

AGENDA ITEM #5
September 10, 2013

Presentation

MEMORANDUM

September 6, 2013

TO: County Council

FROM: Linda McMillan, Senior Legislative Analyst 

SUBJECT: **Report of the Food Recovery Work Group**

This past October, the County Council established the Food Recovery Work Group. The Work Group was asked to recommend action steps and costs associated with creating a food recovery system for Montgomery County. At this session, the Council will receive a presentation on the Work Group's final report and Action Plan. Jacki Coyle, Executive Director of Shepherd's Table and Chair of the Work Group will present an overview of the Action Plan and the activities of the Work Group. Following the presentation, five members of the Work Group have been asked to provide comments to the Council: Jenna Umbriac from Manna Food Center, Brett Meyers from Nourish Now, Judith Clark from Women Who Care Ministries, Kathi Carey-Fletcher from Montgomery College, and Greg Ten Eyck from Safeway. Other members of the Work Group will also be present. The Work Group membership is attached at Page A-2 of the Report.

In April, the Work Group presented its Interim Report to the Health and Human Services Committee. The Interim Report requested \$200,000 be appropriated in FY 2014 to implement a food recovery system. The Health and Human Services Committee recommended and the Council approved a \$200,000 appropriation to the Department of Health and Human Services for this purpose. Pages 3-6 of the report provide recommendations for the allocation of these funds as a part of the Action Plan.

Food Recovery Work Group

Dear Council President Navarro and Councilmembers,

On behalf of the Food Recovery Work Group, I am pleased to provide you with our final report which includes an Action Plan for implementation of a county food recovery system. In establishing the Work Group, it is clear that the Council understood both the needs of hungry people in Montgomery County and the potential to increase the county's ability to recover food that might otherwise be wasted.

The members of this Work Group feel passionately about this effort and while some of us knew each other, I am not sure that any one of us knew everybody. It has been a great opportunity to learn from each other about the work that non-profits and community organizations are doing to feed people in need, the great work that grocery stores, restaurants, and farm markets are already doing in providing surplus food to emergency food providers, and how much more food there is to direct to people in need. How do we know there is more to do? Here are just two examples since the Work Group started meeting. Montgomery College made sure that its new food contract will allow food to be recovered and they are excited about bringing food recovery to their campuses. And, as a result of a small survey and outreach effort the Work Group conducted, Nourish Now has six new partners and has rescued over 5,000 pounds of food that might otherwise have gone to waste.

We believe that investing in a coordinator (we have provided specific tasks), creating a hotline donors can call to donate food, and providing grants for equipment (freezers, refrigerators, transportation) and other uses that will increase the county's capacity to pick-up and store recovered food will yield many more thousand pounds of rescued food.

While our primary focus is on recovering food that will help feed hungry people, our report also highlights the need to improve the nutrition of the food available to emergency food providers, especially fresh produce and protein, and to work to divert food scraps from the waste stream through food composting.

Thank you for this opportunity to bring people together around these issues. We are eager to find a way to continue to work as a group to help implement this plan and educate the community on ways that we can help end hunger.

Sincerely,

A handwritten signature in black ink that reads "Jacki Coyle". The signature is written in a cursive, flowing style.

Jacki Coyle, Chair
Food Recovery Work Group

Final Report from the Food Recovery Work Group August 23, 2013

Summary

On October 16, 2012 the Council approved Resolution 17-564 which established the Food Recovery Work Group. The Work Group was asked to develop a report detailing how to create and implement a food recovery system in Montgomery County. The planning should evaluate best practices; map existing resources; identify ways to enhance communication among non-profits, organizations, service providers, and food suppliers; and recommend any legislative changes needed to assist in these efforts.

The Food Recovery Work Group met on January 10, February 7, February 21, March 7, March 28, April 4, April 18, May 16, May 30, June 13, June 27, July 25, August 8, and August 23, 2013. The membership of the Work Group changed during this period due to job changes and interest by others who learned of the effort. The membership for this final report is attached at Appendix 1 (page A-2).

On April 18, 2013 the Food Recovery Work Group provided its Interim Report (Appendix 3; Page A-8). The Interim Report emphasized that **the real goal of food recovery is to end hunger in Montgomery County and that when food is recovered in Montgomery County, it should stay in Montgomery County.** In developing the recovery system, priority should be given to increasing the donation of and access to healthy food. Surplus food and food scraps should be recovered, repurposed, and recycled to prevent them from ending up in a landfill or being incinerated.

In the Interim Report, the Work Group recommended \$200,000 be provided in Fiscal Year 2014 to develop and implement a food recovery system. On April 22, 2013, the Work Group participated in a Health and Human Services' budget worksession. The Health and Human Services Committee recommended and the County Council approved an appropriation of \$200,000 to the Department of Health and Human Services to implement a food recovery system.

The Food Recovery Work Group is pleased to recommend its Action Plan to the County Council. In summary the Work Group recommends:

- A Coordinator to implement a systemic outreach and enrollment of donors, educate potential donors on options for the food recovery method that will work best for their business, and collaborate with stakeholders, including emergency food providers, to maximize the amount of recovered food provided to those in need and minimize the amount of food or food scraps

in the waste stream. The Action Plan outlines specific tasks for the Coordinator.

- Grants to partner organizations to increase food recovery. The Work Group process has highlighted the need to increase transportation, storage, and processing capacity in the system.
- Completing data sets needed to facilitate matching donors and emergency food providers and maintaining data as a part of open data Montgomery.
- Continuing the Food Recovery Work Group as a work group of the Montgomery County Food Council.
- Planning and developing protocols for the recovery and reuse of non-edible food.
- Increasing the amount of fresh produce that is provided to emergency food providers and improving nutrition for county residents.

The Action Plan includes recommended allocations for the \$200,000 FY 2014 appropriation

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**Food Recovery Work Group's
Recommended
FOOD RECOVERY ACTION PLAN**

A. Uses of FY 2014 Funding

**1. Contract for a Coordinator for the Food Recovery System
(\$60,000)**

Overview

The Coordinator will be responsible for organizing and implementing an approach for systematic outreach and enrollment of restaurants, grocery stores, caterers, farm markets, and institutions with food services. This approach will collaborate with stakeholders and others that are a part of the Food Recovery Work Group. It will educate potential donors on the available options for food recovery and help them make decisions on the method that will work best for their business. Such an approach might begin by targeting geographic areas or certain types of food vendors.

Tasks

1. Develop protocols for sanitary and safe food pick-up, storage, and redistribution of smaller amounts of prepared and non-prepared recovered food (such as regular pick-ups from restaurants). This could be a multi-leveled system that has a centralized or regional pick-up component and direct, regularly scheduled, dedicated connections between donors and non-profit organizations.

2. Develop protocols for more unusual, large donations of food. These protocols will address such situations as the caterer with pallets of food to donate, the grocery store that loses power, or the truckload of produce that has been rejected. These protocols will have a centralized/regional approach and will first look at leveraging and building on the use of existing resources such as county agency storage and non-profits that already store and redistribute larger amounts of food. County facilities such as the Montgomery County Public School's Food Production Facility, Department of Liquor Control Warehouse, and facilities with commercial kitchens, such as the White Oak Community Center, could be a part of such protocols.

3. Develop protocols for donors of both smaller and large amounts of food. In developing these protocols the Coordinator must consider whether multiple partnerships for recovering food are more responsive to needs of different types of donors. For example, should Food Recovery Network work with Montgomery College as its expertise is campus food recovery?
4. Implement in the first year a 24-hour food recovery hotline that is a phone-based system for food recovery with a single number for use by those wanting to donate.
5. Plan for and/or implement a web-based recovery tool in Year 1. Emphasis will be placed on leveraging or customizing tools that are in place or already in development rather than investing in creating a new tool. If such a tool is not implemented in Year 1, cost estimates for Year 2 will be prepared.
6. Develop an outreach and incentive campaign that serves both donors and recipients. The campaign will provide materials explaining the recovery system, information on the Good Samaritan laws, potential tax benefits, etc. The campaign will also explain best practices that Montgomery County has in place to assure food safety. Use of public service announcements on network television as well as featured pieces on Montgomery County cable television will be considered. The campaign will also include newspapers and radio.
7. Develop an incentive and rewards system. This will include having window stickers, a logo that could be used on websites, or other visible recognition for restaurants and stores participating in food recovery. It will clearly show that this is the Montgomery County Food Recovery System but could also include other partners as they are involved (for example, Food Cowboy, Food Donation Connection, Nourish Now, or the Food Recovery Network). The reward system must include ways to publicly recognize participants (grocery stores, restaurants, caterers, farmers, etc.) through the press, newsletters, at government events, etc. This system can also highlight the non-profit organizations that receive the food to raise awareness about those in need.
8. Understand that Montgomery County's priority is that first food is recovered for people, then to feed animals, and then to return to soil.

The solicitation for the Coordinator will include clear performance expectations and proposed timelines and progress reports.

**2. Data
(\$5,000)**

Major data sets will be the basis of the work done by the Food Recovery Coordinator. These data sets can be used by others, such as the Food Council and Agricultural Services, and will be developed and maintained as a part of open data Montgomery. Data already exists for food vendors. Data on emergency food providers will be moved into the open data system and a new data set around agriculture will be developed.

Only a small amount of funding is specifically recommended to be allocated at this time. It will be used if there is a need for temporary assistance for verification of data or data entry.

This task has already started and work will continue while the contracting process is underway for the Coordinator.

**3. Grants to Partner Organizations for Equipment or Other Items to Increase Food Recovery
(\$100,000)**

Some of the non-profit and business partners involved in food recovery may need to purchase additional equipment either to facilitate the ability to recover food or to store food as the amounts of recovered food increase. The Work Group is recommending that a substantial amount of Year 1 funds go for grants to these organizations to assist with such needs. Items might include refrigerators, freezers, coolers, or a refrigerated truck.

Parameters for such a grant program must be developed. There will also need to be a determination about whether these grants should only be used for equipment or whether applications would be accepted for operating expenses. Some organizations may need one-time start-up monies for efforts that would become self-sustaining. While the County generally targets these types of grants to non-profit 501(c)(3) organizations, the Work Group wants to make sure that solutions can come to the table from all interested parties and recommends that these grants not be limited to non-profits.

The Work Group recommends that this grant program move forward as soon as possible and not wait until the Coordinator is hired. A variety of needs have been identified during the Work Group discussion and the sooner some of them can be met, the more likely it is that food can be easily recovered and properly transported and stored.

4. Retain funds to allocate at a later time for materials, pilot programs, and technology development (\$35,000)

The Work Group recommends these funds be available to pay for items that arise during the implementation process. Possible uses include: information, marketing and recognition materials, funds to establish the 24-hour hotline, funds to non-profit organizations to pay for certified food services manager training, pilot projects to see if there are effective ways to increase food available to emergency food providers (such as increasing the Rainbow Community Development Center's ability to get donated produce in large amounts by paying the fee to rent a refrigerated truck), looking at the issue of whether non-profits that facilitate moving larger amounts of recovered food might be paid a delivery fee to assist with covering transportation costs, and funds that might be needed to customize an "app" for food recovery in Montgomery County.

B. Continue the Food Recovery Work Group

While the Council's Food Recovery Work Group officially ends with this report, its work should not stop.

This Work Group has brought many partners to the table and allowed for increased collaboration and communication about food recovery issues. During the course of the Work Group there are examples of food recovery that occurred because new donors were contacted and Work Group members were able to contact each other when a large donation became available.

The Food Recovery Work Group recommends that it continue as a work group of the Food Council which is also working to increase access to food to those in need. The Food Council wants to be involved with and support food recovery and there are members of the Food Council on the Work Group. As a work group of the Food Council, the Food Recovery Work Group would support the implementation of the Action Plan and be an

advisory body to the Coordinator. The Food Recovery Work Group will help the Coordinator build a team of community partners to take on certain tasks. The Food Recovery Work Group can also foster the broad community support that is needed to both reach out to potential donors and to efficiently move recovered food to those in need. As a part of the Food Council, there will be no question that food recovery is an important part of the larger food system mission of the Food Council.

The Food Recovery Work Group will monitor the progress of this effort and form recommendations for enhancing the system beyond Year 1. The Work Group, through the Food Council, will provide insight and recommendations to the Department of Health and Human Services, the County Executive, and the County Council.

Food Council work groups have members beyond the members of the Food Council but each has at least one member that serves as a liaison to the Food Council. Over the course of this Work Group, members have changed and people who have learned of the effort have joined the meetings. A part of establishing the ongoing Food Recovery Work Group will be outreach to others who may want to be involved and expanding and reconstituting its membership to provide the best support system for the work that will take place in the coming months.

C. Planning and Protocols for Recovery and Reuse of Non-edible Food

The Work Group stated in its Interim Report that minimizing food waste was one of three issues that should be considered in developing a food recovery system. The Work Group continues to recommend that Montgomery County should declare that its policy is to recover food. Under such a policy, the County would have three priorities: (1) recover and deliver food that can be used by people, (2) create systems to feed animals food that cannot be used by people but is still edible, and, (3) compost remaining inedible food.

As noted in the Work Group's Interim Report and the resolution establishing the Work Group, the Department of Environmental Protection estimates that in 2011, 19% of the waste stream was food waste and another 18% was classified as "other organics." Of the food waste, 28,769 tons was from restaurants, 14,014 tons was from supermarkets, and 5,301 tons from schools. The Work Group learned about the success of the County's pilot program to compost food waste from the Executive Office

Building's cafeteria and the challenges facing this effort because of the need for clear regulations for establishing food composting facilities. Local capacity is needed for food composting where the materials can be transported to the composting facility and then transported to other locations, such as community gardens, for use. The Work Group's Interim Report recommended that: (1) the Zoning Ordinance should be reviewed to make sure it provides the flexibility needed to recover food and close the food system loop by allowing the recycling of food scraps; and, (2) Montgomery County Public Schools should be challenged to rescue and compost food at the individual school level and at the central kitchen facility.

The Work Group was informed by staff from the Department of Environmental Protection and the Department of Economic Development's Agricultural Services' that a State work group has been convened to develop regulations for food waste composting as required by House Bill 1440, *Recycling – Composting Facilities*. Pilot food composting projects are underway in Takoma Park and in Howard County.

Information is included in Appendix 4 (pages A17-50) of this report on the Takoma Park and Howard County programs, case studies about composting at the Four Seasons Hotel in Philadelphia and Hillsboro, Oregon, and a New York Times article on plans by New York City to begin a residential food composting program.

D. Increasing the amount of fresh produce that is provided to emergency food providers and improving nutrition of County residents.

In the Interim Report, the Work Group said that prioritizing healthy food should be a part of food recovery. While the Work Group does not recommend excluding any type of food from food recovery, an effort will be placed on increasing the nutritional value of emergency food, nutrition education, and information on the preparation of meals made with fresh foods.

The Work Group received information from the Food Council's Food Access Work Group and met with additional representatives from the Food Council at its June 27, 2013 meeting (several members of the Food Council serve on the Work Group.) At that meeting, the Work Group learned about the main efforts of the Food Council that include: Food Access, Healthy Eating, School and Youth Gardens, and Land Use,

Zoning & Planning. The Work Group and the Food Council discussed what the longer-term role for the Food Council might be in the food recovery effort.

The Work Group recommends that the FY 2014 funds provided by the County Council be targeted to food recovery and expects that food recovery will increase the amount of fresh produce that is provided to emergency food providers. There is also a natural alliance between food recovery and the Food Council's vision to cultivate "a vibrant food system that consciously produces, distributes, and recycles food making it accessible to all citizens while promoting the health of the local food economy, its consumers, and the environment" that should continue as the food recovery system is implemented.

The Work Group recommends that the County Council seek updates and recommendations on: (1) the results of efforts to freeze or preserve fresh foods so that they are available to emergency food providers throughout the year, (2) the development of commercial kitchen resources both for food recovery and expanding locally produced food (commercial kitchens can allow recovery of less-than-perfect food, such as tomatoes for use in sauce or small or bruised vegetables that can be cut and frozen), (3) the potential for restaurants to donate a "closed day" where staff and facilities could be used while the restaurant is closed, (4) collaboration with schools to use staff and kitchens for training and nutrition education, and, (5) providing nutrition and cooking classes in expanded settings throughout the County. In addition, the Work Group recommends the County Council look at the cost effectiveness and potential for the low cost purchase (10 to 15 cents per pound) of produce from farm markets to both increase fresh foods to those in need and provide support to local farmers.

Appendix 6 (pages A73-102) of this report includes slides from the Food Council's presentation "What Do We Know About MoCo's Food System?" which was presented at a community meeting and provided to the Work Group. It also includes a series of maps that were produced by John's Hopkins' Center for a Livable Future. The maps include such data points as emergency food programs and food store locations. The Food Council's Food Access Committee's goal is to "increase access to locally produced, healthy food among county residents, especially communities with limited access over the next six years." The Food Access Committee believes it is getting close to identifying specific pockets of people in need and expects to use surveys and other tools to create strategies to address specific nutritional needs and obstacles to access.

E. Discussion and Activities of the Work Group

1. The Potential to Increase Recovered Food

While food is being recovered in Montgomery County, the Work Group provides examples of how the system can rescue or miss recovering food for Montgomery County depending on whether a phone call can be answered or whether a refrigerated truck or storage is available. At its early meetings, the first two stories were shared.

a) 2,100 Pounds of Carrots

Manna Food Center was the recipient of a ton of carrots. According to Kevin Trostle (director of operations) Manna received a call from a trucking company. The company had done an internet search to find Manna. They had a truck in the area with 2,100 pounds of carrots that were mislabeled with the wrong distributing brand and so were refused by the store. The trucking company wanted to know if Manna could take and use the carrots. Manna accepted the offer and the trucker delivered the carrots within about 2 hours. The carrots were perfect. They were packaged in 5 pound bags and Manna was able to distribute them to 420 families over the next 2 days.

b) 22 Pallets of Produce that was Missed

The Rainbow Community Development Center got a call on a Monday night from a driver who had a truck full of food (22 pallets of carrots and 8 pallets of lettuce) and wanted to donate them. It is not clear how the trucker found the Rainbow Community Development Center. By the time Pat Drumming got the message on Tuesday morning the driver had already gone to the Maryland Food Bank which took a few pallets of food. Manna could have taken the food on Tuesday but by that time too much time had elapsed and the driver could not deliver it there. It is unknown if the driver was able to donate the food or just disposed of it but many Montgomery County families could have benefitted if there had been a way to get the message and quickly identify a place for the driver to deliver it.

c) Pallets of Pasta

In July, after the Work Group had been meeting, Brett Meyers at Nourish Now received a call from a caterer who had several hundred pounds of frozen pasta that they wanted to donate but it had to be picked up from the caterer. Nourish Now did not have the capacity to handle it all, but was able to call other members of the Work Group to try to make arrangements. Nourish Now found a way to transport about half the pasta to Manna Food Center and the rest was picked up by the Christian Life Center which is a partner with the Food Recovery Network.

The pasta transported to Manna Food Center was distributed to Montgomery County families and the pasta at Christian Life Center was distributed to families in Montgomery and Prince George's Counties. It should be noted that if all the pasta could have been transported by a Montgomery County non-profit, Montgomery County Public Schools would have made arrangements to store it at the central food production facility where it could have been redistributed to emergency food providers.

d) Extra Produce at Jessup Distribution Center

Rainbow Community Development Center received a call on Monday, August 12, from a partner that there were no refrigerated trucks available to rent to pick up several pallets from Taylor Farms and Coastal Wholesalers in the Jessup area. The closest available truck was in Philadelphia and it already had a waiting list for it. Taylor Farms and Coastal Wholesalers will donate surplus produce but only if it is transported in a refrigerated truck.

Through this partnership, Rainbow CDC picks up each Monday. There are four groups that take turns each week sharing the expense for this food recovery. Typically, a minimum of eight pallets full of prepackaged fresh lettuce mixes, spinach, broccoli, greens and sometime fruit are picked-up. Pat Drumming immediately called other companies that have refrigerated trucks as far as Baltimore, but none were available. Faced with the possibility of this food going to waste, when hundreds of families could benefit, she reached out to Manna who came through the next day. Due to their truck and driver availability, they could only pick up one load of six pallets. There were eight pallets left and Pat Drumming was concerned that they would be trashed.

She sent an email out to the Food Recovery Workgroup and received many calls of support. The only group that could go was D.C. Central Kitchen. Several groups in D.C. were helped from that, but none of the groups in Montgomery County benefited from remaining eight pallets of produce.

The next week Manna helped out again. They picked up from Coastal six pallets of melons, lettuce, bananas, burrito shells, etc. Having access to a refrigerated truck in Montgomery County could really help out in this type of situation.

The Action Plan recommendations to have protocols for food recovery for large amounts of food and in unusual, non-routine, situations and to provide grants to non-profit organizations for equipment are in direct response to these types of situations where additional capacity and quick coordination would make sure that rescued food helps people in need in Montgomery County.

2. Food Recovery Survey

Many members of the Work Group already recover food in Montgomery County. As noted in the Interim Report, Manna Food Center has regular pick-ups from about 40 stores; picking-up about 7,000 pounds of food each day. In Fiscal Year 2012, 1.5 million pounds of food was donated by grocery stores and another 427,000 pounds of produce was donated, primarily by the Capital Area Food Bank. Nourish Now reported that since its founding in 2011, it had donated over 104,000 pounds of food to those in need and has over 30 donor partners that include restaurants and caterers. Organizations such as Shepherd's Table, Interfaith Works, Rainbow Community Development Center, and Women Who Care Ministries benefit from donations of recovered food, either through connections that were made one-on-one or through organizations such as Food Donation Connection that match emergency food providers with partner restaurants.

The Work Group was interested in understanding what the potential is to recover more food if there is a systemic way to contact new and existing donors and more capacity to pick-up, transport, and store food. To accomplish this, the Work Group (1) sent surveys to all County grocery stores requesting information on specific categories of food that a store could donate more of or start recovering for donation, asking if the store was aware of protections like the Good Samaritan Act and potential tax donations, and whether a recognition program would be helpful; (2) identified restaurants, caterers, and other potential donors such as hotels and golf courses and contacted about 90 to determine if they would be interested in donating recovered food; (3) reached out to Montgomery College, Montgomery County Public Schools, hospitals, and Sodexo about the potential for food recovery.

Response to the grocery store survey was directed to Manna Food Center as they already have relationships and regular pick-up from most County stores. The responses were minimal as corporate grocery stores replied that they do not do surveys at the individual store level. Safeway is reviewing the request to determine if there is additional product that can be donated. During the course of the Work Group, it was also learned that Wegman's is interested in donating food.

The effort to contact restaurants, caterers, hotels, and golf courses was undertaken by Nourish Now. Nourish Now identified 33 caterers, 786 restaurants, 15 golf or country clubs, and 12 hotels as potential donors. Nourish Now contacted 27 caterers of which 13 were very interested and one has already partnered with Nourish Now. Thirty-four restaurants were contacted and 14 of these reported that they were already recovering food. Three restaurants did not

believe they had leftover food that could be recovered but were interested in assisting the County's efforts in other ways. Fifteen golf/country clubs were contacted with 3 expressing interest. Twelve hotels were contacted and two were interested in donating if they had food left over from large events.

As a result of this survey work, Nourish Now has six new partners and has rescued over 5,000 pounds of food that might otherwise have been wasted. Nourish Now believes that this shows that with continued outreach there would be more donors. Because there is not capacity in the system to pick-up, transport, and store prepared food from many more donors, more calls have not been made so as not to discourage potential donors by asking of their interest and then not being able to have the food recovered. As protocols are put in place and capacity is increased for food recovery organizations, more potential donors that have already been identified will be contacted.

Food Recovery Network contacted Montgomery College and Montgomery County Public Schools. Montgomery College is working to establish food recovery at its campuses and in developing new requirements for its food service contract included a requirement to participate in food recovery. With regards to MCPS, there is not a significant amount of leftover food at individual schools; however, there is a need to make sure that all schools have "share tables" so students can leave food for others to take rather than placing it in the trash. MCPS is interested in whether small numbers of meals that might be leftover at an individual school could be recovered if frozen on site. This is the protocol used by Food Donation Connection. Smaller amounts of food are frozen at the site and then can then be collected less frequently, such as once a week. MCPS is interested in setting up tours now that school is back in session to consider how to pilot a program.

Contacts were identified at the County hospitals, two were contacted, and both were interested. The discussion with MedStar Montgomery identified a potential disincentive. MedStar receives credits for composting and recycling and there was concern that they would lose credits if food is recovered and donated instead.

Sodexo is very interested in food recovery. They do donate some food already, but have identified about 25 sites in the county and are interested in seeing how that can participate in this program.

