

# Increasing Restaurant Food Donations: A Strategy for Food Waste Diversion

Prepared for: The National Restaurant Association

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May 2, 2014

*This student presentation was prepared in 2014 in partial completion of the requirements for PUBPOL 804, a course in the Master of Public Policy Program at the Sanford School of Public Policy at Duke University. The research, analysis, policy alternatives, and recommendations contained in this report are the work of the student team that authored the report, and do not represent the official or unofficial views of the Sanford School of Public Policy or of Duke University. Without the specific permission of its authors, this report may not be used or cited for any purpose other than to inform the client organization about the subject matter. The authors relied in many instances on data provided to them by the client and related organizations and make no independent representations as to the accuracy of the data.*

May 2, 2014

Natalie Chadwick and Jeff Clark  
National Restaurant Association  
1200 17<sup>th</sup> Street, NW  
Washington, DC 20036

RE: Increasing Restaurant Food Donations to Charities

Dear Ms. Chadwick and Mr. Clark,

We are pleased to submit our consulting report to the National Restaurant Association. It has been a pleasure working with both of you over the course of the semester. Thank you for graciously lending us your time and support throughout the process.

Please also extend our thanks to Laura Abshire and Alyssa Prince for providing us with their valuable insights.

Sincerely,

Joaquin Brahm

Helen Chananie

Toumil Samonte

Yi Yang

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# EXECUTIVE SUMMARY

## Policy Question

What steps can the National Restaurant Association (NRA) take to increase food donations from restaurants to charities?

## Problem Overview

Approximately 40 percent of food produced in the United States each year ends up in landfills, negatively impacting the environment and the economy. Restaurants generate a significant portion of this food waste, with an annual average of 35 tons per full-service restaurant. This waste includes food scraps and spoiled inventory, as well as unsold food still fit for consumption. While this edible food is wasted, over 16 percent of Americans suffer from food insecurity – defined as inconsistent access to adequate food.

Durham, NC, is a foodie city with more than 600 restaurants for its 250,000 residents. It serves as an ideal case study for investigating food waste and food insecurity at the local level. Durham restaurants are responsible for 50 percent of the 16,000 tons of commercial food waste generated by the city each year. Durham also suffers from food insecurity more acutely than the rest of the nation, with approximately 19.7 percent of the population hungry or at risk of hunger.

Donating surplus food to the needy can minimize both food waste and food insecurity. The US EPA recommends food donations as its second most preferred method for reducing food waste. Incentives for restaurants to donate surplus food to charities include enhanced tax deductions and federal liability protection under the Bill Emerson Good Samaritan Act.

Unfortunately, many restaurants do not donate surplus food because of:

1. A lack of awareness about food waste and food donation, including where and how to donate surplus food and the benefits of doing so.
2. Transaction costs, including staff time to arrange donation logistics, and capital expenditures related to storage and transportation.
3. Confusion regarding food safety, and fear of liability and bad publicity.
4. A lack of relationships, trust, and communication with food donation recipients.

## **Recommendations**

Increasing restaurant food donations will require a multi-pronged approach to engage diverse stakeholders, raise awareness, lower transaction costs and logistical barriers, and shift mindsets regarding food waste and food donation.

By taking steps to empower existing food recovery organizations, the NRA can help increase rates of food donation immediately.

- **Recommendation 1:** The NRA should support the Food Recovery Network by awarding small grants to exceptional university chapters.
- **Recommendation 2:** The NRA should work with Food Donation Connection to increase route densities for food recovery organizations, thereby increasing volume per donation pick-up and lowering transaction costs.

By taking steps to change mindsets within communities and the restaurant industry, the NRA can also help to have long-term, wide-reaching impacts on food donation.

- **Recommendation 3:** The NRA should promote food donation to local governments as a cost-effective mechanism for achieving municipal waste diversion goals. The NRA should provide government officials with a food donation toolkit to promote food donation to restaurants and the community.
- **Recommendation 4:** The NRA should help develop a sustainable management course for culinary schools. The course should emphasize cost savings and benefits to restaurants' organizational culture and reputation.

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## INDEX OF ORGANIZATIONAL ACRONYMS

<b>Organizations Mentioned in Report</b>	
<b>DHHS</b>	Department of Health and Human Services
<b>EPA</b>	U.S. Environmental Protection Agency
<b>FDC</b>	Food Donation Connection
<b>FRN</b>	Food Recovery Network
<b>FWRA</b>	Food Waste Reduction Alliance
<b>KAF</b>	Keep Austin Fed
<b>NCGA</b>	North Carolina General Assembly
<b>NCRLA</b>	North Carolina Restaurant and Lodging Association
<b>NRA</b>	National Restaurant Association
<b>NRDC</b>	Natural Resources Defense Council
<b>TROSA</b>	Triangle Residential Options for Substance Abusers
<b>USDA</b>	U.S. Department of Agriculture

# INTRODUCTION

## Policy Question

What steps can the National Restaurant Association (NRA) take to increase food donations from restaurants to charities?

## Problem Overview

### Food Waste and Food Insecurity

In 2011, approximately 36 million pounds, or 40 percent, of food produced in the United States was sent to landfills.<sup>1</sup> Restaurants contributed significantly to this total, generating an annual average of 35 tons per full-service restaurant.<sup>2</sup> Restaurant food waste includes customers' discarded leftovers, kitchen scraps, and spoiled inventory, as well as unsold food still fit for consumption.

Food waste creates significant environmental and economic impacts. As food decomposes anaerobically in landfills, it releases methane, a potent greenhouse gas. Sending food to landfills is also wasteful of the water, energy, and financial resources used to produce it. Americans throw away the equivalent of \$165 billion and 25 percent of all freshwater and 4 percent of all oil consumed in the U.S. each year, along with their food waste.<sup>3</sup>

At the same time, about 16.4 percent of the national population –over 50 million Americans- suffered from food insecurity in 2011.<sup>4</sup> The USDA defines food insecurity as a household-level economic and social condition of limited or uncertain access to adequate food.<sup>5</sup> Food insecurity can result in a state of hunger for individuals within those households.

Young children in food insecure households are particularly vulnerable to poor health and stunted development. They may find it more difficult to fully participate in school, and continue to see negative health impacts into adulthood.<sup>6</sup> Food insecurity is linked to higher risks of diabetes and cardiovascular diseases, as well as higher levels of aggression and anxiety.<sup>7</sup>

Looking locally, Durham, North Carolina serves as a microcosm of national food waste and food insecurity trends. Durham generates an estimated 16,000 tons of commercial food waste each year, with local restaurants contributing half of this total.<sup>8</sup> Durham also experiences food insecurity more acutely than the rest of the nation. In 2011, 19.7 percent of Durham's population –more than 50,000 people-

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<sup>1</sup> (Gunders, 2012)

<sup>2</sup> (Business for Social Responsibility, 2013)

<sup>3</sup> (Gunders, 2012)

<sup>4</sup> ("Map the Meal Gap | Food Insecurity in your County," 2011)

<sup>5</sup> ("USDA Economic Research Service - Measurement," 2013)

<sup>6</sup> ("Food Insecurity - Causes of Food Insecurity | Feeding America," 2014a)

<sup>7</sup> ("Food Insecurity - Causes of Food Insecurity | Feeding America," 2014b)

<sup>8</sup> (Leven, 2012)

were hungry or at risk of hunger.<sup>9</sup> Approximately two-thirds of Durham's children received free or reduced school meals in 2012.<sup>10</sup>

### **Food Donation and Food Waste Reduction**

Donating surplus commercial food to charity is an effective method to simultaneously reduce food waste and address the needs of the food insecure.<sup>11</sup> The U.S. Environmental Protection Agency (EPA) promotes food donation to needy populations as the second most optimal organic waste reduction measure, after reducing waste at its source.<sup>12</sup> Restaurants can donate safe, unspoiled food that has not yet been served to customers. Diverting edible food waste by just 15 percent would generate enough food to feed 25 million Americans each year.<sup>13</sup>

Many local governments have begun to prioritize food waste reduction in order to reduce the costs and environmental impacts related to municipal waste disposal, while other local governments have taken up food insecurity as a priority issue.

