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Rivertowns

Food Scraps Mangement Study

Prepared For

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Executive Summary

The Rivertowns Food Scraps Study provides a comprehensive roadmap for transforming how seven villages manage food waste, reduce greenhouse gas emissions, and build local resilience. By outlining a phased strategy that integrates curbside pickup, community composting, and upstream waste reduction, the plan empowers the Rivertowns to turn food scraps from an underutilized waste stream into a valuable community resource.

Reaching Net Zero Food Waste

Achieving net zero food waste is a vital component of the Rivertowns' broader commitment to sustainability and climate action. Across New York State, the Climate Leadership and Community Protection Act (CLCPA) has set ambitious goals to reduce greenhouse gas emissions by 85% by 2050. Diverting food scraps from landfills plays a crucial role in meeting these targets, as food scraps are a leading contributor to methane emissions—a greenhouse gas many times more potent than carbon dioxide. In the Rivertowns, food scraps and other organics make up a significant portion of the municipal solid waste (MSW) stream, comprising between 40–60% of household waste. However, when these materials are not diverted and instead buried in landfills, the resulting greenhouse gas emissions represent a missed opportunity. Instead of being wasted, food scraps can be transformed into valuable compost, which enriches soil health, supports local gardening and agriculture, and closes the loop on nutrient cycles within the community.

Reducing the volume of food waste entering the waste stream is more than a climate imperative—it's a practical step toward local resilience and community sustainability. By diverting organics from landfills, the Rivertowns can lower disposal costs, extend the lifespan of regional waste facilities, and create a local, renewable resource in the form of compost. This report demonstrates how the Rivertowns can turn an underutilized waste stream into a community asset, aligning local action with state and federal climate goals.

Current Rivertowns Food Scraps Program

Each of the seven villages that make up the Rivertowns has shown leadership in launching food scraps programs, primarily through village-specific drop-off sites. Participation in Westchester County's Residential Food Scrap Transportation and Disposal (RFSTAD) Program has provided foundational infrastructure and a framework for community engagement. While these drop-off sites have successfully diverted hundreds of tons of organics since their inception, significant barriers remain that limit broader participation.

Key barriers include inconvenient drop-off locations, limited hours of operation, and accessibility challenges for residents without easy transportation options. In some villages, drop-off sites are located at Department of Public Works yards that may be difficult to access for seniors, families without vehicles, or residents with limited mobility. Concerns about odor, pests, and contamination at drop-off sites can also create a negative perception of composting, discouraging broader community buy-in.

Data generated by this study show that the current drop-off model captures only about 3–5% of total food scraps generated across the Rivertowns. For example, the Village of Tarrytown generates approximately 1,729 tons of food scraps annually but currently collects only 71 tons through its drop-off program—about 4%. Similar gaps are evident across other villages, underscoring the limitations of a drop-off-only model. Private services like Hudson Composting provide curbside pickup for paying customers, but these services are not widely accessible to all residents, creating inequity in participation opportunities.

Despite these barriers, the foundation laid by village drop-off sites is invaluable. It has built awareness, fostered early adoption, and demonstrated that residents are eager to participate when systems are convenient, accessible, and well-supported. The next step is to expand this foundation through a phased, community-wide approach that reduces barriers and scales food scrap diversion efforts.

A Phased Strategy

Working together, the Rivertowns have the opportunity to reach an ambitious goal: 80% food scrap diversion by 2045. Achieving this requires a multi-year, multi-phase approach that blends operational capacity, infrastructure development, community engagement, and local policy. The strategy is guided by the EPA's Food Recovery Hierarchy, which prioritizes waste prevention, recovery for people in need, composting, and energy recovery over landfill disposal.

The report outlines three integrated strategies to guide this transformation:

- **Reduce Barriers to Participation**: Expand beyond drop-off sites by launching curbside pickup programs that make food scrap recycling as easy and routine as garbage collection. This removes the need for residents to self-haul organics, addressing the biggest participation hurdle.

- **Diminish Food Scrap Generation at the Source**: Engage residents through outreach and education to promote climate-smart consumption, meal planning, and food waste prevention. By building awareness and shifting behaviors, households can reduce the amount of food waste generated in the first place.
- **Capture Food Scraps Locally**: Invest in community composting infrastructure that processes organics within the Rivertowns, reducing transportation emissions and building a resilient, closed-loop system. Local processing allows communities to reinvest finished compost into public parks, gardens, and green infrastructure.

The phased approach envisions a gradual adoption curve with four distinct stages:

- **Phase 1: Establish Pilots (2026–2030)** – Village-led pilots test curbside pickup, expand drop-off locations, and pilot small community composting sites in public parks, schools, or gardens.
- **Phase 2: Grow into Programs (2030–2035)** – Early pilots evolve into full-service programs coordinated through an intermunicipal consortium. Participation targets expand, infrastructure investments begin, and community education intensifies.
- **Phase 3: Scale Programs (2035–2040)** – Curbside pickup is integrated into routine DPW operations. Local processing pilots transition to larger, dedicated sites that handle growing volumes of organics. Policies and incentives support food waste prevention at the household and business level.
- **Phase 4: Full-Service Programs (2040–2045)** – A mature, region-wide organics management system diverts up to 80% of food scraps, supported by local processing facilities, robust curbside collection, community composting, and sustained policy innovation.

Rivertowns Food Scraps Programs: Collect, Recover, Reduce, and Collaborate

Collect: Establishing Curbside Pickup

Curbside pickup is the cornerstone of scaling participation. Studies and stakeholder input reveal that ease of use is the single most influential factor driving program adoption. By integrating food scrap pickup into existing household waste collection, villages make sustainable behavior the default option for residents.

The plan proposes launching village-led pilot routes first, using retrofitted vehicles or satellite trucks to collect food scraps weekly. As demand grows, villages will transition to a shared intermunicipal model using mid-sized packer trucks and efficient regional routes. This approach maximizes route density, reduces per-ton hauling costs, and supports long-term financial sustainability.

Scarsdale's pilot program offers a real-world model, demonstrating that small-scale curbside services can drive rapid growth and community buy-in with modest startup costs. The Rivertowns can build on this model, scaling to an estimated 7,000+ tons of food scraps annually by Phase 2.

Recover: Capture Food Scraps Locally

Community composting complements curbside pickup by providing hyper-local processing and closing the loop within the Rivertowns. Small-scale sites in parks, schools, or community gardens enable residents to see how their food scraps are turned into compost used right in their neighborhoods. These visible, educational pilots help demystify composting, reduce misconceptions about odor or pests, and build a culture of participation.

Villages can also support backyard composting by distributing starter kits, hosting workshops, and training volunteer "compost coaches." This model empowers households to manage organics on-site while reinforcing broader waste diversion habits. Over time, community composting sites and backyard systems can handle a significant share of total food scraps, reducing the strain on curbside collection and large-scale facilities.

Reduce: Programs and Policies for Upstream Waste Reduction

The third pillar focuses on reducing food waste before it enters the waste stream. Educational campaigns, school curricula, and community workshops will encourage smarter meal planning, proper food storage, and better understanding of expiration dates. Partnerships with local grocers can promote "imperfect produce" sales and food donation networks, while institutions like schools and hospitals adopt best practices for inventory management and portion control.

Long-term, the Rivertowns can phase in regulatory measures like pay-as-you-throw pricing, mandatory organics separation for large generators, and food scrap performance benchmarks. These tools create consistent, enforceable incentives for households and businesses to minimize waste generation and maximize participation in diversion programs.

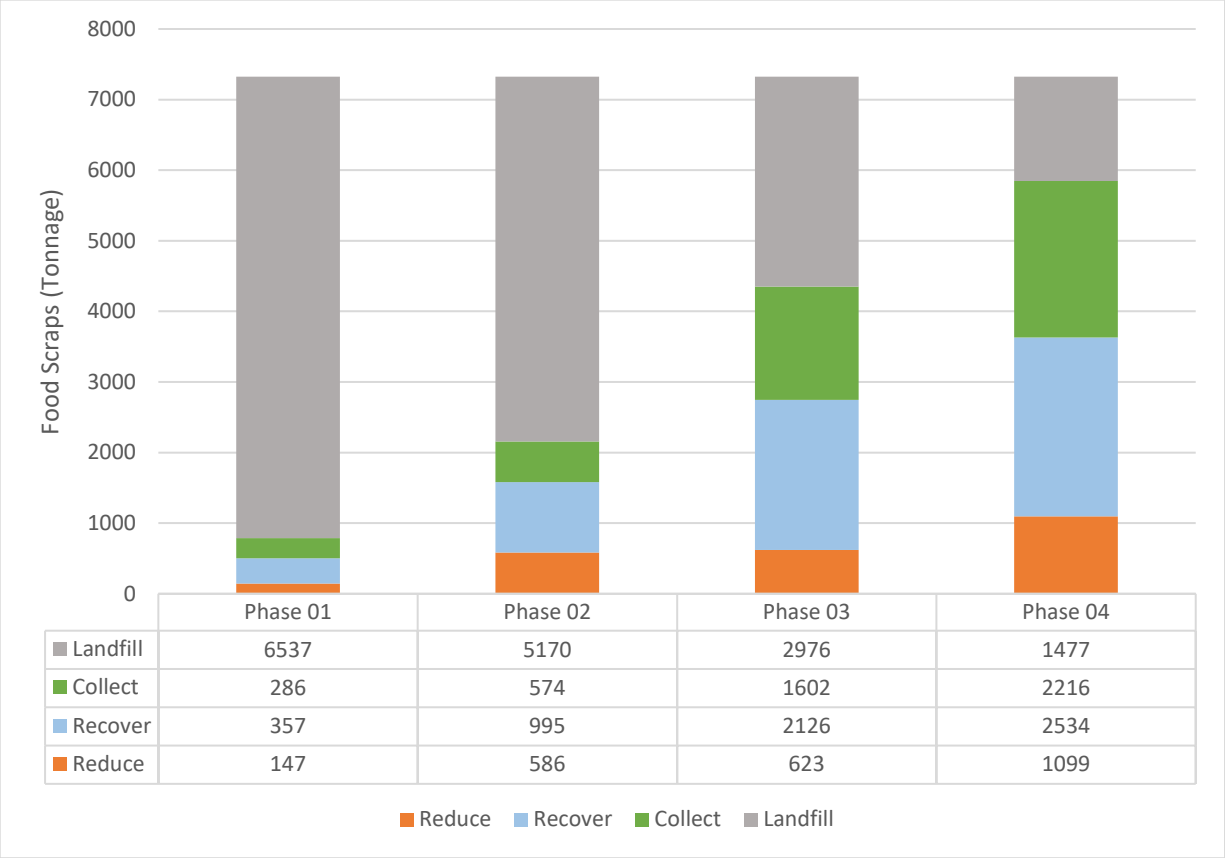
Collaborate: Rivertowns Office of Sustainable Waste Management