3. Providing Information to Potential and Current Donors

The Work Group's recommendations emphasize that food recovery must be sanitary and that pick-up, transportation, and storage must be done in a safe manner. Task #6 for the Coordinator is develop materials explaining the Montgomery County food recovery system which would include information on

and the practices that have been put in place to assure food safety. In several Work Group discussions, it was noted that while there is liability protection, no one and no business wants to end up in a situation where such protection is needed.

Included in Appendix 5 (pages A51-72) are examples of such materials. The first is a Feeding America brief on the Bill Emerson Good Samaritan Food Donation Act. The second is information that has been developed by the Food Recovery Network for food recovery at colleges using a volunteer pick-up and delivery model. It includes a one page summary of acceptable foods ("The best rule of thumb is to ask yourself if you would eat the food...if the answer is no then you shouldn't donate it!) and guide for food recovery for chefs and managers. This guide provides clear and thorough information on protocols for the program and safe food handling requirements such as hand washing, correct temperatures and the point of donation and after transport, and maximum length of time between pick-up and drop-off.

4. Input from Restaurateurs, Restaurant Association and Food Donation Connection.

On July 11, 2013 the Work Group met with Jim Larson of Food Donation Connection, Laura Kimmel of the Maryland Restaurant Association, Scott Feldman from Giuseppe's Pizza, Michael Holstein of Quench, and Todd Mann who previously worked with the National Restaurant Association.

The meeting started with a presentation from Jim Larson from Food Donation Connection (FDC). Mr. Larson explained FDC's protocol which has donor restaurants either freezing (primary method) or refrigerating surplus food. Having the food frozen or refrigerated on site helps ensure food safety. FDC provides storage bags, large collecting containers, labels, and food logs. FDC matches donors with emergency food providers who pick-up the food from the donor. Often restaurants do not realize how small amounts of food recovered each day add up to a substantial amount of donated food over a week or two. FDC tracks the donations and provides the donor with tax information. An example was provided that showed that donating surplus food can reduce the after tax cost of surplus food by 59% compared to no donation. There is no cost to the emergency food provider for receiving food. A portion of the tax savings to the donor is paid to FDC for the service. FDC works primarily with corporate restaurants but can work with any business. Since 1992, nearly 300 million pounds of food have been recovered. Food is recovered from about 15,000 locations and provided to 8,100 recipients in the United States, Canada, and the United Kingdom. FDC is working in Montgomery County; in 2012 183,000 pounds of prepared food was donated from 67 locations in Montgomery County. The food was donated to 34 agencies and was valued at \$1.1 million. Mr. Larson believes there are opportunities to expand FDC's reach in the county.

The food was donated to 34 agencies and was valued at \$1.1 million. Mr. Larson believes there are opportunities to expand FDC's reach in the county.

Michael Holstein from Quench shared that he already donates food to Nourish Now and also participates in a program that invites a family to dine-in at no cost. He said this dine-in program not only is a morale boost for the family but also for his staff. He wants to continue to participate and emphasized that restaurants need the logistics to be easy. He liked the idea of a central phone number to call if food is available. He asked whether food could be placed in coolers that would be picked up. It would be helpful if there was a way to make it easier to take a tax donation. Having recognition and publicity for those who participate is also very important. The County may also want to consider a financial incentive. Scott Feldman of Giuseppe's Pizza said that they like to donate food and often do, although not as a part of a regular food recovery effort. He said that for a restaurant, donating food is far easier than being asked to donate money for a cause. He too, said that a central phone number to call would be best. It must be easy to know who to call and to know who is picking up the food and when it will be picked-up. He would also be interested in a list of nearby non-profits that he could contact when he had food to donate.

Laura Kimmel of the Maryland Restaurant Association said that the Association is very interested in helping and from her experience it is the logistics of donation that will be most important. Who is picking up the food and when? Pick-up must be dependable. Who is responsible if the food is not picked up? There should be one central phone number. An "app" might also work later on but a phone number is easier. If the program is not dependable and easy to use, it will be dropped by restaurants. There should be a one-page information sheet on the program that explains the process clearly and that a restaurant owner could keep by the phone. Tax donations are good, but recognition and publicity are very important as they bring people to the door. Todd Mann, previously with the National Restaurant Association, discussed that the procedures for chain restaurants that have fixed-menus might be different than procedures with small, independent restaurants.

5. The Potential for Long-Term Collaboration with the Food Council

On June 27, 2013 the Food Recovery Work Group met with Cheryl Kollin, Sheila Crye, Jenny Brown, and Kim Robien of the Montgomery County Food Council. While several members of the Work Group are involved with the Food Council (Brett Meyer, Food Council; Clark Beil, Food Council; Jenna Umbriac, Food Access Work Group, and Jessica Weiss, Food Council Coordinator), the Work Group invited the Food Council for a joint meeting to learn about the mission of the Council and its work groups and to discuss how the Food Council might be involved in the food recovery effort. Ms. Kollin, Food Council Co-Chair, provided history on the establishment of the Council and the Council's efforts to cultivate a

opportunities to increase healthy eating and the use of fresh/perishable food, increasing school and youth gardens, and monitoring zoning and planning.

There was discussion about the Food Recovery Work Group's thoughts that the Food Council might undertake the efforts on food composting and increasing fresh produce to emergency food providers and possibly serve as the home for the food recovery program. Food Council members said that they see the Food Council as conveners, connectors, and a place for discussion of policies but not necessarily program administrators. In the short term, the Food Council is using the Community Foundation as its fiscal agent and there could be conflicts with administering funds. The Food Council is, however, very interested in the food recovery effort and would like to be involved and supportive. There was discussion about how food recovery might fit within the Food Council's current work groups or become a work group of its own.

The Action Plan recommends that the Food Recovery Work Group continue as a work group of the Food Council. As a work group of the Food Council, the Food Recovery Work Group would support the implementation of the Action Plan and be an advisory body to the Coordinator. The Food Recovery Work Group will help the Coordinator build a team of community partners to take on certain tasks. The Food Recovery Work Group can also foster the broad community support that is needed to both reach out to potential donors and to efficiently move recovered food to those in need. As a part of the Food Council, there will be no question that food recovery is an important part of the larger food system mission of the Food Council.

6. Day of Civic Hacking

On June 1, 2013, Montgomery County participated in the National Day of Civic Hacking by hosting an event at the Universities of Shady Grove. The Food Recovery Work Group was invited to provide one of the five "reverse pitches." Ben Simon (Food Recovery Network), Jenna Umbriac (Manna Food Center), and Linda McMillan (Council staff), provided the reverse pitch presentation and served as a resource to the breakout group. There was significant interest by those participating in this "hack-a-thon" on the issues of hunger, food recovery, and how to use an application to partner donors (in this case the focus was generally on food establishments, caterers, and farm markets) to emergency food providers or directly to people in need of food. Because the information on emergency food providers and farms and farm markets is not yet in the open data Montgomery data set, actual development of an application was not possible at the event. The "reverse pitch" presentation is included at Appendix 7 (pages A103-115).

Appendix 1

Membership of the Food Recovery Work Group for Final Report

Members of the Food Recovery Work Group

Membership for Final Report

Jacki Coyle, Chair	Shepherd's Table
Clark Beil	Department of Health and Human Services
Marla Caplon	Montgomery County Public Schools
Kathi Carey-Fletcher	Montgomery College
Judith Clark	Women Who Care Ministries
Jeremy Criss	Department of Economic Development Agricultural Services
Patricia Drumming	Rainbow Community Development Center
Richard Jackson	Department of General Services
Brett Meyers	Nourish Now
Sandra Miller	Interfaith Works
Barry Scher	Capital Area Food Bank
Ben Simon	Food Recovery Network
Greg Ten Eyck	Safeway
Jenna Umbriac	Manna Food Center
Jessica Weiss	growingSoul and Montgomery County Food Council

Council Staff

Linda McMillan	Senior Legislative Analyst
Jean Arthur	Legislative Analyst

Appendix 2

Resolution 17-564, Establishment of Food Recovery Work Group

Resolution No.: 17-564
Introduced: October 9, 2012
Adopted: October 16, 2012

**COUNTY COUNCIL
FOR MONTGOMERY COUNTY MARYLAND**

By: Councilmembers Ervin, Andrews, Floreen, Elrich, Leventhal, Navarro, Rice, Riemer
and Council President Berliner

SUBJECT: Establishment of Food Recovery Work Group

Background

1. The current economic crisis has forced more people than ever before to ask for public assistance. In 2012, the self-sufficiency standard, which is the minimum income families require to achieve financial security, for a family of four in Montgomery County is approximately \$82,877.
2. According to Montgomery County's Self-Sufficiency Standard, a single adult must pay \$256 per month for food to sustain himself or herself on a low-cost diet, which is based solely on home-cooked meals. For a family of four this cost is estimated at \$802 per month.
3. In 2011, the food index on the U.S. Consumer Price Index rose 4.4 percent. Federal officials expect grocery prices to increase by 3 to 4 percent overall in 2012. These prices are dramatically higher than 2009 and 2010, when food-price inflation was the lowest since the 1960s. For example, in 2011, meat, coffee, and peanut butter prices rose 9 percent, 19 percent and 27 percent respectively, and corn prices hit a record high of \$8 per bushel.
4. The Capital Area Food Bank reports that 40 percent of its clients must choose between food and other necessities like housing, utilities, medical care and transportation.
5. Low-income children are at the greatest risk of food insecurity. Often the meals that they receive lack the vitamins and nutrients essential for their development, which can have a dramatic impact on student achievement. This problem is ever increasing, as approximately one-third of Montgomery County students currently qualify for Free and Reduced Meals (FARMS), a poverty indicator and a figure that may be higher due to underreporting.

6. According to the Environmental Protection Agency, in 2010 more than 34 million tons of food waste was generated in the United States. This is larger than any other category except paper. Food waste accounted for almost 14 percent of the total municipal solid waste stream. Less than 3 percent of the food waste was reused or recycled and the rest was thrown away, which makes food waste the single largest component of the materials reaching landfills and incinerators.
7. In 2011, 19 percent of Montgomery County's waste stream was made up of food. The amount of food waste produced by the non-residential sector includes restaurants which accounted for 28,769 tons, supermarkets which produced 14,014 tons, and Montgomery County Public Schools which generated 5,301 tons.
8. Student volunteers at the University of Maryland, College Park have created a successful model of food redistribution called the Food Recovery Network. This group redistributes food that would otherwise be wasted to those in need. As of May 2012, the organization donated more than 30,000 meals from University of Maryland. After starting three other chapters at colleges across the United States, the organization is becoming a 501(c)(3) nonprofit with the mission of replicating the model in other communities. In addition, many cities have food recovery programs, such as the D.C. Central Kitchen in Washington D.C. and City Harvest in New York City.
9. A food recovery effort should be created in Montgomery County to provide our low-income residents with assistance and to bolster our non-profit community partners who focus on issues associated with hunger.
10. A Council Work Group is necessary to evaluate the costs associated with creating a food recovery effort and to develop a strategic action plan for implementation. This group would also evaluate best practices; map existing resources; identify ways to enhance communication among non-profit organizations, service providers, and food suppliers; and recommend any needed legislative changes to assist in these efforts.

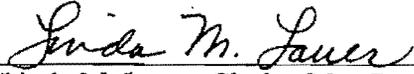
Action

The County Council for Montgomery County Maryland approves the following resolution:

1. The Council will appoint a Food Recovery Work Group.
2. The Work Group must consist of no more than 21 members and include representatives from: the Department of Health and Human Services; the Office of Community Partnerships; the Agricultural Services Division of the Department of Economic Development; the Food Council; Montgomery County Public Schools; Manna Food Center; the Maryland Restaurant Association; non-profit organizations; local faith-based institutions, farms, supermarkets, universities, and advocacy groups focusing on gardening, nutrition or ending hunger.

3. The Work Group must develop a report detailing how to create and implement a food recovery effort in Montgomery County.
4. The Work Group must submit a report to the Council that specifies recommended action steps and costs associated with creating a food recovery effort in Montgomery County. The report should also evaluate best practices; map existing resources; identify ways to enhance communication among non-profit organizations, service providers, and food suppliers; and recommend any needed legislative changes to assist in these efforts.
5. The Work Group must submit its interim report to the Council by March 31, 2013 and a final report by July 1, 2013.

This is a correct copy of Council action.



Linda M. Lauer, Clerk of the Council

Appendix 3

Interim Report from the Food Recovery Work Group
April 18, 2013

Interim Report from the Food Recovery Work Group
April 18, 2013

On October 16, 2012 the Council approved Resolution 17-564 which established the Food Recovery Work Group. The Work Group was appointed November 27, 2012. To date, the Work Group has meet seven times: January 10, February 7, February 21, March 7, March 28, April 4, and April 18, 2013.

The Work Group was asked to develop a report detailing how to create and implement a food recovery system in Montgomery County. The Work Group is to submit an interim report and complete its work in July 2013. The final report should evaluate best practices; map existing resources; identify ways to enhance communication among non-profits, organizations, service providers, and food suppliers; and recommend any needed legislative changes to assist in these efforts.

The Work Group agrees that as a part of developing a food recovery system to increase the donation of food to those in need, attention should be paid to three additional issues:

➤ **End Hunger In Montgomery County**

The real goal of this effort is to help end hunger in Montgomery County. While emergency food will always be needed, the larger goal should be to reduce the number of people who cannot meet their own food and nutritional needs. It is important that the County continue to look for new ways to generate employment opportunities for those who are food insecure because they are economically insecure. When food is recovered in Montgomery County, it should stay in Montgomery County to help achieve this goal.

➤ **Prioritize Healthy Food**

Priority will be given to increasing the donation of and access to healthy foods. The Work Group is not excluding any type of food from the food recovery system but believes there are untapped ways to increase the amount of donated produce, fresh foods, meat, and dairy that can improve the nutritional value of emergency food. Increasing the capacity to receive leftover food from farm markets or farms and then preserving it so it is available throughout the year could help to meet this goal.

➤ **Minimize Food Waste**

The County should declare that its policy is to recover food. Recovery of good edible food can also lead to opportunities to recover, repurpose, and recycle food waste and prevent it from ending up in a landfill or being incinerated. In 2011,

19% of Montgomery County's waste stream was food. The County should work to eliminate food waste by composting food. Food composting is not limited to produce; it can include all types of pre-consumer food scraps and organic materials.

Comments and Interim Recommendations

The Work Group does not yet have final recommendations or full funding requests but provides the following recommendations and comments based on this initial period of education and fact finding:

1. Funds Will be Needed in FY14

- **The Work Group is requesting \$200,000 in FY14 to continue its work to develop and implement a food recovery system. While the Work Group's interim recommendations are broad, it is important that funds are available in FY14. It is expected that some part of this funding will be needed to complete the community assessment, survey, and analysis that will provide critical information on donors, emergency food providers, and food recycling options and capacity. While some of this work is underway at the Food Council and the Work Group endorses a collaborative planning process, resources will be needed to accelerate the complete assessment phase. Second, the Work Group expects that there will be a need to procure technology solutions for matching suppliers and emergency food providers and to either create or supplement existing web resources. Third, an assessment must be made about whether additional equipment, storage, or staffing may be needed by emergency food providers or others in the food recovery system if large quantities of recovered food are available. Lastly, there may be a need for staff to oversee and manage the implementation process.**

2. There is Potential for Adding Partners and Increasing Recovered Food

- Grocery stores, including the major grocery store chains, are already donating significant amounts of food through the Capital Area Food Bank and directly to Manna Food Center and they should be recognized for these efforts. However, all County grocery stores, including large super stores that are now serving as grocery stores, and smaller chains and independent stores should be contacted to see if they are donating food. If they are not, they should be asked if they are willing to start.
- Work should continue to see if the types of food donated by the major grocery stores can be expanded to include more meats, non-perishables, and produce. Safeway has recently started donating dairy, which has been of tremendous

benefit to County emergency food providers. Emergency food providers continue to look for ways to increase the amount of dairy, produce and protein that is donated.

- Caterers, restaurants, hotels, country clubs, colleges and universities, hospitals, and food vendors should be contacted to see if they will donate prepared foods that would otherwise go to waste. Nourish Now and Shepherd's Table have received donations from caterers and a representative from Sodexo joined the Work Group to discuss potential opportunities. Nourish Now is regularly picking up prepared foods from some caterers and restaurants. The Work Group sees this as a signal that there is opportunity to expand the donation of prepared food.
- Many farmers and farm market vendors are donating food; however, all farmers should be contacted to see if they would be interested in donating. In addition, Manna also purchases food for their Farm to Food Bank program. To help with this effort information should be developed that describes the economic benefits to farmers from donating food. Stipends to local farmers may also be an appropriate way to increase the amount of fresh food available to emergency food providers while incorporating local agriculture into the food recovery system.
- The County should develop and distribute information on the benefits of food recovery including how and where to donate food, the provisions of the Good Samaritan Law that protect those donating food from liability, and potential tax and economic benefits of food recovery and donation.

3. Protocols, Contracting, and Regulatory Changes May Increase Food Recovery

- A protocol should be created to respond when a grocery store has an unplanned event such as a loss of power and could donate large amounts of food if the County's response is quick. County agency resources such as refrigerated transport and warehouses could be a part of this response. Such a protocol might also be used if a large amount of produce becomes available but cannot be immediately stored or used by one of the County's non-profit emergency food providers. Manna has the capacity to pick up large amounts of perishable food but at times is operating at capacity with respect to its frozen and refrigerated storage.
- County agencies' contracts with food vendors and caterers should require that food be recovered or donated when possible.
- Health regulations should be reviewed to determine whether there are any that unnecessarily impede the appropriate donation of food.
- The Zoning Ordinance should be reviewed to make sure it provides the flexibility needed to recover food and close the food system loop by allowing the recycling

of food scraps. The Work Group heard about challenges for recycling because transporting food waste scraps from the originating source to an off-site farm or other location so the farmer-operator can recycle it into organic material (that may also be transported off-site) is not allowed. Such flexibility would increase capacity for food composting and could provide additional income to a farmer-operator. The actual operations would be regulated by the Maryland Department of the Environment.

4. Education is a Must to Achieve Long-Term Goals

- Educating people to recover food and reduce waste through food composting can start in our educational facilities. The University of Maryland has created signage that provides easy icon-based direction on how to sort and recycle materials appropriately. They are willing to share this signage state-wide for continuity with the purpose of expanding compost awareness and education.
- Montgomery County Public Schools should be challenged to rescue and compost food at the individual school level as well as from the central kitchen facility. To be successful, collaboration between MCPS' waste management group, individual schools, and County Government is a must. The effort should also be a part of the school curriculum.

Best Practices

The Work Group has identified City Harvest in New York and Angel Harvest in Los Angeles as organizational models. In addition, the Work Group will look at efforts in Austin, Texas; Boulder, Colorado; San Francisco, California; and Seattle, Washington to learn more about both food recovery and management of food waste.

Resource Mapping

A food recovery system must match supply and demand. The United States Department of Agriculture's Food Security Assessment Toolkit stresses the importance of good data and a community food security assessment. "A community food assessment will help you to (1) understand local food systems; (2) inform the setting of goals to improve these local food systems; (3) inform decision-making about policies and actions to improve community food security; and (4) establish a long-term monitoring system with a clear set of indicators.

The Montgomery County Food Council has begun to develop data sets with information on emergency food providers, food outlets, and farms that it is pleased to share with the Work Group and others. It is working with Johns Hopkins University's Center for a Livable Future on developing these maps.

Data sets that need to be developed for a food recovery system should be coordinated with the efforts already underway at the Food Council. However, there is also survey work and information about potential food donors that may need to be collected specifically for this effort.

Logistics and Technology

The Work Group discussed the logistics of the current food recovery efforts at Manna, Nourish Now, and Food Donation Connection and the potential for technology to create a more efficient and robust system that could better and more quickly match a food source with someone who could pick up and distribute the food to those in need (either an organization or directly to a household).

The Work Group received information about Food Cowboy. Food Cowboy is an enterprise that will work to link very large quantities of unwanted food (such as truckloads of produce that might be rejected upon delivering to a store or distribution center) and smaller amounts of recovered food from restaurants and caterers to organizations that will use or redistribute the food to those in need. Mr. Gordon of Food Cowboy estimates that when the system is fully implemented a ton of food could be rescued from a supermarket each week. Food Cowboy has three components: (1) an online exchange that matches donors with charities, much like eBay and Craigslist match buyers with sellers; (2) logistics tools that enable large national retailers to coordinate with small local charities; and (3) an umbrella acceptance and quality assurance organization to protect donors and their brands. Food Cowboy will track the food and label it as Food Cowboy so that a supplier or store will not have a concern that the food would still carry a specific brand name and potentially be resold with the original brand name still attached. This same system can also link food waste to composting facilities.

The Work Group also received information on "zeropercent.us" which uses e-mail and text messaging to link donated food to those who can use it. When a restaurant or other food vendor has food to donate they sign into a system and the system sends out a text message or e-mail describing the donation. An organization wanting the donation responds directly to the donor and picks up the donation. The application can also be used by farms and farm markets. There is no charge for signing up but there is a fee to the restaurant for providing information that can be used for tax purposes. Zeropercent.us finds that about 95% of food is picked-up. This service is currently based in Illinois but can be used in any community.

Current Food Recovery Efforts

The Work Group spent time during its first meetings learning about current on-going efforts by Work Group members. There is already a substantial amount of donated grocery and prepared food that is being donated and redistributed in

Montgomery County. The two major organizations based in Montgomery County are Manna Food Center and Nourish Now. Food Donation Connection, a national organization, operates in Montgomery County. Other members of the Work Group that make use of donated and recovered food include Shepherds Table, Interfaith Works, Rainbow Community Center, and Women Who Care Ministries. In addition, there are many community-based organizations such as the HELP and faith-based food pantries.

Manna Food Center

In Fiscal Year 2012, through the Food for Families program, Manna Food Center served an average of 161 households per day or almost 41,000 households. Manna distributes food to the public at its main warehouse location, six mobile pantries and targeted apartment complexes. Each food package weighs 70-75 pounds. In addition, Manna distributed 69,278 Smart Sacks to elementary school children and provided food to 50 partner agencies.

Last fiscal year, 1.5 million pounds of food was donated by grocery stores and wholesalers. Another 427,000 pounds of produce was donated, primarily by the Capital Area Food Bank (87%). In addition, 126,762 pounds of fresh produce was purchased from local farms and farmers markets for a nominal fee with the support of the County.

Manna Food Center has regular food rescue from about 40 stores that include Giant Foods, Safeway, Bloom, Weis, Harris-Teeter, Shop Rite, Pepperidge Farm, Roots, Fresh Markets, Whole Foods, Mom's Organic Market, Georgetown Bagelry, Trader Joe's and Food Lion. There are other organizations such as Sodexo and Century Distributing that provide food. Manna has four refrigerated trucks picking up on specific routes each day. About 7,000 pounds of food are picked-up each day. Much of the food is redistributed within hours to clients.

Manna does not re-distribute many prepared foods. If they receive a call that there is prepared food to be donated, they will contact Nourish Now to pick it up directly.

Nourish Now

Nourish Now was founded in May 2011 and runs four major programs: (1) collecting unused fresh food from over 30 food providers; (2) donating meals and healthy snacks to over 500 Montgomery County Public School students in need weekly; (3) hosting canned food drives at local businesses and grocery stores; and (4) hosting cooking projects to prepare large amounts of food for those in need.

All food collected is donated to families, schools, shelters, and social service agencies that assist in feeding the hungry. Since its inception, Nourish Now has donated over 104,000 pounds of food to those in need.

Nourish Now works with a network of volunteers. Food that is picked-up is either taken back to the kitchen or delivered directly to the organization that will use it.

Nourish Now works with a network of volunteers. Nourish Now recently moved to a new kitchen space located on Ziggy Lane in Gaithersburg. Previously, the Universities at Shady Grove provided kitchen and storage space.

Both Manna and Nourish Now are operating close to capacity in terms of physical plant and transportation. If there is success in increasing the amount of recovered and donated food, the capacity of recipient organizations may also need to be addressed.

Montgomery County Food Council

The Montgomery County Food Council is an independent council formed and led by professionals, private businesses, government officials, individual members, community organizations, and educational institutions that broadly represent the food system both substantively and geographically. Its mission is to bring together a diverse representation of stakeholders in a public and private partnership to improve the environmental, economic, social and nutritional health of Montgomery County through the creation of a robust, local, sustainable food system.