For example, the North Carolina General Assembly formed a committee in 2013 to investigate the high rate of food insecurity in the state and to make policy recommendations to the state legislature. Thus far, the committee has primarily discussed expanding the Department of Health and Human Services' (DHHS) Food and Nutrition Services in order to meet need. While the committee has not discussed food recovery specifically, it does include food banks as DHHS funding recipients in strategy documents.<sup>14</sup>

The National Restaurant Association (NRA) also supports national food waste reduction and food donation efforts. Its Conserve initiative provides resources and advice for restaurants seeking to adopt conservation methods. In 2011, the NRA partnered with the Grocery Manufacturers Association and Food Marketing Institute to form the Food Waste Reduction Alliance (FWRA). The FWRA represents the grocery, manufacturing, retail, and restaurant industries, which produce 42 percent of food waste sent to landfills each year. The FWRA aims to reduce the amount of food waste generated and increase the amount of safe, nutritious food donated to those in need.<sup>15</sup>

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<sup>9</sup> ("Map the Meal Gap | Food Insecurity in your County," 2011)

<sup>10</sup> (Food Bank of Central and Eastern North Carolina, 2013)

<sup>11</sup> Note: The term "food donations" in this report will refer to surplus food donations, rather than food prepared and donated at the request of an organization.

<sup>12</sup> Please see Appendix V for the EPA's Food Recovery Hierarchy diagram

<sup>13</sup> (Gunders, 2012)

<sup>14</sup> ("NC Division of Social Services Food Access in North Carolina," n.d.)

<sup>15</sup> (FRWA, 2014)

## **Food Donation Policy Incentives**

The U.S. federal government encourages businesses to donate surplus food by extending federal tax benefits and liability coverage to commercial food donors.<sup>16</sup> These measures make donating surplus food in the U.S. easier and more culturally accepted than in other countries.

In 1976, Congress amended Section 170e3 of The Internal Revenue Code. The amendment allows C corporations<sup>17</sup> to take permanent enhanced tax deductions for food donated to 501(c)(3) nonprofits that serve vulnerable populations. C corporations can deduct the cost of half of the food's appreciated value, so long as the total deduction does not exceed twice the donated food's basic cost.

In 2005, Congress enacted the Katrina Emergency Tax Relief Act to encourage emergency responses to Hurricane Katrina. This law temporarily extended food donation tax deductions to all business entities, including small businesses. These are businesses classified as non-C corporations; they may be S corporations, partnerships, or sole proprietorships. These tax deductions for non-C corporations have been renewed inconsistently, and at times have been extended retroactively after expiration.

The Bill Emerson Good Samaritan Food Donation Act, ratified in 1996, protects businesses and nonprofits that donate food in good faith.<sup>18</sup> So long as a donor does not act in gross negligence or does not intentionally mishandle food, they cannot be held liable if donated food causes illness. While this federal law does not supersede state laws, all states have passed some version of the Food Donation Act.

## **Looking Ahead**

Despite progress made by the public and private sectors, there are still unrealized opportunities to increase food donation and decrease food waste. This report will address how restaurants in particular can increase their surplus food donations to combat waste and help those in need.

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<sup>16</sup> For an extended discussion of tax benefits and their calculations, see Appendix II.

<sup>17</sup> C corporations are defined by the IRS as any corporation that is taxed separately from its owners for federal income tax purposes.

<sup>18</sup> For the full text of the Bill Emerson Good Samaritan Food Act, please visit <http://www.gpo.gov/fdsys/pkg/PLAW-104publ210/pdf/PLAW-104publ210.pdf>

## Research Methodology

To address our policy question of how to increase restaurant food donations to charities, we researched four major stakeholders in the food donation chain: restaurants, food recovery organizations, food recipient organizations, and government entities.

We first conducted a literature review of food waste and food insecurity issues and current food donation practices. We then collected data by interviewing stakeholders with both local and national perspectives. The majority of our research focuses on local Durham stakeholders. We used Durham as a case study to understand trends in food donation that can be generalized to cities across the country.

These interviews were conducted in-person, by phone and e-mail. Please see Appendix I for a detailed list of interview subjects and topics. We summarize our interviews below:

- 19 restaurants
  - 3 national restaurant corporations
  - 16 local or regional restaurants
- 2 restaurant associations
- 9 food recovery organizations and recipient groups
- 4 public sector representatives

We also conducted a separate survey of 20 restaurants in and around the New Hope Commons shopping center to assess the density of food donation practices in a single locale. Please see Appendix I for a complete list of restaurants surveyed.

## SECTION II: STAKEHOLDER OVERVIEW

Figure 1. Stakeholder Map of the Food Donation Process

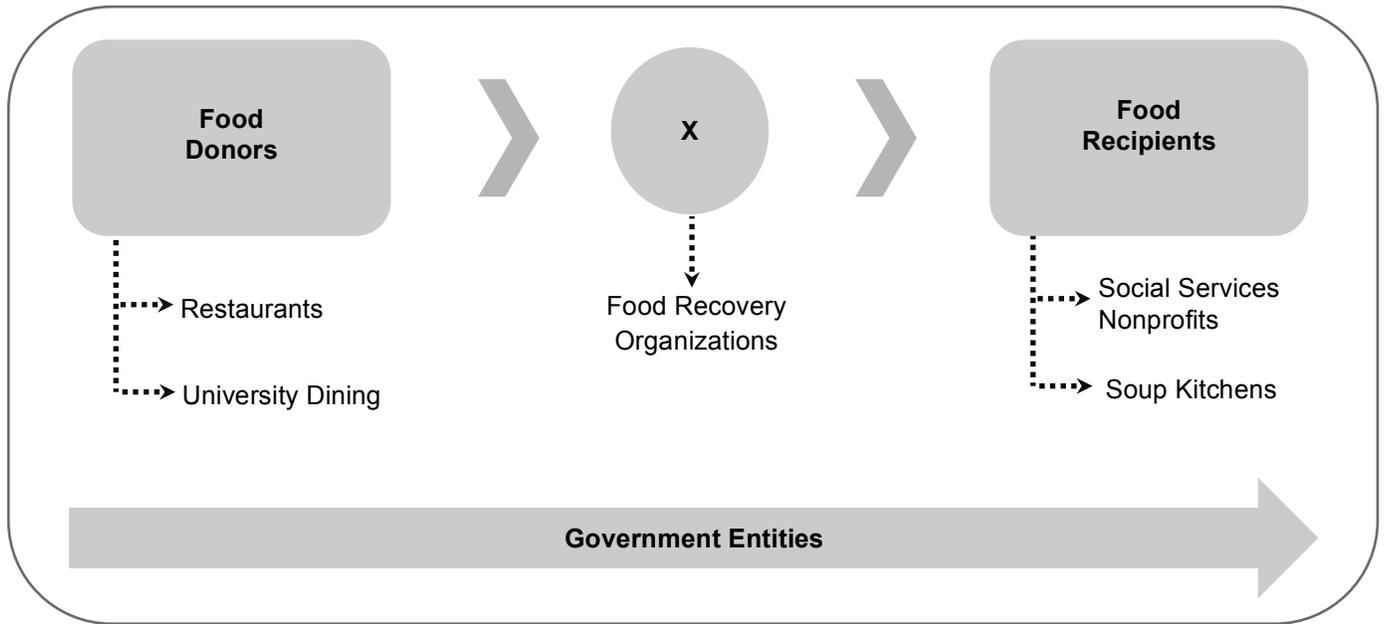


Figure 1 depicts the main stakeholders involved in the food donation process. While this report focuses on donations from restaurants and university dining services, food donors can also include food manufacturers and retailers. Food recovery organizations coordinate donation transactions, bridging the gap between restaurant donors and recipient organizations. Food recipient organizations include social service nonprofits, shelters, soup kitchens, and food pantries. Government entities sit outside of the food donation chain, but can exert influence over the entire process.

