selected the correct date. Select any waste strategies that you did that week (you get points towards prizes)! Save your entry and you'll automatically go to the Household Summary. Verify your weights.



Repeat the steps for signing in and logging your weights every Sunday.

You can use the app for more than logging your weights. You can see how well you're performing, compare your performance with others and connect to the F2G2W Facebook page.

### **Challenge Rules**

- You may participate in the challenge as an individual or request City staff to register your team of no more than 10 people/ households. Teams may be friends, neighbors, church groups, organizations, etc.
- The individual who reduces the most waste during the six-week challenge receives a prize package, bragging rights and city wide recognition.
- The team who reduces the most waste during the six-week challenge receives a prize package, bragging rights and city wide recognition
- In order to be considered for prizes and/or bragging rights, you have to participate and weigh in every week.

# **Challenge Calculations**

- Household waste:
  - Food waste + garbage
- Individual household waste:
  - Household waste/ # of people in the household
- Team waste:

All team members' household waste/total # of people in each team member's' household

# F2G2W Challenge FAQ

#### What is the purpose of the Food Too Good to Waste Challenge?

The Healthy Communities Food Too Good to Waste Challenge seeks to reduce waste by teaching you how to improve your health by simply eating more fresh fruits and vegetables, shopping more efficiently and implementing waste diversion and reduction strategies into your daily, weekly and monthly routine.

#### How often am I supposed to weigh in?

You have the option to weigh in daily, but it is required that you weigh in at the end of every week by Sunday. The Food Too Good to Waste Challenge keeps an average of your food waste and garbage weights for six weeks. If you are a person who empties their in-home garbage can multiple times a week, remember to weigh the bag before you empty the garbage into your larger garbage cart.

#### What is the last day I can enter my weight(s) for the week?

Sunday is the last day you are able to enter your weight(s) for the week. The weekly deadline dates are as followed:

November 5November 12November 19November 26December 3December 10

Please visit healthycommunitiesclt.com for more specific details.

#### How do I weigh my food waste and garbage?

- Before the challenge began you should have received a food scale and a grey 10-gallon trash can. If you do not have a trash can and/ or a food waste scale please email curbit@charlottenc.gov.
- Line your grey 10-gallon food waste trash can with a trash bag.
- Separate and put all food waste into the 10-gallon trash can. This includes food from all meals and unwanted food in the refrigerator.
- Remove plastic bag from the trash can each Sunday. Place the plastic bag with food waste on the top of the scale. Weigh your weekly food waste in pounds.
- Remove garbage bag from your personal garbage can. Place the plastic bag with garbage on the top of the scale. Weigh your weekly garbage weight.

#### What measurement should I weigh my food waste in?

Pounds (lbs). Before weighing your food waste and garbage ensure that your scale is set to pounds.

#### How is my ranking calculated?

The calculation for rankings is the sum of your average food waste weight plus any waste reduction strategies that you use. **Note:** All waste reduction strategies are not ranked equally. Some strategies are worth more points than others. Example: If the Johnson family marked on the strategies list that they checked the refrigerator and cabinets before going to the grocery store, which is a prevention strategy, they would score higher than if they marked they stored their food properly, which is a combination strategy.

#### What happens if I miss a week?

In order to be considered for any prizes you have to participate **all six weeks** of the challenge. After Sunday evening, you will not be able to go back and enter weights for the previous week. If you do happen to miss a week, you may continue to participate in the challenge, but will not be considered for any prizes.

#### Is there a way to interact with other challenge participants?

You may the join the Healthy Communities Food Too Good to Waste Challenge Facebook group at https://www.facebook.com/F2G2Wclt. You can also follow Solid Waste Services @CLTSWS on Facebook, Instagram, Pinterest and Twitter.

#### Who do I contact if I have any other questions or concerns?

If you have any other questions or concerns please send an email to curbit@charlottenc.gov.

For details and information please visit healthycommunitiesclt.com.

# The Health Challenge

## 5210 Challenge Calendar

The 5210 Calendar is provided by our Healthy Communities partner, Carolinas Healthcare Systems.

#### What does 5210 mean:

- **5** Get 5 servings of fruits and/or vegetables daily
- **2** Limit screen time to 2 hours
- **1** Get 1 hour of physical activity
- **0** 0 sugary beverages.

The 5210 calendar list behaviors that you should incorporate into your lifestyle. These behaviors, if completed, makes you eligible to receive a prize from Carolinas Healthcare Systems! Incorporating these behaviors into your daily lifestyle is good for your health, good for managing your food waste and good for the environment.