Finally, the fourth pillar presents the Rivertowns with the option to formalize collaboration and streamline the implementation of programming, operations, and messaging. This centralized coordinating entity would serve as a hub for policy development, public engagement, and performance tracking. The Office of Sustainable Waste Management (OSWM) would also lead the important task of monitoring the availability of funding opportunities and applying for grant awards. This shared body can aid the Rivertowns in unifying operations and collectively pursuing consistent, innovative strategies.

Implementation and Regional Collaboration

Implementing this vision requires a clear roadmap, robust governance, and sustained community engagement. The plan recommends creating the **Rivertowns Office of Sustainable Waste Management (OSWM)** to coordinate operations, share resources, and ensure consistent service standards across villages. This office will oversee curbside routes, community composting sites, public outreach, policy research, and annual tracking of diversion progress.

Rivertowns Foodscraps Diversion Curve



	Phase 01	Phase 02	Phase 03	Phase 04
Landfill	6537	5170	2976	1477
Collect	286	574	1602	2216
Recover	357	995	2126	2534
Reduce	147	586	623	1099

Shared infrastructure, intermunicipal agreements, and pooled funding will help villages manage costs while achieving economies of scale. Clear performance metrics and transparent reporting will build public trust and keep the initiative aligned with climate goals.

Food Scraps Program Phasing Matrix

	Phase 1 (2026-2030)	**Phase 2 (2030-2035)**	**Phase 3 (2035-2040)**	**Phase 4 (2040-2045)**
Diversion Target	10%	30%	60%	80%
Reduce (Education)	Education and Awareness	Community Tools & Community Partnerships	Incentives and Mandates	Regulations and Reforms
Recover (Composting)	Pilot Community & Backyard Compost Program	Expand Community & Backyard Compost Programs	Pilot Local Processing	Expand Local Processing
Collect (Curbside)	Village Pilot Curbside Pickup Program	Consortium Pickup Program	P1: MSW to Food Scraps Pickup Transition (50%)	P2: MSW to Food Scraps Pickup Transition (100%)

Visioning a Cleaner, Circular, Local Future

Through this comprehensive, phased approach, the Rivertowns can lead the region in achieving net zero food waste. By building on current successes, removing barriers to participation, investing in local composting infrastructure, and driving upstream waste prevention, the Rivertowns will not only meet state climate mandates but also create a resilient, community-driven circular economy. This study charts a practical path forward, turning food scraps from an overlooked waste stream into an invaluable local resource—and proving that small municipalities working together can make big strides toward a sustainable future.

2

Current State of Food Scraps

The Rivertowns have made clear progress in building a culture of sustainability, but food scraps remain one of the largest and most under-addressed parts of the local waste stream. This chapter explains why tackling food scraps is so critical to the region's climate and waste goals—and why moving beyond today's drop-off model is the next step toward a more resilient, efficient, and community-centered system. By understanding the current gaps and opportunities, local leaders and residents can shape a program that matches the Rivertowns' climate ambitions.

Importance for Food Scraps for the Rivertowns

Across the Rivertowns, communities are expressing a growing commitment to sustainability and climate action. One of the most immediate and impactful ways to advance these goals is through improved management of food waste. Residential food scraps represent a significant portion of the municipal waste stream—and addressing them directly supports broader environmental, social, and economic outcomes.

This local momentum aligns with state and county priorities. New York State's Climate Leadership and Community Protection Act (CLCPA) calls for an 85% reduction in greenhouse gas emissions by 2050 and positions organic waste diversion as a key strategy[1]. At the county level, Westchester has reinforced this approach through its Residential Food Scrap Transportation and Disposal (RFSTAD) program and regional partnerships aimed at boosting diversion rates and reducing landfill dependency.[2]

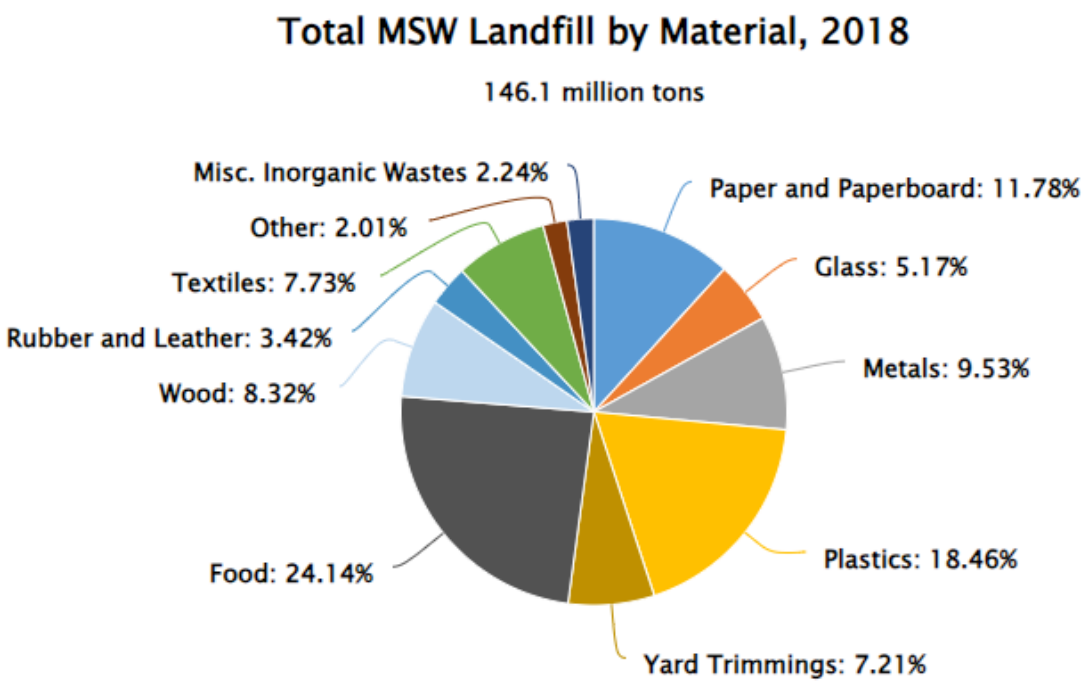
[1] New York State Climate Action Council. 2022. *New York State Climate Action Council Scoping Plan*. Albany, NY. https://climate.ny.gov

[2] Westchester County Department of Environmental Facilities. 2023. Residential Food Scrap Transportation and Disposal (RFSTAD) Program Overview. https://environment.westchestergov.com/food-scraps

Rivertowns Food Scraps Study

Each year, the Rivertowns collectively generate an estimated 45,000 tons of municipal solid waste (MSW). National data from the EPA indicates that 40–60% of household waste is made up of compostable organics, including food scraps, yard trimmings, and other biodegradable materials[3]. This means that roughly 18,000–27,000 tons of waste generated annually in the Rivertowns could be diverted from landfills through composting. The emissions associated with this organic material—particularly methane from landfilled food scraps—represent a meaningful share of statewide and countywide greenhouse gas emissions[4].

United States Total MSW Landfill by Material, 2018



Source: U.S. Environmental Protection Agency (EPA). 2020. *Advancing Sustainable Materials Management: 2018 Fact Sheet.* Washington, DC. https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling

Despite strong public support, the greatest challenge to expanding food scrap diversion remains behavioral. Much like the early days of recycling, building long-term habits around food scrap separation will require a cultural shift. Overcoming this challenge demands a coordinated strategy that includes:

- **Generating demand** through public education and social normalization of food scrap recycling;
- **Removing barriers** by making participation easy, accessible, and convenient;
- **Expanding service** capacity to ensure reliable and scalable collection and processing as participation grows.