## Stakeholder I: Food Donors

This report focuses on donations from restaurants and university dining services, however, food donors can also include food manufacturers and other retailers.

On average, a full-service restaurant generates 35 tons of food waste a year, while a limited-service restaurant generates 13 to 20 tons.<sup>19</sup> Although many restaurants across the U.S. do donate surplus food, there still significant opportunity to divert more food waste from restaurants to feed those in need.

### Durham Restaurants

Over 600 hundred restaurants operate in the City of Durham. The diversity and vibrancy of Durham's food scene has attracted national accolades. Known for specializing in local ingredients, Durham has been recognized by *Bon Appetit* as the "Foodiest Small Town in America" and by *Southern Living Magazine* as the "Tastiest Town of the South."<sup>20</sup>

While the local food scene maintains a strong independent streak, many national chain restaurants and franchises operate in the city as well. Durham has renovated its downtown tobacco factories and warehouses into popular restaurants, bars, and entertainment venues.<sup>21</sup> The city serves as an ideal case study as more U.S. cities follow suit by revitalizing their downtowns and embracing the local foods movement.

Durham restaurants vary widely in the nature and scale of their food donation efforts. Some restaurants donate surplus food regularly through established food recovery programs. Others may donate directly to local charities on an infrequent, ad hoc basis. Most, however, do not donate surplus food at all. Some restaurants give back to the community by preparing special food for fundraisers and events.

### Duke Dining

Duke University Dining Services is comprised of 28 independently operated dining locations. Core dining locations, including both made-to-order and buffet-style services, are operated by national food service provider, Bon Appétit. Other concessionaires range from such quick-service chain eateries as McDonalds and Panda Express, to local, independent cafes, and upscale full-service dining at the Washington Duke Inn.

A 2005 Duke Dining environmental impact study found that the buffet-style locations, which account for more than 15 percent of meals served on campus, generate the majority of campus food waste.<sup>22</sup> Duke Dining management has since worked with Bon Appétit to implement front and back-of-the-house composting at these locations.<sup>23</sup>

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<sup>19</sup> (Ellis, Lee, Reeder, Yip, 2013)

<sup>20</sup> (Ellis, Lee, Reeder, Yip, 2013)

<sup>21</sup> (Disbrowe, n.d.)

<sup>22</sup> ("Methodology for Developing a Comprehensive Green Dining Program at a University," n.d.)

<sup>23</sup> Interview with Kirsten Marinko

Duke Dining currently donates surplus food to Urban Ministries, a local food pantry, twice a semester. While a single undergraduate student initiated the donations, Duke Dining management is supportive of the efforts and open to increasing food donations as student interest increases.<sup>24</sup> A number of students are currently in discussion with Food Recovery Network (FRN), the national campus-based food donation nonprofit, to expand Duke's food donation program in the near future.<sup>25</sup>

### **The North Carolina Restaurant and Lodging Association (NCRLA)**

The NCRLA represents the state's more than 2,100 restaurant and hospitality businesses, and is the state affiliate of the National Restaurant Association.<sup>26</sup> The NCRLA lobbies the North Carolina General Assembly to create a favorable regulatory environment on behalf of their members. Like the NRA, the NCRLA is in a position to support restaurant sustainability and food donation practices.

### **Chef's Academy Culinary School**

Culinary schools train aspiring chefs, restaurant managers, and pastry artists, who will influence future restaurant practices. Like university dining systems, culinary schools can also be a large contributor to food and commercial waste. However, The Chef's Academy in Morrisville, NC provides an example of how culinary schools can be leaders in waste reduction practices. Through a partnership with a local composting contractor and an aggressive recycling and composting campaign, The Chef's Academy reduced its trash production from 50 gallons to only 5 gallons per day.<sup>27</sup>

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<sup>24</sup> Interview with Kirsten Marinko

<sup>25</sup> Interview with Autumn Rauchwerk

<sup>26</sup> ("North Carolina Restaurant and Lodging Association: About NCRLA," n.d.)

<sup>27</sup> E-mail with Alyssa Barkley

## Stakeholder II: Food Recovery Organizations

Food recovery organizations act as a bridge between restaurant donors and recipient organizations. Through business relationships, volunteer support, and technology, food recovery organizations facilitate donations by coordinating pick-ups and providing labor and equipment to handle, transport, and store food.

### Durham Food Recovery Organizations

The Food Bank of Central and Eastern North Carolina, a local affiliate of the national Feeding America network, distributes the majority of food donations in the Raleigh-Durham-Chapel Hill area. In 2013, the Durham branch distributed over 6.2 million pounds of food to 172 agencies in six counties, both to partner agencies and directly to food-insecure families.<sup>28</sup> The Food Bank does not accept prepared food from restaurants, but connects restaurants to local partner agencies that do so.<sup>29</sup>

Another local Feeding America partner, the Interfaith Food Shuttle, coordinates food recovery efforts across Durham County and six neighboring counties. Using a fleet of refrigerated trucks, the Food Shuttle recovers 7 million pounds of food from 350 donors annually, and distributes the food to a network of 130 nonprofit agencies. While founded as a restaurant-based food recovery organization, the Food Shuttle has recently shifted to sourcing food primarily from high-volume retailers such as Kroger and Walmart, in order to minimize cost per donation pick-up.<sup>30</sup>

### New Frontiers in Food Recovery: Mobile Apps

Recently, tech entrepreneurs have begun to develop mobile apps to better coordinate food donations. Some of these new apps include Waste No Food, MintScraps, and Spoiler Alert.

These apps allow restaurants to post the type, quantity, and even photos of food they have available to donate. As soon as food is posted, recipient organizations receive alerts and can use the apps to claim food and arrange for pick-up. This feature makes mobile apps ideal for arranging last-minute, ad hoc donations. Waste No Food also encourages donors and recipients to publicly rate one another, in order to increase accountability of users.<sup>31</sup>

Mobile apps can log donation transactions, allowing restaurant operators to track their waste, adjust food orders to minimize waste, and reduce expenses. Logs can also be used to accurately calculate tax benefits earned from donating.

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<sup>28</sup> ("Durham Branch - Food Bank of Central & Eastern North Carolina," n.d.)

<sup>29</sup> Jennifer Caslin

<sup>30</sup> Interview with Don Eli

<sup>31</sup> Interview with Kirin Sridhar

## Spotlight on National Food Recovery Organizations

Food recovery programs, also called food rescue programs, have been around since the 1980s. However, many Americans are more familiar with food banks, which distribute shelf-stable, nonperishable foods to food pantries and soup kitchens. Food recovery programs specialize in recovering surplus, prepared food from restaurants, cafeterias, or large catered events.

Many food recovery programs organized into a national network, called Foodchain in 1992.<sup>32</sup> In 2001, Foodchain merged with Second Harvest, an umbrella organization of over 200 food banks, food pantries and soup kitchens.<sup>33</sup> This new organization became Feeding America in 2008.<sup>34</sup> Feeding America's affiliates supply over 3 billion pounds of food to more than 37 million food-insecure Americans each year.<sup>35</sup>

Numerous volunteer-driven food recovery programs exist throughout the United States. Rock and Wrap It Up! and Food Recovery Network (FRN), are two programs that have grown into national networks. Rock and Wrap It Up! recovers food from the music, entertainment and sports industries. FRN is a network of 61 student-led college chapters that recover food primarily from university dining locations.

Some city-based volunteer food recovery programs include D.C. Central Kitchen, and City Harvest in New York City. Keep Austin Fed (KAF) is working with the Austin City Council's Food Policy Task Force to help draft regulatory guidelines to support city-wide food donation activities. The Austin City Council declared 2013 the year of "Food Waste Prevention and Food Recovery," raising awareness of the issues.

