



Sustainable Materials Management Grant Program

PHASE 2 APPLICATION*

(*For applicants that have been invited to Phase 2 following the Expression of Interest Phase 1)

January 25, 2022

1. OVERVIEW

In September 2021, the Connecticut Department of Energy and Environmental Protection (DEEP) [announced the availability of grant funding and technical assistance](#) for Connecticut municipalities and regions through the [Sustainable Materials Management \(SMM\) Grant program](#), pursuant to June Spec. Sess. P.A. 21-2, § 308. The Public Act authorized \$5 million in total; DEEP anticipates approximately \$0.96 million for technical assistance to support municipalities and businesses and will have the remaining up to \$4.04 million potentially available for the Sustainable Materials Management (SMM) Grants Program.

DEEP received 55 Expressions of Interest from Connecticut municipalities or regional entities in response to the first phase of the SMM Grant Program. After reviewing the Expressions of Interest, 35 applicants were invited to apply in Phase 2 of the Grant Program, based on the scope of the projects and the potential for waste reduction and diversion. For more information and to review the SMM Grant Program Request for Applications from September 2021, please visit DEEP's [Municipal and Regional Grants and Technical Assistance webpage](#).

2. INSTRUCTIONS

Please read all instructions and the application form carefully and answer each question completely. Submission of complete and accurate information will enhance the chance of the application being reviewed in a timely manner. The tables will expand to fit your responses.

Please check off which program type you are applying for to determine which sections of the SMM Grant Program Application you are required to complete:

- Individual municipal curbside or transfer station programs** – complete Sections A, C, and E
- Regional or multi-town curbside or transfer station programs – complete Sections B, C, and E
- Regional infrastructure projects – complete Sections B, D, and E

3. APPLICATION DEADLINE

Applications will be accepted from January 25 through March 31, 2022 at 11:59PM EST. DEEP reserves the right to extend the deadline and/or consider late applications.

- Submit the application as a word or PDF attachment to DEEP.RecyclingProgram@ct.gov. DEEP

staff will confirm receipt of application. If you have not received a confirmation within the week, please contact us.

- Please use the following file name format to save the attachment: “SMM Grant Application – MUNICIPALITY/ REGION/ COG name” example: “SMM Grant Application – Phoenix”.

4. ESTIMATED AWARD AMOUNTS

4.1 AWARD AMOUNTS FOR PROGRAMS

Applicants will be asked to propose and justify the award amounts requested for the applicant’s program. DEEP reserves the right to adjust award amounts based on the priority of the proposal and the availability of funding. The anticipated rate for the awards is approximately \$50 to \$100 per household depending on impact on waste reduction and diversion and permanence of program. Other factors will include but not be limited to number of awards DEEP is granting, duration of program, the strength of the applicant’s commitment or plan to transition from a pilot to permanent program, number of households involved, and the strength of the program incentive for residents to reduce waste.

The following example projects are *listed in order of funding preference*, for illustration purposes only:

Proposed activity	Program details
Unit-Based Pricing (UBP) town-wide municipal pilot program (with or without food scrap collection)	<ul style="list-style-type: none"> • One year duration with clear, documented plan for transitioning the pilot to a permanent municipal program upon successful conclusion of the pilot • All residential households participating, no free bags provided
UBP municipal program for specific routes (with or without food scrap collection)	<ul style="list-style-type: none"> • Six-month duration with clear, documented plan for transitioning the pilot to a permanent municipal program upon successful conclusion of the pilot • 1000+ households, one free bag provided
Curbside food scrap collection only	<ul style="list-style-type: none"> • 6-month duration with clear, documented plan for transitioning the pilot to a permanent municipal program upon successful conclusion of the pilot • 1000+ households, separate collection container

4.2 AWARD AMOUNTS FOR INFRASTRUCTURE PROJECTS

Funding needs for infrastructure projects will be evaluated on a project-by-project basis.

5. CONTACT INFORMATION

If you have questions about this form, please contact DEEP.RecyclingProgram@ct.gov.

Section A – General Questions for Individual Municipal Applicants

For individual municipal applicants, please complete Section A. For regional applicants, please skip to Section B.