By investing in this transformation, the Rivertowns have an opportunity to lead by example—demonstrating how small municipalities can make big strides in sustainability by tackling one of the most overlooked elements of the waste stream: food scraps.

[3] U.S. Environmental Protection Agency (EPA). 2020. *Advancing Sustainable Materials Management: 2018 Fact Sheet*. Washington, DC. https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling

[4] U.S. Environmental Protection Agency (EPA). 2020. Reducing the Impact of Wasted Food by Feeding the Soil and Composting. Washington, DC. https://www.epa.gov/sustainable-management-food/reducing-impact-wasted-food-feeding-soil-and-composting

Current Village Food Scraps Program

The Rivertowns' participation in Westchester County's Residential Food Scrap Transportation and Disposal (RFSTAD) Program has been an important first step in building community awareness around food waste and composting. Through this program, a majority of the villages have established drop-off locations where residents can bring their food scraps for collection by a county-contracted hauler. While the Village of Ardsley does not have a drop off location within village limits, collaboration exists between the neighboring Town of Greenburg to provide interested residents the option to participate in the program. The materials are then transported from these drop off locations to an off-site composting facility, helping reduce landfill dependency[5].

Drop-off sites vary between villages, ranging from being located at the local department of public works to being spread throughout the village. Location of the bins often reflect the localized operational needs and community preferences. Dobbs Ferry, Hastings-on-Hudson, and Elmsford located their drop-off sites near their DPWs based on lack of alternative sites that would not be a nuisance for the community. Meanwhile, Irvington, Sleepy Hollow, and Tarrytown have located bins in downtown locations that are more accessible to their communities[6].

[5] Westchester County Department of Environmental Facilities (DEF). 2023. *Residential Food Scrap Transportation and Disposal (RFSTAD) Program Overview*. Available at https://environment.westchestergov.com/food-waste/residential-food-scrap-transportation-and-disposal-program-rfstad

[6] Rivertowns Green Committees & Village DPW Staff. 2022–2023. *Local Program Site Plans and Drop-Off Maps*. Referenced in Item A – Task 1 Memo – Rivertowns Food Scraps Existing Operations

Map of Rivertown Food Scrap Drop Off Sites and Village DPW Facilities

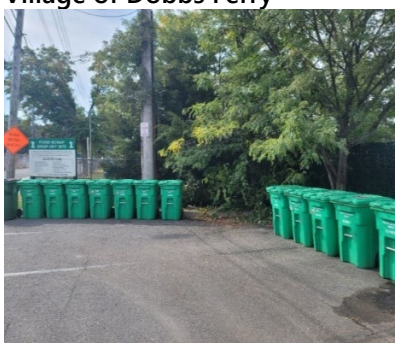
Food Scrap Drop Off Sites

Hastings-on-Hudson

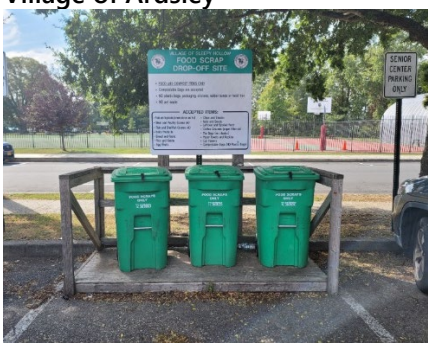
Village of Dobbs Ferry

Village of Ardsley

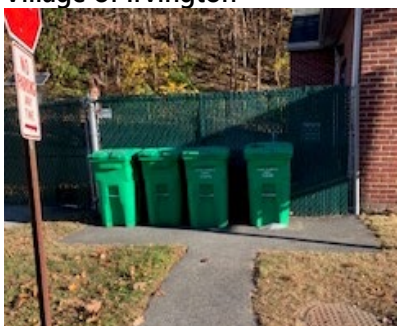
Village of Irvington



Village of Tarrytown



Village of Sleepy Hollow



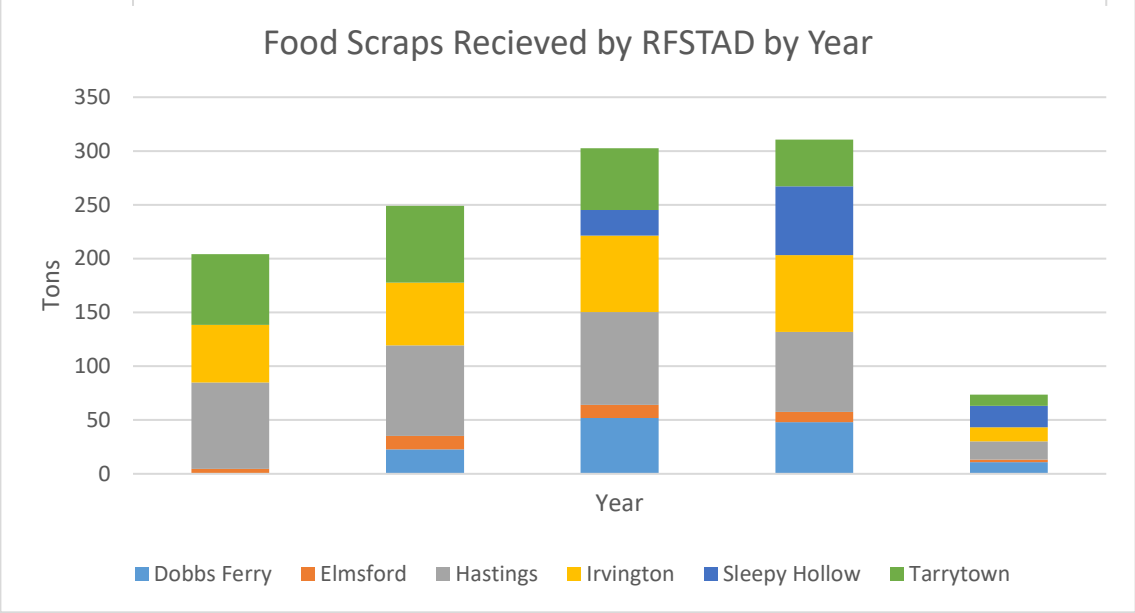
Village of Elmsford

For More Information, see Appendix A – Rivertowns Food Scraps Operating Memo

Analysis of RFSTAD Tonnages:

Over the past four years, the Rivertowns have steadily increased the amount of food scraps diverted through the County's RFSTAD program, growing from about **204 tons in 2021** to an estimated **310 tons by 2024**, before a drop to **73 tons in 2025**. On average, villages are diverting about **228 tons per year**, with communities like Tarrytown, Sleepy Hollow, and Hastings consistently achieving the highest capture rates relative to estimated generation. While this marks important early momentum, the figures confirm that drop-off alone only scratches the surface of diversion potential — reinforcing the need to expand curbside pickup, community composting, and local processing to reach Rivertowns' long-term climate and waste goals.

Rivertowns Food Scraps Received by RFSTAD



Source: Source: Westchester County GIS. Westchester County Food Scrap Drop-Off and Yard Waste Sites. ArcGIS Online Map. Accessed July 9, 2025. https://wcgis.maps.arcgis.com/home/item.html?id=b07e3d5d9d0c4c258654bb979546244e

Rivertowns Food Scraps Received by RFSTAD

	Food Scraps Received by RFSTAD (Tons)					
	2021	**2022**	**2023**	**2024**	**2025**	Average
Dobbs Ferry		22.6	51.9	48.1	10.9	33.375
Elmsford	4.5	12.7	12.3	9.4	2.2	8.22
Hastings	80.3	84	86	74.4	17.1	68.36
Irvington	53.6	58.5	71.1	71.5	13.2	53.58
Sleepy Hollow			24	63.9	19.9	35.93333
Tarrytown	65.9	71.2	57.4	43.2	10.4	49.62
Rivertowns Total	204.3	249	302.7	310.5	73.7	228.04

*The Village of Ardsley does not have food scrap drop off locations within its' limits. Participating Ardsley residents are directed to drop off their food scraps through a program run by the Town of Greenburg.

Source: Westchester County GIS. Westchester County Food Scrap Drop-Off and Yard Waste Sites. ArcGIS Online Map. Accessed July 9, 2025. https://wcgis.maps.arcgis.com/home/item.html?id=b07e3d5d9d0c4c258654bb979546244e

However, despite its environmental value and early success, the drop-off model has reached a plateau. Participation remains limited largely due to access barriers. Drop-off sites are often located in places that are inconvenient, poorly marked, or restricted to limited hours—especially when placed on school properties or behind municipal buildings. This results in limited visibility and a lack of awareness surrounding the option to drop off food scraps. These consequences primarily affect potential participants who are not aware of the program. These challenges disproportionately affect residents with mobility issues, inflexible schedules, or limited transportation access. While some villages have introduced creative outreach and siting strategies to boost participation, the overall momentum scale of the program has stalled across a broader scale.