The Food Council's goals are to: (1) develop and sustain an economically viable local food system in Montgomery County that supports producers, processors, distributors, and retailers of local foods; (2) increase access to locally produced, healthy food among county residents, especially communities with limited access; (3) increase Montgomery County residents' understanding of the importance of local, healthy food through education opportunities that lead to healthier food choices by residents; and (4) improve agricultural soils and reduce the environmental impacts of local land and water use, and environmental footprint from non-local food in Montgomery County.

As a part of its efforts to increase food access, the Food Council has been working to map resources and conduct a needs assessment. This includes developing a resource list or wiki of organizations, non-profits, county offices and other entities that address food access. The Food Council has been working with Johns Hopkins University's Center for a Livable Future to develop resource maps on emergency food providers, food outlets, and farms. It is hoping to collaborate with the County's Interagency Technology Policy and Coordination Committee (ITPCC) and open data project to find a permanent home for this data and to develop a plan for data maintenance.

Food Donation Connection

Food Donation Connection is a national organization that started in 1992. It is linked with over 15,000 restaurants and 8,600 organizations nationwide. Restaurants donate food that has never been served. Generally this surplus food is wrapped and frozen on-site which allows donations to range from small to large. If the food is

refrigerated it must be picked up within 72 hours. Donations are usually picked up once a week by a non-profit organization.

Food Donation Connection tracks the food and provides the restaurant or corporation with information on the value of donations. The organization receives 15% of the tax savings the donating restaurant receives, so if there is no benefit to the donator there is no charge.

In 2012, Food Donation Connection recovered and donated 183,000 pounds of food valued at \$1.2 million in Montgomery County from 11 restaurant concepts working at 67 locations. The food was donated to 34 organizations through the Food Donation Connection Harvest Program. Food Donation Connection would like to expand its work in Montgomery County.

Some brief points on Hunger

The County Council understands the problem of hunger and food insecurity in Montgomery County as it was the reason for establishing this Work Group. The following are some brief points highlighting this growing problem:

- The 2013 Hunger Report from Bread for the World Institute notes that economists from Brandeis University calculated that in 2010 the direct and indirect cost of hunger in the United States, taking into account its effects on health, education, and economic productivity was \$167.5 billion. The Hunger Report further notes that data indicate that about 50% of children in the United States will, at some point before they turn 18, live in a household that participates in SNAP.
- The 2012 Montgomery County self-sufficiency standard estimates that a single adult needs at least \$256 per month for food; a family of four needs \$802 per month.
- The Capital Area Food Bank reports that 40% of its clients must choose between food and other necessities such as housing, utilities, medical care, and transportation.
- In January 2008, 25,977 people in Montgomery County participated in the Maryland Food Supplement Program (SNAP). In January 2013, there were 67,142 people participating – a 158.5% increase. The five-year increase for the State of Maryland was 117.9%.
- About one-third of Montgomery County Public School children qualify for the Free and Reduced Meal Program. Montgomery County Public Schools has a Universal Breakfast Program at 41 schools and covers the cost of a breakfast for reduced priced eligible students to give more children the opportunity to have

breakfast. Five schools are participating in the Fresh Fruit and Vegetable Program.

- Maryland Hunger Solutions reports that 1 in 8 Marylanders are food insecure. There are 80 schools in Montgomery County that are eligible for the Maryland Meals for Achievement Program but only 32 (40%) are participating. During the 2011-2012 school year, 1,677 children participated in the At-Risk Afterschool Meal Program at 38 sites.
- The Department of Health and Human Services' Senior Nutrition Program served 203,055 congregate meals to 4,666 unduplicated seniors in FY12 and 187,686 home delivered meals to 673 seniors.
- When adequate and affordable amounts of fresh food are not available people often choose food that is affordable and filling. Unfortunately, this food is often high in calories and fat, which can lead to obesity and other chronic health conditions.
- The 2012 Montgomery County Obesity Profile said that 54.3% of adults in Montgomery County are overweight or obese.
- Almost 4 in 10 (36.3%) of Montgomery County children are either overweight or obese.
- From 2000 to 2012, the rate of hospitalizations per 10,000 residents with a primary or secondary diagnosis of obesity increased three-fold for adults and four-fold for children.

Appendix 4

Information on Food Composting:

Takoma Park, Maryland

Howard County, Maryland

Four Seasons Hotel Philadelphia

City of Hillsboro and Oregon Department of Environmental Quality

New York City

TAKOMA PARK FOOD COMPOST PILOT

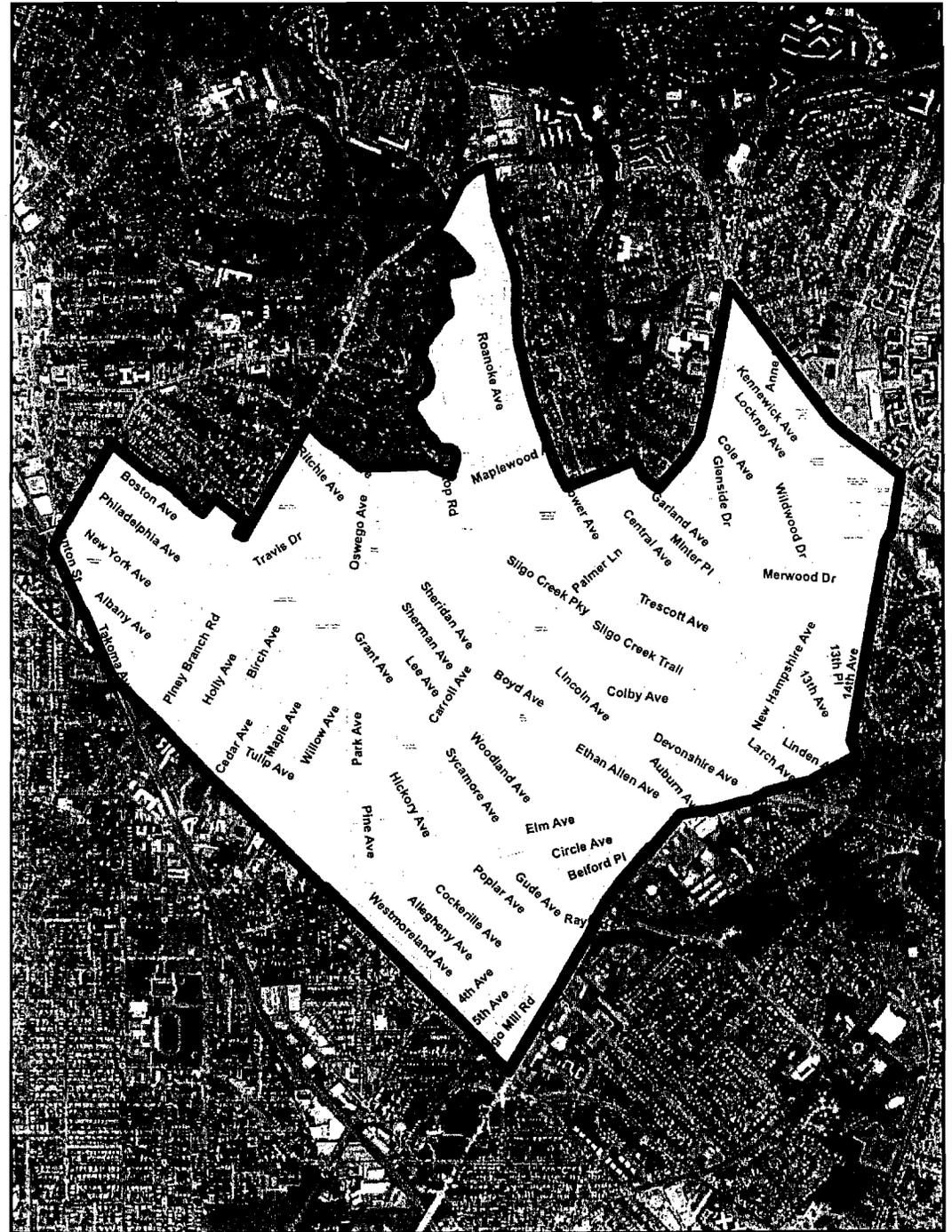


Daryl Braithwaite
Director of Public Works

Date: 4-18-2013

Introduction

- City of Takoma Park
- Area: 2.09 Sq.Mile
- Population: 16,715 (Census 2010)
- City provides solid waste services to 3,300 homes
- Robust curbside recycling and mandatory yard waste programs manage 50% of waste
- To increase %, food waste composting identified as best opportunity



Pilot Areas

- **Area 1**

Partner collection

260 total homes

25% participation

vegetable matter only

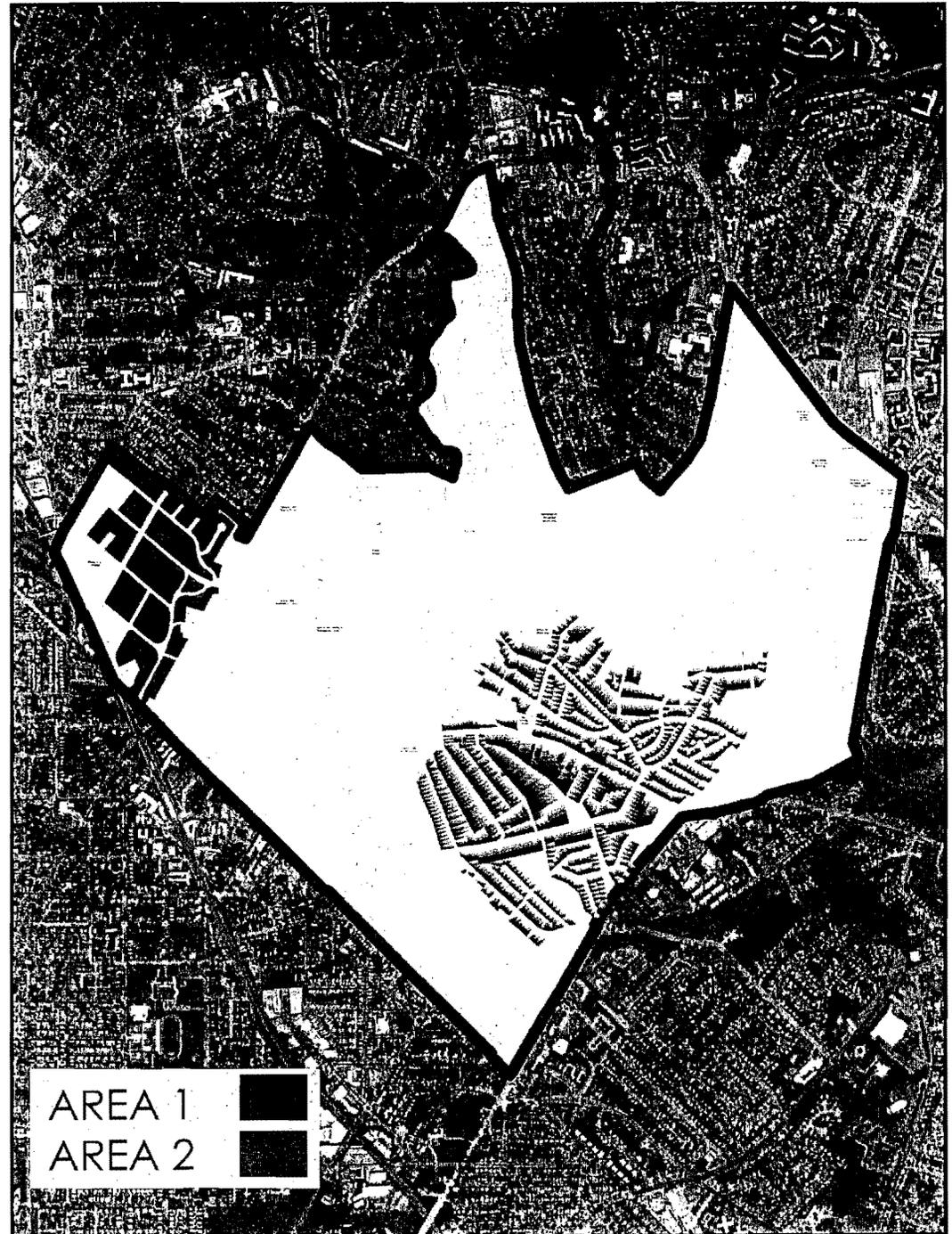
- **Area 2**

City collection w/ yard waste

850 total homes

35% participation

all food types and paper waste



AREA 1

- Designed for 65 households
- Manages accounts by email, provides weekly collection, weighs each container
- Processes at facility in Montgomery County



AREA 2

- Designed for 300 households
- Registration by email
- Delivered containers
- City collects and delivers to Chesapeake Compost Works in Curtis Bay, Baltimore
- City records total weight collected and counts number of set outs weekly



GROWING SOUL

COMPOST CREW



DEPARTMENT OF PUBLIC WORKS

31 Oswego Avenue
Silver Spring, MD 20910
www.takomaparkand.gov

Dear Resident:

Would You Like To Participate In A Food Waste Collection Program?

The City of Takoma Park is partnering with *growing SOUL* to run a 6 month pilot program for the collection of food waste for composting. This program is being offered to 65 households in your neighborhood. The pilot program will start February 20 and run through July 31.

Food waste makes up to about 23% of household trash. By reducing the amount of food waste in the trash, the City could lower trash collection costs and create a valuable compost product that could be used to enhance our lawns and gardens.

What Will Be Accepted?

The food waste collection program will accept food waste and food related paper products. This includes such items as:

- Fruit, and vegetable scraps (raw or cooked),
- Breads, pasta, rice, cereal, grains (raw or cooked)
- Nuts, beans, seeds (raw or cooked)
- Coffee grounds, filters and tea bags
- Used paper towels, paper napkins, paper plates, paper bags, paper food containers
- Egg shells

How Will The Program Work?

The collection will take place once a week, on Wednesday. Food waste items are to be set out separately in a City provided container. Staff from *growing SOUL* will pick up the food waste in a bio-diesel fueled collection vehicle.

Each participating household will receive a 5 gallon plastic container with a tightly sealed lid for the storage of food waste items. 13 gallon compostable plastic bags will also be provided. The compostable plastic bag is to be placed in the plastic container and filled with food waste items during the week. The night before collection, the food waste container should be brought to the curb.



A PILOT PROGRAM IN PARTNERSHIP WITH



DEPARTMENT OF PUBLIC WORKS

31 Oswego Avenue
Silver Spring, MD 20910
www.takomaparkand.gov

Dear Resident:

Would You Like To Participate In A Food Waste Collection Program?

The City of Takoma Park is partnering with The Compost Crew to run a 6 month pilot program for the collection of food waste for composting. This program is being offered to 300 households in your neighborhood. The pilot program will start February 25 and run through August 19.

Food waste makes up to about 23% of household trash. By reducing the amount of food waste in the trash, the City could lower trash collection costs and create a valuable compost product that could be used to enhance our lawns and gardens.

What Will Be Accepted?

The food waste collection program will accept food waste and food related paper products. This includes such items as:

- Fruit, vegetable and meat scraps (raw or cooked),
- Breads, pasta, rice, cereal, grains (raw or cooked)
- Nuts, beans, seeds (raw or cooked)
- Cheese, yogurt and cultured milk products
- Coffee grounds, filters and tea bags
- Used paper towels, paper napkins, paper plates, paper bags, paper food containers
- Egg shells

How Will The Program Work?

The collection will take place once a week, on Monday, with the yard waste pick up. Food waste items are to be placed with your yard waste items or set out separately in a City provided container. City collection crews will pick up the food waste with yard waste in City trucks.

Each participating household will receive a 5 gallon plastic container with a tightly sealed lid for the storage of food waste items. 13 gallon compostable plastic bags will also be provided. The compostable plastic bag is to be placed in the plastic container and filled with food waste items during the week. The night before collection, the food waste container is to be brought to the curb, or the compostable plastic bag can be placed in your yard waste bag or can.



A PILOT PROGRAM IN PARTNERSHIP WITH

A-22

GROWING SOUL



TAKOMA PARK FOOD COMPOST PILOT

Registration is still open!

in partnership with **growingSOUL**
www.growingSOUL.org



bread, cereal,
pasta, rice & grains
(raw or cooked)



fruit & vegetable scraps
(raw or cooked)



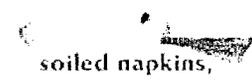
nuts, beans, seeds (raw or cooked)
egg & nut shells, pits, corn cobs, husks



cakes, pies,
baked goods



dairy, milk, eggs
(raw or cooked)



soiled napkins,
paper towels

Also: limited amounts
of wooden toothpicks,
popsickle sticks &
chopsticks



soiled pizza boxes, paper egg cartons, paper bags
cardboard food and ice cream containers



uncoated paper plates



shredded paper



coffee grounds,
filters & tea bags

DO NOT COMPOST:

- x - meat, fish or bones
- x - metal, aluminum foil
- x - styrofoam
- x - plastic wrap
- x - plastic-coated or wax-coated paper or cardboard
- x - plastics of any kind including compostable plasticware

Instructions:

- ☺ Place paper in the bottom of your empty bin to absorb moisture
- ☺ Line your bin with ONLY compostable plastic bags provided
- ☺ Always screw the lid on tightly to keep odors in and pests out
- ☺ Save your compostables in a lidded container as you prep and scrape food
- ☺ Transfer compostables DIRECTLY into lined bin
- ☺ DO NOT PLACE OTHER TYPES OF PLASTIC BAGS INTO THE BIN
- ☺ Place your bin out at your curb Wednesday morning by 8am
- ☺ Rinse your bin, dry, REPEAT

To register please email at takomaparkcompostpilot@gmail.com or call at 301-799-8955

COMPOST CREW



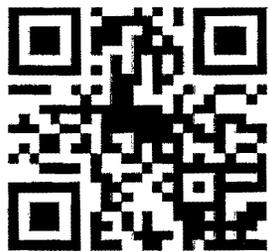
TAKOMA PARK FOOD COMPOST PILOT

Want to cut down on the amount of waste you send to the incinerator and waste water treatment facility? You can, by **signing up** for the food waste pilot collection program.

Registration is still open !

Here's how you can sign up: The City's partner, The Compost Crew, has established a website & phone line for registration. If you would like to participate, please email The Compost Crew at takoma@thecompostcrew.com or call 301-202-4450.

You can also Sign up on your smartphone or tablet device.

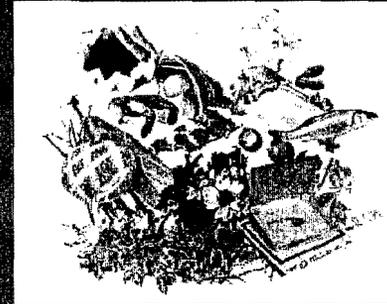


The program is designed for 300 households & will be offered on a first come, first served basis.

A pilot program in partnership with **THE COMPOST CREW**



Accepted Materials



FOOD SCRAPS

Meat, poultry, seafood, bones, eggshells, cheese, bread, pasta, grains, beans, nuts, fruits, vegetables, coffee grounds, paper napkins, paper towels, coffee filters, tea bags, pizza delivery boxes

Questions? Email us at takoma@thecompostcrew.com

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PROGRAM EVALUATION

AREA 1

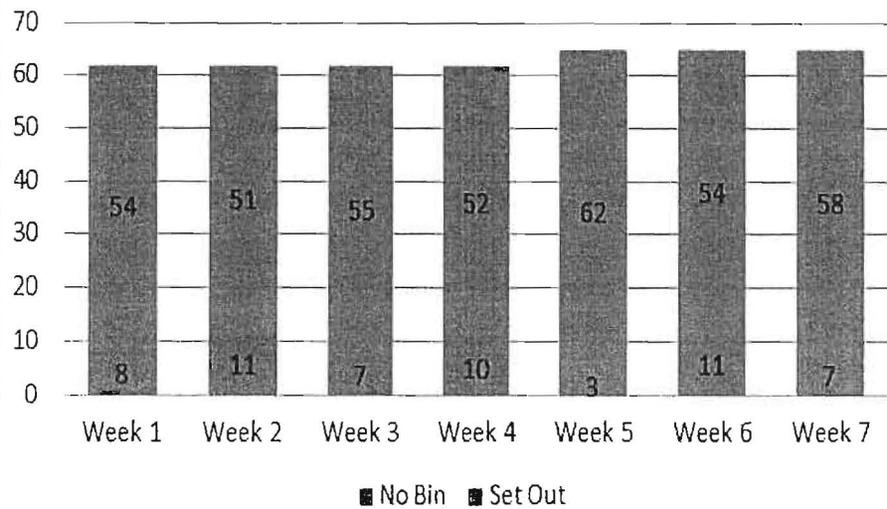
- 5 gallon plastic bucket, screw top lid and compostable plastic bag liners
- Average weight per home per week = 8 lbs
- Average set out rate per week = 85%
- Maximum weight per container = 24 lb

AREA 2

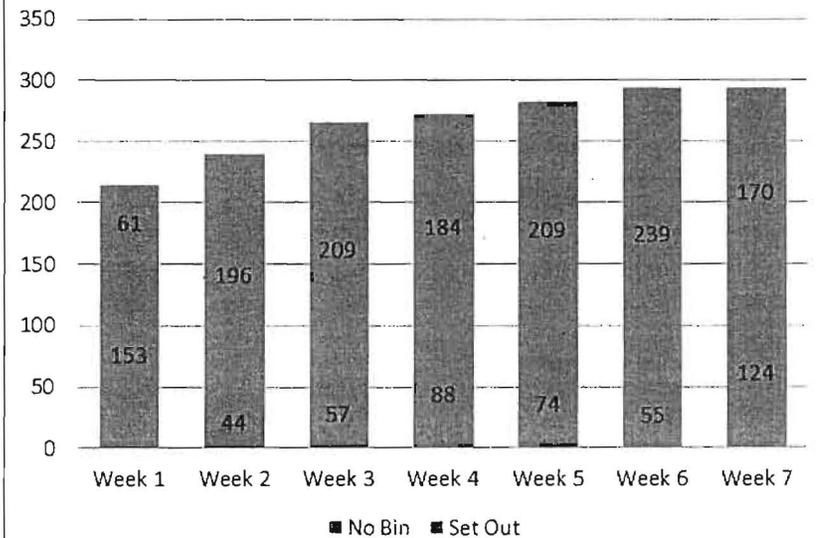
- 5 gallon plastic bucket, screw top lid and compostable plastic bag liners
- Est weigh per participant per week = 24.85 lbs
- Average set out rate per week = 68 %
- yard waste compared to food waste = 80% to 20%
- Anticipate wide seasonal variance

PROGRAM EVALUATION

Area 1 Weekly Set Out



Area 2 Weekly Set Out



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Next Steps

- Pilot programs to last 6 month - ends in early August
- Continue to evaluate weights collected and develop estimates for Citywide program
- Determine if program will be separate or in combination with yard waste
- Fingers crossed for more local processing options



www.baltimoresun.com/news/maryland/howard/ellcott-city/bs-gr-howard-composting-20130421,0,3665255.story

baltimoresun.com

Food-scrap composting finds a home in Howard

County launches own facility to process residential waste

By Timothy B. Wheeler, The Baltimore Sun

5:37 PM EDT, April 21, 2013

Howard Hord considers himself a chef of sorts, but the food he works with is a little past its prime.

advertisement

Using moldy melon rinds, orange peels and other castoff fruit and vegetables from some Howard County kitchens, Hord is "cooking" the first batches of plant fertilizer to be produced by the new composting facility at the county's Alpha Ridge landfill in Marriottsville, set to mark its official opening on Monday, Earth Day.

Hord, the landfill's operations supervisor, and his bosses hope they've got a winning recipe for reducing trash in the suburban county, one that the rest of Maryland will want to follow.

"We're the guinea pigs," Hord said as he waited for a trash compactor truck to deliver a fresh load of compost ingredients. It's mostly grass clippings, branches and other yard debris, but also some pungent food scraps and greasy pizza boxes collected from about 1,000 households in the eastern part of the county. He and his crew mix them together with a little animal manure, trying to get just the right blend to produce a rich organic material for growing plants or flowers.

Howard County, one of the first East Coast communities to try large-scale composting of household food scraps, is doubling down on the pilot program it launched a little over a year ago. The county recently completed an \$800,000 processing facility at Alpha Ridge, where Hord and his crew are working to produce compost that county officials plan to sell back to residents and also use to enhance parks and government property.

"What we are doing here is clearly important for playing our role in sustainability," said County Executive Ken Ulman, who plans to mark the facility's startup with Monday's ribbon-cutting ceremony. "It will, when it's successful on a broader scale," he predicted, "show to other jurisdictions that it's possible."

Food-scrap composting is an established practice in some West Coast communities, but has been slow to spread. Only about 3 percent of the 34 million tons of food waste produced nationwide in 2010 got diverted from landfills or incinerators for composting, according to the Environmental Protection Agency.