1.	Municipality:	City of Bristol
2.	Project Manager/Contact Name:	Ray Rogozinski
	Title:	Director of Public Works
	Address:	111 North Main Street, Bristol, CT 06010
	Phone Number:	860-584-6125
	E-mail:	raymondrogozinski@bristolct.gov
3.	Total matching funds or in-kind service expected (if any):	Bristol will provide in-kind service (administrative, trucking/dumpster coordination, public education & record-keeping).
4.	Municipalities should be compliant or actively working towards compliance with all applicable recycling and waste related laws and regulations. Please describe any known compliance issues and how they are being addressed.	The City of Bristol is in compliance with state recycling and solid waste regulations.

Section B – General Questions for Regional Applicants

For regional applicants, please complete Section B. Regional applicants may be more than one municipality, such as a group of municipalities, Councils of Government, regional planning groups, or regional waste authorities.

1.	Regional group or lead municipality:	Click or tap here to enter text.
2.	Provide the following contact information for the project lead and communication liaison who will communicate between DEEP and all participating municipalities (note: <i>ALL communication will be between DEEP and this contact, it is the contact's role to disseminate to appropriate parties</i>)	
	Regional Contact Name:	Click or tap here to enter text.
	Title:	Click or tap here to enter text.
	Organization (if different than above):	Click or tap here to enter text.
	Address:	Click or tap here to enter text.
	Phone Number:	Click or tap here to enter text.
	Email:	Click or tap here to enter text.
3.	Total matching funds or in-kind service expected (if any):	Click or tap here to enter text.
4.	Federal Employment Identification #:	Click or tap here to enter text.

5.	How will the regional group support the municipalities in the region on this project? Check all that apply.
	<input type="checkbox"/> Administrative (grant reporting and personnel) <input type="checkbox"/> Outreach and Education <input type="checkbox"/> Serve as fiduciary agents on behalf of the municipalities (list municipalities below) <input type="checkbox"/> Other, please explain here: Click or tap here to enter text.

6.	Are there any related-projects currently underway in the region that could enhance the goals of this project? Please describe below.
	Click or tap here to enter text.



8. Each participating municipality should be compliant or actively working towards compliance with all applicable recycling and waste related laws and regulations. Please describe any known compliance issues and how they are being addressed.

Municipality	It is my understanding that the municipality is in compliance with all applicable recycling and waste related laws and regulations, including the Annual Municipal Recycling Report for the last 3 years.	If no, please describe any known compliance issues and how they are being addressed.
Click or tap here to enter text.	<input type="checkbox"/> Yes <input type="checkbox"/> No	Click or tap here to enter text.
Click or tap here to enter text.	<input type="checkbox"/> Yes <input type="checkbox"/> No	Click or tap here to enter text.
Click or tap here to enter text.	<input type="checkbox"/> Yes <input type="checkbox"/> No	Click or tap here to enter text.
Click or tap here to enter text.	<input type="checkbox"/> Yes <input type="checkbox"/> No	Click or tap here to enter text.
Click or tap here to enter text.	<input type="checkbox"/> Yes <input type="checkbox"/> No	Click or tap here to enter text.
Click or tap here to enter text.	<input type="checkbox"/> Yes <input type="checkbox"/> No	Click or tap here to enter text.
Click or tap here to enter text.	<input type="checkbox"/> Yes <input type="checkbox"/> No	Click or tap here to enter text.
Click or tap here to enter text.	<input type="checkbox"/> Yes <input type="checkbox"/> No	Click or tap here to enter text.
Click or tap here to enter text.	<input type="checkbox"/> Yes <input type="checkbox"/> No	Click or tap here to enter text.
Click or tap here to enter text.	<input type="checkbox"/> Yes <input type="checkbox"/> No	Click or tap here to enter text.
Click or tap here to enter text.	<input type="checkbox"/> Yes <input type="checkbox"/> No	Click or tap here to enter text.
Click or tap here to enter text.	<input type="checkbox"/> Yes <input type="checkbox"/> No	Click or tap here to enter text.
Click or tap here to enter text.	<input type="checkbox"/> Yes <input type="checkbox"/> No	Click or tap here to enter text.
Click or tap here to enter text.	<input type="checkbox"/> Yes <input type="checkbox"/> No	Click or tap here to enter text.

Section C – Municipal and Regional Curbside and Transfer Station Programs – Unit-Based Pricing and Food Scrap Collection

Complete Section C if you are proposing to develop or expand a residential waste-reduction program involving unit-based pricing and or food scrap collection. For regional applications, please provide information on each participating municipality, especially when there is a variation in program details. If you are proposing an infrastructure project, please skip Section C and complete Section D.