Tonnages of Rivertowns Food Scraps Generated

Village	Estimated Food Scraps Generated	Average Annual Food Scraps Collected	Percent of Food Scraps Collected
Tarrytown	1,728.86	71	4%
Dobbs Ferry	1,332.58	23	2%
Sleepy Hollow	1,277.61	60	5%
Hastings on Hudson	1,101.79	84	8%
Irvington	786.28	59	8%
Ardsley*	600.79	0	0%
Elmsford	498.15	13	3%
Grand Total	**7,326.06**	**310**	**4%**

*The Village of Ardsley does not have food scrap drop off locations within its' limits. Participating Ardsley residents are directed to drop off their food scraps through a program run by the Town of Greenburg.

As of 2022, the Rivertowns collectively diverted only 310 tons of food scraps through the drop-off program—just 4% of the total estimated food waste generated annually[7]. That generation is substantial: based on household type and occupancy data, the seven villages together produce approximately 7,327 tons of food scraps each year . Notably, the vast majority of this material—over 80%—continues to be disposed of in the municipal solid waste (MSW) stream and sent to landfills[8].

Importantly, the level of participation and diversion is not evenly distributed across the villages. Some communities, especially those with more accessible drop-off sites or stronger outreach programs, have achieved higher participation rates. However, many villages are still well below their diversion potential, leaving more than 7,000 tons of food waste annually that could be captured through improved services.

[7] Westchester County DEF. 2023. *Annual RFSTAD Tonnage Report* (2022 Collection Totals).

[8] U.S. Environmental Protection Agency (EPA). 2020. *Advancing Sustainable Materials Management: 2018 Fact Sheet*. Washington, DC. https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling.

Food Scrap Generation Methodology

To estimate how much residential food scrap waste is generated within each Rivertown village, this study uses a generational model that applies **housing tenure data** from the **U.S. Census Bureau's American Community Survey (ACS) 2018–2022 5-Year Estimates, Table B25003**. For each census tract, the total number of owner-occupied and renter-occupied housing units is multiplied by an assumed **annual generation rate** based on EPA and peer municipal studies of typical household food waste.

Assumptions:

- Owner-Occupied Units: 730 lbs/year per household
- Renter-Occupied Units: 657 lbs/year per household
  (Source: U.S. EPA, 2020; municipal averages from comparable residential studies)

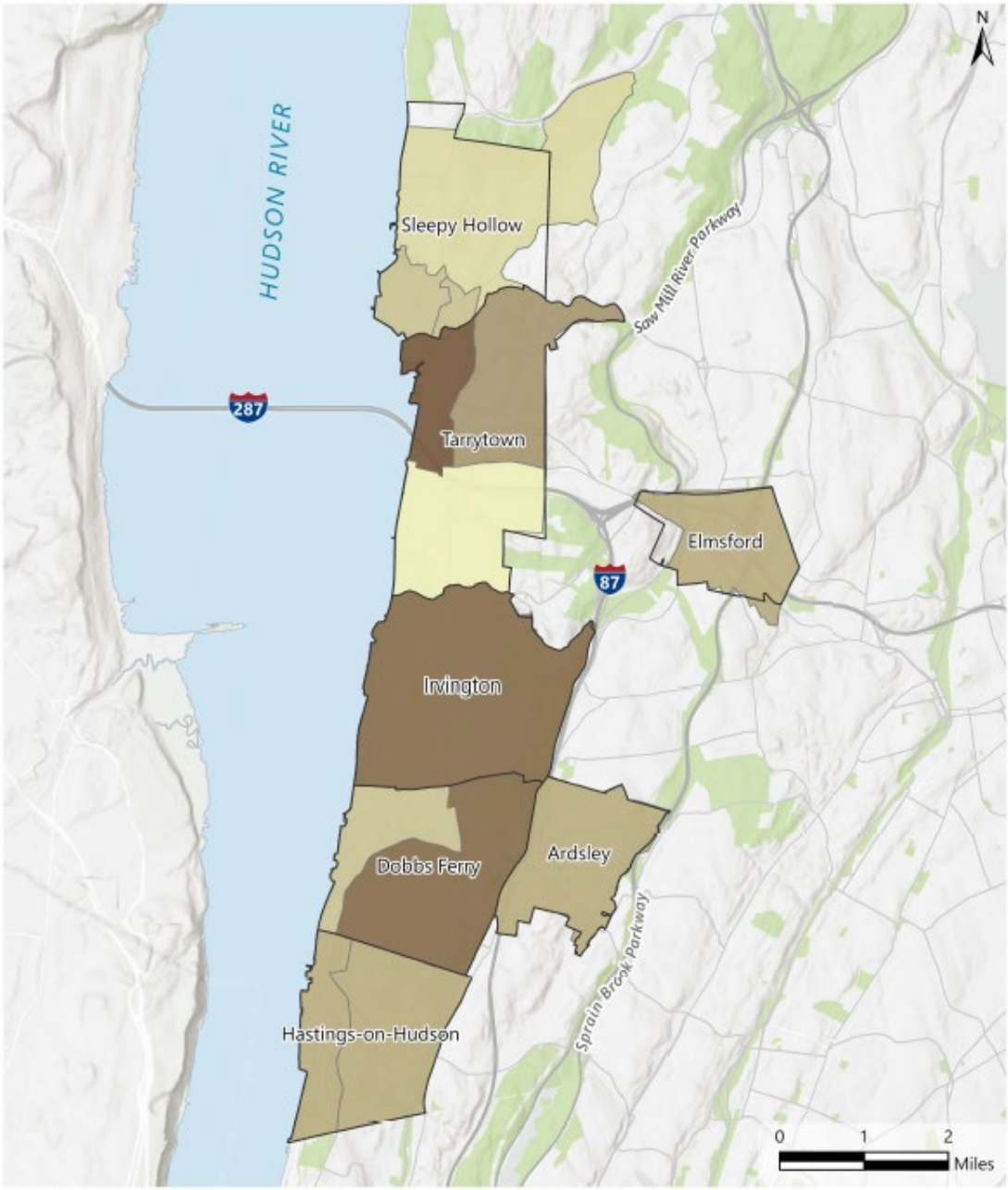
The calculation follows this formula:
Total Food Scraps (lbs/year) = (Number of Owner Units × 730) + (Number of Renter Units × 657)

This output is then converted to tons using a standard factor (**1 ton = 2,000 lbs**) to provide annual food scrap generation estimates at the tract and village level. These estimates serve as a baseline for local planning — helping villages assess the potential scale of curbside pickup, drop-off expansion, or community composting capacity needed to divert food scraps from the landfill.

Diverting this material from landfills is not just a matter of better waste management—it is a climate necessity imperative. Organic waste that decomposes in landfills generates methane, a greenhouse gas many times more potent than carbon dioxide. By transitioning beyond the current drop-off model, the Rivertowns can begin to close this gap and further reduce GHG emissions and make significant progress toward their environmental and climate goals[9].

[9] U.S. Environmental Protection Agency (EPA). 2023. *Overview of Greenhouse Gases: Methane Emissions*. https://www.epa.gov/ghgemissions/overview-greenhouse-gases#methane.

Map of Rivertown Food Scraps Generational Model by Census Tract



Source: VHB

Community Food Scraps Conversations

To be successful, any program launched at the local government level is ideally supported by the public. In the context of community composting and examining the feasibility of expanding upon the already existing food scrap drop off program in the Rivertowns, public support and participation following program launch, is a critical determinant of success. The project team convened two focus groups over the course of the project made up of key community stakeholders across the seven Rivertowns villages. At each of these focus group sessions, the goal of the project was explained, and any progress completed by the core team was shared with the group. The discussion portions of these focus group sessions included visioning activities and breakout sessions constructed around a multi-topic survey.

Through this engagement, the core project team was able to better understand the needs, wants, and dreams passionate community members had for the future of the Rivertowns. Members of each Village stated the current status of food scrap collection programs and the barriers which they felt prevented further expansion among the public. These barriers included lack of easy access to the site itself, limitations on the operational hours of each drop off location due to staff or location of the site, and difficulty maintaining the cleanliness of the site. Initial solutions to these barriers included involving the local schools at a greater level, creating greater public interest through outreach and education campaigns, expanding backyard composters with residents, and overall increasing convenience of participation. With each of these solutions, stakeholders emphasized priorities like cost effectiveness, leveraging existing resources and programs, and mitigating the contamination of the new waste stream to the best of their ability.

In the second focus group meeting, progress on the effort was reported and key questions and topic areas were presented to the attendees for discussion. The feedback in this engagement session touched on a greater number of program-specific preferences. In regard to containerization, participants agreed that all curbside containers needed to be lockable to mitigate the issue of pests. Containers would have to follow municipal guidelines but participants favored a smaller bin that was picked up more frequently and smaller bins would also create a lighter possible weight of the container, making pickup more accessible for staff. This final item was a concern due to the heavier weight of food scraps in comparison to general MSW.

The discussion of processing noted that none of the Villages have processing. The presence of Hudson Compost in each community was discussed. Hudson Compost was once able to use the drop off bins in each Village but now that they are no longer able to, the company has less engagement in the community, especially in attending events where they once collected compost. Some villages report about 100 paid subscribers to Hudson Compost's services, but others have significantly lower rates. Backyard composting was discussed, but many have concerns or even negative experiences with the installations attracting unwanted animals and taking to long to create a final product, unable to keep up with the waste coming out of the household. In this part of the discussion, stakeholders agreed that a phased approach to this program would be necessary.