#### Food Too Good To Waste Tracking Calendar

Use the tracking calendar below to also help you reduce food waste and improve your health. The calendar has many ideas to help you. From October 29 through December 10, do at least 35 of the activities below to be entered to win a prize. Put a check mark next to each item that you do. You can complete these in any order.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
29 Try a new fruit	30 Take the stairs instead of the elevator	31 Eat breakfast	Unplug 1 appliances you're not using	2 Bring your own bag to the grocery store	3 Try a yellow vegetable	4 Take a walk
Use one less paper napkin with lunch	Eat 1 cup of fruit	7 Trade paper towels for a cloth towel	Visit a park trail	9 Try a new vegetable	10 Tupperware - Use it!	11 Start your day with a healthy breakfast
12 Do 10 squats	13 Eat 1 1/2 cups of veggies	14 Use a reusable water bottle instead of buying one	15 Prepare a new fruit or vegetable recipe	16 Take a walk or go for a jog	17 Try a red fruit	18 Use leftovers to make a new meal
19 Make a shopping list (and only buy what's on it)	20 Try a green vegetable	21 Break bananas apart to increase their counter life	22 Try a blue fruit	Drink only water for the entire day	24 Walk a new route	25 Visit a local farmers market
26 Buy frozen vegetables and fruit without added salt or sugar	27 Try a new fruit or vegetable	28 Don't overserve food; use small plates	29 Clean your refrigerator	30 Try a new recipe with an "in season" fruit	Limit your screen time to 2 hours	2 Freeze your fruit before you toss it
3 Skip the juices and sodas	4 Try a new exercise (such as yoga, running, swimming)	5 Make a smoothie with a fruit and vegetable	6 Use up what's in your fridge before buying more	7 Donate what you don't want	Share a tip with a friend on how to reduce food waste	Stretch 9 Split a meal if eating out 10
CHARLOTTE.					Carolinas	HealthCare System

#### **Important Dates**

Date	Importance					

# Appendix

# Facts About Garbage and Food Insecurity

#### Garbage

- There's a direct link between your personal health and the environment.
- The top five chronic diseases in Mecklenburg County cancer, heart disease, stroke, kidney disease, and diabetes - these diseases can be connected to poor air and soil quality.
- Garbage is a major contributor to poor air and soil quality and global warming.
- Garbage decomposes in the landfill and emits methane gas.
- The EPA estimates landfills are the third largest cause of methane gas emissions.
- Methane is a powerful greenhouse gas that is 35 times more powerful at trapping heat in the atmosphere, which is the cause of climate change, this gas comes from landfills.
- Changing our waste management habits will reduce the amount of garbage going to the landfill and decrease methane gas production.
- Composting, upcycling, reusing and recycling are all ways to reduce the amount of waste going in the landfill.
- Eating more fresh fruits and vegetables can improve your health and the health of the environment because it reduces the amount of packaging, which is waste.
- Things we can do now to improve the environment include:
  - Minimize the items we throw in the garbage. i.e. avoid the garbage can at all costs.
  - Shop/buy fresh fruits and vegetables. Example: farmers' market
  - Make use of community gardens.

- Buy in bulk using the bulk section at the grocery stores, the less packaging the better.
- Shop closeout stores.
- Eat in, do potlucks!
- Don't get individual baggies for your produce, place all items in one reusable bag.
- Visit www.healthycommunitiesclt.com, click LEARN for more fun facts and tips.

#### **Food Insecurity**

- Food is the largest stream of materials in household trash.
- More than 37 million tons of food waste was generated in 2013.
- 48 million Americans live in food insecure households, about 73,000 of those people live in Mecklenburg County.
- Food loss and waste totals \$161 billion dollars.
- 31 percent of available food goes uneaten in the United States.
- 18% of Mecklenburg County are affected by food insecurity.
- 22% of children in Mecklenburg County live in food insecure activity.
- We can manage our food waste by being conscious about how we shop, prepare and store food.
- Start by buying only what you need.
- Keep fruits and vegetables fresh by storing them in their proper place.
- Prepare perishable food as soon as possible, preferably right after shopping.
- Be mindful of left overs and old ingredients that need to be used sooner rather than later.
- Freeze leftovers that won't be eaten within three days.
- In previous challenges, by the end of the six weeks, families were able to reduce their food waste by 25% or more.