1.	What type of program(s) are you proposing?		
	<input type="checkbox"/> Unit-based pricing	<input checked="" type="checkbox"/> Unit-based pricing with food scrap collection	<input type="checkbox"/> Food scrap collection only
	<input type="checkbox"/> Other, please describe: Click or tap here to enter text.		
	For regional applicants, please provide details if there is any variation between the types of programs for each municipality.		
Click or tap here to enter text.			

2.	What is the duration of your program?		
	<input checked="" type="checkbox"/> Pilot (Please enter number of months): 12 months		
	<input type="checkbox"/> Permanent (municipality wide, long-term program)		
For regional applicants, if there is any variation between duration of municipal programs, please provide details. Click or tap here to enter text.			

3a.	Are you planning town-wide or specific routes for your proposal? How many total households in the municipality or region will be included in the proposed program? For regional applications, please list each individual municipality's total households on a separate line.		
	<input type="checkbox"/> Town-wide (skip to question 4)	<input checked="" type="checkbox"/> Specific routes , please describe below in 3b.	
	Total households: 650		

3b.	If the project will serve specific routes, which routes and on what days. How will the pilot areas be selected? Will one or more of your collections be bi-weekly? For regional applicants, please list each individual municipality's information on a separate line.		
	The City of Bristol has selected a route consisting of 650 households near the Covanta waste-to-energy facility. The route was selected due to the environmental justice concerns raised in this neighborhood during Covanta's application for a permit to incinerate biomedical waste. Implementing a program proven to help reduce waste can reduce materials sent to Covanta, and receive more support from residents living in this section of the City.		

4a.	<p>How/where will program be implemented? Check all that apply.</p> <p><input type="checkbox"/> Drop-off / Transfer Station</p> <p><input type="checkbox"/> Curbside, please choose from options below and answer question 4b.</p> <p><input type="checkbox"/> municipal contract (trash or organics)</p> <p><input checked="" type="checkbox"/> municipal collection</p> <p><input type="checkbox"/> subscription</p>
<p>For regional applicants, please list each individual municipality's information on a separate line. Click or tap here to enter text.</p>	

4b.	<p>If food scraps are proposed to be collected curbside, will there be a separate collection, or will food scraps be co-collected with trash?</p> <p><input type="checkbox"/> Separate collection</p> <p><input checked="" type="checkbox"/> Co-collected with trash</p> <p>Please indicate the location where bagged food scraps will be sorted from bagged trash. Is the location a solid waste permitted facility? Country Disposal in Wallingford OR HQ Dumpster in Southington</p>
<p>For regional applicants, please list each individual municipality's information on a separate line. Click or tap here to enter text.</p>	

5.	<p>Describe the partners you propose to work with including facilities where food scraps will be sent for processing (intermediate and final destinations), haulers, and others.</p> <ul style="list-style-type: none"> • What is your strategy to engage partners, or are they already on board? • Do your partners require solid waste permitting or modifications to existing solid waste authorizations?
<p>Bristol will work with the following partners to execute our pilot program:</p> <p>Naugatuck Valley Council of Governments (NVCOG): Should NVCOG receive its own SMM grant, the agency will provide education and outreach services before and during Bristol's pilot program. These efforts would be organized by an SMM Coordinator serving all funded programs the region, and may include: public information sessions, on-demand webinars, social media campaigns, mailers, and data tracking (area-level participation, compliance, public opinion). COG staff would be available to attend public meetings as SMM program ambassadors and would help plan the program's transition from pilot to permanent, if Bristol decides to move forward.</p> <p>Country Disposal: Country will collect orange and green bags from the Bristol Transfer Station, bring them to Wallingford for sorting, and then transport the two streams to their destinations. Food waste will be delivered to Quantum Biopower in Southington and the remaining trash will be sent to Covanta. *NOTE: We may work with HQ Dumpster instead of</p>	

Country Disposal for this step, depending on HQ's availability. HQ is located in Southington and has assisted Meriden with its pilot.

Quantum Biopower: Connecticut's first anaerobic digester, this Southington-based company will receive Bristol's food scraps and transform them into renewable energy. Quantum provides a sustainable reuse for organic waste that would otherwise contribute to disposal tonnages, and be placed in landfills or trash burning plants.

Covanta: This waste-to-energy plant is located and Bristol and is where the City current sends its waste. They would receive and process the trash (orange) bags.