Ulman, inspired by seeing how widely accepted composting seems in places like Portland, Ore., and Seattle, decided to try it here. In 2011, the county invited residents in select communities to collect their fruit and vegetable castoffs and put them out for pickup once a week, just as they do with recyclables and trash. About one in five households in the targeted area volunteered, and received a green bin from the county for their food and yard waste.

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The pilot program hit a costly glitch, though, when state regulators shut down the commercial composting facility in Carroll County where Howard was sending its food scraps, citing concerns over polluted runoff from the site. The county began trucking its food waste to Delaware for composting, but the cost for that ran \$65 per ton, well above the \$41.60 per ton the county pays to send its trash by rail to a Virginia landfill.

So the county set about developing its own facility, making sure the Maryland Department of the Environment approved its plans for controlling runoff and odors — two issues that have plagued other composting operations.

At the Alpha Ridge landfill, a trash truck dumps out its load of yard waste and food scraps, and county environmental services workers wade into the pile wielding box cutters to rip open plastic bags and remove them. A crew of five took an hour to get through one delivery last week.

Once de-bagged, the debris is scooped up by a front-end loader and put through a massive grinder, which shreds everything with a jet engine's scream. The material then gets covered with a tarp, first to "cook" out disease-causing bugs and next to let beneficial microbes hasten decomposition.

The piles get moved every couple of weeks to ensure even treatment. All the while, a perforated pipe on the bottom of the pile draws air through the material to capture any rotten odors and filter them out.

The whole process should take about three months, officials say, roughly half the time such material normally needs to break down in nature.

County officials hope the new composting facility will save taxpayers money in addition to its environmental benefits, which include reducing the need for chemical fertilizer and avoiding the release of more climate-warming carbon into the atmosphere. Officials figure they can compost more cheaply than landfilling, by selling the finished product to offset the costs of collecting and processing the food scraps.

While only about 20 percent of eligible households participate, county officials said they're encouraged and expect to expand collection to another area in the coming year. Officials say the program has diverted about 200 tons from the county's waste stream to date, and they say each household puts out about 10 pounds of food scraps for collection every week.

The biggest hurdle to broader participation has been what officials call the "yuck factor," with residents reluctant to store food waste for a few days rather than flush it down the garbage disposal or toss it into the trash.

"My biggest fear was that it was going to smell really bad," said Rhamin Ligon of Elkridge. But her neighbor had signed up for the curbside collection, so she decided to give it a shot.

"I've always wanted to compost for my family, and have quite frankly been too lazy to do it at my house," said Ligon, an emergency physician. With the county sparing her from the chore of backyard composting, she fitted her kitchen trash can with a small receptacle for collecting food scraps.

"When I'm cooking, I can just throw vegetables in there, so it made it simple," she explained. "It kind of smells a little bit like it's fermenting when you dump it out," she said, but "it doesn't really smell bad."

Food-scrap recycling has begun to catch on more in the past few years in Maryland, according to the Department of the Environment, though mainly among restaurants and some large food users such as the University of Maryland. Pilot residential programs similar to Howard's have been launched or are in the works in Montgomery and Prince George's counties, according to Jay Apperson, MDE spokesman.

In the Baltimore area, it appears Howard County will remain a pioneer among local governments in collecting and composting food scraps from homes. Spokespeople in Anne Arundel and Baltimore counties and Baltimore City all said they're not ready to follow suit any time soon.

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"I'm excited for them, and somewhat jealous," said Michael Beichler, chief of Baltimore County's bureau of solid waste management. He said the county is focused for now on improving its residential recycling rate, which at 14 percent overall falls well short of expectations.

"There's a reason why other jurisdictions haven't done it," Ulman said. "It's not the easiest thing to do."

Howard's executive said he hopes composting catches on enough with supermarkets and other major food vendors so that a private company will want to build a large-scale processing facility and take over the residential business as well.

"My real hope is that we're able to change the culture, to convince people who think it's nasty and messy ... that in fact it's easy and convenient," Ulman said. "When you think about it, most families produce very little that can't be recycled ... or go into food scrap."

tim.wheeler@baltsun.com

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Fine Dining Returns to the Earth



Guests and the environment both receive the royal treatment at the Four Seasons Hotel in Philadelphia, Pennsylvania. By focusing on behind the scenes operations, such as food waste management, the hotel is preserving environmental resources and saving money without compromising the guest experience.

A Cost-Effective, Closed-Loop Composting Partnership

A 2006 waste audit at the Four Seasons Hotel in Philadelphia indicated that its recycling program, which included paper, cardboard, bottles, and cans, only captured three to five percent of the hotel's waste by weight, due to the large quantity of high-weight food waste in the waste stream. To the Four Seasons, a five percent recycling rate was not acceptable. As Director of Engineering Marvin Dixon explains, "We strive for perfection." To increase the recovery rate, the hotel established a kitchen scraps recycling program with local composter Ned Foley of the farm Two Particular Acres. Here's how it works:

Black composting bins stand close to each kitchen work station, along with blue recycling bins and gray trash cans. The staff deposits all of the kitchen's organic discards—food scraps plus paper, cardboard, and biodegradable packaging, napkins, and dishware—into the composting bins. At the end of each day, the bins are loaded into a truck that Dixon drives 35 miles to Two Particular Acres on his way home from work. The truck runs on biodiesel made from Four Seasons' used cooking oils. Dixon drives the empty bins back to the hotel the next morning. In the program's first year, Four Seasons worked with two different contractors to transport the organic waste to Two Particular Acres. Due to rising fuel costs, both companies discontinued this hauling service. When Four Seasons couldn't find a replacement hauler, Dixon decided to transport the material to the farm to ensure that the program continued.

At Two Particular Acres, Farmer Foley uses the kitchen scraps from Four Seasons to make compost, which Four Seasons then purchases for its gardens and landscapes.

This symbiotic, closed-loop system fulfills the needs of both parties, and it's cost-effective too. Four Seasons rents each 150 lb kitchen composting bin for \$40 per month. The hotel pays Two Particular Acres \$35 per ton of organic waste in addition to a monthly service fee. In total, sending waste for composting is 30 percent cheaper for the hotel than landfilling, at just under \$0.04 per pound versus \$0.06 cents per pound. With 240,000 pounds of organic waste from the kitchen each year, that's more than \$4,800 saved annually.

BENEFITS OF

▶ COMPOSTING

- ④ By composting instead of landfilling its kitchen scraps, Four Seasons keeps 52 metric tons of carbon dioxide equivalent out of the atmosphere each year, an emissions reduction tantamount to decreasing the annual consumption of oil by 110 barrels.
- ④ Composting saves the Four Seasons \$4,800 each year, a 30 percent savings over landfilling its food scraps.



Carrying the Message

Dixon explains, "The kitchen is the nucleus of the [recycling] operation." Program success hinges on the kitchen staff separating organic materials from the other waste and depositing organics into the compost bins. This is no easy task, as the kitchen operates 24 hours a day, seven days a week, with three supervisors managing three large teams on three shifts. Dixon identified three factors necessary for success.

Hotel Management Support:

"The General Manager and Executive Committee have to be behind the program 110 percent" for employees at all levels to feel accountable for the success of the program, said Dixon. Composting is one piece of the hotel's broad environmental strategy, and the hotel is very supportive of this effort.

Personal Investment:

Employees learn about the environmental benefits of composting, fostering a personal investment which motivates them to be extra vigilant when separating waste.

Education:

Program instructions are incorporated into new employee orientation, so that the staff views the program for what it is, an integral part of kitchen operations.

It took two months for the program to take hold in the kitchen, but after the initial effort, it became easy to monitor the bins and keep everyone on board. As Dixon explains, "People have to carry the message to make sure it happens; that's the success right there."

To encourage others to establish successful food scrap collections like that at Four Seasons, Farmer Foley is a primary trainer for EPA's Campaign to Mid-Atlantic State Farmers to Promote Organic Material Composting, a free, peer-to-peer training program to help farmers start composting commercial kitchen discards. Other agencies such as the Pennsylvania DEP and the USDA are offering grants to educate farmers and to assist with the initial costs of purchasing composting equipment.

You Can Help

Help your business start its own kitchen discards composting program.

- Visit www.epa.gov/foodscraps
- Search for composters in your area at www.findacomposter.com

STEPS TO

▶ LESS WASTE

In addition to composting organics from the kitchen, the Four Seasons Dining Services:

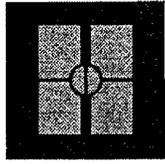
- *Carefully tracks food purchases to minimize surplus food (source reduction)*
- *Purchases local ingredients whenever possible*
- *Makes biodiesel from used cooking oils*
- *Purchases only biodegradable disposables*
- *Uses table-size, reusable condiment containers instead of serving-size disposables*
- *Buys back the finished compost to use on its landscapes*

In total, Four Seasons in Philadelphia has reduced its landfill waste by 23% (239 tons)



U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460
www.epa.gov

EPAS30-F-09-024
October 2009



City of Hillsboro



August 2010

Food Waste Prevention Case Study: Intel Corporation's Cafés



City of Hillsboro

Oregon Department of
Environmental Quality



Printed on 100% recycled paper

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SUMMARY

Food service staff at two Intel business dining facilities in Hillsboro, Oregon (operated by Bon Appetit Management Company) tracked all pre-consumer food waste on a daily basis for one year using computerized food waste tracking systems and software¹. The goal was to prevent and minimize food waste by raising staff awareness, focusing behavior, and providing information to diagnose the causes of waste. The initiative was launched in April 2009 and this report summarizes data collected through April 2010.

During this period of daily waste tracking, the sites collectively reduced pre-consumer food waste by 47% by weight and reduced food costs per meal by 13.2%. This reduction in food waste, over the course of a full year, reduces greenhouse gas emissions by approximately 100 metric tons of greenhouse gases (MTCO_{2e}). The sites required no additional labor to support the tracking effort.

These results have implications for other food service operations in Oregon and beyond, illustrating that daily food waste tracking is a best practice for minimizing food waste, thereby reducing operating costs while mitigating adverse upstream and downstream environmental impacts associated with food waste.

¹ Pre-consumer waste (i.e. kitchen waste) is food that goes to waste while under the control of the food service operator. This waste comes in the forms of overproduction, spoilage, expiration, trimmings and handling issues (burned, dropped, etc.)

WHY FOOD WASTE PREVENTION MATTERS

Food waste costs commercial and retail food service operations \$30-40 billion per year, according to the U.S. Environmental Protection Agency. In fact, data from LeanPath, a national provider of automated food waste tracking systems, shows that 4-10% of the food purchased in high-volume food service operations is discarded as waste before ever reaching a customer's plate (due to overproduction, trim waste, spoilage, and expiration). Beyond these significant economic implications, there are compelling environmental reasons to prevent food waste.

Food Waste – Upstream Environmental Impact

Upstream, the production of food uses tremendous energy, water, and land resources, and is a major source of pollution. Reducing the waste of food is an easy way to reduce these environmental impacts. The upstream chain begins at the farm where extensive fresh water and fossil fuels (for example, artificial fertilizers and pesticides) are used in the production of food and continues through environmental impacts associated with transportation, processing, packaging, storage, and preparation.

Food Waste – Downstream Environmental Impact

Downstream, the transportation of food waste generates diesel emissions from hauling vehicles. Most food waste in the U.S. is landfilled, and when food decomposes in a landfill, it produces methane, a greenhouse gas approximately 20+ times more potent than carbon dioxide in warming potential.

THE CHALLENGE: REDUCE PRE-CONSUMER FOOD WASTE AT INTEL'S CAFÉS

Intel's employee cafés Jones Farm 5 and Ronler Acres 3 serve approximately 12,000 meals per week and offer a diverse, high-quality menu to meet the expectations of employees and visitor. Despite focusing on food waste control over many years, these two cafés were producing over 2,900 lbs of pre-consumer food waste per week (primarily from overproduction, spoilage, expiration and trim waste) at the start of the tracking initiative (April 2009).

This was an important issue for Intel, Bon Appetit Management Company, Oregon's Department of Environmental Quality (DEQ), and the City of Hillsboro due to the costs and environmental impacts food waste generates both upstream and downstream from a food service or restaurant operation.

The challenge: How could Intel and Bon Appetit reduce pre-consumer food waste significantly while continuing to maintain the great food and service quality provided by the Intel cafes?

Starting Point: Why Is There Pre-Consumer Food Waste To Begin With?

Pre-consumer food waste is a challenge throughout the food service industry and no operation is immune.

At Intel, Bon Appetit chefs work diligently to estimate customer demand and produce accordingly. Additionally, managers work to ensure dozens of culinary workers follow the menu plan and use food as efficiently as possible, avoiding excessive trim waste when cutting fresh meat, fruit and vegetables.

However, it is challenging to develop 100% accurate forecasts due to changes in the

number of customers and menu choices. As a result, there is a significant volume of pre-consumer food waste generated in the kitchen as a result of overproduction or over purchasing which results in expiration and spoilage of food products.

Bon Appetit faces the additional challenge of aligning production realities with the forecast. For example, if a forecast calls for a limited number of turkey portions it's still necessary to produce an entire turkey breast at a minimum, whether or not the entire breast is needed to meet portion forecasts.

The Solution: Implement Daily Food Waste Tracking and Staff Training in Best Management Practices to Reduce Waste

We manage the things we measure

With support from an Oregon DEQ Solid Waste Program grant and matching funds from LeanPath & Bon Appetit, the City of Hillsboro sponsored a project to reduce pre-consumer food waste at Intel's Jones Farm Café 5 and Ronler Acres Café 3.

The goal was to reduce pre-consumer food waste by 50% through daily food waste monitoring, staff training, and staff involvement in brainstorming and implementation of creative solutions. Monitoring relied on a computerized food

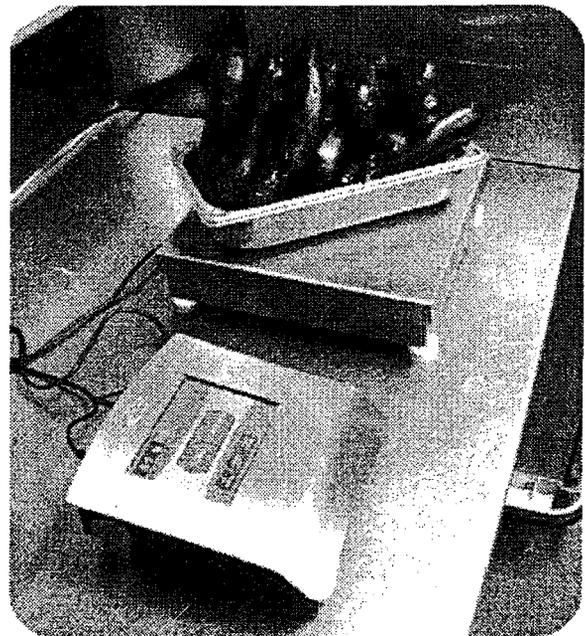
waste tracking system from LeanPath. The expectation was that tracking waste data would raise staff awareness, focus behavior, and provide information to diagnose the causes of waste. By watching trends over time, this data could be used to target intervention and improvement practices.

Additionally, the City of Hillsboro wanted to develop best management practices that could be shared with other restaurants and food service operations to help them reduce pre-consumer food waste.

THE TRACKING SYSTEM

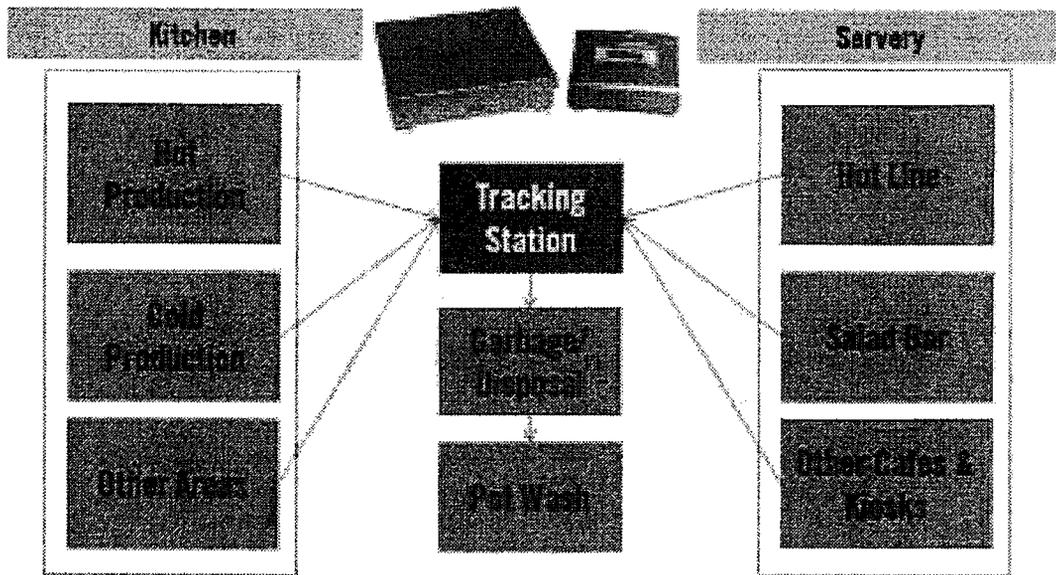
Employee training was done via brief in-service sessions demonstrating how to use the equipment and the rationale for tracking. Trainers and managers explained that this was a positive, employee-driven initiative and that no employee would be disciplined due to the amount of waste recorded even if it was deemed to be excessive. By recording this data, staff members were part of the solution and their efforts would be recognized and rewarded.

The scale was placed in the production area near the path that kitchen waste naturally followed en route to review and composting.



Each café tracked pre-consumer waste using one ValuWaste Tracker touch-screen terminal and scale from LeanPath.

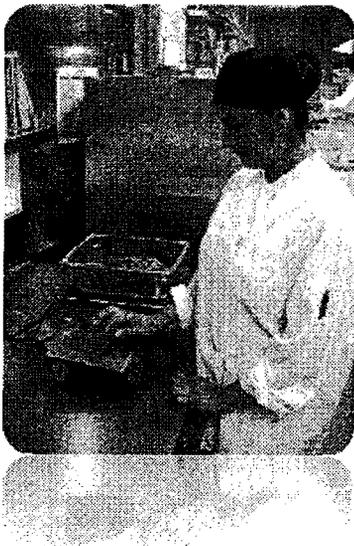




The Tracking Process

Food waste items were weighed prior to disposal, donation, or composting.

Employees used the touch-screen interface to record the food item, the reason for loss, the container type (container weight is subtracted



by the software), the sending station and employee name. The software automatically recorded the date, time and weight of the item and computed its estimated value.

The weighing process typically required less than 4 minutes per employee per week. Bon Appetit did not have to add any labor to accomplish this and according to Ken Dale, District Manager, the effort may have even reduced labor by preventing waste and thereby avoiding excess production. In a hypothetical operation (with average hourly wages of \$10 and a staff of 40 FTEs), total labor cost for tracking would be less than \$30 per week and would be accomplished without adding additional hours or dollars.

This tracking system is currently used in hospitals, colleges, corporate dining facilities, and casino/hotels. The reporting software can also be paired with paper tracking to provide a software-only solution for lower-volume restaurants, coffee shops, convenience stores and food service operations.

Creating Reports

Bon Appétit also installed reporting software (ValuWaste Advantage from LeanPath) to generate waste reports and see progress over time. Data was moved from the Tracker to the Advantage software once weekly using a USB drive.

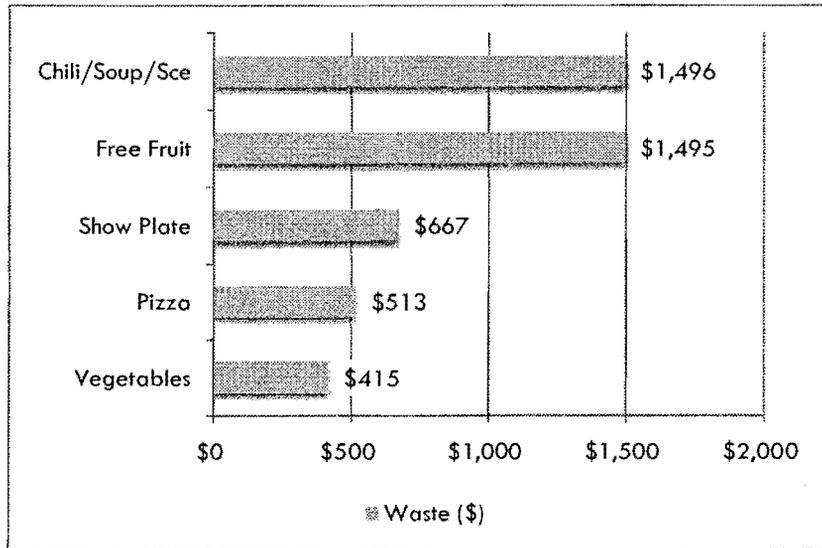
Using Data to Drive Change

Each site appointed its Executive Chef to lead the waste prevention program who then assembled Stop Waste Action Teams (SWAT) to work with them. The SWAT teams met on a regular basis to review data and set goals for improvement. Goals were defined very specifically (e.g. "Reduce soup waste by 50%"). Chefs solicited ideas from all staff members and discussed waste in regular employee pre-shift meetings. LeanPath also provided a coach who worked with the Chefs and teams at each site to understand their data and deploy best practices learned in other operations.

Summary of Weekly Waste Tracking Items

1. Track all pre-consumer food waste using touch-screens/scales.
2. Print and post waste reports weekly.
3. Hold a weekly SWAT team meeting and set specific goals for improvement.
4. Work methodically through each goal before setting a new goal.

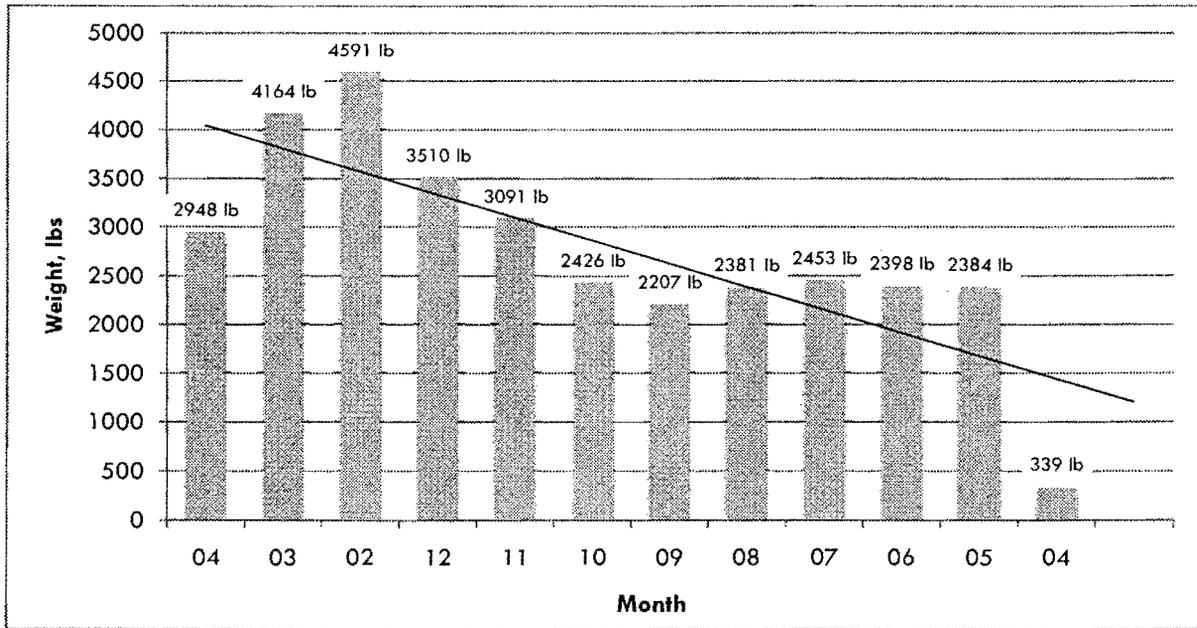
Figure 1. RA3 – Top 5 Food Detail – Jan. 4 to Current



LeanPath

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Figure 2. Waste Trend Report for Month



LeanPath

RESULTS

Waste Reduction

The combined pre-consumer food waste at the two cafes was reduced by 47% when comparing the baseline week of April 20, 2009² versus the week of April 5, 2010. This approach compares two moments in time the same seasonal period, year-over-year.