Food Donation Connection (FDC) is one of the country's largest food recovery business ventures, and facilitates food donations through its Harvest Program. In 1992, a former PepsiCo executive started FDC to link food service companies interested in donating food to nonprofit hunger relief organizations.<sup>36</sup> Nonprofits in the Harvest Program conduct all food pick-ups, while FDC provides Harvest Program donors with transportation containers and receipts for all transactions. FDC funds itself by collecting a share of its restaurant partners' savings from donated food tax deductions.<sup>37</sup>

The financial crisis of the last decade has increased pressures on emergency food donors and national food recovery networks. Since then, over half of Feeding America's food banks, shelters, and kitchens have reported increased demand for their services.<sup>38</sup> Food pantries and soup kitchens interviewed also cited shortages of funding and food supplies as the most common threat to their operations.<sup>39</sup>

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<sup>32</sup> (Binns, 1998)

<sup>33</sup> (Poverty in the United States: A-K, 2004)

<sup>34</sup> ("America's Second Harvest Changes Name to Feeding America", DATE?)

<sup>35</sup> ("Our Food Bank Network | Feeding America," n.d.)

<sup>36</sup> Interview with Jim Larson

<sup>37</sup> ("Food Donation Connection - Donate Food - Harvest Program," 2014)

<sup>38</sup> (Mabli, Cohen, Porter, Zhao 2010)

<sup>39</sup> (Mabli, Cohen, Porter, Zhao 2010)

## **Stakeholder III: Recipient Organizations**

Surplus food donations support the food insecure, including homeless and low-income individuals, as well as such special populations as veterans, recovering substance abusers, and domestic violence victims. Food recipient organizations may include social services nonprofits, shelters, soup kitchens and food pantries.

### **Durham Recipient Organizations**

Urban Ministries of Durham and Durham Rescue Mission, an FDC partner, are local faith-based nonprofits that provide meals, shelters, and vocational services for the city's homeless. In 2013, Urban Ministries' Community Café served an average of 664 meals per day. The Café relies on food from the Central and Eastern North Carolina Food Bank, a Feeding America Partner, and meals donated by volunteers.<sup>40</sup> Other religious organizations, including local churches and synagogues, also serve food-insecure people on a limited basis.

Triangle Residential Options for Substance Abusers (TROSA) is a local comprehensive two-year residential substance abuse recovery program.<sup>41</sup> Their dining services feed over 480 people, three meals a day, 365 days per year.<sup>42</sup> Victims of domestic violence or sexual abuse can find emergency accommodations and food at the Durham Crisis Response Center, another FDC recipient organization.

Other local nonprofits depend on the Food Bank and volunteer-donations for meals. Some youth programs may also be eligible to receive food from the Durham Public Schools' Child Nutrition services. Urban Hope, a faith-based nonprofit that supports the Walltown neighborhood youth participates in this program.<sup>43</sup>

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<sup>40</sup> ("Urban Ministries of Durham | Community Café," n.d.)

<sup>41</sup> ("TROSA | About Us," n.d.)

<sup>42</sup> Interview with Willie Lane

<sup>43</sup> Interview with Bahari Harris

## Stakeholder IV: Government Entities

Local government bodies, including city councils, municipal waste management offices, and sustainability offices, can help incentivize food waste reduction and food donations. In Durham, the offices best positioned to influence food donations are the Solid Waste Department and the City Council.

### **Durham Government Overview**

Solid Waste Department: The City of Durham has outlined solid waste diversion goals in the Durham Solid Waste 10-Year plan. According to Durham's Solid Waste Director, Donald Long, the city currently diverts 28 percent of waste from landfills via recycling. Durham intends to increase the diversion rate an additional 30 percent over the next 10 years by implementing municipal composting services. The Solid Waste Department does not currently endorse or organize commercial food recovery as a means to minimizing waste, however, the department does provide waste audit services to businesses on request, and will also be piloting a public-private partnership with select local supermarkets to initiate municipal composting efforts.<sup>44</sup>

Durham City Council: The Durham City Council is a seven-member, legislative and policy-making body for the City of Durham.<sup>45</sup> According to Durham City Councilman Steve Schewel, there is significant discussion in Durham policy circles around the issue of food insecurity. Proposed solutions to the problem include expanding access to farmers markets and supporting low-income urban farming projects. Restaurant food donations have not been raised as a policy alternative.<sup>46</sup>

Councilman Schewel explained that budgetary constraints place a limit on the extent to which the City of Durham could support food donation activities. Durham concentrates its limited resources on consistently providing core services. While the city could publicize and support a food donation program run by others, Councilman Schewel said that the city would not be likely to organize and run the program.<sup>47</sup>

Durham City/County Sustainability Office: The Durham Sustainability Office works primarily to achieve goals outlined in Durham's Greenhouse Gas Emissions Reduction Plan for 2030. Durham's greenhouse gas inventory does not currently include emissions related to waste hauling and landfill methane, so this office would not be the primary local champion for food waste reduction efforts.<sup>48</sup>

However, sustainability offices in other cities may be better positioned to address waste diversion. For example, New York City's PlaNYC Sustainability Office launched the Food Waste Challenge in 2013. It engaged 100 restaurants to divert more than 2,500 tons of food waste from landfills, making significant progress towards the city's long-term waste diversion goals.<sup>49</sup>

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<sup>44</sup> Interview with Donald Long

<sup>45</sup> ("City of Durham - City Council," n.d.)

<sup>46</sup> Interview with Steve Schewel

<sup>47</sup> Interview with Steve Schewel

<sup>48</sup> Interview with Tobin Freid

<sup>49</sup> ("More Than 2,500 Tons of Food Waste Diverted From Landfills in Six Months of Food Waste Challenge," n.d.)

## SECTION III: FINDINGS

Insights from our research and stakeholder interviews have helped us to identify common barriers to increasing food donations, and to better understand the components of successful food donation programs.

### A. Barriers to Increasing Restaurant Food Donations

#### 1. Lack of Awareness

This issue represents the most significant hurdle to increasing restaurant food donations, and includes lack of awareness about the following:

Food waste generated: This is the central barrier to increasing food donation. Many of the restaurant managers and operators we interviewed claimed that they did not generate enough leftovers to be able to donate. However, just four out of twenty local restaurants interviewed track their food waste, so most had no measurements on which to verify these claims.

Many independent restaurant managers identified alternative methods to reduce food waste, including incorporating excess ingredients into soups, salads and daily specials, allowing employees to take home leftovers, and placing small and frequent inventory orders to avoid spoilage.

Lack of food donation awareness: Once restaurant operators are aware that they generate food waste, they must also know about food donation and how it works. Many of the restaurant managers we interviewed did not know that they could donate their surplus food, or know to which organizations they could donate.

Low consumer demand: Restaurant patrons and the general public also have low awareness of food waste and do not expect food donation or food waste reduction practices. Restaurants do not advertise their food donation practices, and consumers do not pressure them to donate. Bryan Latch, Purchasing Manager at the Washington Duke Inn, explained that recycling and sourcing local and organic foods are hotter “sustainability trends,” so restaurants tend to prioritize these issues instead.<sup>50</sup>

1d. Tax deductions: Many local restaurant operators also do not realize that they can take a tax deduction for donating food, weakening motivation to donate. Just five out of twenty local restaurants interviewed had taken advantage of tax benefits, but none do it systematically.

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<sup>50</sup> Interview with Bryan Latch

## **2. Costs and Logistical Barriers:**

For many restaurant owners and operators that do overcome the first awareness barrier, the following cost and logistical challenges may still inhibit regular food donation:

Inefficiency: Most restaurant operators said that they would be interested in donating their surplus food to charities as long as it did not increase their expenses. Many would prefer volunteer led pick-ups to minimize restaurant staff-time required. However, nonprofit recipient organizations and some food recovery intermediaries may also lack the volunteer base to provide such manpower.