6. Describe the types, estimated sizes, and approximate pricing for units (i.e., dollars per bag or cart volume) you are proposing for trash and/or food scraps. Please also indicate if you will be providing free bags to households, how many and at what frequency. Do you plan to provide bags or collection containers for other recyclable materials? For regional applications, please list each municipality's information on a separate line.

- **Households will receive a mailer with two 8-gallon official food waste bag (green) and an informational card with a QR code to download an app. This app will be tied into a coupon system to redeem bags at a local grocery store or the City of Bristol.**
- **Through the grocery store (or from the City of Bristol directly), households will receive 100 free trash bags (orange) and 50 free food waste bags (green) for the pilot year.**
- **During the pilot year, additional trash bags can be purchased for \$0.35, and additional food waste bags can be purchased for \$0.25 as needed. Bags may be provided by the City at the request of residents, however said bags usage will be monitored and education will be provided to limit bag use.**
- **Orange trash bags and green food waste bags will be co-collected in the same container that residents now use for trash.**
- **Bristol will collect the waste, store it at its Transfer Station, and then Country Disposal will transport the co-collected bags to their sortation facility in Wallingford. Orange and green bags will be separated by color.**
- **After sortation, food will be transported to Quantum Biopower for digestion into energy and a nutrient-filled digestate for composting. The remaining trash will be sent to Covanta for incineration.**

7. For *food scrap only proposals* please provide the following details:

- What will you do to motivate residents to separate food scraps for collection?
- What is the strategy for transitioning to a permanent food scrap diversion only program and how will it be funded?
- Description of full-scale residential participation including implementation of a UBP strategy.

N/A

8. If the proposed project is a pilot (ie., a temporary program; of limited duration; and/or covering only a portion of the municipality), describe your plan for scaling up or transitioning to municipality-wide permanent program? Please include the following:

- Why is your municipality seeking to implement the program?
- What are the current barriers to implementing your program on a permanent basis or at scale?
- What outcomes do you anticipate from the pilot, and how will the pilot materially address the identified barriers to a permanent program?
- What is your plan if the project costs are greater than actual savings? Will you continue the program and pay from another funding source, or will you put the program on hold and redesign the scope?
- If the pilot achieves success (see question 12), what steps will the municipality then take to implement a permanent program? Is the municipality committed to taking these steps?
- For regional applications, please specify if there are any town-by-town variations in establishing the permanent program.

Background:

The City of Bristol participated in several meetings as part of DEEP's Unit-Based-Pricing (UBP) initiative in 2016. The Mayor and Public Works Director are aware of the impending waste crisis and the benefit that UBP and a food waste co-collection program could provide to Bristol's residents. UBP has a strong presence in the Northeast. Early adopters of curbside food waste collection coupled with UBP, like Brattleboro, VT have maintained waste reduction levels of more than 69%. Staff feels it is our responsibility to fully vet and actively pilot a program that has the potential for such a significant financial and environmental benefit for the residents.

Barriers:

- Staff are aware of the difficulty / barriers that other CT municipalities experienced when considering UBP. We propose to pilot ~650 households for one year as a means to engage in this issue. This pilot will allow residents to experience the program firsthand and will prove reduced costs and reduced waste over the year. UBP programs in other New England communities receive strong resident support after implementation. We believe that if the program is a success, participating residents will become advocates and be able to speak from their own experience: i.e. using only one bag-per week for trash, not witnessing illegal dumping or cheating neighbors.

- The primary barrier to the UBP program is the erroneous, negative public perception that has developed over the years. This pilot will approach the public differently than prior CT implementation attempts. Using the DEEP grant funds for free bags, extensive resident outreach conducted by NVCOG as part of that agency's own grant request, key campaign messages (outlined under Question 9 herein) and providing a solution for food diversion will reduce the barriers that have prevented people from even considering this idea.

Expected Outcomes:

At the conclusion of the pilot program, a number of outcomes can be evaluated, such as: Does the co-collection system work, i.e. do the bags hold up and keep food, and waste streams separate? Do residents understand what material goes in each bag, i.e. are they compliant? Are waste tonnages decreased and is there measurable food waste diversion? How do residents feel about the program? Does this model allow for implementation of unit-based pricing on a larger scale? The Mayor and staff will review the outcomes of this program. To the extent that the pilot produces positive results, the City staff will consider whether and to what extent this program should be implemented in other parts of the City.