Metric	Total
Total Pre-Consumer Food Waste collected	92,920 lbs.
Waste Baseline Week (4/20/2009)	2933 lbs.
Report Period Ending Week (4/05/2010)	1562 lbs.
Percentage Change in lbs.	-47%

There are other assessment models available which also show strong waste reduction. For example:

In comparing the final six weeks of the study (the weeks beginning March 1-April 5, 2010) versus the baseline (April 20, 2009), the cafés experienced total waste reduction of 49% versus baseline:

² LeanPath personnel monitored the baseline data collection to ensure high capture rates and an accurate initial baseline, although some undercapture of data was possible. All subsequent tracking was self-monitored and may include some amount of undercapture. Undercaptured data has not been estimated in this case study.

A-40

Last Six Weeks	1,496
Baseline	2,933
Change	1,437
Percentage Change	49%

Using the same baseline (2933 lbs per week) and projecting monthly anticipated waste totals for the period, waste should be 152,935 lbs. Actual recorded waste was 91,358 lbs, indicating reduction of 61,577 lbs or 40%.

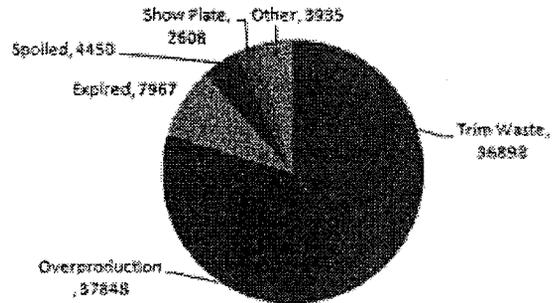
Food Cost Reduction Results

The two cafés reduced their food cost per meal served (FCPM) by a blended rate of 13.2% in the year of the tracking effort versus the prior year.

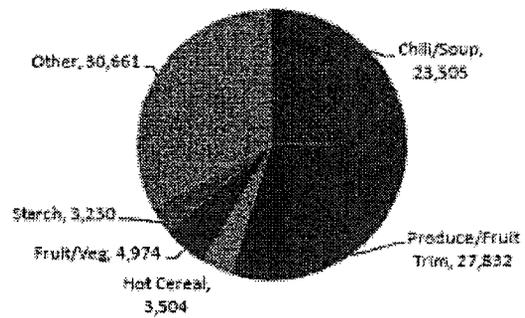
To place this in perspective, for every \$1,000,000 spent on food purchases, the operator would yield a \$132,000 savings. In an industry with modest margins wherein food cost averages 30-40% of total revenue, this savings reflects a significant economic gain.

Profile of Pre-Consumer Food Waste Tracked

Cafe's Top 5 Loss Reasons-Pounds



Cafe's Top 5 Discarded Foods-Pounds



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BEST MANAGEMENT PRACTICES

(Note: All BMP's require and assume full compliance with all applicable food safety protocols. They also assume strict adherence to quality standards; leftovers refer to overproduced items held correctly at time and temperature)

- **Vegetable Trim Waste**
Chef reviews trimming practices, and reuse opportunities for trim in creating stock as a base for soup and sauce production.
- **Fruit**
Unused fruit can be re-worked into chutney and sauce that is used in daily offerings at café stations.
- **Pizza Station**
Move to a batch-oriented production model throughout meal periods allowing for lower upfront production of each variety. Utilize unused calzones in products such as soups.
- **Soup**
Use tracking data to establish leftover amounts. Review customer flow, seasonal preferences and weather to reduce initial soup production levels per day. Change procedures at the soup station to create opportunities to reuse leftover soup (planned re-use).
- **Chili**
Utilize leftover chili the following day as a topping for certain entrees.
- **Secondary Use Station**
Review all leftovers daily and discuss re-use opportunities among culinary team. Create a special station where leftovers can be safely redressed into new menu offerings.
- **Starches**
Redress leftover potato products and use at the utilization station. Puree certain starches and use as thickeners and texture enhancers for soups and entrees.
- **Coffee**
Coffee is offered for free at these sites and brewed throughout the day. Coffee production was curtailed in the afternoon as demand diminishes in order to lessen the amount discarded. Any leftover coffee is saved, chilled and mixed with ice and transferred to the flavored water station as an iced coffee beverage.
- **Coffee Mixers**
Dairy items prepped for the coffee station may be used as ingredients when making chowder.
- **Deli Station**
Historically was self-serve, but subsequently converted to a staffed station. This staffing led to a reduction in daily usage and post-consumer leftovers since each sandwich is made by a staff member – leading to better portion control. Also, since deli items are now in a controlled environment (behind the counter) there is more opportunity for safe re-use since there is no exposure to the public.
- **Salad Bar**
Reviewed vessel sizes and waste by item. Changed layout of salad bar and moved to smaller display bowls; maintained variety without having excessive leftovers.

CONCLUSION

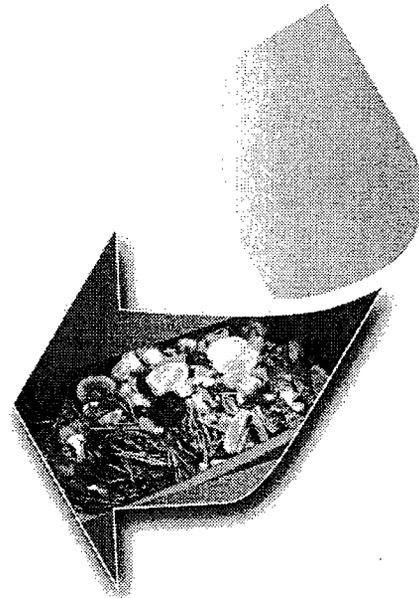
*"I was surprised at the steady lowering of waste as it was projected over the duration of the program. It is still going down, which makes me wonder where the bottom will be ... **zero waste?**"*

- Executive Chef Micah Cavolo from Jones Farm 5

Pre-consumer food waste was a significant challenge for Intel at the two participating cafés, with more than 1 ton produced per week. After implementing continuous daily food waste tracking and staff training and involvement, the sites:

- ✦ Reduced pre-consumer waste by 47%.
- ✦ Combined with other initiatives, reduced food costs per meal by 13.2%.
- ✦ Achieved environmental benefits including approximately 100 or more metric tons of avoided CO2 equivalent greenhouse gases (MTCO2e), annualized, split between upstream and downstream benefits (see Appendix).
- ✦ Created these results without adding any labor for tracking or expending any incremental labor dollars.

Along the way, the team identified numerous best practices which will be continued and can serve as a resource for other Chefs and food service managers.³



³ While this effort focused on waste prevention, the tracking process and training also validated existing practices and catalyzed new progress across other tiers of the food waste diversion hierarchy. For example, by the conclusion of the project, both cafés were sending pre-consumer fruit and vegetable trim waste to a local farmer for composting whereas only one site had done so previously. The sites purchased food from this farmer, thereby closing the farm-to-table loop. Both cafes had also implemented Bokashi composting of post-consumer food waste, whereas only one had implemented this prior to the project.

APPENDICES

APPENDIX A – GREENHOUSE GAS REDUCTION IMPACT

In addition to considering food waste reduction and cost reduction results, the study also evaluated avoided greenhouse gas emissions related to food waste prevention.

Methodology

Seven food types were selected among all the waste items tracked at Intel for further investigation of greenhouse gas avoidance:

- ✦ Bread/bakery (311810)
- ✦ Coffee (311920)
- ✦ Dairy (31151A)
- ✦ Fish (311700)
- ✦ Fruit/vegetables (1113A0)
- ✦ Poultry (311615)
- ✦ Beef (31161A)

Each of these was selected because upstream lifecycle data could be obtained for that item through the Carnegie Mellon Economic Input-Output Life Cycle Assessment EIO-LCA database. The number in parenthesis represents the EIO-LCA series code for that item. It should be noted that the EIO-LCA database does not account for indirect land use changes associated with increased or decreased agricultural production.

Each food waste item was assigned a value based on its net weight (the gross weight on the scale less the weight of the vessel containing the food) multiplied by an estimated cost per pound per item which was reviewed by Bon Appetit.

The cumulative totals for each item were calculated for consecutive periods ranging from 182 to 294 days per item. The amount of waste during the first week for each item was compared to the end week in the data set.

The weekly averted waste totals for each item were annualized to represent a 52 week year. This waste value was then adjusted by removing an allowance for wholesale and distribution costs (assumed to be 19% of the food service operator's purchase price) in order to arrive at the waste value expressed in producer prices.

The value was further adjusted to convert to 2002 dollars, the input required by the EIO-LCA 2002 dataset.

The data was then processed through the EIO-LCA tool to develop estimates of upstream metric ton carbon dioxide equivalent (MTCO_{2e}) avoided for each item.

Additionally, downstream landfill impacts were also estimated. These assumed that all food waste would be disposed of as mixed solid waste (not composting), using average disposal conditions for the Portland metropolitan area. Although the sites actually send their food waste to be composted, the emissions profile of composting is not well understood, and this case study modeled disposal as being more representative of a "typical" food waste generator. Coffee was not included as it would normally be disposed of as wastewater. The "dairy" category was included

because it is composed primarily of solid foods (cheese, yogurt) as opposed to fluid milk.

Avoided "downstream" emissions include reductions in fugitive methane emissions at landfills, incinerator nitrous oxide emissions, energy recovery offsets, and landfill carbon storage, consistent with the US EPA's Waste Reduction Model (WARM) tool.

The analysis focused only on greenhouse gas avoidance associated with the seven items identified above. Since the food waste stream included many other items, it is highly likely there are incremental avoided GHG savings beyond those described here.

Avoided Greenhouse Gas Emissions, Annualized

For Selected Items	Bread/ Bakery	Coffee	Dairy	Fish	Fruit/ Veg	Poultry	Beef	Total
Upstream								
Annual savings (to Operator), 2009 \$	\$5,512	\$5,928	\$4,680	\$1,456	\$16,692	\$10,504	\$14,976	\$59,748
Upstream GHG reductions, MTCO ₂ e	3.35	3.68	9.21	1.25	15.6	10.7	41.7	85.49
Downstream								
Annual pounds of waste prevented	2,704	12,636	1,560	312	30,888	8,892	4,940	61,932
Annual tons of "counting" waste prevented	1.35	0	0.78	0.16	15.44	4.45	2.47	24.65
Downstream GHG reductions, MTCO ₂ e*	0.62	-	0.36	0.07	7.12	2.05	1.14	11.36
Total Annual GHG Reductions, MTCO₂e/year	3.97	3.68	9.57	1.32	22.72	12.75	42.84	96.85

Thanks to the City of Hillsboro and Oregon Department of Environmental Quality for project management, Intel for the use of its cafes, LeanPath and Bon Appétit for project implementation, and Metro for project review and comment.



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The New York Times

June 16, 2013

Bloomberg Plan Aims to Require Food Composting

By MIREYA NAVARRO

Mayor Michael R. Bloomberg, who has tried to curb soda consumption, ban smoking in parks and encourage bike riding, is taking on a new cause: requiring New Yorkers to separate their food scraps for composting.

Dozens of smaller cities, including San Francisco and Seattle, have adopted rules that mandate recycling of food waste from homes, but sanitation officials in New York had long considered the city too dense and vertically structured for such a policy to succeed.

Recent pilot programs in the city, though, have shown an unexpectedly high level of participation, officials said. As a result, the Bloomberg administration is rolling out an ambitious plan to begin collecting food scraps across the city, according to Caswell F. Holloway IV, a deputy mayor.

The administration plans to announce shortly that it is hiring a composting plant to handle 100,000 tons of food scraps a year. That amount would represent about 10 percent of the city's residential food waste.

Anticipating sharp growth in food recycling, the administration will also seek proposals within the next 12 months for a company to build a plant in the New York region to process residents' food waste into biogas, which would be used to generate electricity.

"This is going to be really transformative," Mr. Holloway said. "You want to get on a trajectory where you're not sending anything to landfills."

The residential program will initially work on a voluntary basis, but officials predict that within a few years, it will be mandatory. New Yorkers who do not separate their food scraps could be subject to fines, just as they are currently if they do not recycle plastic, paper or metal.

Mr. Bloomberg, an independent, leaves office at the end of the year, and his successor could scale back or cancel the program. But in interviews, two leading Democratic candidates for mayor, Christine C. Quinn, the City Council speaker, and Public Advocate Bill de Blasio, expressed strong support for the program — including the plan to eventually make it mandatory.

Sanitation officials said 150,000 single-family homes would be on board voluntarily by next year, in addition to more than 100 high-rise buildings — more than 5 percent of the households in the city. More than 600 schools will take part as well.

The program should expand to the entire city by 2015 or 2016, the sanitation officials said.

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Under the program, residents collect food waste — like stale bread, chicken bones and potato peels — in containers the size of picnic baskets in their homes. The contents are then deposited in larger brown bins on the curb for pickup by sanitation trucks.

Residents of apartment buildings dump pails of food scraps at central collection points, most likely in the same places they put recyclable material.

It remains to be seen whether New Yorkers will embrace the program, given that some may cringe at keeping a container of potentially malodorous waste in a typically cramped urban kitchen, even if it is supposed to be emptied regularly.

The city has historically had a relatively mediocre record in recycling, diverting only about 15 percent of its total residential waste away from landfills.

In the latest 12-month period recorded, the Sanitation Department issued 75,216 summonses to home and building owners for failing to recycle. Officials expected that more summonses will be issued in the current fiscal year, because the department has redeployed personnel to recycling enforcement.

Still, the residential food-waste program would represent the biggest expansion of recycling efforts since the city began separating paper, metal and glass in 1989.

“It’s revolutionary for New York,” said Eric A. Goldstein, a senior lawyer with the Natural Resources Defense Council, a prominent environmental group. “If successful, pretty soon there’ll be very little trash left for homeowners to put in their old garbage cans.”

The city spent \$336 million last year disposing of residential trash, exporting most of it to landfills in Ohio, Pennsylvania and South Carolina.

Food waste and other organic materials account for almost a third of all residential trash, and the city could save about \$100 million a year by diverting it from landfills, said Ron Gonen, who was hired last year as deputy sanitation commissioner for recycling and sustainability, a new job at the department.

Experts have long criticized recycling as a weak spot in Mr. Bloomberg’s environmental record. But he appears to want to close out his tenure with a push to improve the program.

In his State of the City address in February, Mr. Bloomberg called food waste “New York City’s final recycling frontier.”

“We bury 1.2 million tons of food waste in landfills every year at a cost of nearly \$80 per ton,” he said. “That waste can be used as fertilizer or converted to energy at a much lower price. That’s good for the environment and for taxpayers.”

The city does not handle commercial waste — businesses must hire private carters. But the administration intends to propose legislation that would require restaurants and food businesses to recycle their food waste.

A central question for the next mayor and City Council will be when to make residential recycling of food waste mandatory, with violators subject to fines. Garbage disposals remain relatively rare in the city.

Mr. de Blasio called diverting trash from landfills “crucially important to the environment and the city’s fiscal health” and said he would like to have a mandatory program within five years.

Ms. Quinn said the City Council would take up a bill this summer to require pilot programs across the city to ensure that voluntary recycling of food waste continues, regardless of who is mayor.

She said a mandatory program should be in place by 2016.

“We’re going to lock it in,” she said. “When New York makes composting part of everyday life, every other city will follow through. This is going to create an urban trend.”

Sanitation officials said they had been heartened by recent pilot programs.

At the Helena, a 600-unit building on West 57th Street in Manhattan, bins are kept in the trash rooms on each floor and emptied daily by workers.

The building’s owner, the Durst Organization, said the weight of the compostable material had been steadily rising, to a total of 125 pounds daily.

In the Westerleigh section of Staten Island, the city offered 3,500 single-family homes brown bins, kitchen containers and compost bags last April. Residents were told to separate out all foods, and even soiled paper like napkins and plates. Already 43 percent are placing their bins out on the curb for weekly pickups, said Mr. Gonen, the senior sanitation official.

Ellen and Thomas Felci, neighborhood residents, said they were eager to take part in the program — “for the good of the city,” Mrs. Felci said.

Everything now goes into the brown bin: things like corn husks and broccoli stems, but not meat (because Mr. Felci, 65, said he feared raccoons).

Mrs. Felci, 62, said that a week into the tryout she noticed a bad smell coming from the container, which she had placed next to the sink in the kitchen.

She solved the problem by dumping the contents into the bin outside more regularly and putting baking soda in the bottom.

But across the street, Joe Lagambina, 58, shunned the program. He said that recycling plastic and metal was already a burden, and that he would not separate food unless it was required by the city. He said his three daughters often mixed trash with recyclables.

“I’m the one who has to separate everything,” he said. “I go outside and there’ll be regular garbage in the blue can. It’s a pain.”

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"I have enough work," he said.

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Appendix 5

Examples of Information on Food Recovery:

Bill Emerson Good Samaritan Food Donation Act from Feeding
America

Acceptable Food to Donate and A Guide to Food Recovery for Chefs
and Managers from Food Recovery Network



The Bill Emerson Good Samaritan Food Donation Act P. L. 104-210

Background Guide¹

On October 1, 1996, President Clinton signed into law the Bill Emerson Good Samaritan Food Donation Act, a federal law to encourage the donation of food and grocery products to non-profit charitable organizations for distribution to needy people.²

The federal Good Samaritan law protects businesses, volunteers and non-profit organizations from civil or criminal liability in the course of donating apparently fit and wholesome food or grocery products for distribution to needy people. The federal Good Samaritan Act is designed to encourage donations of food and grocery products by providing a uniform, national standard of liability for donations.

The Emerson Good Samaritan Act converts Title IV of the National and Community Service Act of 1990, from "model" legislation to permanent law, and transfers the Good Samaritan law to Section 22 of the Child Nutrition Act of 1966. The federal Good Samaritan Act preempts the various state Good Samaritan statutes with a single, federal standard of criminal and civil liability in the donation of food and grocery products.³ Civil and criminal liability protection is extended to donors, persons, gleaners, and non-profit organizations arising from the nature, packaging, age, or condition of apparently wholesome food or apparently fit grocery products donated for distribution to needy people. Liability for donations is limited to acts of "gross negligence" or intentional misconduct, as defined by the Good Samaritan Act. The Good Samaritan Act also stipulates that local and state health regulations and workers' compensation laws are not altered or interfered with by the Act.

Brief Legislative History

In 1990, model Good Samaritan legislation was enacted the National and Community Service Act. At that time, Congress recognized the need to protect donors from liability, in order to increase private sector in-kind donations to charities serving the poor. The 1990 model

¹ This background guide is provided for informational purposes only. No representation is made to the applicability of the Bill Emerson Good Samaritan Food Donation Act to the actions of any individual or organization. Donors and potential donors should consult legal counsel regarding the applicability of the statute to their activities.

² P.L. 104-210, H.Rpt. 104-661.

³ P.L.104-210 pre-empts state Good Samaritan food donation statutes. The doctrine of pre-emption precedes from the U.S. Supreme Court which holds that certain matters are of such national, as opposed to local, character that federal law pre-empts state law.



legislation was used by several states in the drafting of their own Good Samaritan statutes. All 50 states enacted their own versions of the Good Samaritan legislation, with varying degrees of liability protection, coverage, types of food covered, definitions of donors and other standards.

From 1990 to 1996, the “patchwork” of varying state Good Samaritan statutes led some food manufacturers to either curtail donations of food, or limit the distribution of their donations to only certain states. Further proof of the problem was evidenced in a 1995 Market Potential Report commissioned by Second Harvest. The 1995 Report found that 83%, of more than 240 companies polled, cited “liability concerns” as the single greatest factor in determining whether or not a company would donate product.⁴ For example, 33 states and D.C, protect the donor from civil and criminal liability, while 17 states protect the donor only from civil liability. As the House Committee on Economic and Educational Opportunities noted: “These laws ... vary with respect to the types of food covered and the definition of donor and good faith.”⁵ Some companies, which are national in scope, were faced with the daunting task of determining their liability risk -- and the varying definitions of “good faith” and duties to inspect -- in each state before making a donation. The varying state standards of liability led some companies to destroy surplus food rather than donate for distribution to needy people.

To ease donor concerns and increase in-kind donations to charitable organizations, Representatives Pat Danner and Bill Emerson introduced H.R.2428, the Good Samaritan Food Donation Act. Their bill converted the model legislation into permanent law and, upon enactment, would supersede the varying 50 state statutes. The Good Samaritan legislation was amended to honor the deceased Congressman Bill Emerson, one of the bill’s original co-sponsors and a long-time advocate for hungry people. The legislation passed both chambers of Congress, unanimously, and signed into law on October 1, 1996.

President Clinton spoke to the importance of the legislation:

“Last October, I signed into law the good Samaritan Food Donation Act. This law encourages private businesses, local governments and ordinary citizens to donate food by protecting them from lawsuits. This can make a real difference. Second Harvest, a national food bank network, estimates that the Good Samaritan law will result in approximately 25 million pounds of food next year.”⁶

⁴ 1995 Market Potential Report for Second Harvest; Angell Research Group, Inc.; 1995. The Angell Group was asked to poll the food and grocery industry with the purpose of “determining the extent to which Second Harvest is maximizing potential in obtaining donations, and determining what actions or efforts would be most beneficial in maximizing donor contributions in the future.” As stated, among both current donors and potential donors, concerns over donated product liability were cited by respondents as the single greatest factor influencing their decision whether or not to donate.

⁵ House Report 104-661, page 3; Committee on Economic and Educational Opportunities, July 9, 1996.

⁶ Radio Address of the President to the Nation, November 23, 1996; Port Douglas, Australia.



For legislative intent, please see the House Report (#104-661) that accompanies the Good Samaritan legislation.

Chronology of Emerson Good Samaritan Food Donation Act

Sept. 29, 1995: The Good Samaritan Food Donation Act introduced by Representative Pat Danner, (H.R. 2428); referred to the House Committee on Economic and Educational Opportunities.

Oct. 13, 1995: H.R. 2428 referred to Subcommittee.

May 31, 1996: Subcommittee hearing held. Christine Vladimiroff, President and CEO of Second Harvest testifies in support of the legislation.

June 26, 1996: Subcommittee discharge, Committee consideration and Mark-up session. Bill reported by voice vote.

July 9, 1996: Reported to House, amended by the Committee on Economic and Educational Opportunities. Placed on Union Calendar. H.Rpt. 104-661 to accompany H.R.2428.

July 12, 1996: Called up by House under suspension of the rules, Passed House (amended) by voice vote. Unanimous.

Aug. 2, 1996: Received in the Senate, read twice and held at the desk. Senate companion legislation introduced by Senator Bond (S.1938).

Sept. 4, 1996: Measure (H.R.2428) laid before the Senate. Amended (SP5148 - Santorum/Leahy and SP5149 Santorum/Kennedy); passed (as amended) by Unanimous Consent. Message on Senate action sent to the House.

Sept. 5, 1996: On motion that the House agree to the Senate amendments, House Agreed without objection. Unanimous. H.R. 2428 cleared for the White House.

October 1, 1996: President signed H.R.2428, became P.L.104-210.

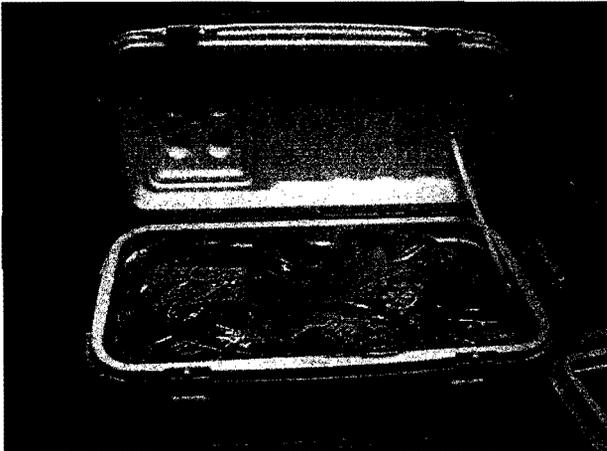
FOOD RECOVERY NETWORK

FIGHTING WASTE. FEEDING PEOPLE.

ACCEPTABLE FOODS TO DONATE

PRODUCTS ACCEPTABLE FOR DONATION:

- Unserved prepared entrees, side dishes, and desserts
- Self-serve items from a buffet if approved by your food donor
- Unopened containers of food, beverages, condiments, sauces, and spices
- Fresh produce
- Dairy products
- Fresh chilled or frozen meat



PRODUCTS NOT ACCEPTABLE FOR DONATION:

- Food that will not make it to the recipient organization's refrigeration within less than two hours in the Temperature Danger Zone (41-135 F)
- Home canned, vacuum-packed or pickled foods
- Perishable foods past a "use by" date, unless frozen
- Foods in sharply dented or rusty cans
- Foods in opened or torn containers exposing the food to potential contamination
- Unpasteurized milk
- Foods with an "off" odor or color
- Foods prepared, cooked, cooled, or reheated at home (except for baked goods that do not need refrigeration)
- Donations from a donor that has experienced a power outage
- Foods that have been in fridge for over 5 days

The best rule of thumb is to ask yourself if you would eat the food...if the answer is no then you shouldn't donate it!