Equipment constraints: Food donors and/or recipients need cold storage units to safely keep perishable food items. They also need insulated containers and refrigerated vehicles to transport food. These equipment costs can prohibit donations.

Incompatible Scheduling: Restaurants can have unpredictable availability of leftovers and may need flexibility to arrange ad hoc donations. Limited storage space may necessitate that food donations be picked up the same day that leftovers become available. This can create difficulties in coordinating with recovery or recipient organizations, since restaurants often close down after midnight.

## **3. Food Safety Concerns**

Many restaurant managers, even those with both the awareness and the capability to take on regular food donation activities, are nevertheless put off by the following concerns:

Fear of Legal Liability and Bad Publicity: Many restaurant operators and health officials are unaware that the federal government protects food donors from liability through the Bill Emerson Good Samaritan Act. One restaurant manager who was aware of the liability protection still feared that negative publicity from food-borne illness connected to their restaurant could significantly damage business.

Food Safety Confusion: Multiple restaurants were also unaware of the legal food safety requirements related to donating leftovers. Charitable organizations may also omit restaurants from food donation program sourcing due to perceived legal issues. For example, veteran volunteers at the Urban Ministries food pantry in Durham wrongly assumed that they were legally unable to accept food donations from restaurants.<sup>51</sup>

Food Safety Variability: The Interfaith Food Shuttle cited the wide variability of food safety standards across restaurants, and the cost and effort associated with verifying safety, as one reason for no longer sourcing food from restaurants.<sup>52</sup>

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<sup>51</sup> Interview with Elizabeth Newman

<sup>52</sup> Interview with Don Eli

#### **4. Relationship Barriers**

Bridging the gap between restaurants that have food to donate and charitable organizations that want it requires time and effort to build and maintain relationships. Strong relationships between restaurants and recipients are often built on a personal basis, which presents a challenge to scaling up existing food donation programs. Trust between food donors and recipients can also be crucial. Both restaurants and nonprofits mentioned concern that partners might not handle food safely or might be otherwise unreliable in terms of coordinating donation logistics.

Forging strong relationships between restaurants and recipients can be vital to both initiating and sustaining food donation efforts.

## B. Components of Successful Food Donation Strategies<sup>53</sup>

### Restaurants

Motivation: FDC's Jim Larson says, "An internal champion is more important than anything."<sup>54</sup> This statement rang true for the three businesses we spoke with that donated food on a weekly basis –Darden Restaurants, Starbucks, and Durham-based, Saladelia. Jim Larson states that some of FDC's earliest restaurant contacts were accountants who realized the economic benefits of surplus food tax deductions. These accountants then promoted the program to their executives. Once executives and owners decide to donate food, they can incorporate it into their company's culture at multiple franchise locations.

In our research, food donation practices also correlated with strong commitment to sustainability by owners or corporate management. Darden Restaurants and Starbucks both practice conservation methods and work to raise customer awareness around sustainability by outlining sustainability goals and providing progress-to-goal reports on their websites. Similarly, Saladelia owner Fida Ghenam emphasizes that the additional cost of purchasing recyclable containers is worth it to her, because "it's not about the savings, it's about the waste."<sup>55</sup>

Strong company cultures also improve staff compliance. For example, Darden Restaurants places sustainability teams at each of its locations. These teams help ensure that food is properly handled and that the donations are carried out.<sup>56</sup> The chain is currently exploring ways to increase customer awareness about the issue.

Resource Capability: For restaurants that deliver food directly to shelters, a refrigerated truck fleet is extremely valuable for facilitating donations. Durham entrepreneurs, Fida and Robert Ghenam, operate six restaurants and a catering service in Durham. They donate baked goods daily from their Mad Hatters bakery to the local nonprofit, Urban Ministries. When orders are cancelled, they use their catering trucks to donate the unexpected surplus. For restaurants in FDC's Harvest program, nonprofit organizations will pick up food on-site.

Passport Pizza, of Clinton Township, MI, is another example of a business that used their resource capabilities to increase food donations. Passport Pizza has turned their stores into clearinghouses for donated food. Restaurants and grocers may drop off food, and Passport Pizza will store and distribute it to local nonprofits.<sup>57</sup>

Relationship-Building: Restaurant operators who donate food found motivation through personal experiences in the community. Saladelia owners chose to donate to Urban Ministries after personally volunteering there with their children.<sup>58</sup> Jim

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<sup>53</sup> Please see Appendix III for a condensed matrix covering this topic

<sup>54</sup> Interview with Jim Larson

<sup>55</sup> Interview with Fida Ghenam

<sup>56</sup> Interview with Brandon Tidwell

<sup>57</sup> Interview with Alyssa Prince

<sup>58</sup> Interview with Fida Ghenam

Larson recalled that one executive refused to meet with FDC, but after volunteering in a homeless shelter did a “180”.<sup>59</sup> The executive now champions food donations.

### **Food Recovery Organizations**

Motivations: Enduring food recovery programs combine a mission to feed the needy with a charge to combat environmental degradation. The more successful programs have paid staff to ensure the continued growth of their programs.

Resource Capability: Successful food recovery organizations minimize the cost burden of donating for restaurants and recipient groups. For example, FDC links restaurants and nonprofits, and provides them with containers and food labels. They also maintain a log of all transactions, which are confirmed through a mobile application. Restaurants can then use FDC’s logs to accurately calculate their tax deductions.

FRN’s student volunteers prepare the donations behalf of food service providers, thereby minimizing staff costs. FRN adds additional value by logging transactions to help restaurants measure food waste and calculate tax benefits. FRN’s national office also provides support and technical assistance to new and mature chapters in order to grow its network and maintain continuity and momentum at current chapters.

Relationship-Building: Food recovery organizations with diverse connections to restaurants and nonprofits develop trust through consistency and high standards. For example, volunteers with KAF and FRN are required to go through safe food-handling training to increase trust and accountability with their partners.

These organizations also partner with restaurant groups and leaders to facilitate donations at the local level. For example, FDC officially partners with the NRA, who promotes FDC’s activities to its members. FRN has established partnerships with Sodexo and Bon Appetit to facilitate expansions at new campuses and develop food-handling protocols. City Harvest in New York City increased food donation awareness among independent restaurants by establishing a 75-member Food Council. Representatives on the council are popular chefs, restaurateurs and food industry professionals, who also help raise the visibility of the program.<sup>60</sup>

Political advocacy by food recovery organizations is an important mechanism for expanding the pool of potential food donors. For example, Rock and Wrap It Up! introduced and helped pass the Federal Food Recovery Act of 2008, which encourages food service providers in federal buildings to donate their surplus food.<sup>61</sup> FDC has advocated for the extension of permanent tax deductions for all restaurants. In 2007 they helped submitted a technical correction into that the tax code that clarified benefits to S corporation shareholders.<sup>62</sup>

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<sup>59</sup> Interview with Jim Larson

<sup>60</sup> (“City Harvest - Rescuing Food for New York’s Hungry,” n.d.)

<sup>61</sup> (“Advocacy Partnerships to Help Fight Hunger | Advocacy Wrap! |,” 2014)

<sup>62</sup> (“Food Donation Connection - Donate Food - Harvest Program,” n.d.)

## **Recipient Organizations**

We only encountered a few recipient organizations in Durham that relied consistently on restaurant food donations. At least two local nonprofits, Durham Crisis Response Center and Durham Rescue Missions, partner with FDC. In Durham, TROSA exemplifies the type of nonprofit that would most benefit from increased restaurant donations, and one that has the scale and resources to consistently run pick-ups. TROSA is a two-year residential program for rehabilitating substance abusers.

Motivation: Willie Lane, TROSA's Food Services Manager says that TROSA limits its trips to the food bank to so that they do not take food from "organizations who need it more."<sup>63</sup> However, recent cuts to the Supplemental Nutrition Assistance Program (SNAP) have reduced their benefits by 25 percent. As a result, they more actively seek food donations as not to reduce meals.