Both Dobbs Ferry and Hastings on Hudson were credited with having great public education and engagement materials already created. Overall, the group noted that when formulating these curriculums, it is important to consider the high number of people moving to the area from New York City and the culture shift between the two. Environmental Committees and schools were also indicated to be ideal partners in this aspect of the effort.

3

Reaching Net Zero Food Waste

Reducing food scraps at the source is one of the most immediate and impactful actions the Rivertowns can take to advance climate goals, support local sustainability, and strengthen community resilience. This chapter outlines a practical roadmap for achieving net zero food waste by combining curbside collection, community composting, and proven programs and policies that prevent waste before it starts. Together, these strategies position the Rivertowns as a regional leader in closing the loop on food scraps and creating a more circular, community-driven food system.

The Story of Recycling and Need for Curbside Pickup

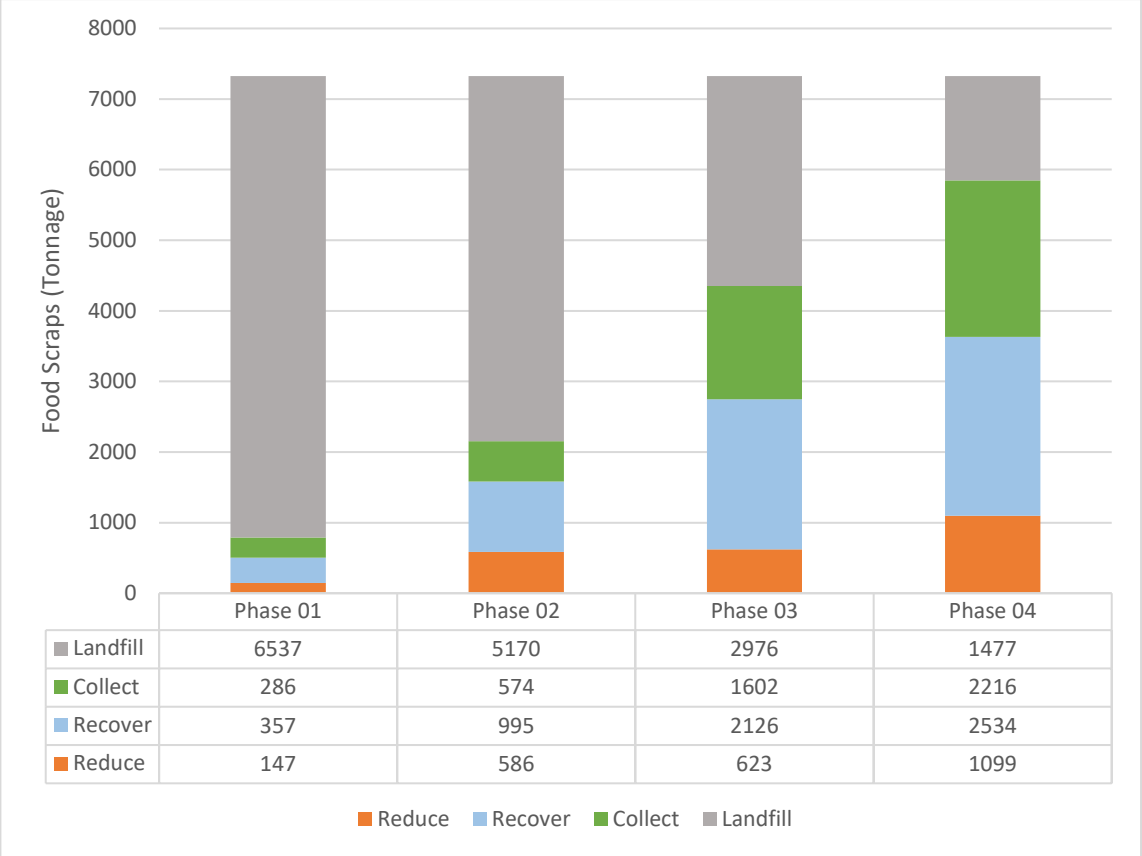
Over the past 200 years, there has been a marked and significant shift in the way humans manage their waste. At one time, people recycled without thinking, reusing and repurposing whatever they could until the material had truly come to the end of its' usable life. Even during wartime, Americans were consistently asked to separate certain materials like cloth, rubber, and metals for reuse and these efforts had great success. However, curbside trash pickup became standard not long after, and source separation rates declined significantly. In the 1960's, the national recycling rate was just 7%. Just a decade later in the 1970s, the environmental movement began to gain traction and support across the country. Those who did begin recycling to be environmentally conscious had to separate the materials and drive them to a recycling facility, making the practice time-consuming and inconvenient. Into the 1980's, many municipalities began to see landfills reach capacity or come close. Recycling now served two purposes, one which was environmentally – friendly, but also one which was now financially advantageous. Expanding landfills, if feasible, is a costly practice. Diverting waste away from landfills would make installations last longer, avoiding harsh constraints on the budget. The first

curbside recycling program was founded to speed this process along. In 1981, Woodbury, New Jersey established the first curbside recycling program and before the end of the decade there were 1,050 programs just like it across the county. Today, recycling rates have risen to 32%. While still leaving much room for improvement, the convenience and accessibility of curbside recycling created a drastic boost in diversion.

Growing Participation in the Program

Achieving a sustainable, circular waste system in the Rivertowns requires a fundamental shift in how food scraps are managed at the residential level. While current drop-off programs have laid a foundation, they are not sufficient to meet the region's climate and waste diversion goals. The ultimate objective is to divert 80% of food scraps from the municipal solid waste (MSW) stream by 2045, keeping valuable organics out of landfills. Reaching this goal will not happen overnight—it will require a phased, strategic effort that builds both infrastructure and community engagement over time.

Rivertowns Food Scraps Projected Diversion Curve



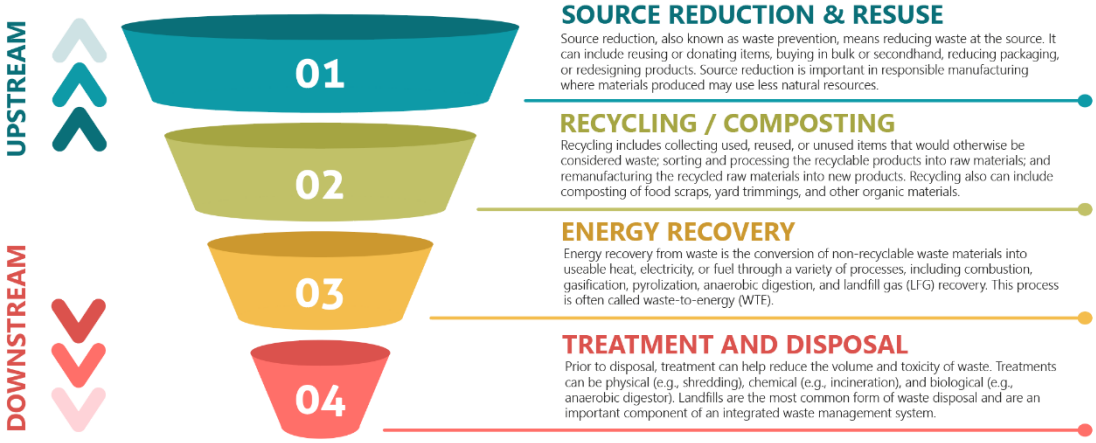
	Phase 01	Phase 02	Phase 03	Phase 04
Landfill	6537	5170	2976	1477
Collect	286	574	1602	2216
Recover	357	995	2126	2534
Reduce	147	586	623	1099

Source: VHB

No single village can meet this challenge alone. Coordinated action across the Rivertowns is essential. Through the Rivertowns consortium, the villages can share resources, streamline operations, and expand collective capacity to deliver food scrap programs at scale. This study outlines an adoption curve that models how participation can grow exponentially with the rollout of targeted interventions, including curbside pickup, local composting infrastructure, and public education on climate-conscious consumption.

At the heart of this strategy is breaking down obstacles to participation through building convenience into the process of managing food scraps. Feedback from residents and local governments has consistently emphasized that ease of use is the single most influential factor limiting broader participation. In response, curbside pickup has emerged as a natural and necessary next step—offering residents a simple and familiar way to participate by placing food scraps at the curb alongside regular trash and recycling.

The Waste Management Hierarchy



Source: VHB, based on EPA Solid Waste Management Framework

To reach full diversion, the Rivertowns should consider the implementation of a holistic, four-pronged strategy:

	**Collect: Establish Curbside Pickup** Launch curbside pickup programs to make food scrap recycling as accessible and routine as garbage collection, reducing the barriers to participation.
	**Reduce: Programs and Policies for Upstream Waste Reduction** Engage residents through community outreach and education that encourages climate-conscious consumption, meal planning, and food waste prevention, supporting the reduction of food scrap waste at the source.
	**Recovery: Capture Food Scraps Locally** Build and expand community composting infrastructure to process food scraps within the Rivertowns, reducing reliance on distant facilities and closing the loop locally.
	**Collaborate: Rivertowns Office of Sustainable Waste Management** Formalize a partnership between the Rivertown Villages to support the collective pursuit of sending less waste to the landfill.