A Guide to Food Recovery for Chefs and Managers

August 14, 2013

**Authored by the Food Recovery Network
with the support of Bon Appétit Management Company**

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INTRODUCTION

The Food Recovery Network (FRN) unites students at colleges and universities to recover surplus perishable food from their campuses and surrounding communities that would otherwise go to waste and donate it to people in need. Students pick up wasted food from dining halls and drive it to local hunger fighting agencies. Since its founding in September of 2011, FRN has expanded to more than twenty-three college campuses and has recovered over 166,000 pounds of food.

This guide was authored with the support of Bon Appétit Management Company (BAMCO), an onsite restaurant company that provides café and catering services to corporations, colleges and universities, and specialty venues at over 500 locations in 32 states across the country. This guide is a compilation of best practices that FRN and BAMCO have learned through their extensive experience in food recovery, specifically for chefs and dining managers. BAMCO deeply values environmental sustainability as well as community and student engagement and recommends participation in Food Recovery Network.

PROBLEM AND SOLUTION

The Problem

Food is the largest component of America's waste stream. **70 billion pounds** of food is wasted each year, while simultaneously **50 million Americans - 1 in 6** - don't have access to sufficient amounts of food. One in four American children falls into this category. This costs Americans **\$165 billion** every year and accounts for 25% of freshwater use, 4% of oil consumption, and **25%** of the **US methane emissions**, a greenhouse gas 21 times more harmful than carbon dioxide.

College campuses often generate an unavoidable amount of pre-consumer food waste that could be donated. Food Recovery Network's market research found that **75% of colleges do not have a food recovery program** in place amounting to approximately 2,200 colleges with **22 million pounds of wasted food each year**.

The Solution

Food Recovery Network (FRN) is a 501(c)(3) nonprofit that formed to address the two issues of food waste and hunger with one simple, student-led model of food recovery on college campuses. FRN unites, inspires, and trains college students to recover excess food from their campus eateries and nearby restaurants and donates this food to partner agencies in their communities that feed the hungry in their local area.

FRN provides a new model of campus food recovery that is lean and easily replicable. Our model is student-driven and involves delegating meal planning and serving to local nonprofit partners. We provide these partners with a reliable, supplemental source of delicious and nutritious food that is high in protein and vegetables often not on their menu. In the economic downturn, many agencies saw their budgets slashed and the need rise. Our donations allow our nonprofit partners to spend less money on purchasing food in order to preserve other vital programming to help Americans in need get back on their feet. Meanwhile, donors are protected from liability under the Bill Emerson Good Samaritan Food Donation Act, and our food safety protocol meets all federal guidelines.

BENEFITS AND PURPOSE

Help the Community

- ▶ 1 in 7 American households are food insecure
- ▶ Participating in FRN helps feed hungry people in your community with food that would otherwise go to waste

Improve Your Bottom Line

- ▶ Reduce waste hauling fees
- ▶ Cut costs by developing new waste reduction strategies
- ▶ You may be eligible for an enhanced tax deduction*



Bolster Sustainability

- ▶ Food recovery helps reduce food waste, America's largest waste stream
- ▶ Organic waste emits methane, which is 21 times more harmful than carbon dioxide
- ▶ Source reduction and donating food to feed people are the best ways to reduce food waste

Attract Good PR

- ▶ Get recognized in news outlets

- ▶ Get complimentary window stickers to highlight your participation to students and parents

Easy for Dining Services

- ▶ Dining Services carts unsold surplus food to student volunteers
- ▶ Students typically handle packaging and transport
- ▶ Reducing waste is our ultimate goal. FRN provides data on food you donate to help you reduce quantities

Liability Protection

- ▶ The Bill Emerson Good Samaritan Act protects all good faith food donors from liability
- ▶ Thousands of businesses, universities, and even the federal government donate surplus food regularly

Food Safety

- ▶ FRN's Food Handling Guidelines meet FDA and ServSafe standards and were developed with food safety professionals at Bon Appétit
- ▶ Limit time in Food Temperature Danger Zone to less than 2 hours
- ▶ Proper personal hygiene
- ▶ FRN provides grants for shift leaders to become ServSafe certified



Food Recovery Endorsed by USDA, EPA, and Others

- ▶ In 2013, the USDA and EPA launched the Food Waste Challenge to encourage food waste reduction
- ▶ Your school can optionally sign on to this effort and meet the challenge by partnering with FRN

PROCESS

Getting Started

1. Meet with FRN student representative (and BAMCO Sustainability Fellow in your region if applicable)
2. Schedule a walk through with students and café staff (and the nonprofit receiving donations if applicable). Here some example discussion

questions for the meeting:

- a) Will staff or students be in charge of packaging the leftover food for donation?
 - b)
 - c) Who should students talk to when they arrive to pick up food?
 - d) What food items do they want you to save and how do they want them stored (frozen, refrigerated or hot off the line)?
 - e) What type of containers and how many are needed for food donations?
 - f) What days and times work best for donation pick ups?
 - g) What information needs to be included on labels?
3. Schedule a time to talk with your staff to explain how the food recovery will work. It is good to go over what foods can and cannot be donated, how they should be stored, and who is in charge of packaging the leftovers.

The Process

1. First collect the leftover food that can be donated and package it. Packaging can be provided by FRN or donated by you. Labels will be provided by FRN.



Wai Hon Chan is pictured packing food for donation for the Food Recovery Network chapter at Rochester Institute of Technology.



Luis Cotto of Bon Appétit Management Company helps students weigh donated food for tracking.



Students from the Whittier College Food Recovery Network Chapter load up their car with donated food to take to the nearby shelter.

2. Store the food in a designated part of the freezer or fridge if food is not being picked up immediately after being taken off the line.
3. Food Recovery Network volunteers will pick up the food at a scheduled day and time. Pickups should happen at least once a week if not more often for food safety purposes.
4. Food Recovery Network volunteers will take the food directly to a partner agency such as a community kitchen, church, senior center, or other organization that feeds people within the community.
5. If reusable containers are being used, Food Recovery Network will return the containers at their scheduled pick up time, and exchange fresh containers for ones filled with donated food.

***Even if the organization cleans the containers, make sure to run them through your dishwasher before use*

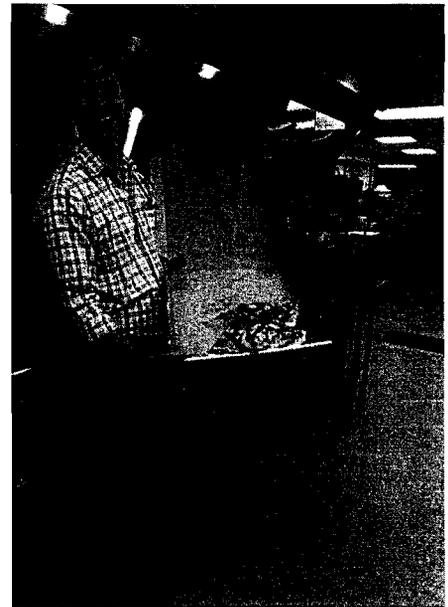
FOODS TO DONATE

Products acceptable for donation

- ☐ Unserved prepared entrees, side dishes, and desserts
- ☐ Unopened containers of food, beverages, condiments, sauces, and spices
- ☐ The following unused products:
 - o Fresh produce
 - o Dairy products
 - o Fresh chilled or frozen meat
 - o Non-food items

Products NOT acceptable for donation

- ☐ Food that has been in the Temperature Danger Zone for more than two hours/will not make it to shelter within two hours of being in the Temperature Danger Zone
 - Home canned, vacuum-packed or pickled foods
- ☐ Perishable foods past a "use by" date, unless frozen
- ☐ Foods in sharply dented or rusty cans
- ☐ Foods in opened or torn containers exposing the food to potential contamination
- ☐ Self-serve items from a buffet
- ☐ Unpasteurized milk



Leo Fraser, General Manager for Bon Appétit Management Company, shows that saving a little food goes a long way!

- ☒ Foods with an “off” odor or color
- ☒ Foods prepared, cooked, cooled, or reheated at home (except for baked goods that do not need refrigeration)
- ☒ Donations from a donor that has experienced a power outage
 - Has been in fridge for over 5 days

The best rule of thumb is to ask yourself if you would eat the food...if the answer is no then you shouldn't donate it!

Commonly Donated Food

1. Soups and stews
2. Entrees like lasagna, rice dishes, or pizza
3. Baked goods such as day old pastries
4. Packaged items like sandwiches from our grab and go markets
5. Produce that is too ripe to sell or cosmetically damaged but fine to eat

TIPS FOR SUCCESS

- Designate a food recovery point person on staff. They are the person that will oversee the program and serve as the contact for the organization.
- Start off with aluminum pans for the first week or two of donations to get a sense of how much food you will be donating on an average basis. That way you know how many containers you will need and what sizes are best.
- Make sure to check in with Food Recovery Network after the first month of donations to see how things are going on their end.
- Be flexible! Especially during the first month of the program there will be a few kinks to work out.

EXAMPLE RECOVERY PROTOCOL AT UNIVERSITY OF MARYLAND COLLEGE PARK

Below is a peek at how a sample chapter of FRN runs. Please remember that this is just an example, and every chapter is a little bit different.

1. Between 3 and 5 student volunteers can enter through the back loading dock at 8:50pm. You can park in the back loading dock. Ring the doorbell and ask for Chef Rob.

2. Students must have proper foot wear and pants in order to be in the kitchen. Long pants and closed toe foot wear only, no shorts or open toe foot wear is allowed in the kitchen area. Please be aware that kitchen floors get wet and greasy at times and there is hot equipment turned on at all times. Please be cautious and aware when walking through the kitchen.
3. Students will be allowed to gather a cart, sheet pans and utensils from the dish area but must not venture into any other area of the kitchen.
4. Trays, lids, latex gloves and spoons are supplied by Dining Services and will be stored in the 251 North kitchen.
5. Cooks will bring products that are being recovered to the kitchen area where the students will transfer products into aluminum trays and put lids on them for transport.
6. Record each item and the approx. number of servings.
7. Students will neatly stack empty food pans and clean the table areas where food was repackaged. Students will request a dishwasher pick up the empty food pans.
8. Student will transport the recovered food to the loading dock. If you use a cart, please make sure it is neatly placed back inside.
9. FRN at UMD's partner shelters for Spring 2012 are So Others Might Eat (Mon and Fri), Gospel Rescue Ministries (Tues and Wed) and Community for Creative Non-Violence (Thurs). Drive the food down to the appropriate shelter and unload the food.
10. Make sure you log your recovery on our Google form after every pickup.



FREQUENTLY ASKED QUESTIONS AND CONCERNS

Am I protected from liability?

Yes! Unless you knowingly donate food that is unsafe, you are protected from liability under the Bill Emerson Good Samaritan Food Donation Act, which was signed into law in 1996 as a way to encourage food donation of surplus food.

What about food safety?

FRN is a national organization with a dedication to strict food safety guidelines, and a proven track record of responsible food handling. FRN has a HACCP (Hazard Analysis and Critical Control Points) plan that we review with Leadership Team members of all chapters, who in turn provide training to all of their volunteers. In addition, all prepared food that is recovered will be kept at correct temperature (either frozen or hot) throughout the recovery process, through the use of thermal bags while transporting the food. In addition, when possible, we certify one member of each chapter in ServSafe practices.

What health codes apply?

All normal food safety protocols apply here. There is nothing specific for food recovery. All local, state, and health codes apply. Your management should already be very familiar with these health codes and can help ensure that the food recovery program complies with them.

Will food recovery cost me anything?

Food recovery doesn't cost dining services anything, except possibly a small amount of staff time and packaging materials. At some of our chapters, FRN volunteers package the food, and at some chapters, staff members package the food. Additionally, dining services can donate packaging or FRN can cover the cost. These decisions are up to individual chapters and their dining services. Another potential cost is storage space because some dining services store leftover food in their freezers until FRN volunteers come to pick it up, but it is not an expectation.

How much work will it be for our staff?

It depends on how involved you want to be! Dining hall staff will spend anywhere from a few minutes to a few hours a week assisting with the recovery process. If students are packaging the food, then the only staff time needed will be workers identifying which food will be recovered. Generally, the time it takes to help recover food is the same amount of time it would take workers to dispose of leftover food.

What type of packaging will be used?

Again, a lot of schools use different types of packaging, but three types of packaging seem to be consistently the most efficient and widely used. The first is single-use aluminum trays, with the accompanying lids. These are useful because they are the same size as serving pans. The second type of commonly used packaging is Ziploc bags. They freeze very well, come in a variety of sizes, and are extremely cheap. The third option is re-usable containers (essentially, heavy-duty Tupperware). This is the most expensive option in the short-run, but it pays off in the long run and is the most eco-friendly. Thermal bags are also used for containing the packaging during transportation.

How will the food be transported?

The food can be transported by students or local hunger fighting agencies. If the food will be transported by students, they will use either personal vehicles or university vehicles (some schools have a community-service van that students can use). The food will be transported in thermal bags, to ensure that it stays at the correct temperature, and to comply with all food safety procedures. Student volunteers are trained in food safety handling.



Students show off their food safe thermal bags for transporting the donated food!

Where will the food be going?

Each local program picks where to donate the food, but all of our chapters freely provide food to local hunger fighting agencies.

How often will volunteers recover the food?

This will be decided by the dining services and students. The frequency of pickups depends on the amount of food you have to donate as well as your cafés storage capacity. Our chapters range from recovering nightly, to recovering food every other day or a few times a week. If pick-ups aren't done nightly, the food will be kept frozen until it is picked up by the volunteers.

How many different volunteers will there be?

This also depends on the size and structure of the program at your particular schools, but FRN uses a model of involving existing campus groups in recoveries. Therefore, if there are recoveries every night, there will be 7 different student groups recovering food. Depending on how packaging is handled, each students group will send an average of 2-5 volunteers each night.

How should we store the food? Does this require any space?

The way the food is stored depends on when the recoveries take place. If the program is set up so that volunteers recover the food after every meal, then food does not need to be stored and can be directly transported to the shelter. If food is not recovered directly after the meal, then it should be frozen. The food can either be stored in dining hall freezers or in a freezer provided by FRN.

Do I get a tax credit for donating food?

If you are a for-profit food service company and you own the food being donated, you can claim an enhanced tax deduction for donating surplus food. You can find details of the tax deduction here: <http://www.foodtodonate.com/pdfs/FDC%20Intro%202013.pdf>. Usually, the tax savings are equal to twice the normal tax savings if the food were thrown out.

Is FRN a 501c3 nonprofit organization?

Yes.

What makes FRN unique?

FRN is the only entirely student-run food recovery program in the country.

We have very few leftovers, can we still donate?

You probably have more than you think and Food Recovery Network will pick up as little as 10 pounds of food. If you are



skeptical about the amount you have to donate, do a trial run and collect and track the amount of food you would donate on an average week to see how much it amounts to...you may be surprised at what you find!

What if we don't do regular food service in the summer?

This is a common concern from educational accounts. You can have a regular donation program during the school semesters and then during summer and winter breaks you can do donations on an "on-call" basis or not at all.

What if I don't have much space to store and save food?

Most organizations can work with you to schedule more frequent pickups if that is the case. Some of our accounts donate once a week and others donate everyday

But we already compost, isn't that just as good?

Composting is good but donating is better. Financially, you may save money in reduced compost hauling bills. Environmentally, the energy that went into growing, transporting, and preparing that food doesn't get wasted. And socially, hungry people in your community get fed!

RESOURCES



UNIVERSITY OF MARYLAND

DEPARTMENT OF DINING SERVICES
DIVISION OF STUDENT AFFAIRS

1150 South Campus Building
College Park, Maryland 20742-8411
301.314.8054 TEL 301.314.9764 FAX
www.dinmg.umd.edu

Dear College and University Dining Directors,

By way of introduction, I'm the Director of Dining Services at the University of Maryland, College Park. I'm writing to let you know of a wonderful opportunity to support your local community and possibly reduce expenses for your dining program.

For the last two years, Dining Services has worked with The Food Recovery Network, a student-run organization that recovers surplus food from UMD dining halls and from Byrd Stadium concessions stands and donates it to So Others Might Eat (SOME) and other local shelters in the Washington, DC area.

The Food Recovery Network is eager to expand this initiative and recover surplus food from other campuses like yours. I would highly recommend you consider the benefits of joining as a donor in this effort - in my experience they have been very professional and flexible and they are truly making a difference in our community.

Let me detail how the program works - a team of trained volunteers arrive at our dining halls at a time we specify; then our staff aggregates any food items that were not sold/served during the meal period and that cannot be saved and reheated for sale the next day; the volunteers transfer this food into trays and transport it immediately to partner shelters. We are proud that our partnership resulted in over 10,000 donated meals last year.

Working with the Food Recovery Network has also saved us money by helping our dining hall teams be more aware of the type and amount of leftovers we have - we are tracking production more closely and we are cooking in smaller batches. It has also encouraged our Chefs to modify recipes and look for ways to better utilize leftovers. And when there is waste, everyone has an increased level of satisfaction when items we can't reuse go to someone in need, rather than to the compost bin.

All restaurants donating leftover food in good faith are protected from liability under the federal Bill Emerson Good Samaritan Food Donation Act and the National Restaurant Association encourages donating leftovers whenever reasonable and possible. Most importantly though, our involvement shows that food service is not just an industry, but a community of people who care about and provide for others in need.

I hope you will join with the University of Maryland by joining the Network!

Sincerely,

Colleen Wright-Riva
Director, Department of Dining Services
University of Maryland College Park

THE BILL EMERSON GOOD SAMARITAN FOOD DONATION ACT OF 1996

(Protecting Our Food Partners, 2013)

The Bill Emerson Food Donation Act

One Hundred Fourth Congress of the United States of America

At the Second Session

Begun and held at the City of Washington on Wednesday, the third day of January, one thousand nine hundred and ninety-six.

An Act

To encourage the donation of food and grocery products to nonprofit organizations for distribution to needy individuals by giving the Model Good Samaritan Food Donation Act the full force and effect of law.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

Section 1. CONVERSION TO PERMANENT LAW OD MODEL GOOD SAMARITAN FOOD DONATION ACT AND TRANSFER OF THAT ACT TO CHILD NUTRITION ACT OF 1966.

(a) Conversion to Permanent Law. -- Title IV of the National and Community Service Act of 1990 is amended --

1. by striking the title heading and sections 401 and 403 (42 U.S.C. 12671 and 12673); and
2. in section 402 (42 U.S.C. 12672) --

(A) in the section heading, by striking "model" and inserting "bill emerson"

(B) in subsection (a), by striking "Good Samaritan" and inserting "Bill Emerson Good Samaritan:"

(C) in subsection (b)(7), to read as follows:

"(7) GROSS NEGLIGENCE. -- The term 'gross negligence' means voluntary and conscious conduct (including a failure to act) by a person who, at the time of the conduct, knew that the conduct was likely to be harmful to the health or well-being of another person.";

(D) by striking subsection (c) and inserting the following:

"(c) LIABILITY FOR DAMAGES FROM DONATED FOOD AND GROCERY PRODUCTS.

"(1) LIABILITY OF PERSON OR GLEANER. -- A person or gleaner shall not be subject to civil or criminal liability arising from the nature, age, packaging, or condition of apparently wholesome food or an apparently fit grocery product that the person or gleaner donates in good faith to a nonprofit organization for ultimate distribution to needy individuals.

"(2) LIABILITY OF NONPROFIT ORGANIZATION. -- A nonprofit organization shall not be subject to civil or criminal liability arising from the nature, age, packaging, or condition of apparently wholesome food or an apparently fit grocery product that the nonprofit organization received as a donation in good faith from a person or gleaner for ultimate distribution to needy individuals.

"(3) EXCEPTION. -- Paragraphs (1) and (2) shall not apply to an injury to or death of an ultimate user or recipient of the food or grocery product that results from an act or omission of the person, gleaner or nonprofit organization, as applicable, constituting gross negligence or intentional misconduct."; and

(E) in subsection (f), by adding at the end the following: "Nothing in this section shall be construed to supersede State or local health regulations."

(b) TRANSFER TO CHILD NUTRITION ACT OF 1966. -- Section 402 of the National and Community Service Act of 1990 (42 U.S.C. 12762) (as amended by subsection (a))

1. is transferred from the National and Community Service Act of 1990 to the Child Nutrition Act of 1966;

2. is redesignated as section 22 of the Child Nutrition Act of 1966; and

3. is added at the end of such Act.

(c) CONFORMING AMENDMENT. -- The table of contents for the National and Community Service Act of 1990 is amended by striking the items relating to title IV.

Newt Gingrich
Speaker of the House of Representatives

Strom Thurmond
President of the Senate Pro Tempore (Bloom,

2010) Approved 10/01/96

William J. Clinton
President of the United States
P.L. 104-210

FOOD RECOVERY NETWORK

FIGHTING WASTE. FEEDING PEOPLE.

FOOD RECOVERY NETWORK – HACCP PLAN

Updated: 1/13/2013

1) Potential Hazards

a. Biological

- a.i. Bacteria
- a.ii. Viruses

b. Physical

- b.i. Hair
- b.ii. Dirt/Debris from Transport

2) Critical Control Points (CCP)

- a. Temperature of food when received
- b. Personal Hygiene
- c. Transport Time
- d. Temperature of food upon arrival to establishment
- e. Preparation of food at establishment

3) Critical Limits

a. Temperature and condition of food when received

- a.i. Food should be removed from hot – Holding at 135°F or above
- a.ii. Food should be removed from cold – Holding at 41°F or below
- a.iii. Food should be in safe, non-absorbent, leakproof pans
- a.iv. Food should be cooked before transport

b. Personal Hygiene

- b.i. Volunteers need to wash hands before handling food
- b.ii. Clean transport vehicles
- b.iii. Volunteers are required to wear gloves while handling food
- b.iv. Volunteers must have hair pulled back of shoulders or wear a hat/hairnet

FOOD RECOVERY NETWORK

FIGHTING WASTE. FEEDING PEOPLE.

FOOD RECOVERY NETWORK – HACCP PLAN

Updated: 1/13/2013

c. Transport Time

c.i. Transport shall take no longer than 2 hours total, (including time from removal of holding)

d. Temperature of food upon arrival to establishment

d.i. If total time for transport (removal of holding-transport), is 2 hours, temperature must
temperature must be 70°F or below for hot food

d.i.1. Cold food must not be above 70°

e. Preparation of food at establishment

e.i. Establishment should be given instructions on proper reheating techniques.

4) Monitor you CCPs

- a. Check temperatures using a clean and sanitized thermometer
- b. Log temperatures into a chart
- c. Inspect Vehicle Cleanliness

5) Identify Corrective Actions

- a. Work with both establishments to ensure safety
- b. Correct policies/procedures as needed

6) Verify that the plan works

7) Keep records/documentation on file

- a. Keep for 365 days

A-72

Appendix 6

“What Do We Know About MoCo’s Food System?”
Montgomery County Food Council
April 17, 2013

What Do We Know About MoCo's Food System?

Compiled Data and
Preliminary Mapping from the MoCo
Food Council and its Partners

April 17, 2013

Thank you to our Food Council
volunteer intern, Liz Ducey, Amanda
Behrens and her colleagues at the
Center for a Livable Future, and the
Food Council's many volunteers who
have worked to compile and map this
information

Background Data

Land Use

The County has a unique landscape with well defined rural, suburban, and urban areas

We are 491+ square miles or about 316,800 acres

93,000 of these acres are in the County's Agricultural Reserve

Sources: www.montgomerycountymd.gov/agsservices

Additionally, $\frac{3}{4}$ of the Agricultural Reserve has been preserved

106,735 or 37.8% of the County is zoned for traditional agricultural activities

56% of the County's land is zoned for rural, low, medium, and high density residential communities and neighborhoods

The remainder is zoned for commercial, industrial, mixed use, and office development

<http://www.montgomeryplanning.org/development/zoning/documents/PHEDBriefingApril52013.pdf>

Importance of improving regulations for agriculture in ag reserve, County's suburban and urban communities.

Note discrepancy between the Ag Reserve acreage and land reported to be zoned for agricultural use.