Next Steps:

- The City of Bristol has the potential to develop a Unit-Based Pricing (UBP) program for up to 14,595 single-family / four family and under multi-family units.
- Country Enterprises and Quantum BioPower would be able to accommodate a scaled city-wide rollout, should the City decide to do so based on pilot feedback and final program design. However, at some point Quantum could perhaps engage in separation which would allow for more cost-effective transportation.
- The scaled program would likely include some number of free official trash bags and food bags in the initial program years. If a UBP strategy is adopted after successful implementation of co-collection, the number of free bags could decrease (or the bag prices could increase) over a multi-year period, until full UBP is realized. Bristol already has a lower-than-average per capita disposal so the likely waste reduction would be between 48% and 70% depending on the program structure in years to come. The pilot results will inform the final parameters of a scaled implementation (i.e. number of free bags, cost of regular UBP bags and potential additional grant funds).
- The pilot will use a hybrid version of UBP program by providing 104 free trash bags, and 52 free 8-gallon food waste bags. A scaled program, which over the course of 5 years eliminates free or discounted bags and moves into full UBP with food scrap collection, will reduce waste by approximately 70% (annual) below the current waste levels. The pilot results will inform a potential final city-wide design.
- City staff feels that by gaining support within the pilot homes, a full-scale implementation plan has a much better chance of moving forward. There are examples of Massachusetts communities that gained public support because they piloted prior to implementation. This was also the case in Stonington, CT and several communities in Maine where the program was implemented and then one year later, residents voted to continue the program in a referendum.
- If the pilot is underfunded and projected costs exceed expectations, or if there are any unforeseen complications, the Mayor and/or Public Works Director will consult with DEEP and make recommendations based on the situation.

9. Describe your outreach and education plan for your municipality or region and how you intend to engage the community including:

- What key messages will you use to enlist support for the pilot (among both participants and non-participants)? What potential benefits will you emphasize (ie., convenience, quality of life, environmental benefits, equity, controlling disposal costs, reducing reliance on out of state landfiling, etc.)? What misconceptions will you address in your messaging?
- How will the proposed program be promoted/advertised and how will you create and maintain community buy-in?
- Are you interested in coordinating messaging with other municipalities implementing similar programs, or do you prefer messaging specific to your community? Are there outreach or education resources that you might find helpful?
- For regional applications, please specify if there are any town-by-town variations in this approach

In addition to the education and outreach work described in NVCOG’s regional application, there will be a 3-pronged approach to program education which includes: high-level messaging provided through DEEP’s contractor, Decker; general municipal communications through City offices; and an effort to engage with local groups, known as program champions, to help disseminate information throughout the program through social media.

- 1. The high-level campaign will focus on the state, regional and national waste crisis to help residents see that there is a clear problem which needs to be addressed.**
- 2. The general municipal communications will explain how the municipality, in partnership with DEEP, is using CCSMM grant funds to proactively pilot a DEEP-recommended program that incentivizes residential waste reduction and food scrap diversion. The municipality, will use the mobile application to engage with residents and obtain feedback throughout the program. The app can also be used to build a support base for the program.**
- 3. Community champions and influencer engagement will help with ongoing messaging using social media. Materials developed by Decker (program benefits, myth busters, etc.) along with monthly program results will be used in messaging.**

Key campaign messages include:

- **Information regarding the waste crisis, and capacity crisis, including MIRA facility closure.**
- **Social and environmental justice concerns related to continuing waste generation at the current rate, specifically the effect on communities where waste is ultimately disposed (pollution and declining property values).**
- **Long-term financial cost to taxpayers (rising costs; lost opportunity for regional jobs through a more circular economy where diversion fuels local businesses in organics processing, recycling, reuse and repurposing).**
- **Environmental benefits / climate change implications of waste reduction.**

- Introduction to the benefits of UBP and food waste diversion including co-collection as a critical, innovative and equitable way to manage the waste crisis.
- Demonstrate that the program is user-friendly and not a cost burden or inconvenience.

Pilot progress and results will be conveyed to residents and stakeholders through ongoing communication and regular briefings. Tours / visits of bag sorting for residents, students and surrounding communities may be held to show how the program works and create confidence. There may also be a press event at the site.