Resource-Capacity: Unlike most nonprofits, TROSA raises its own revenues from in-house business ventures. It also has a seven-person intake department that solicits food and material donations from a variety of sources. They have multiple refrigeration units to store prepared food. Residents and former residents who staff its cafeteria and café are all ServSafe certified in proper food handling methods.

Relationship-Building: Depending on the season, food donations from restaurants, retailers and manufacturers can account for 30 to 70 percent of TROSA's food inventory.<sup>64</sup> Because the donations do not meet their demand they also cultivate relationships with vendors for reduced prices.

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<sup>63</sup> Interview with Willie Lane

<sup>64</sup> Interview with Willie Lane

## C. New Hope Commons Route Density Analysis

There are over 20 restaurants in or near Durham’s New Hope Commons shopping area. Located at a major exchange between Chapel Hill and Durham, commuters pass this suburban shopping center daily. New Hope Commons’ mix of chain restaurants, franchises, and independent restaurants is common to many suburban shopping centers throughout the U.S.

We surveyed restaurants at New Hope Commons with one question: “Do you donate your surplus food to charities on a weekly basis?” Of the 21 restaurants interviewed, only four restaurants replied that they donate surplus food to charities on a weekly basis. Three of these restaurants –Starbucks, Bob Evans and Chipotle –are FDC partners who donate food to the Durham Crisis Response Center between two to three times per week. These restaurant chains are all C corporations and receive permanent tax benefits for donating surplus food.

Jim Larson, Program Director of FDC, cited advocacy from restaurant accountants as key levers in initiating partnerships with restaurants.<sup>65</sup> Other restaurants in the shopping center are privately owned corporations, franchises, or independent restaurants. Their tax benefits for charitable food donations are subject to congressional renewal every year, making it difficult to plan tax payments. In testifying to Congress, Jim Larson noted that Pizza Hut and KFC franchisees have told him they would donate food if Congress made these benefits permanent for their businesses.<sup>66</sup>

This survey illustrates how food recovery organizations and recipient organizations capture only a small market share of potential surplus food suppliers. FDC, which has an efficient model for working with multi-store chain restaurants, cannot extend its business model because the economic incentives for restaurants to donate their surplus food differ based on a restaurant’s tax classification.

The lack of density increases cost of picking up food donations. Willie Lane, Food Services Director of TROSA, said that they would be willing to rent a refrigerated truck to pick up donations, if the total costs were less expensive than purchasing the food themselves.<sup>67</sup> However, the lack of density (the percentage of restaurants per pickup within a given area) and low-volume per-pick-up at smaller restaurants make it impractical for nonprofits to pursue restaurant surplus food donations. Increased density and volume-per-pick-up could be achieved if all the restaurants in this shopping center participated in a food recovery program.

Our research indicates that a permanent extension of enhanced tax deductions to all businesses presents the greatest potential for increasing surplus food donations. Therefore, we believe that the NRA, Feeding America and FDC should continue to lobby for this extension.

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<sup>65</sup> Interview with Jim Larson

<sup>66</sup> (Larson, 2009)

<sup>67</sup> Interview with Willie Lane

## SECTION IV: RECOMMENDATIONS AND ANALYSIS

Based on our findings, we have developed the following four recommendations for the NRA to increase restaurant food donations by strengthening existing food recovery efforts in the short-term, and shifting the mindsets of communities and restaurants in the long term.

### Recommendation 1: Build Campus Capacity for Food Recovery

A. **Small Grants for Food Recovery Network Chapters:** The NRA should award small grants to chapters of the national campus-based food donation nonprofit, Food Recovery Network (FRN). The NRA should work with FRN to select grant recipients in two categories:

1. **Outstanding Chapter Award:** This grant should be awarded to FRN chapters that demonstrate exceptional food recovery efforts (similar to the NRA's Restaurant Neighbor Award). This capacity-building award should be used for chapters to strengthen and expand their efforts, particularly to recover food from more off-campus restaurants.
2. **Start-Up Award:** This needs-based grant should be awarded to new FRN chapters that lack funding to initiate food recovery efforts.

Both awards should be used to cover food recovery equipment costs and operational expenses, such as:

- New volunteer recruitment and training, including ServSafe or other food safety training.
- Food transportation costs, including vehicle rental, maintenance, and gas.
- Food storage equipment costs, including food-safe containers, insulated bags, tongs, and gloves.

B. **Publicity for FRN:** The NRA should publicize stories about grant recipients and outstanding FRN campus initiatives on the NRA Conserve website and NRA Conserve social media sites.

This recommendation would require minimal effort on behalf of the NRA, and would have an immediate impact on increasing food donations nationwide. By providing grants to support FRN chapters, the NRA can capitalize on the strengths of FRN's model, which harnesses the time and energy of student volunteers to overcome cost and logistical barriers to increasing food donations.

Both awards address student chapters' barriers to growth. The awards can motivate other students who want to start their own chapters and can motivate chapters to set higher goals for food recovery.

The NRA should use the Outstanding Chapter Award to encourage chapters to recover food off campus and spearhead city-wide donation efforts. FRN university chapters are well positioned to lead food recovery efforts within their communities in a few ways.

First, most FRN chapters initially recover food from such national food service providers as Sodexo and Bon Appetit, which have partnerships with FRN national. This buy-in from major corporate partners can instill confidence in independent restaurant owners, overcoming fear and trust barriers to donating.

FRN volunteers can also provide the time and manpower to recover food from small, independent business often excluded from national food donation programs, which tend to focus on donors with economies of scale.

Building critical mass of restaurant participation on campus also raises expectations and creates pressure for businesses in the community to donate food. As one food recovery organization manager explained, as more participants sign on to food recovery efforts, it creates the perception that businesses holding out due to fear are “just making excuses, or lazy.”<sup>68</sup>

Furthermore, students and university administration can help to raise awareness around food insecurity and food waste issues in their community. In the long-run, this can shift mindsets and inspire broad change. For example, the University of Maryland’s FRN chapter recently inspired Montgomery County, MD to establish the nation’s first county-wide food recovery program.<sup>69</sup>

By publicizing FRN’s work on the NRA website and social media pages, the NRA can also help to build momentum for national food recovery efforts. Autumn Rauchwerk of FRN reported that each time FRN receives national media attention, applications to found new campus chapters spike, accelerating growth of the FRN network.<sup>70</sup>

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<sup>68</sup> Interview with Don Eli

<sup>69</sup> (FRN Inspires First County-Wide Food Recovery Program in Nation | Food Recovery Network.”2013)

<sup>70</sup> Interview with Autumn Rauchwerk

## Recommendation 2: Increase Route Densities

- A. **FDC Partnership:** Recruit restaurants located in shopping centers with current FDC donors to join FDC's Harvest Program.
- B. **Group Marketing:** Take out promotional group advertisements in local newspapers.

This recommendation uses the model of the NRA's Zero-Waste Zone pilot program in Atlanta to address the logistical and cost barriers associated with low route densities. The Zero-Waste Zone in Atlanta is a voluntary program for businesses in designated neighborhoods to implement and promote conservation methods. It is designed to increase route density for recycling haulers and lower transport costs for all participants. The NRA should help apply the benefits of increased route density to food recovery in Durham.

As shown in the New Hope Commons analysis, recruiting more restaurants in shopping areas with FDC Harvest Program donors increases a Harvest Program recipient's volume-per-pick-up in current pick-up routes and decreases their costs. The NRA should work with the FDC to identify restaurant-dense shopping areas that include FDC Harvest Program donors. The NRA should mail non-participating restaurants fliers explaining FDC's Harvest Program benefits and how they can join the Harvest Program. The flier should also personalize the information for the community by naming which local charities they would be supporting. As a result of this recommendation, increased restaurant participation in the Harvest Program will make it more economically feasible for recipients to pick up for food from restaurants that produce less recoverable food.