Farms

21.3% of the County's land (67,613 acres) is in farms according to the Department of Agricultural Services

Cash grains are the predominant agricultural land use covering 48,000 acres and farms

There are a total of 561 farms and 350 horticultural enterprises in the County

217 of these farms produce table crops

Sources: www.montgomerycountymd.gov/agservices

Farms employ more than 10,000 residents

Over 174 farms have annual sales of \$10,000 or more

Montgomery County was home to 4% of all Maryland farms in 2007

In 2007, Montgomery County was ahead of Howard and Prince George's Counties in number of farms, farm size, and farm value by sales

Sources: www.montgomerycountymd.gov/agservices
and

Courtney Edwards' Food and Farm Economy of Montgomery County
Feb 2013 for the Food Council's Value Chain Analysis Working Group

Market for Local Food

In 2007, the County's farms sold \$33 million in total agricultural products. Direct farm sales were \$3 million of total sales.

87 of our 561 farms (15%) had direct farm sales in 2007

Per capita food expenditures in 2007 were \$683 for fast food, \$728 in restaurants and \$3 for direct farm sales

Courtney Edwards' Food and Farm Economy of Montgomery County
Feb 2013 Value Chain Analysis Working Group
Source: USDA Economic Research Service, Food Environment Atlas

Big impact that shifting even just 2 or 3 dollars from fast food per capita spending to direct farm sales could have on economy and health

The County's Ag Services Division believes the Direct Sales number is low, possibly due to underreporting – figure estimated to currently be somewhere between \$5 and \$10 million. Hope is that 2012 Ag Census will provide better picture.

Food Retail

In 2011, Montgomery County residents spent \$1,948,933,012 at "foodservice and drinking places"

\$1,579,940,288 of these dollars were captured by the County establishments for a capture rate of 81%

On the other hand, food and beverage stores captured 127% of consumer spending during the same period

Page 31 of Montgomery County Snapshot: Council Districts by the Numbers
http://www.montgomeryplanning.org/research/documents/MoCoSnapshot_web.pdf

Food and Beverage Stores

2,132,489,256 (consumer spending)

2,707,980,786 (retail spending)

127% (capture rate)

575,491,530 (surplus)

Foodservice and Drinking Places

1,948,933,012 (consumer spending)

1,579,940,288 (retail spending)

81% (capture rate)

368,992,724 (unmet demand)

Health and Wellness

56.1% of adults were considered overweight or obese adults in 2011 compared to 51.1% in 2007

In 2011, 5.1% of the County's adults had diabetes. Adults over 65, women, and African-Americans have higher rates

29.6% of adults ate fruits and vegetables five or more times per day in 2010

All stats pulled from Healthy Montgomery, don't have data on children

Source: Maryland Behavioral Risk Factor Surveillance System (used by Healthy Montgomery)

<http://www.healthymontgomery.org/modules.php?op=modload&name=NS-Indicator&file=indicator&iid=4022891>

From Healthy Montgomery:

In 2007, diabetes was the seventh leading cause of death in the United States. In 2010, an estimated 25.8 million people or 8.3% of the population had diabetes. Diabetes disproportionately affects minority populations and the elderly and its incidence is likely to increase as minority populations grow and the U.S. population becomes older.

<http://www.healthymontgomery.org/modules.php?op=modload&name=NS-Indicator&file=indicator&iid=4023159>

Adult Fruit and Vegetable Consumption:

<http://www.healthymontgomery.org/modules.php?op=modload&name=NS-Indicator&file=indicator&iid=231163>

Food Security

In 2010, 70,510 or 7.9% of Montgomery County residents were considered food insecure. Almost 34,000 of them were children.

52% of the County's food insecure residents were eligible for SNAP benefits

Statewide 12.8% of residents were considered food insecure. Nationwide this figure is 16.1% or more than 48 million residents

Source: Feeding America (used by Healthy Montgomery)
<http://feedingamerica.org/hunger-in-america/hunger-studies/map-the-meal-gap.aspx>

Food Security

In Feb 2008, 26,231 residents were enrolled in the federal food supplement program. In Feb 2013, 67,799 were enrolled

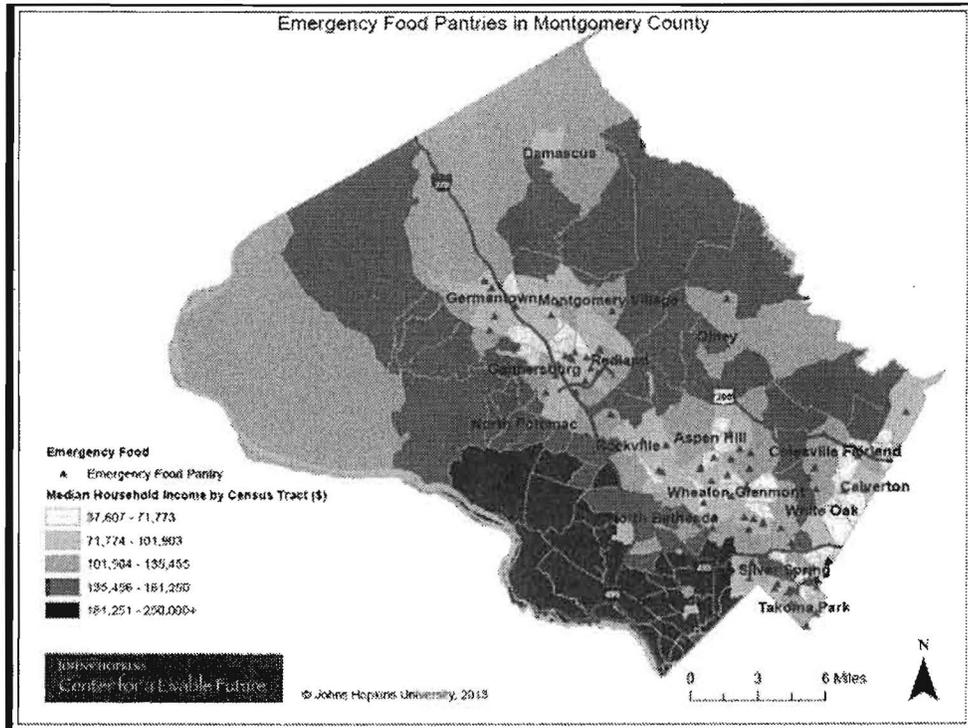
For 2012 to 2013, 33.2 % of the County's 148,593 school children eating school lunch qualified for free or reduced lunches

42.9% of children eating school lunch qualified for free or reduced lunches statewide over the same period

Source: MD Hunger Solutions

http://www.mdhungersolutions.org/pdf/countydata/montgomery_feb13.pdf

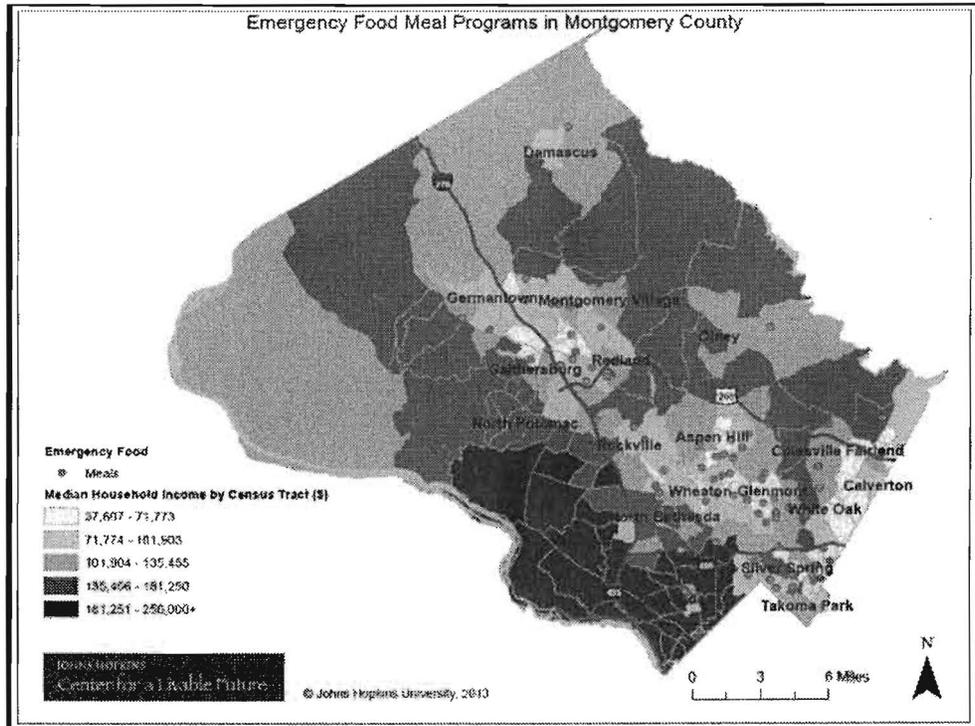
**What do some of these
and other data points on
the food system look like?**



In the Food Access Working Group, we are looking for gaps in food access. From different angles.

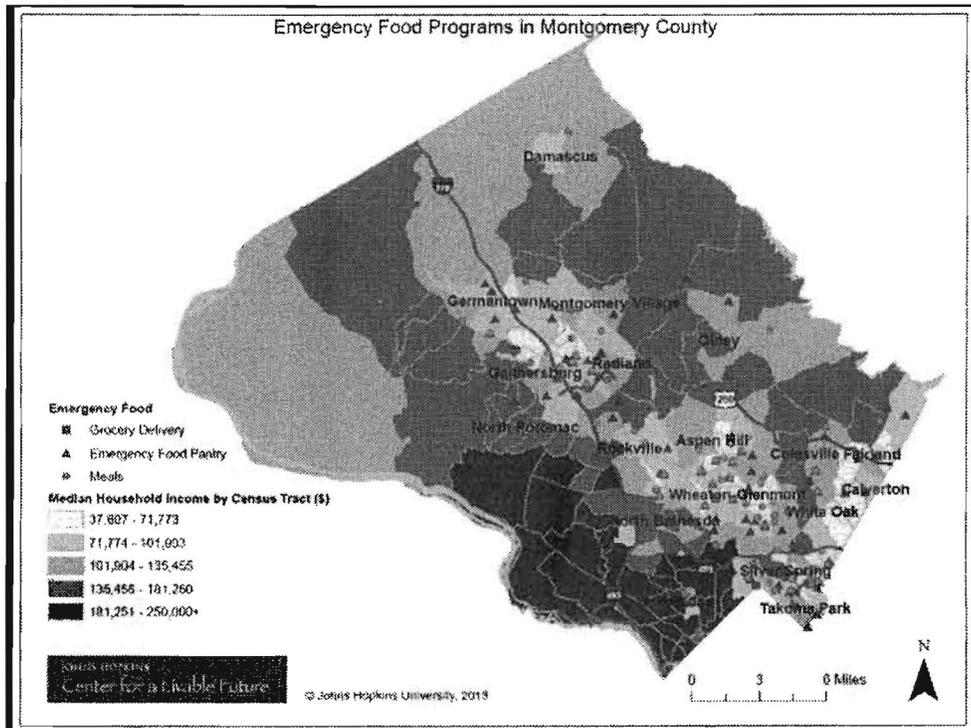
We started with emergency food providers. This map shows food pantries (where people can pick up grocery items) with household income. For the most part, these pantries are located in the lowest income areas.

114 Pantries



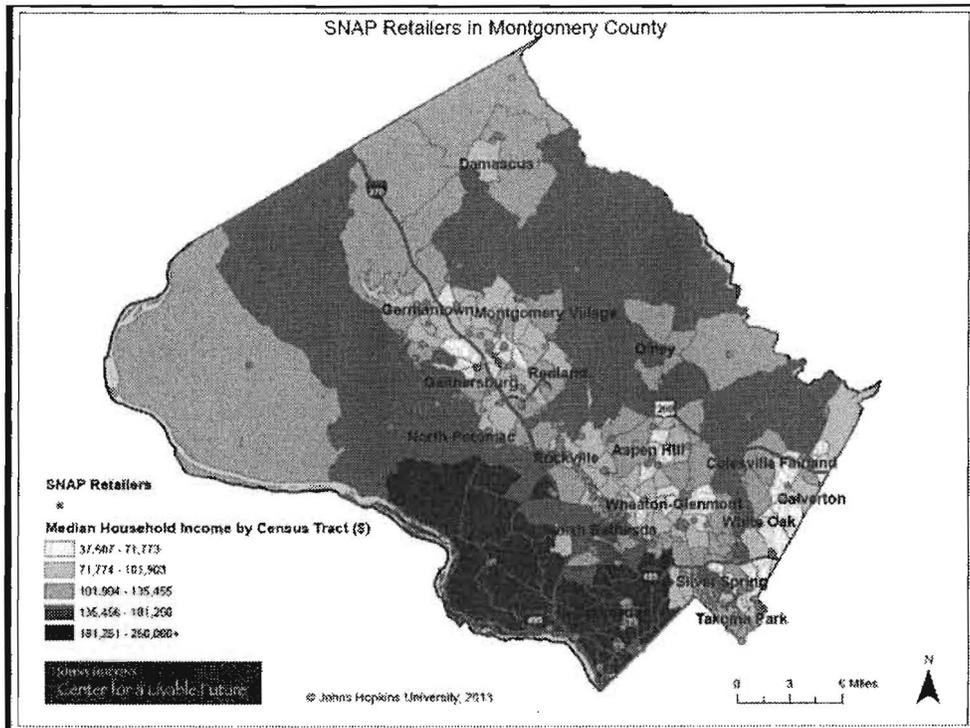
Next we looked at meal programs (where people can get hot meals), with household income. Again, they are mostly located in the lowest income areas.

99 meal programs



This map combines the two previous maps, to show all emergency food providers together. There is significant overlap in their locations, which suggests that these programs are located where there is the most need. But to truly understand if emergency food needs are being met, we will need to do a more granular analysis, at the community level.

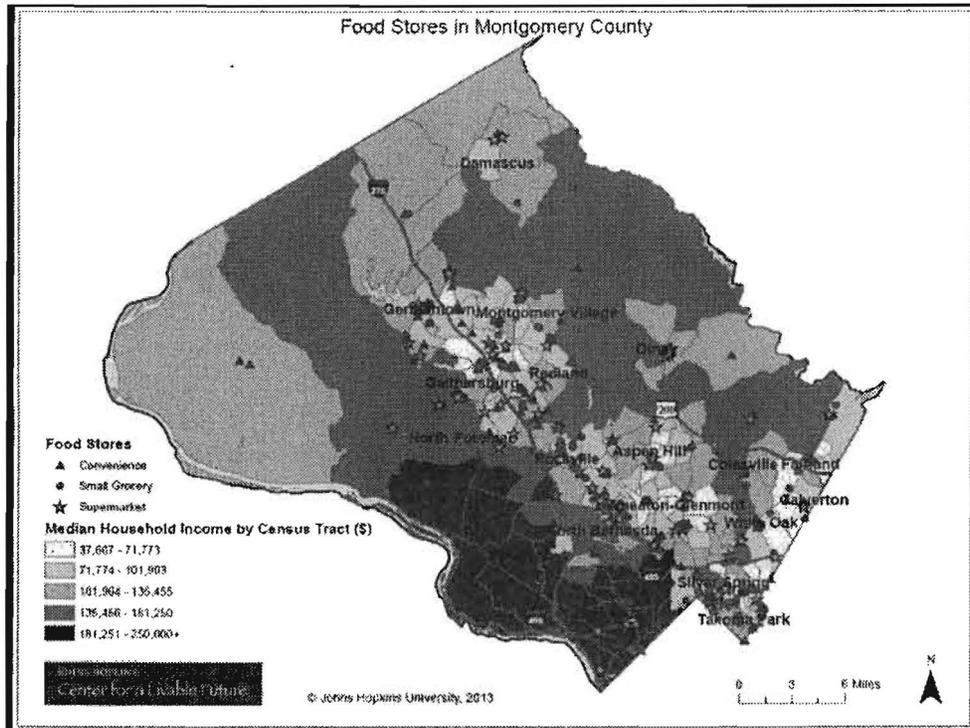
- 219 TOTAL providers
- 119 pantries
- 99 meals
- 5 other (delivery/discount)



In addition to emergency food, we've also looked at those food outlets that accept food stamps, or SNAP (supplemental nutrition assistance program).

While most of these are also located in the lower income areas, we see a different pattern, as food stores are typically situated along major roads.

It is interesting to note that some locations are within the highest income areas.

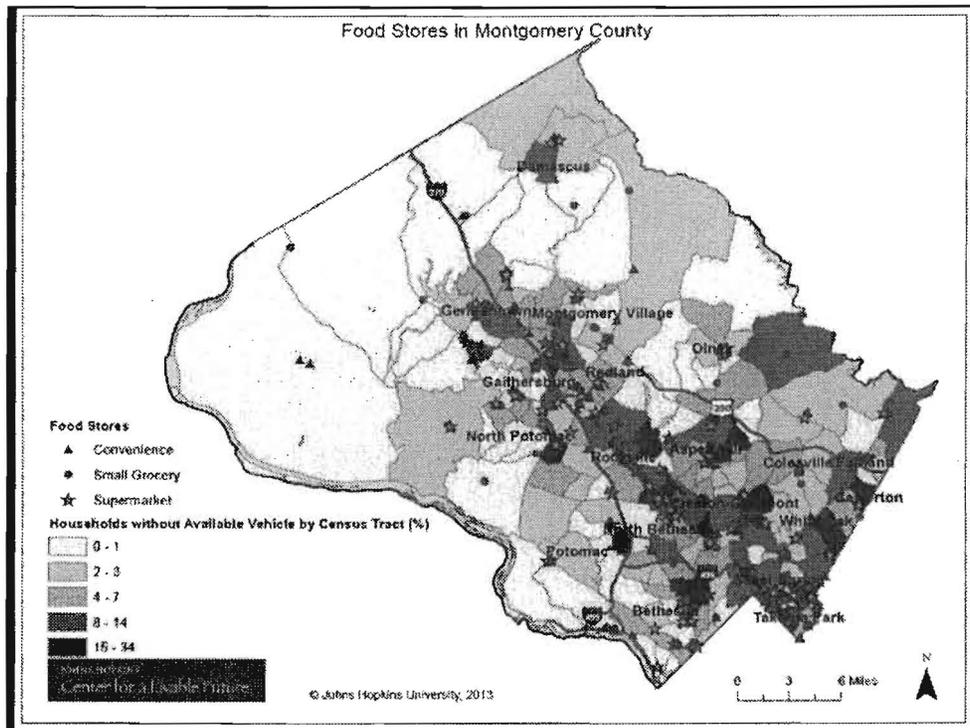


Next we look at all food stores. Many of these stores are the same locations as the previous map, meaning that they are in fact SNAP retailers. But this map shows the different types of food stores – supermarkets, small groceries and convenience stores.

This is important when thinking about the quality of food that is available for purchase with SNAP benefits. There are no restrictions on what you can buy with SNAP benefits, other than no tobacco, alcohol or hot meals, so you can purchase anything from fruits and vegetables, to chips and soda. The quality, quantity and price of food options will impact what people spend their SNAP benefits on.

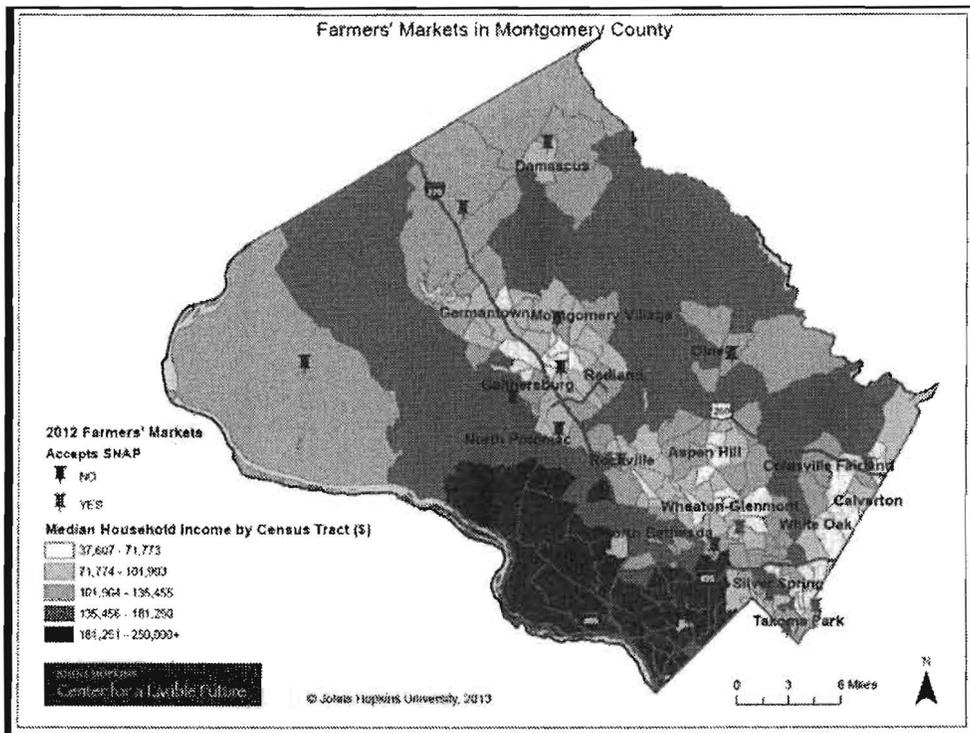
183 convenience stores (7-11 and gas station convenience stores)
 155 small grocery (neighborhood and ethnic markets that provide a variety of grocery items)
 85 supermarkets (mostly safeway and giant, but includes harris teeter, whole foods, costco, aldi, trader joes)

Additional stores 3 specialty markets (2 seafood, 1 produce), 63 pharmacy (CVS, Rite Aid, Walgreens), 27 discount stores (dollar tree, family dollar, etc.)



Example of other demographics that we can look at – access to vehicles. Same food stores as the previous map.

Note the pockets where at least 15% of households do not have vehicles. Surprising in this county. Solutions to food access should take this into consideration (ex. Shuttles to supermarkets, rather than new markets).

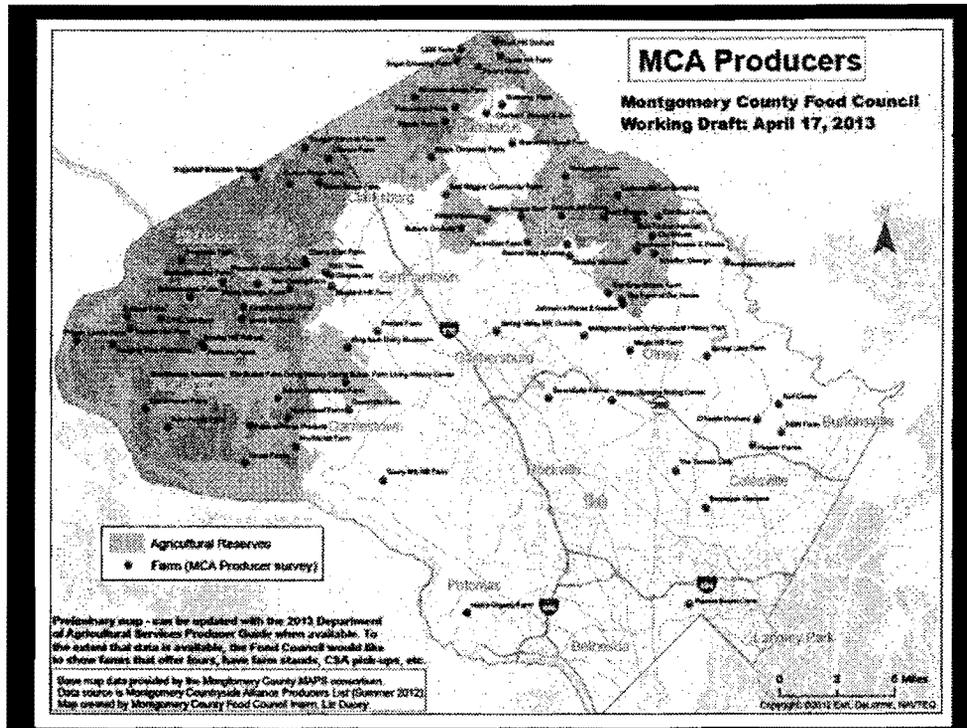


The final map that has been made for the FAWG – farmers markets and income.

6 of 19 farmers markets do accept SNAP. (Note: this list of markets from 2012, may be a few new this year, and potentially more or less that accept SNAP)

There is a pattern to where these markets are located – all in the southeast region. Why is this, just because it is lower income, or something else? Interest, willingness of farmers? Can we expand the reach of SNAP at farmers markets?