The implementation outreach plan is as follows:

- Mailer with two free food waste bags will be sent to each home. Included in the mailer will be program information and download instructions for a mobile app that will facilitate the distribution of a coupon from a partner supermarket so that residents can redeem 100 free trash bags and 50 free food waste bags. The informational sheet in the mailer will include information about the program: waste crisis; program start date; links to What's in What's Out; what goes in the food waste bag and how to participate in the new curbside recycling option. The information sheet will also have a QR code that will link to the mobile app.
- There will be alternative means for residents to receive their free bag allotment if they have difficulty with technology. This will likely be done through City Hall or the recycle center (to be determined).
- Outreach will be done before, during, and after the program. Outreach personnel will include paid employees, community volunteers and students.
- The app will allow for coupon distribution for free bags and will also act as a two-way communication between the City, program manager and residents, including reminders to participate in the food program weekly, and regular simple surveys with "thumbs up, thumbs down" icons so that residents can easily respond and provide feedback about the program. Sample questions might include: Did you use the food waste bag this week? Do you find the program easy to use? If you needed to purchase additional trash bags, were they easy to find in the local store? The app will also provide a regular call to action like: "Please help use to make this program a success"; "You can make a difference by using the food bag for weekly scraps"; "Thank you for participating! The City has diverted X lbs. of food from the waste stream so far."
- Ongoing information will be available through Zoom seminars hosted by DEEP contractor.
- The municipality will host a link to a landing page/website for information.
- Stakeholders will assist with social media before, during, and after the outreach.

There may also be a student assistance initiative - working through the schools to provide scholarships for students who enter contests for posters, TikTok and YouTube videos explaining the program. The student assistance program will be coordinated through the program manager, the City, and the region.

10. Identify key champions/ stakeholder groups in your municipality(ies) and explain how you will engage them to make your project successful.

- Who is/are the champion(s) that will rally support for the program during pilot and/or during implementation of a full-scale program? A champion may be Clean Energy or Sustainability task forces, Board of Education, parent-teacher organizations, Elected official(s), town staff, neighborhood revitalization associations, any community groups, senior groups, etc.
- How will the municipality develop and maintain the champions' interest and engagement?

The City of Bristol sees community outreach and education to change the behavior of residents as one of the primary grant objectives. In order to leverage the resources of the community the City envisions cooperating with the following organizations: Conservation/Inland Wetlands, Planning, Zoning, Energy and Board of Public Works Board/Commissions. In addition, the Department of Public Works will utilize existing Reduce, Reuse & Recycle education programs with the Bristol Board of Education. Additionally, the City will contact the following groups to solicit their assistance in spreading the word and garnering support for the pilot program:

Bristol Residents for Clean Air – Dave Rackliffe, (860) 384-2997, effilcar@gmail.com
Energy Commission – Sean Dunn sean.dunn@yale.edu
Pequabuck River Watershed Association – Mary Ridingsward
<https://www.facebook.com/pequabuckriver>
Diversity Council – Alicia Mojica Washington diversitycouncil@bristolct.gov
Bristol Cares – Mayor Jeff Caggiano, (860) 584-6250, jeffcaggiano@bristolct.gov
Bristol Garden Club – Linda Tonon 860-302-1484

11. What is the expected impact on waste reduction and increased diversion/ recycling once the program is implemented? Please specify the estimated waste reduction and increased diversion/ recycling in tons. Please attach documentation as necessary.

Pilot Program:

- **The impact of a voluntary hybrid UBP and food waste system will be influenced by several factors: the level and type of direct outreach with residents; the characteristics of participating homes; the number of actual participating homes. There is no specific estimate for waste impact in a pilot where the residents are 'volun-told' / asked to participate, but rather the pilot is a way to gain the following information:**
 - **Participation rate: estimate - between 25% and 75%**
 - **Food waste diversion each week - between 3 lbs. and 10 lbs. per participating household.**
 - **Resident feedback including: was the program easy; were the bag sizes correct; what systems do residents create at home to manage food waste; how many UBP bags do residents use; do residents like the concept and would they be willing to participate in a UBP system; do residents have feedback on how to make the program better.**

- The goal of the program is to better understand resident behavior within the municipality, gain support and feedback from participating routes, and build resident confidence in the concept.