These programs are not all-or-nothing—they can be phased in over time, starting at a manageable scale and growing as infrastructure and engagement expand. By aligning rollout

with capacity and public momentum, the Rivertowns can steadily increase the tonnage diverted each year, tracking progress against clear benchmarks and making choices which best align with the resident participation driving programming.

Following this plan will allow the Rivertowns to not just improve waste management, but also lead in climate action, community collaboration, and regional sustainability.

Rivertowns Food Scraps Program

Food scraps represent one of the largest remaining opportunities for the Rivertowns to reduce landfill waste, lower greenhouse gas emissions, and transition toward a circular materials economy. Building on the foundation of existing drop-off programs, the Rivertowns Food Scraps Program outlines a multi-phase strategy to scale up food scrap collection and processing through **collection** (curbside pickup), **recovery** (community composting), **reduction** (program and policies), and **collaboration** (Rivertowns Office of Sustainable Waste Management).

This section provides a detailed roadmap for implementing a regionally coordinated, phased curbside collection system that begins with small village-led pilots and evolves into a fully integrated service. The program is designed to be flexible, scalable, and fiscally sustainable—leveraging shared infrastructure, regional coordination, and public engagement to maximize participation and impact.

By first investing in curbside pickup, the Rivertowns can remove barriers to participation, align with state and county regulatory thresholds, and prepare for future growth in both volume and complexity. Over time, this service will operate in concert with other program elements—like backyard composting and local processing centers—to create a resilient and self-sustaining food scraps ecosystem for the Rivertowns region.

Collect: Establishing Curbside Pickup

Curbside pickup is one of the most effective strategies to expand food scrap recycling across the Rivertowns. Unlike drop-off sites, curbside collection brings the service directly to residents' homes—allowing households to set out food scraps alongside trash or recycling on their regular collection day. Instead of having to store material for transport or navigate limited drop-off hours, residents use a kitchen caddy to gather scraps, empty it into a sealable curbside bin, and place it at the curb for weekly pickup.

By removing the inconvenience of self-hauling food waste, curbside pickup significantly lowers the barrier to participation and makes food scrap separation a routine part of household behavior—just like trash and recycling are today. This simplicity and convenience are exactly why recycling programs in the 1990s saw huge adoption gains once curbside service was introduced.

For the Rivertowns, curbside pickup is not only a more accessible option for seniors, renters, and busy families; it is the linchpin for scaling participation to levels that make meaningful climate impact possible. Modeling shows that villages cannot reach the goal of diverting up to 80% of food scraps from the landfill without a reliable, convenient curbside service. Community feedback during the planning process strongly supports this: stakeholders consistently identified curbside pickup as the critical next step to turn awareness and interest into real action, village by village.

How Curbside Food Scraps Pickup Works:

5. **In the Kitchen:** Residents collect food scraps daily in a countertop caddy or small container lined with a compostable bag.

1. **At the Curb:** On trash day, residents empty their caddy into a secure 6–13 gallon food scrap bin with a tight-fitting lid to keep out pests and odors.
2. **Collection:** DPW crews or a contracted hauler pick up food scrap bins along the same routes as trash and recycling, using a dedicated truck or a split-body vehicle.
3. **Transport & Processing:** Collected food scraps are taken to a transfer station, the County RFSTAD system, or a local composting facility—turning waste into nutrient-rich compost instead of methane-producing landfill waste.
4. **Closing the Loop:** Finished compost can be returned for use in community gardens, parks, street trees, and local landscaping, bringing the benefits right back to residents.

Aligning with State and County Policy

Expanding curbside food scrap pickup requires careful coordination with regulatory frameworks at both the state and county levels. Two key thresholds govern how food scraps must be managed:

- **New York State Requirement (6 NYCRR Part 350):** Any generator—residential or commercial—producing an average of two tons or more of food waste per week must recycle this waste at a certified organics processing facility within 25 miles. In practice, this means municipal programs collecting food scraps above that threshold must use the County's RFSTAD transfer station, not drop-off sites.
- **Westchester County RFSTAD Program Threshold:** Municipalities participating in the Refuse Disposal District #1 Inter-Municipal Agreement (IMA) benefit from tiered pricing:
  - Under 20 tons/year: $15/ton fee.
  - At 20+ tons/year: Mandatory delivery to RFSTAD at a reduced rate of $10/ton.

Given that most drop-off locations currently operate near full capacity (10–14 toters at 64 gallons each, filled once or twice weekly), they are already nearing the 2-ton limit per site—placing curbside programs at the edge of state-mandated thresholds. This makes the case for a more structured, phased approach to scaling curbside collection.

Phase 1: Village Pilot Programs (2025–2030)

Currently each village's drop-off program generates between an estimated 0.1 to 0.8 tons of food scraps per route. In this initial phase, individual villages can launch modest curbside pickup efforts using retrofitted pickup trucks or satellite vehicles. These vehicles can service routes once per week, collecting bins placed at the curb by participating households. Waste would then be dropped off at upgraded municipal food scrap transfer points for later pickup by County haulers.

- **Advantages:** Low upfront cost, uses existing DPW staff and routes, aligns with MSW operations.
- **Scalability:** Frequency could increase to twice per week if demand rises.
- **Infrastructure:** Villages would manage their own operations, with waste delivered to either their own drop off points, or to County RFSTAD Collection points if tonnage requires it.
- **Financing:** It is estimated that this would cost the villages no more than $10,000, mainly focused on a sustained outreach and engagement campaign to raise awareness for the curbside pickup.

Case Study: Scarsdale Food Scraps Curbside Pick Up Program

Source: Scarsdale10583.com, "Launch of Curbside Pick-Up of Food Scraps Celebrated at the Recycling Center," April 10, 2018, https://scarsdale10583.com/section-table/101-village-voices/6949-launch-of-curbside-pick-up-of-food-scraps-celebrated-at-the-recycling-center.

- **Program Type:** Curbside and drop-off pilot (voluntary participation)
- **Description:** Scarsdale began with a drop-off program and transitioned to curbside pickup for food scraps as a pilot in 2017, led by its Conservation Advisory Council and with strong grassroots support. Participation started with single-family homes and used affordable kitchen caddies and bins purchased by residents.
- **Relevance:** Demonstrates how a small-scale curbside model can be introduced with modest equipment and high community buy-in. Uses local DPW routes for pickup and delivery to County RFSTAD program.
- **Takeaway:** Strong initial uptake and support from schools and residents can sustain a low-cost pilot and inform Phase 2 scaling.

Phase 2: Intermunicipal Consortium Model (2030–2035)

By 2030, as early village pilots grow and curbside participation climbs to roughly 35% of households, food scraps collected per route could increase significantly—rising to 2–7 tons per run, well beyond what small pickup trucks can handle. At this scale, the Rivertowns will need to move from village-by-village pilots to a coordinated regional system that combines routes across municipalities for efficiency and cost savings. In this phase, villages will share resources and governance through an intermunicipal consortium, such as a Local Development Corporation

(LDC), Solid Waste Authority, or municipal Co-Op. Mid-sized packer trucks with 4–6 ton daily capacity will service new regional routes that cross village lines, maximizing route density and reducing redundant trips. This model builds economies of scale, lowers hauling costs per ton, and positions the Rivertowns for long-term financial sustainability as food scrap volumes continue to grow.

- **Advantages:** Continued ability to meet the curbside pickup demand and establishing cross-village routes.
- **Infrastructure:** Each route would be serviced two days per week using dedicated packer trucks. Villages could either:
  - Invest in shared fleet and labor, or
  - Contract service to private haulers.
- **Scalability:** Loads would be delivered directly to RFSTAD or other regional processors. As countywide food scrap volumes grow, capacity constraints may arise, increasing transportation distances and emissions. This underlines the future need for local processing solutions.
- **Financing:** Based on comparable communities, the Rivertowns should expect to budget $400,000–$600,000 per route for startup capital costs (trucks, containers, route design, and staff training). For two routes, this means a total capital estimate of $800,000–$1.2 million, which may be spread across multiple villages through an intermunicipal agreement.
  - **Public (Consortium DPW -Operated):**
    Villages run collection in-house using DPW crews and owned trucks. Estimated annual operating cost: $80–$120 per ton ($240,000–$480,000 per route) plus upfront fleet costs. Good for communities that value local control and want to integrate routes with MSW.
  - **Private (Contractor-Operated):**
    A private hauler is contracted to run curbside pickup for the entire consortium, paid per ton or per household. Estimated annual cost: $100–$150 per ton ($300,000–$600,000 per route) with little or no fleet investment by the villages. Flexible and scalable if well-managed.

Developing Two Regional Routes

As curbside participation expands across the Rivertowns, building efficient regional routes will be essential to manage growing tonnage while keeping hauling costs low. Modeling shows that by 2030–2035, villages working together through a shared consortium can collect over 7,300 tons of food scraps annually, with roughly 70 tons collected per pickup cycle across the entire area.