**Other components of MoCo's
Food System:
Liz Ducey's Maps**

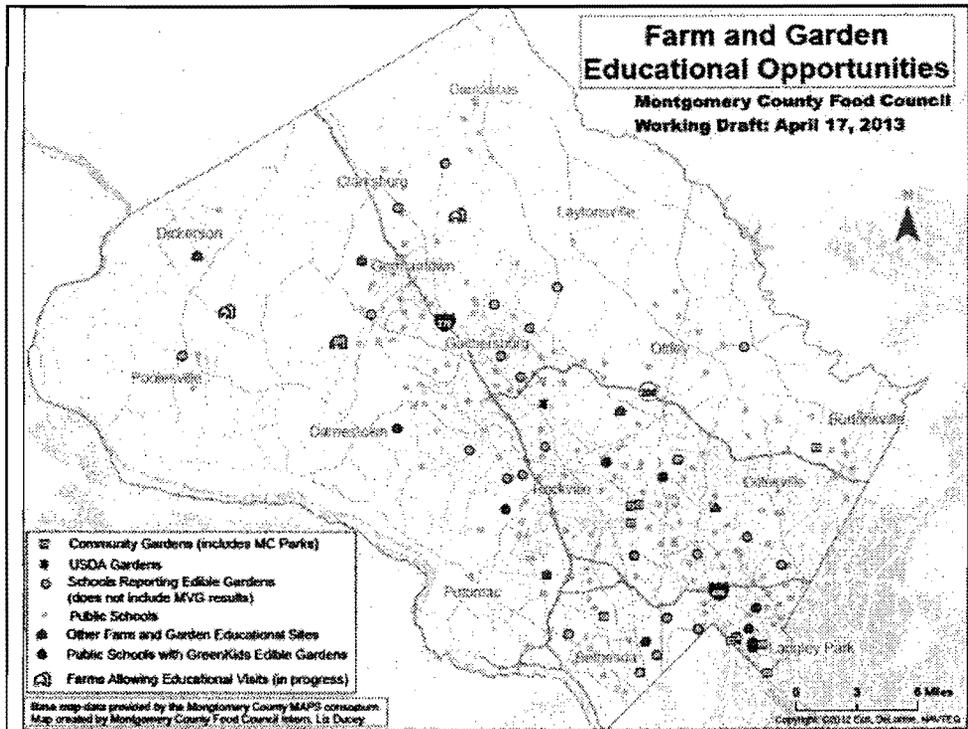


MCA Farms

83 farms are currently displayed, 54 of which are located immediately within the agricultural reserves, with more being located nearby with an additional 13 farms being located within a mile of the main reserve boundaries (approximately 80% of the farms in Montgomery County).

The agricultural reserves are displayed in green on the map, with overlapping sections creating darker green areas.

For this map, we'd like to continue to identify any farms we do not have in our database yet, and highlight farms that provide tours, have farm stands, participate in CSA pick ups, etc.



This initial map is showing:

10 community gardens

(Data from Montgomery Parks.org—Patricia Lynch)

2 USDA Gardens

(Montgomery Farm Park, Fenton Oaks)

24 Public Schools that report having edible gardens

3 Farms that participate in educational visits

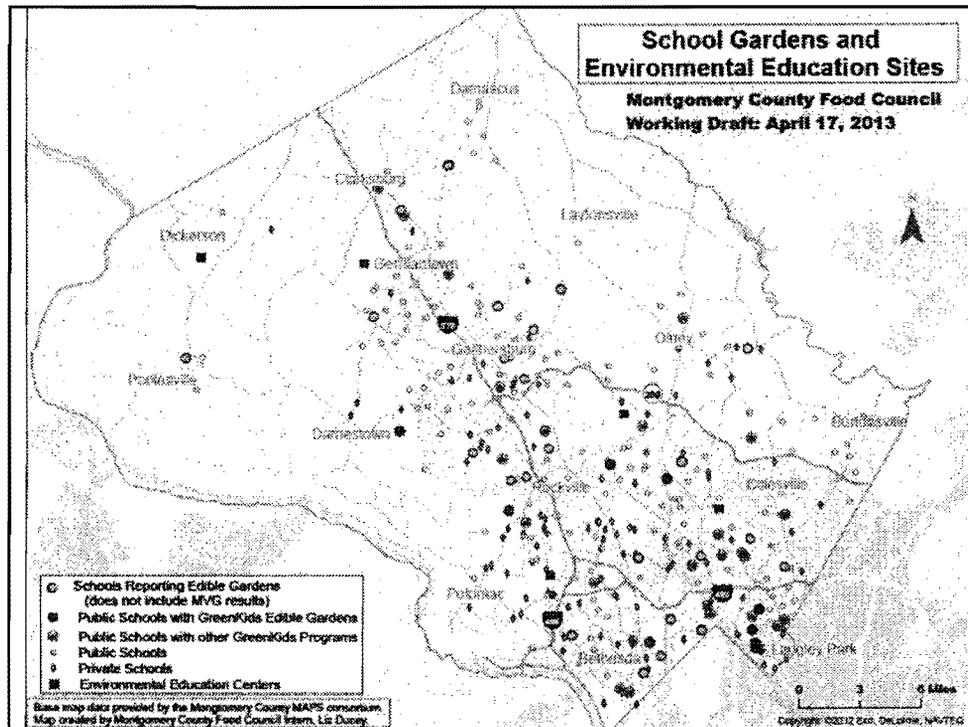
(Lewis Orchard, King Barn Dairy Mooseum, and Butler's Orchard)

5 Educational Sites, including Brookside Gardens!

(Meadowside Nature Center, Black Hill Regional Center, Locust Grove Nature Center, Brookside, Landscape and Natural Discovery Center)

Montgomery County Public Schools are also displayed in a lighter color as a reference of where programs can expand from currently participating schools to nearby schools.

For this map, we would like to add any schools involved with edible gardens, community gardens, etc. that are not currently shown



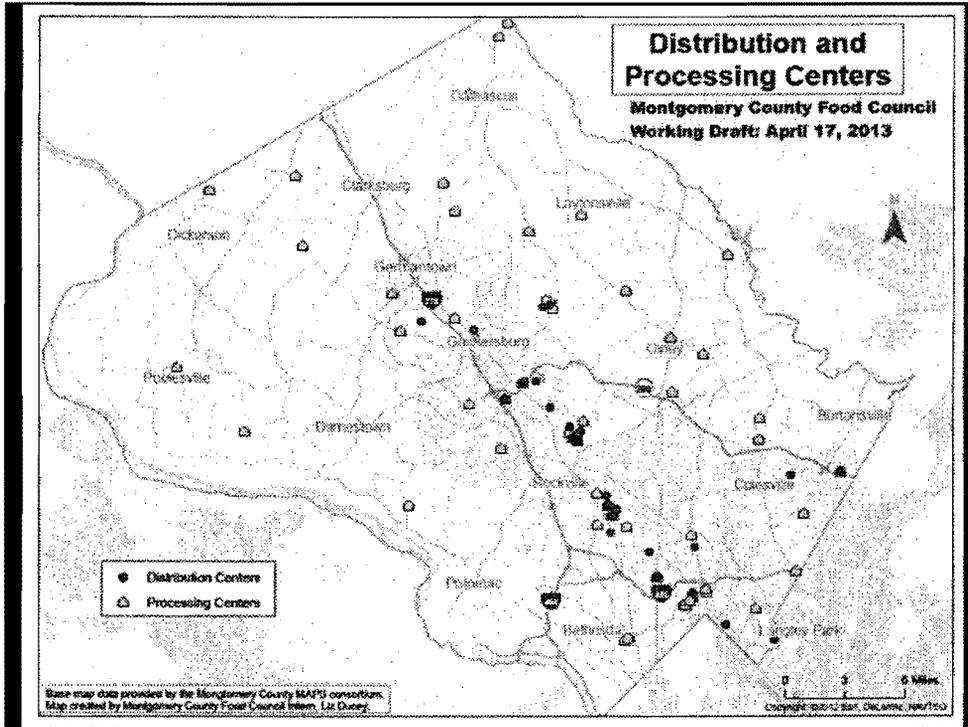
45 public schools associated with the educational outreach program, GreenKids, 18 of which have edible gardens
 24 public schools reported having edible gardens, 8 of which are also labeled under the GreenKids program. The remaining 16 schools may be good targets for expansion of the program.

5 education sites are included on this map as well.

Approximately 200 Public schools and 120 Private Schools (122) are also displayed on this map for reference.

Gaining information about the private schools may help to get a more complete picture for edible gardens etc.

Post presentation note: other environmental education sites such as Audobon Naturalist Society need to be added in the next update.



Data from Johns Hopkins University's Center for a Livable Future. Updated (sorted) information is expected in one to two months and will be published with the MD Food System Map.

Additional Data

Other data points we're mapping right now include commercial kitchen spaces

Coming up: MVG school garden survey results

We can think of things we're missing - what do you think?

Some missing data points:

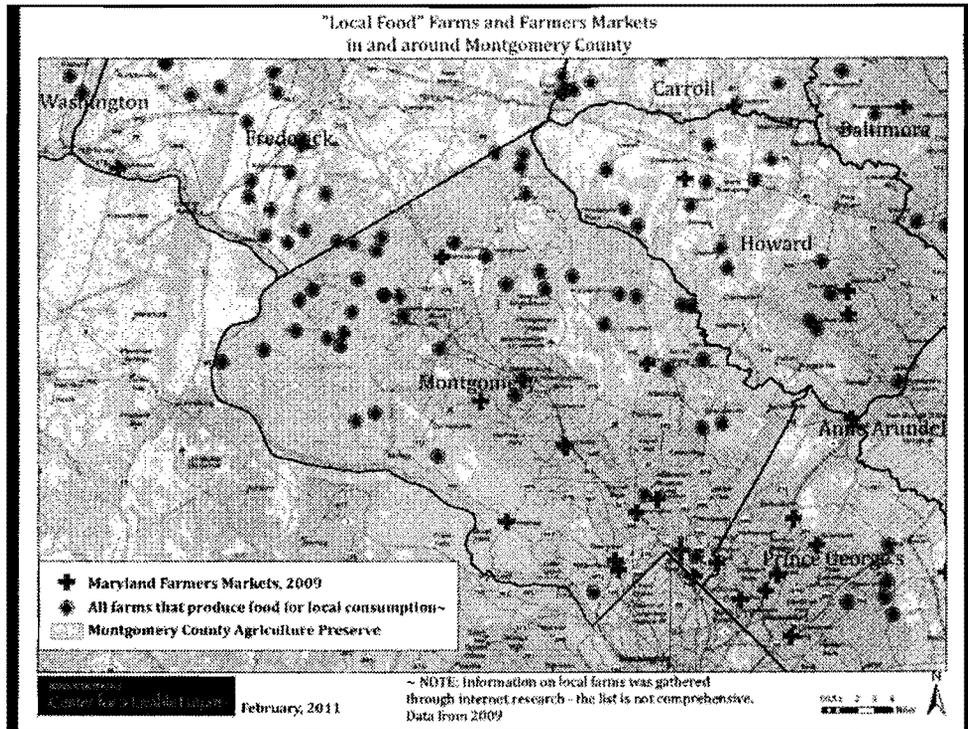
Composting programs, County recycling, compost, and transfer stations

Farm stands, CSA pick-up locations

Other major institutions with meal service (e.g. hospitals) where procurement of local food can be promoted

Public lands in agriculture

Future Harvest/CASA starting a restaurant survey



Working with the Center for a Livable Future, our intern, and partners in County government and across the region, we would like to get an updated pictures like this one – where are there opportunities for direct local food purchases in the County by consumers? No interest in duplicating work being done by MCA, Department of Ag Services, etc. but determining how we can get more info out more regularly and in new ways.

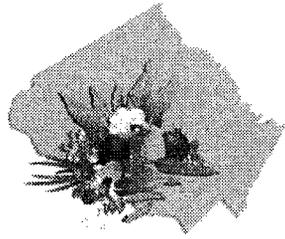
Next Steps and Discussion

Working with the County to find a permanent, accessible home for much of this information

Aspirations for mobile apps

Want to dig deeper into analysis? Join us at a Working Group meeting!

Your thoughts and ideas about what you've seen today, including near and long term applications



Montgomery County Food Council

www.mocofoodcouncil.org

www.facebook.com/mocofoodcouncil

Twitter: @MoCoFoodCouncil

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Appendix 7

Montgomery County – National Day of Civic Hacking
“Reverse Pitch” Presentation

Montgomery County, MD – National Day of Civic Hacking - Agenda

The Universities at Shady Grove, Building III
9630 Gudelsky Drive, Rockville, Maryland 20850

SATURDAY, JUNE 1, 2013

3:30 p.m. - 4:00 p.m.	Registration
4:00 p.m.	Welcome Remarks: Sonny Segal, Chief Information Officer, Montgomery County, MD, Councilmember Hans Reimer, and Mary Lang, Universities at Shady Grove
4:10 p.m.	Overview of openMontgomery: Sonny Segal, CIO
4:20 p.m.	Instructions and Guidelines: Dan Hoffman, Chief Innovation Officer, Montgomery County, MD
4:30 p.m.	Reverse Pitch Session: <ul style="list-style-type: none">• Idea One: MC311 Service Requests• Idea Two: Food Recovery Application• Idea Three: Safe Drinking Water Application• Idea Four: My Green Montgomery• Idea Five: Transit Data Visualizations
5:30 p.m.	Idea Selection and Team Formation
5:30 p.m. – 7:00 p.m.	Teams work in breakout session based on their chosen idea
7:00 p.m.	Dinner provided
7:30 p.m. – 9:00 p.m.	Groups report out ideas and potential solutions
9:00 p.m.	Concluding Remarks: Chief Innovation Officer

The Reverse Pitch

Rather than the typical environment where a solution provider pitches their application to a public servant who may or may not need it, a reverse pitch allows public sector teams the opportunity to pitch. Teams of public servants will have 3-5 minutes to describe their challenge, potential solutions, and desired outcomes. The pitch will be followed by seven minutes of Q&A. After all pitches have been made, the attendees select the idea they would like to work on and form a team. Some ideas may have multiple teams, while others may have none. Eventstir will be used as the registration tool prior to the event and the tool to form teams once ideas are pitched. Once a team has been formed around an idea, they will have about two hours to work on the idea they have chosen. Ideas do not have to use data currently on dataMontgomery, but they should be based on data that could reside on dataMontgomery. **ORGANIZERS: Montgomery County, MD, Universities at Shady Grove, Eventstir.com**

Hashtags for Twitter users during the event are #Hack4MoCo and #HackforChange



More Information: Dan Hoffman, Chief Innovation Officer, Montgomery County, MD
daniel.hoffman@montgomerycountymd.gov | 240-777-2553

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The Ideas

MC311 Service Requests: Montgomery County residents care about their communities and advocate for solutions to ongoing issues. Community leaders would benefit from having current information at their fingertips when setting priorities and reaching out to the County for assistance. We would like for these community advocates and leaders to have access to an app that provides all service requests for their area, listed by most frequently requested service. This could help communities identify "problem areas" in communities. In addition, users can see if the work has been completed. *(Presented by Leslie Hamm, MC311)*

Food Recovery Application: Tons of excess perishable food goes to waste every year. If this food could be properly connected to those who need it, the burden on local food pantries could be reduced. The Montgomery County Food Recovery Working Group has been researching this issue and will present some of their findings that could include an application that links up supply (those with excess perishable food) to demand (shelters, food pantries, etc.) *(Presented by Linda McMillan, County Council Staff)*

Safe Drinking Water Notifications: The quality of our drinking water can have both immediate and long term effects on our personal health and the health of our communities. With the EPA's Safe Drinking Water Information System (SDWIS) data available to the public, it is possible to increase our understanding of water quality trends. Most recently, EPA developed an application programming interface (API) for the Envirofacts database, which houses the Safe Drinking Water data. EPA wants to leverage innovative thinkers and developers that are able to create an application that is simple to use and understand, but creative enough to bring attention to this important public health issue. *(Presented by Sam Bronson, EPA)*

My Green Montgomery: The Department of Environmental Protection would like to build an app that takes locally based "greening" to the next level by providing Montgomery County residents with environmental resources based on their property's layout and location in the county. The next step in "green" education is to take the model of My Green Montgomery and break down some of the barriers that prevent people from taking action. The more personal and specific we can make the data, the more likely people are to take advantage of our programs. The app would provide environmental resources and suggestions based on exactly where and how people live. *(Presented by Jessica Jones, DEP)*

Transit Data Visualizations: Modern transit authorities generate a considerable volume of data: schedules, geospatial data about routes and stops, ridership statistics, historical performance, and more. Visualizing this data helps us see patterns in how transit systems operate and how they are used. For transit authorities, visualizations transform raw data into actionable intelligence that can help optimize transit networks to improve mobility. For transit riders, visualizations of transit networks can open new opportunities, answering questions like "where can transit take me in the next 30 minutes", which conventional static maps are unable to

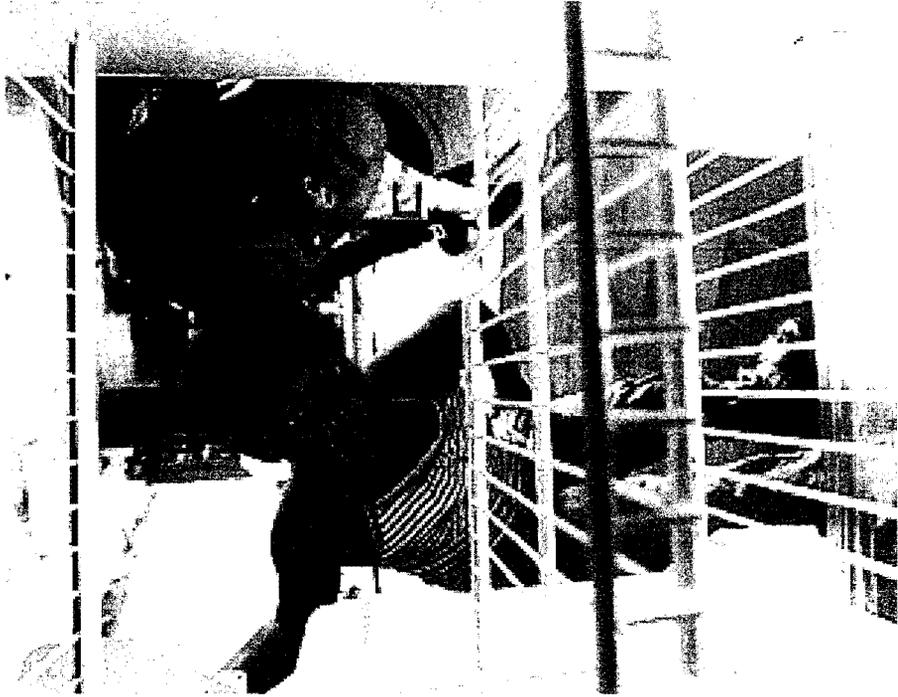


**Food Recovery
Feeding Those in Need and
Reducing Waste**

Day of Civic Hacking

June 1, 2013

Bad Romance



Hunger

FOOD
RECOVERY
NETWORK

Food Waste

Hunger and Food Insecurity in Montgomery County

- In January 2013, 64,142 people in Montgomery County participated in the Maryland Food Supplement Program (SNAP or Food Stamps). This is a 159% increase from 2008.
- About 1/3 of Montgomery County Public School children qualify for the Free and Reduced Meal Program.

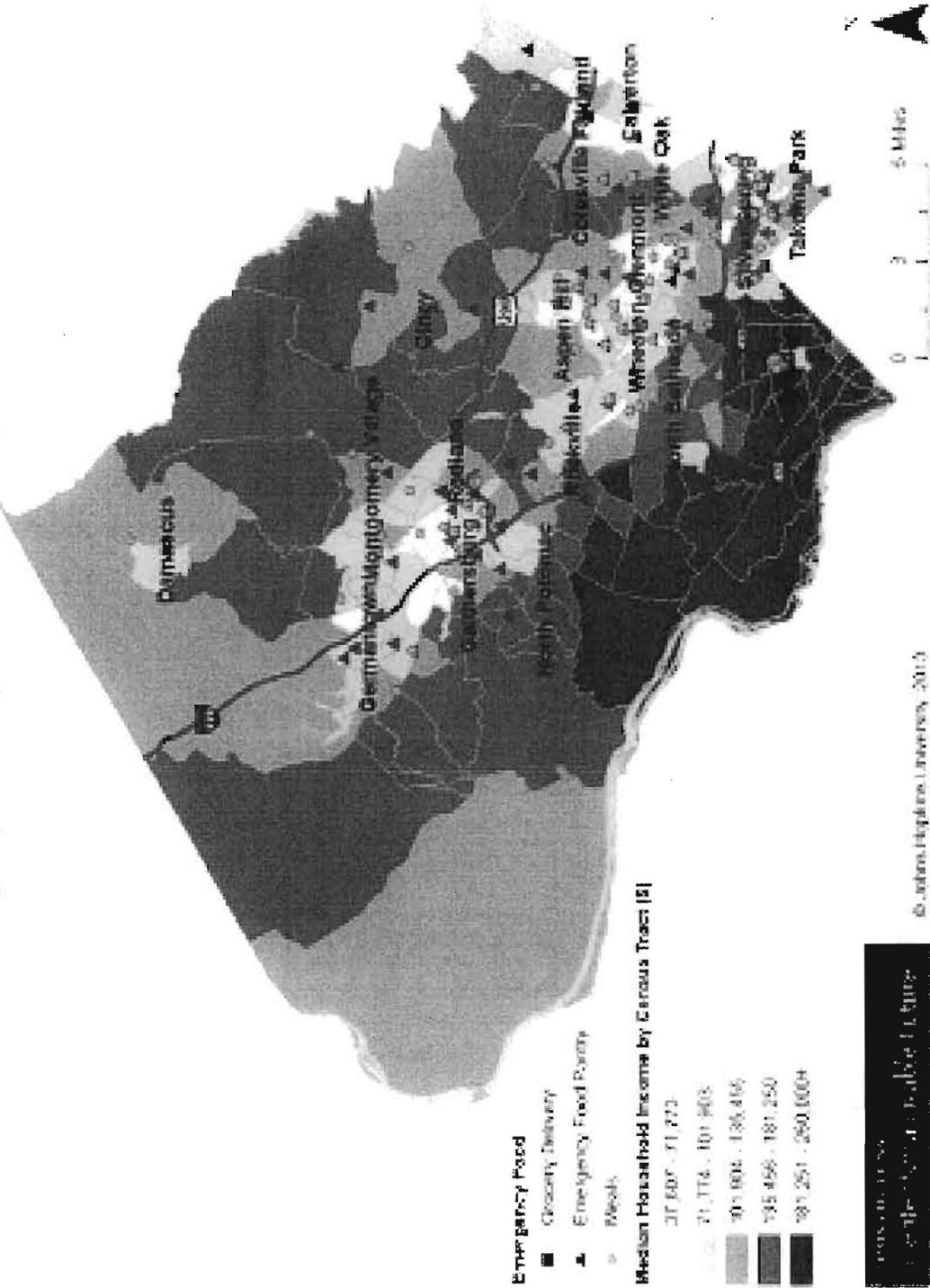
- The Capital Area Food Bank reports that 40% of its clients must choose between food and other necessities such as housing, utilities, medical care, or transportation.
- In 2010, 70,510 (or 7.9%) of Montgomery County residents were considered food insecure. Almost 34,000 were children.

Emergency Food Providers

Food for those in need may come from:

- Large food bank programs such as Manna
- Smaller community based food pantries
- Organizations that distribute prepared meals, such as Nourish Now
- Meal programs both walk-in, such as Shepherd's Table, or through shelters and transitional programs.

Emergency Food Programs in Montgomery County



Food is Being Donated

- In 2012, 1.5 million pounds of food was donated by grocery stores and wholesalers to Manna Food Center and 427,000 pounds of produce was donated primarily by the Capital Area Food Bank.
- Since 2011, Nourish Now has provided more than 104,000 of donated prepared and non-perishable food to people in need.
- In 2012, Food Donation Connection recovered and donated 183,000 pounds of food from Montgomery County restaurants.

But Lots of Food is Still Being Wasted

- In 2011, 19% of the County's waste stream was food.
- Many grocery stores could donate more dairy, protein, and produce
- Deliveries rejected by grocery stores can end up at the landfill
- Food Donation Connection is only at 67 restaurants
- There is untapped supply from caterers, country clubs, hotels, colleges, schools, and hospitals
- Not all Farms or Farm Markets are donating surplus produce to local charities

Solution – Connecting Surplus Food to Emergency Food Providers

- Process needs to be easy for the person/company donating
- Pick-up must be timely and reliable
- Hot or cold prepared food has to reach its destination staying hot or cold
- Recipient organization needs to get the type of food they can use

Potential Data Sources

- Licensed Food Establishments
(available on data montgomery)
- Emergency Food providers
(InfoMontgomery and other non-live sources)
- Farm Directory (pdf format)