This recommendation also aims to increase customer awareness about food donations and sustainability practices. Several interviewees remarked that customers are generally concerned about what they can see in front of them. As a result, sustainability practices have trended towards local and organic sourcing and packaging reduction. A group ad promoting Harvest Program donors can help increase awareness around less visible practices, such as surplus food donations, while advertising their work with nonprofits. Promotional advertising shows consumers how surplus food donations help the environment and demonstrate how restaurant donors operate their businesses responsibly. As consumer awareness increases, so does pressure for more restaurants to donate food.

### Recommendation 3: Educate Government Allies

- A. **Food Donation Road Shows:** The NRA should make presentations to local officials in Solid Waste and Sustainability Offices, encouraging them to incorporate food donation into municipal waste diversion efforts.
- B. **Food Donation Toolkit:** The NRA should develop a food donation toolkit for municipal Solid Waste Departments and Sustainability Offices to disseminate to local restaurants. This toolkit should include:
  - 1. Training Curriculum: Booklets for restaurants that explain tax benefits, liability protection, and food safety, and include worksheets for conducting waste audits and calculating tax benefits.
  - 2. Partner Directory: Contact information for local affiliates of national food recovery programs, such as FDC, FRN and Feeding America.

This recommendation outlines a method for the NRA to appeal to local government offices with common interest in waste diversion, and to make them champions of food donation. This recommendation offers immediate benefits in terms of decreasing food waste and increasing food donations in the short-run, and also shifts awareness and behavior to create lasting change in the long-run.

The NRA should accomplish this by educating government officials on the benefits of adopting food donation programs. Food donation offers municipalities a cost-effective way to reduce waste hauling costs and environmental impacts, while addressing the needs of the food-insecure. Many waste diversion policies –such as implementing municipal composting– require considerable time and financial investments before returns are realized, whereas food recovery programs offer municipalities an inexpensive way to quickly reduce waste.

For example, the Durham Solid Waste Department is developing a city-wide composting program, yet it does not expect to meet waste diversion goals for another 10 years.<sup>71</sup> However, the department already runs education programs to train businesses in implementing recycling and composting programs. With training and this toolkit from the NRA, Durham Solid Waste could incorporate food donation education into current programming at little additional expense.

The NRA can adapt this toolkit from resources provided by the EPA, USDA and national food recovery organizations. While contacting and visiting local officials is time-intensive, our research indicates that face-to-face interactions are the most effective way to encourage uptake of food donation practices. As Donald Long said, when speaking about changing waste disposal behavior in the long-run: “it all comes down to education.”<sup>72</sup>

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<sup>71</sup> Interview with Donald Long

<sup>72</sup> Interview with Donald Long

## Recommendation 4: Train Future Chefs and Restaurant Owners

**Sustainable Management Curriculum:** The NRA should develop a sustainable management course in partnership with a culinary school. The course should emphasize cost savings and benefits to restaurants' organizational culture and reputation. The curriculum should cover:

- A. **Waste Reduction Methods:** Teach students how to minimize waste by following the EPA's food recovery hierarchy:
  1. Prevent Waste: How to conduct waste audits.
  2. Feed People: How to coordinate surplus food donations and calculate tax benefits.
  3. Feed Animals: How to leverage relationships with local farmers to donate food scraps as animal feed.
  4. Industrial Use: How to repurpose food for industrial uses.
  5. Compost: How to navigate legal requirements for composting.
- B. **Sustainable Procurement:** Teach students how to source for local ingredients and how to procure biodegradable and recyclable products.
- C. **Conservation Methods:** Teach students how to optimize resources by saving water and energy; teach students how to navigate recycling ordinances.
- D. **Marketing:** Teach students how to market sustainability practices and increase community involvement.

This recommendation builds sustainability awareness among aspiring restaurant chefs and restaurant owners. To develop the course, the NRA could partner with The Chef's Academy of Morrisville, NC, a culinary school that already encourages environmental sustainability and community partnerships. The sustainable management course could be offered as a 1.5 hour management elective.

While the restaurant industry attracts entrepreneurs from diverse educational backgrounds, Alyssa Barkley of the North Carolina Restaurant and Lodging Association noted growing enrollment at culinary schools, with more chef owners coming up through culinary arts programs. Targeting these future owners, while they are still in training, addresses the awareness gap around surplus food donations among independent restaurant owners.

When restaurant owners start working, their time becomes much more precious and it is more difficult to capture their attention. This recommendation provides practical, sustainability training in a setting where future chef owners are engaged and attentive. The results of this recommendation would take longer to realize, but its impact would be multiplied as these owners train their staff with these methods.

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## APPENDIX I.A: INTERVIEW LIST

Category	Name	Title	Organization	Topic of Interview
<b>Restaurant Associations</b>	Alyssa Prince	Senior Director, Community Relations	National Restaurant Association	Food donation marketing
	Alyssa Barkley	Chief Operating Officer / Director of Health and Safety	North Carolina Restaurant and Lodging Association	Food donation marketing
<b>National Restaurant Chains</b>	Brandon Tidwell	Sustainability Director	Darden Restaurants	Food donation and waste reduction practices
	Bridgette Bell	Sr. Manager of Global Sustainability	Yum! Brands	E-mail correspondence RE: Food donation practices
	Susan Long	Manager of Environmental Impact	Starbucks	Food donation and waste reduction practices
<b>Local Restaurants</b>	Anonymous	Manager	Elmo's Diner	Local food donation and waste reduction practices
	Anonymous	Manager	Torreros	Local food donation and waste reduction practices
	Anonymous	Manager	Dos Perros	Local food donation and waste reduction practices
	Anonymous	Manager	China House	Local food donation and waste reduction practices
	Anonymous	Manager	Thai Cafe	Local food donation and waste reduction practices
	Anonymous	Manager	Nana's	Local food donation and waste reduction practices
	Anonymous	Manager	Firehouse Subs	Local food donation and waste reduction practices
	Anonymous	Manager	Nosh	Local food donation and waste reduction practices
	Anonymous	Manager	Hungry Leaf	Local food donation and waste reduction practices
	Anonymous	Manager	Beyu Caffe	Local food donation and waste reduction practices
	Anonymous	Manager	Carolina Ale House	Local Food Donation Practices

	Jin Choe	Manager	Bull City Burger	Local Food Donation Practices
	Clarissa Kussin	Holistic Health Counselor	The Refectory Cafe	Local food donation and waste reduction practices
	Bryan Latch	Purchasing Manager	Washington Duke Inn	Local food donation and waste reduction practices
	Fida Ghenam	Owner	Saladelia	Food donation and waste reduction practices
	Kirsten Marinko	Marketing Manager	Duke Dining Services	Local Food Donation Practices
<b>Intermediaries and Recipients</b>	Autumn Rauchwerk	Director of Expansion	Food Recovery Network	National food donation efforts
	Bahari Harris	Former Executive Director	Urban Hope	Nonprofit experience with restaurant food donations
	Don Eli	Food Sourcing Manager	Interfaith Food Shuttle	Nonprofit experience with restaurant food donations
	Elizabeth Newman	Manager	Urban Ministries - Food Pantry	University-wide waste reduction practices
	Jennifer Caslin	Coordinator of Marketing, Public & Branch Relations	Central & Eastern North Carolina Food Bank	Local Food Donation Practices
	Willie Lane	Food Services Manager	TROSA	Nonprofit experience with restaurant food donations
	Jim Larson	Program Development Director	Food Donation Connection	Food donation practices
	Joseph de Leon	Director of Operations	Keep Austin Fed	Austin food donation efforts
	Susan Nahkunst	Executive Director	Keep Austin Fed	Austin food donation efforts