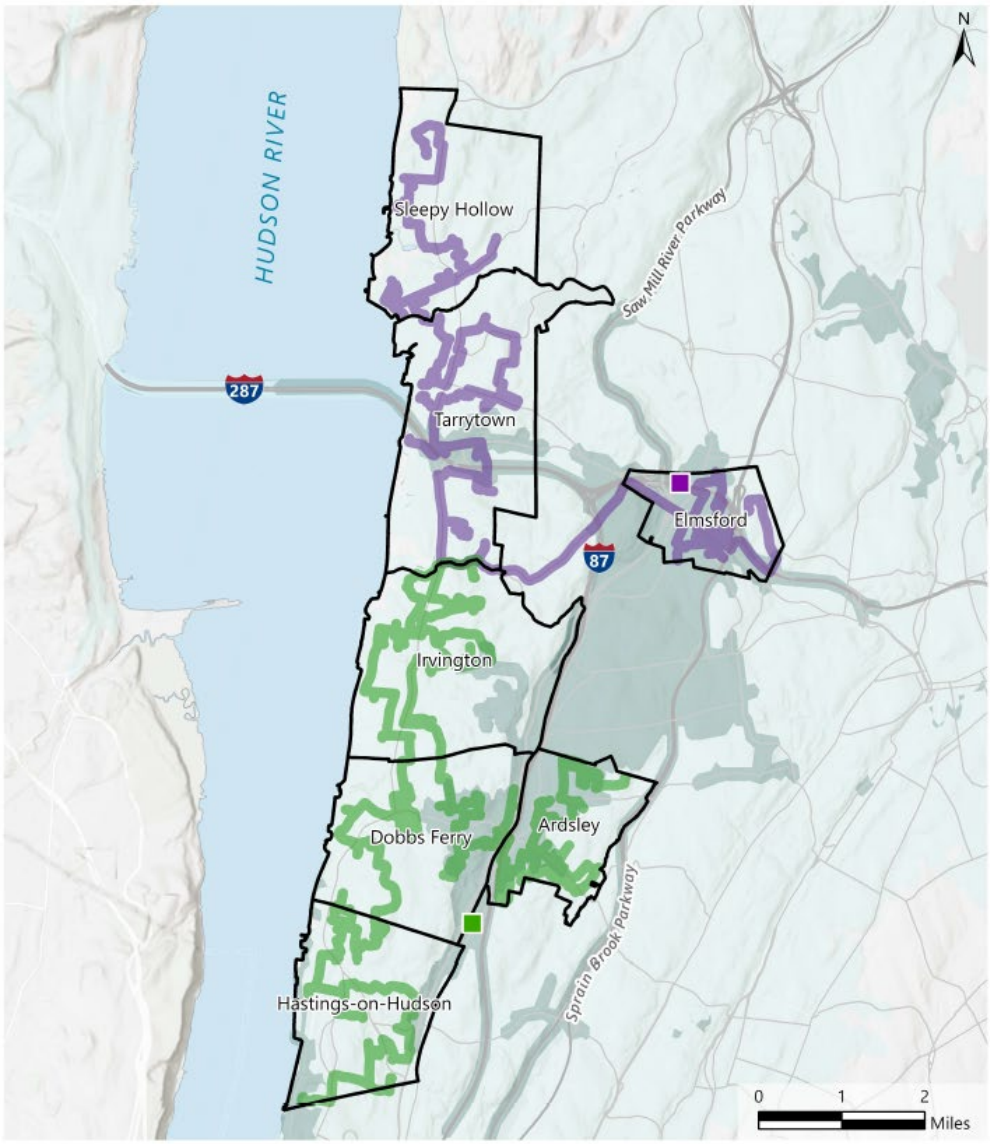
Taking this approach would offer the following advantages:

- **Efficient Coverage:** Grouping adjacent villages together minimizes deadhead miles and unnecessary duplication while keeping truck travel within reasonable timeframes.
- **Balanced Loads:** Both routes carry comparable weekly volumes (13–15 tons/week), supporting consistent service and balanced truck utilization.
- **Shared Infrastructure:** Villages can plan shared transfer points or direct hauling to County RFSTAD facilities, depending on daily route tonnage and local capacity.
- **Flexible Staffing:** Each route could be operated by a dedicated DPW crew, a contracted hauler, or a combination—depending on what ownership model works best for the villages.

Route Structure

To balance volumes and travel times, the program would group the seven villages into two primary service zones:

Map of Potential Food Scrap Curbside Pickup Routes



.Source: VHB

Two-Route Curbside Pickup Structure

Route	Villages Served	Annual Tonnage	Average Collected per Pickup
Route A (Southern Route)	› Hastings › Ardsley › Dobbs Ferry › Irvington	~3,820 tons/year	~36.7 tons per run
Route B (Northern Route)	› Tarrytown › Sleepy Hollow › Elmsford	~3,500 tons/year	~33.7 tons per run
Combined Total	› All Rivertowns villages	~7,326 tons/year	~70 tons per run

Ownership & Operation Model for Curbside Pickup

As the Rivertowns move from pilot curbside collection to a fully scaled regional system, each village—or the intermunicipal consortium—will need to decide how the curbside service is owned, staffed, and managed. Broadly, there are two primary models:

- Municipal DPW-Operated Service
- Contractor-Operated Service (Public-Private Partnership)

Each has clear benefits and tradeoffs that should be weighed based on staffing capacity, fleet readiness, funding, and desired control.

Option 1: Government DPW-Operated

Each village, or the consortium as a whole, directly operates food scrap collection through their Department of Public Works. Villages invest in trucks, bins, and staff. DPW crews run dedicated or combined MSW/organics routes, handle resident education, and manage contamination enforcement in-house.

Advantages:

- **Local Control:** Villages maintain full control over routes, scheduling, and service standards.
- **Flexibility:** Easier to adjust routes, add households, or integrate with MSW collection as needed.
- **Workforce Stability:** Supports local jobs and DPW workforce development.
- **Trust & Familiarity:** Residents may prefer local DPW crews they know.

Challenges:

- Upfront Costs: Villages must fund new trucks, bins, and potentially new drivers or cross-training.

- Staff Capacity: Small DPWs may face workforce shortages, overtime costs, or scheduling conflicts during peak seasons.
- Administrative Burden: Villages must handle customer service, billing (if any), training, and compliance oversight internally.

Option 2: Contractor-Operated

Villages or the consortium issue a competitive bid for a private hauler to provide curbside pickup under a shared contract. The contractor supplies trucks, drivers, bins (in some cases), and disposal or transfer to the County RFSTAD system. Villages retain oversight through performance standards in the contract.

Advantages:

- **Cost Predictability:** Contractors bid a fixed fee per household or ton, which can help with budgeting.
- **Lower Capital Costs:** No upfront purchase of trucks or large equipment needed by villages.
- **Scalability:** Contractors can add trucks and drivers more quickly as participation grows.
- **Specialization:** Haulers may have existing organics routes, safety training, and compliance systems.

Challenges:

- **Less Local Control:** Villages rely on the contractor's staffing and quality. Poor performance may require enforcement or re-bidding.
- **Contract Management:** Municipal staff must monitor compliance, handle complaints, and ensure that haulers follow local regulations.
- **Equity Concerns:** Contract structure must ensure all households receive fair service, especially in low-density or hard-to-reach areas.
- **Profit Margin:** Private contracts may add profit layers that don't exist in DPW-run systems.

Choosing the Best Fit

Many successful programs use a hybrid approach over time: starting with DPW pilots for flexibility and community trust, then adding contracted routes or zone-based service as volume grows and economies of scale are needed. For the Rivertowns, a consortium model may combine municipal oversight, pooled resources, and selective outsourcing to get the best of both worlds.

Rivertowns Food Scraps Study

Case Study: Town of Bethlehem, NY

- **Program Type:** Paid curbside service (FoodScraps360) + municipal drop-off + municipal compost site[10]
- **Description:** Bethlehem partnered with a private hauler for curbside food scrap pickup while developing its own municipally operated composting site. The town provides flexible options including biweekly curbside service and a free drop-off site.
- **Relevance:** Illustrates a successful hybrid model of public-private service delivery with long-term plans for public infrastructure. The program serves as a bridge between village-level pilots and regional capacity-building.
- **Takeaway:** Bethlehem shows how contracting curbside routes while building a shared composting facility can be both efficient and scalable for a consortium.

Phase 3: Scaling to Meet Growing Demand (2035–2040)

By 2035, food scrap diversion in the Rivertowns is projected to reach about **70% of households**, pushing weekly collection volumes to **3–10 tons per village**, or roughly **65 tons per week region-wide**. This surge in participation marks a critical turning point: villages will need to expand fleets with more mid-sized packer trucks, increase route frequency, and test **hybrid DPW models** where food scraps and garbage are collected together using split-body trucks.

As food scraps are pulled out of the trash stream, villages may be able to either reduce garbage pickups, optimize driver schedules, and save on disposal fees. The villages could also transition MSW pickups to also pick up food scraps. Scaling up will also require strong coordination with County facilities, since total annual tonnage could be approaching **4,400 tons**, aligning with mid-term co-digestion projects and longer-term plans for local anaerobic digestion capacity. Phase 3 transforms curbside pickup from a niche pilot to a fully integrated, climate-smart public service that prepares the region for long-term local processing and circular reuse.