Scaled Program Impact:

- The annual waste reduction impact of a UBP/food waste/glass program over the course of 5 years will be approximately 70% below the current waste levels.
- As free bags are eliminated over a time period determined by the City and the price of UBP retail bags set by city officials with program implementation, waste reduction and food waste diversion will increase.
- Please also see image below:

UBP Co-collection (Trash and Food Scraps)

A program in Bristol could transition into UBP by increasing the waste bag prices slowly over the next 4 years. This system will yield an annual benefit (from 2022 baseline tip of \$986,000 for trash and recycling) of between \$58,000 and \$811,000 as tipping fees rise. Diversion would increase from 48% to 70%.

Co-Collection Summary				
	Year 2	Year 3	Year 4	Year 5
Revenue / Savings				
Net Bag Revenue*	\$ 242,046	\$ 372,666	\$ 480,078	\$ 673,346
Waste Tip Savings	\$ 449,869	\$ 556,245	\$ 611,044	\$ 632,190
New Program Costs				
Food Tip	\$ (112,320)	\$ (174,096)	\$ (196,560)	\$ (224,640)
Sort or Collection	\$ (522,000)	\$ (522,000)	\$ (522,000)	\$ (270,000)
Other	\$ -	\$ -	\$ -	\$ -
Additional Recycling Cost/Savings	\$ -	\$ -	\$ -	\$ -
	\$ 57,595	\$ 232,815	\$ 372,562	\$ 810,896

* Net Bag Revenue (Trash & Food Bags)

Assumptions:				
Total Free Bags / HH/ Year				
Trash	0	0	0	0
Food Waste	0	0	0	0
Resident Bag Cost / HH/ Year				
Trash	\$0.45	\$0.55	\$0.65	\$0.80
Food Waste	\$0.25	\$0.25	\$0.25	\$0.25
Waste Reduction	48%	60%	67%	70%

Annual Tipping Fee :

Waste	\$71	\$74	\$78	\$81
Recycling	\$0	\$0	\$0	\$0
Food Waste	\$60	\$60	\$60	\$60

12. What are the measures of success for the program (e.g., level of participation, waste reduction (in tons), increased volume of recyclables)? How will you evaluate the results of the program? How will you address any challenges?

Program success will be monitored each week by Waste Zero including:

- Waste, recycling, and food waste tonnage will be tracked weekly
- Resident feedback will be tracked through mobile app as well as other surveys
- Social media through municipal sites will be monitored and tracked
- Year to date weights for waste and recycling will be compared monthly

There will be a monthly report to all partners, the program manager and the internal pilot team. Any issues will be addressed as they arise.

13 Describe the anticipated schedule/timeline for implementing the program? What are the major milestones for the proposed program?

Please see image below:

	Pre- Pilot			Program												Post Pilot
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Month 16
Pre-Pilot Activities																
Finalize Branding/ Messaging																
Print Materials text																
Website Text																
Bag Art																
Order Pilot Supplies																
Bags																
Mailers/ Flyers																
Other Supplies																
Resident Buckets																
Gather Pre-Launch Data																
Brief Program Champions																
Finalize PR Messaging																
Resident Outreach/ Mailings																
Talk to Press																
Launch																
Pilot																
Start Pilot																
Ongoing Analysis																
Ongoing PR																
Ongoing Communication with Staff																
Ongoing Messaging with Champions																
Ongoing Updates with Electeds																
Begin Decision Process - for Next Phase																
Final Decision on Next Phase																
Post Pilot																
Final Recap & Analysis																
Review with Staff																
Review with DEEP																

14. Include a proposed itemized budget(s) to implement the UBP and/or food scrap diversion program. Please attach additional documentation if necessary. For regional applicants, please be sure to include a proposed budget for each participating municipality.

See attachment on the last page for the budget.

Section D – Food Scrap Processing Infrastructure Projects

Complete Section D if you are planning to use the grant funds to develop infrastructure projects for food scrap processing. The facility and equipment funded through this grant must be under control (ownership or lease agreement) of the municipality or region. *Note: Grant awards cannot be used to apply for state permit applications.*

1. Describe the location and size of your proposed food scrap processing project. If it is private land, will the site be purchased or leased? Describe any existing structures on the property. What is the site being used for currently?
Click or tap here to enter text.

2. Which entity will operate the facility?
 The municipality or regional group (COG/ waste authority) A private operator
 Other, please describe: Click or tap here to enter text.

3. What facility type is proposed for the site?
 Commercial-scale Anaerobic Digestion facility Commercial compost facility On-farm Anaerobic Digester facility Animal feed facility
 Other, please describe here: Click or tap here to enter text.
 Do you plan on operating this site as a business?
 Click or tap here to enter text.