	Kirin Sridhar	Founder and Executive Director	Waste No Food	National food donation efforts
<b>Public Entities</b>	Donald Long	Director of Solid Waste Management Department	Durham County Government	Local food donation and waste reduction efforts
	James Salter	Director of Environmental Health	Durham County Government	Local food safety requirements
	Steve Schewel	Council Member	Durham City Council	Local food donation and waste reduction efforts
	Tobin Freid	Sustainability Manager	Durham City/County Sustainability Office	Local food donation and waste reduction practices
<b>Other</b>	Gloria Mock	Associate Publisher	Indy Week	Food donation practices
	Tavey Capps	Environmental Sustainability Director	Duke University	E-mail correspondence RE: University-wide waste reduction practices

## APPENDIX I.B: NEW HOPE COMMONS SURVEY LIST

Name	Title	Organization	Topic of Survey
Anonymous	Manager	Chipotle	Food donation practices
Anonymous	Manager	Starbucks	Food donation practices
Anonymous	Unknown	McAllister's Deli	Food donation practices
Anonymous	Unknown	Carrabba's Italian Grill	Food donation practices
Anonymous	Unknown	Dickey's Barbecue Pit	Food donation practices
Anonymous	Unknown	Philly Steak Factory	Food donation practices
Anonymous	Unknown	Jason's Deli	Food donation practices
Anonymous	Unknown	Red Robin	Food donation practices
Anonymous	Unknown	New Top's China Restaurant	Food donation practices
Anonymous	Unknown	Papa John's Pizza	Food donation practices
Anonymous	Unknown	Moe's Southwest Grill	Food donation practices
Anonymous	Unknown	Kanki Japanese Steak House	Food donation practices
Anonymous	Unknown	Apple Bee's	Food donation practices
Anonymous	Unknown	Bob Evans	Food donation practices
Anonymous	Unknown	Subway	Food donation practices
Anonymous	Unknown	Five Guys Burgers & Fries	Food donation practices
Anonymous	Unknown	Straw Valley Food and Drink	Food donation practices
Anonymous	Unknown	Pomegranate Kitchen	Food donation practices
Anonymous	Unknown	Outback Steak House	Food donation practices
Anonymous	Unknown	Panera Bread	Food donation practices

## APPENDIX II: TAX BENEFIT CALCULATION

### Example Calculation of Incentive Provided by Tax Reform Act of 1976<sup>73</sup>

“The Tax Reform Act of 1976 allows regular 'c' corporations that donate excess food to certain specified 501(c)(3) nonprofit organizations that serve the ill, infants or needy to take an incremental deduction for donated food. Strict receipting requirements must be met to take the incremental deduction.”

Example of potential tax benefit --

	Product Sold	Surplus Not Donated	Surplus Donated
Sales revenue	\$1.00	\$ .00	\$ .00
Base cost (food & direct labor)	.35	.35	.35
Gross margin/(loss)	.65	(.35)	(.35)
Incremental tax deduction	-	-	.33*
Total income/(deduction) for tax	.65	(.35)	(.68)
Tax (assumes 35% rate)	(.23)	.12	.24
Gross margin/(loss) after tax	\$ .42	\$(.23)	\$(.11)

In this example, donating reduces the after tax cost of surplus by 52%. The company still loses money on the donated food. The amount of the loss is reduced.

Incremental deduction is one-half of the foods' appreciated value (FMV less base cost) however base cost plus the incremental deduction cannot exceed twice base cost.

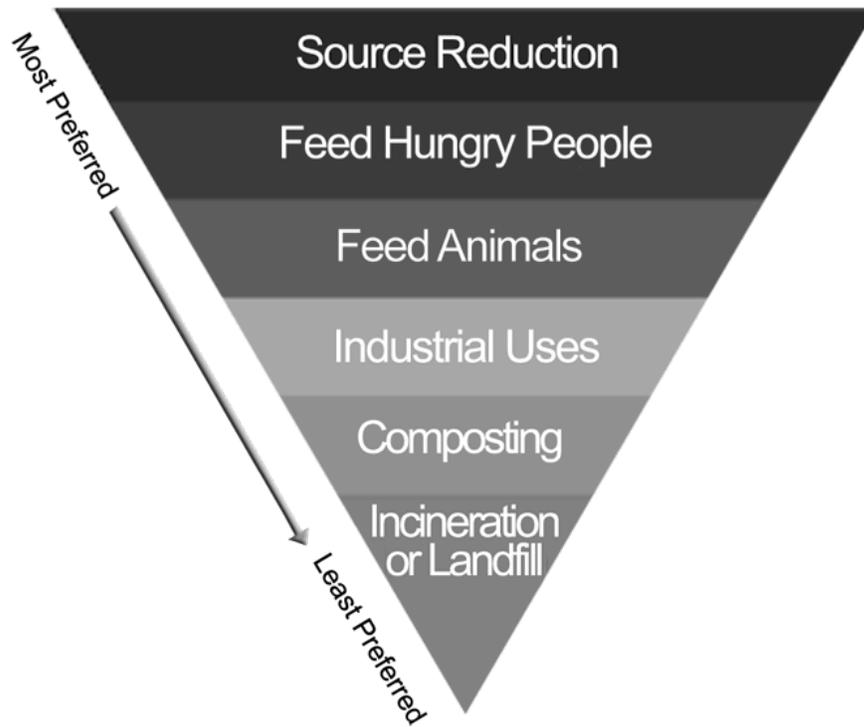
<sup>73</sup> (“Statement of William D. Reighard, President, Food Donation Connection, Newport, Virginia; Testimony Before the Subcommittee on Ways and Means, Hearing on Tax Incentives to Assist Distressed Communities,” 2000)

## APPENDIX III: SUCCESSFUL FOOD DONATION PROGRAMS MATRIX

	<b>Restaurant Donors</b>	<b>Food Recovery Organizations</b>	<b>Food Recipient Organizations</b>
<b>Motivations</b>	<ul style="list-style-type: none"> <li>• Strong internal champions</li> <li>• Awareness of environmental sustainability practices</li> <li>• Awareness of tax benefits</li> </ul>	<ul style="list-style-type: none"> <li>• Mission-Driven Orientation</li> <li>• Sustainable Business Model</li> </ul>	<ul style="list-style-type: none"> <li>• Large constituent base to feed</li> <li>• Reduce overhead costs</li> </ul>
<b>Resource Capacity</b>	<ul style="list-style-type: none"> <li>• Refrigerated truck fleet</li> <li>• Refrigerated storage space for excess food</li> <li>• Regularly scheduled donations</li> <li>• Staff knowledge and execution</li> </ul>	<ul style="list-style-type: none"> <li>• High food safety standards</li> <li>• Consistent volunteer force</li> <li>• Provide food containers</li> <li>• Utilize mobile technology</li> <li>• Track donation records</li> </ul>	<ul style="list-style-type: none"> <li>• Refrigerated truck fleet</li> <li>• Volunteer and/or staff capacity to coordinate pick-ups</li> <li>• Ample refrigerated storage space</li> <li>• Flexible meal preparation plans</li> <li>• Commercial kitchen</li> </ul>
<b>Relationship Building</b>	<ul style="list-style-type: none"> <li>• Employee investment</li> <li>• Personal experiences with local nonprofits</li> </ul>	<ul style="list-style-type: none"> <li>• Trusted by restaurants and recipient organizations</li> <li>• Advocacy</li> <li>• Partnership with industry groups and local governments</li> </ul>	<ul style="list-style-type: none"> <li>• Initiate contact with donors</li> <li>• Integrated with greater community</li> </ul>
<b>Examples</b>	<ul style="list-style-type: none"> <li>• Saladelia</li> <li>• Darden Restaurants</li> <li>• Starbucks</li> <li>• Panera Bread</li> </ul>	<ul style="list-style-type: none"> <li>• Food Donation Connection</li> <li>• Food Recovery Network</li> <li>• Keep Austin Fed</li> </ul>	<ul style="list-style-type: none"> <li>• Triangle Residential Options for Substance Abusers (TROSA)</li> <li>• Durham Rescue Mission</li> </ul>

## APPENDIX IV: EPA FOOD RECOVERY HIERARCHY

Figure 1. US EPA Food Recovery Hierarchy



Source: (US EPA, 2014)