4. Describe the proposed activities for the site, include the following details:

- How will the materials be transported to the facility?
- How and where will the materials be sorted and separated? If sorted at the proposed facility, is there a covered, safe area for on-site workers to process materials?
- Do you have estimated tonnage you expect to be able to process?
- What preparation has been undertaken for the site?
- What fees, if any, will be imposed on the users of the site?
- What other activities will/ may be conducted on the site?

Click or tap here to enter text.

5. Describe the system inputs for the site, include the following details:

- Identify the sources of materials and waste types.
- Are the haulers prepared to/ interested in collecting food scraps? If new trucks are required, have the haulers agreed to this investment and are those costs included in the grant request?
- What are the associated costs for transporting to the location? Do you have buy-in from the expected participants?
- What are your expected carbon sources?

- How will you encourage/ incentivize residents to separate/ collect their food scraps?
- Do you plan to engage commercial customers to separate/ collect their food scraps? How will you market the program to commercial customers?
- How will you reduce or eliminate contamination in the food scraps received?

Click or tap here to enter text.

6. What will be the beneficial use of the finished compost? Will finished compost be sold, given away to residents/businesses, used for municipal projects, etc.?

Click or tap here to enter text.

7. Who are the intended users of the proposed facility?

- Residents
- Commercial customers
- Municipal customers
- Other – please describe here:
Click or tap here to enter text.

8. Based on the meetings with DEEP, please list the necessary permit applications to be submitted.

Click or tap here to enter text.

9. Please answer the following questions about staffing and program administration.

- How many staff will be used to operate? Do you expect to hire additional staff or consultants to support this project?
- What training will your staff need to appropriately manage the materials?

Click or tap here to enter text.

10. Describe the capital and equipment inputs for the site and include the following:

- What equipment does the municipality or region already have that will be used for the project?
- What financial resources are available in support of the project (e.g., bonding, investors, additional grants, loans, etc.)?

Click or tap here to enter text.

11. Describe any equipment that you will need to procure for the proposed project. Will you need depackaging technology? How might the equipment you use for this project be used elsewhere in your region/ municipality?

Click or tap here to enter text.



Section E - Signature for Authorization

For individual applicants, please complete this form with digital (picture file) or written signature (must sign and then convert document to PDF to submit Section E with application). For regional applicants with multiple participating municipalities, please print this form and complete for every participating municipality and regional entity.

I hereby certify that the information included in this SMM Grant Phase 2 Application is accurate to the best of my knowledge.

Municipality or Regional Entity:	City of Bristol
Name:	Jeffrey Caggiano
Title:	Mayor
Signature:	
Date:	5/5/2022
	5/9/22

Program Costs

Bristol

Households	650	
Months	12	
	Orange	Green
Bags	104	52
Outreach	Door To Door	
Bag Sortation	Country Disposal	
Connect Mobile App	Yes	
Enforcement	Yes	

		Price	Extension	UOM	
1	General Program Management	\$1,200.00	\$14,400	Per Month	Mailer and or initial bag distribution management, pilot analytics, ongoing grassroots outreach coordination with community champions and stakeholder groups, website, Connect mobile app management, scanner rental and retail store set-up/ management, 1-800# customer resident service line, extra bag distribution - to residents where applicable
2	Enforcement	\$3.90	\$2,535	Per HH	House by house contamination review, once through + 1 follow up. Includes technology, flipping lids and reporting
3	Transportation Support	\$39.58	\$25,725	Per HH/Year	Funding for material transport
4	Bag Sortation	\$2.89	\$22,555	Per HH/Month	Bag sortation management
5	Door To Door	\$5.00	\$3,250	Per HH	Mailer to every home participating. Includes all relevant insert material and bags.
6	Compost Buckets		\$500		Budget to provide for residents requesting in home buckets.
7	Additional Outreach Supplies & Support		\$3,800		Cart Tags, Flyers, T-Shirts; Schools Video/Outreach/Social Media = Extra Labor
8	Connect Mobile App	\$2.50	\$1,625	Per HH	Two way mobile communication between community and residents. Allows for Realtime feedback and communication during pilot period.
9	Orange Bag Cost	\$0.31	\$20,956	Per Bag	
10	Green Bag Cost	\$0.21	\$7,098	Per Bag	
	Pilot Cost		\$102,444	\$ 157.61	Per Household