- **Advantages:**
  - Increase route frequency to three days/week
  - Expand the fleet with more mid-sized packers
  - Pilot hybrid DPW models where food scraps are collected alongside MSW on split-body trucks
- **Scalability:** As food scraps are diverted from the MSW stream, villages may reduce garbage pickups to once per week, refitting trucks and schedules accordingly. Each village's fleet (1–3 trucks with 4–6 ton capacity) could recover 60%–98% of local food scraps via split operations.
- **Infrastructure:** As Rivertowns' total annual food scrap tonnage approaches 4,400 tons, coordination with County processing facilities becomes essential. By this time, the County expects to add ~20,000 tons/year in processing capacity via:
  - **Mid-Term (3–5 years):** Co-digestion projects at Peekskill WRRF (10k tons/year) and Wheelabrator site (10k tons/year)
  - **Long-Term (5+ years):** Stand-alone anaerobic digestion plant in Valhalla (60k–80k tons/year)

[10] **FoodScraps360,** *Residential Food Waste Recycling Service,* accessed June 2025, https://www.foodscraps360.com/.

Rivertowns Food Scraps Study

- **Financing:** If each village retrofits or purchases one split-body truck to handle both MSW and food scraps on the same route, the upfront cost would range from $250,000–$350,000 per vehicle, depending on whether it's a new purchase or a retrofit. Across all seven Rivertowns, total capital costs could reach $1.75–$2.5 million, but this investment could be offset over time by savings from reduced MSW routes, fewer trucks on the road, and lower landfill tipping fees.

Importance of Aligning Curbside Pickup with Community Composting and Programs and Policies

As curbside food scrap collection reaches scale in Phase 3, it's critical that the Rivertowns don't expand collection faster than regional processing capacity can handle. Without a balanced approach, the villages could risk collecting more food scraps than the County or local sites can sustainably process, leading to higher transportation costs, increased emissions, or bottlenecks at transfer stations.

This is why Phase 3 must align with the Rivertowns' other two core pillars: Community Composting and Reduction at the Source. Expanding local neighborhood-scale composting sites, school garden pilots, or a mid-sized demonstration facility will help manage a share of the increased tonnage right within the community, easing pressure on County RFSTAD infrastructure. At the same time, strengthening food waste prevention policies—like educational campaigns and commercial food rescue partnerships—will keep the total volume of organics generation in check.

Together, these strategies ensure the curbside system grows responsibly: capturing the maximum environmental benefit without creating new downstream constraints.

Case Study: Tompkins County, NY

- **Program Type:** Multi-site drop-off, centralized hauling, public-private composting
- **Description:** Tompkins County operates 14 staffed food scrap drop-off sites serving ~40,000 residents. Food scraps are collected by a contracted hauler and delivered to Cayuga Compost, a local processor. The county offers public outreach, kitchen caddies, and extensive education.
- **Relevance:** This model handles larger food scrap volumes while maintaining community engagement. It balances high participation with decentralized logistics, making it suitable for areas with growing demand but limited infrastructure.
- **Takeaway:** Highlights how multiple collection methods (curbside + drop-off) can coexist and scale as participation grows.

Phase 4: Full-Service Infrastructure & Processing (2040 and Beyond)

By 2045, the Rivertowns' food scraps program will reach maturity as curbside adoption climbs to 80% diversion rate, diverting an estimated 6,600 tons of organics every year. At this scale, the region will be ready to move beyond simply collecting food scraps to processing them locally, turning what was once waste into a reliable source of high-quality compost for parks, gardens, street trees, and local agriculture. This final phase builds on the success of early pilots, regional routes, and community composting pilots by adding dedicated, full-scale processing infrastructure that closes the loop within the Rivertowns instead of relying entirely on countywide or out-of-county facilities.

A robust local processing facility will ensure that growing curbside volumes don't overwhelm regional capacity while also generating new value for residents in the form of soil improvements, stormwater management, and local resilience. Phase 4 represents the program's ultimate vision: a fully integrated, self-sufficient food scrap system that reduces transportation emissions, keeps tipping fees stable, and turns household participation into tangible community benefit.

- **Advantages:** Ability to generate hyper-local compost, aligning with stakeholder visions for the program
- **Scalability:** MSW tonnage may decline enough to allow for consolidation or downsizing of waste collection services
- **Infrastructure:**
  - **Fleet Needs:** Up to six mid-sized trucks running twice per week across two routes (three trucks per route)
  - **Local Processing Viability:**
    By Phase 3, the Rivertowns should be generating enough food scraps to begin to make investing in local food scraps processing facility feasible and attractive, as recommended in Community Composting.
    - With a reliable throughput of 6,600 tons/year, the Rivertowns could justify a local composting site using aerated static pile systems
    - **Site requirements:** 6.5–7 acres—likely necessitating regional partnerships (e.g., with Greenburgh, Mount Pleasant, or Westchester County)
- **Financing:** Upgrading one truck in each village to a split-body truck capable of collecting both MSW and food scraps on the same run would cost an estimated $250,000–$350,000 per vehicle, depending on whether it's a retrofit or a new purchase. Across all seven Rivertowns, this investment would total roughly $1.75–$2.5 million, giving each DPW the flexibility to cover most of their food scrap routes without adding separate runs. Over time, this integrated approach can reduce route duplication, lower fuel costs, and help villages manage labor more efficiently as MSW tonnage declines.

Case Study: City of Cambridge, MA

- **Program Type:** Universal curbside food scrap collection + education + urban agriculture reuse

Rivertowns Food Scraps Study

- **Description:** Since 2018, Cambridge has operated a citywide curbside composting program for all residences under 13 units. The program includes bin distribution, locked carts to prevent pests, and weekly pickup. Processed compost supports local agriculture and tree planting programs.
- **Relevance:** Exemplifies a mature, institutionalized organics system with dedicated education staff, high diversion rates, and integrated sustainability uses.
- **Takeaway:** A strong example of where the Rivertowns could go by 2045—with full curbside service, local processing, compost reuse, and workforce integration.

Overview

This phased plan shows how the Rivertowns can grow from small, village-led curbside pilots into a fully integrated, region-wide food scrap collection system. Each phase builds participation, adds fleet capacity, and gradually shifts operations to match growing demand — all while balancing costs, convenience, and local processing needs. By moving step by step from pilot routes to a shared consortium and eventually to local composting, the villages can keep costs manageable, align with state and county goals, and create a resilient, community-centered circular waste system.

Curbside Pickup Matrices

Phase	Program Type	Estimated Tonnage	How It Works	Operations & Vehicles	Estimated Cost
1: Village Pilots	Village-run curbside	~200–300 tons/year	Small-scale, opt-in pickup with local DPW routes.	Existing DPW trucks modified; 1–2 days/week.	~$5,000–$10,000 per village (mainly outreach & bins)
2: Consortium Model	Shared regional service (2 routes)	~7,300 tons/year	Shared routes across villages; 35% of households.	2–4 mid-sized packers (4–6 tons/day); operated by DPWs or hauler.	~$800K–$1.2M total setup + ~$250–500K annual per route
3: Scaling with Hybrid Fleet	Integrated DPW & hybrid split-body	~4,400 tons/year	MSW + food scraps collected together on same truck; 70% of households.	1 split-body truck per village; flexible routing.	1.75–$2.5M total fleet upgrade)
4: Full-Service & Local Processing	Full regional curbside + local composting	~6,600–8,000 tons/year	Fully scaled curbside with local compost site; closes the loop.	6 mid-sized trucks; local site haulers; MSW routes reduced.	~$3–$5M for compost site + $1–$2M fleet; costs offset by avoided landfill fees

Recover: Community Composting Programs

Community composting gives the Rivertowns a practical, highly visible way to turn food scraps into a valuable local asset instead of waste. By processing food scraps close to where they're generated—in neighborhood gardens, schools, parks, or small local sites—villages can reduce transportation emissions, build public trust, and create a steady supply of compost that supports local landscaping, street trees, rain gardens, and even urban agriculture.

When scaled up intentionally, community composting becomes more than just a supplement to curbside pickup—it becomes a core piece of a circular food scraps system that supports education, resident ownership, and local climate resilience. Unlike centralized industrial-scale facilities, community composting reinforces daily connections: neighbors see how food scraps become soil, children learn about the compost cycle in schools, and DPWs can return finished compost to public green spaces.

This section lays out a realistic, phased approach for the Rivertowns to expand community composting alongside curbside collection and source reduction efforts. It describes where different models make sense—from backyard bins to shared drop-off hubs to larger demonstration sites—and explains how clear outreach, small-scale pilots, and local partnerships can help overcome barriers like space constraints, pest concerns, or perceptions that composting is inconvenient or messy.

The Role of Community Composting

Community composting bridges the gap between small-scale backyard efforts and larger, centralized industrial operations. It allows food scraps to be reused and regenerated locally, turning what would be waste into a visible community asset while reinforcing resident participation and sustainability education. When implemented effectively, community composting weaves together public spaces, individual households, and small local partnerships into a circular system of food recovery that keeps resources in the community.

Models of Community Composting:

- **Public: Composting in parks, schools, and community gardens**
  This model focuses on siting low-cost composting systems — such as static piles, three-bin turning systems, or small aerated static piles — directly in public open spaces, community gardens, or park corners. Villages can take the lead by providing land, signage, basic oversight, and startup equipment, while neighbors, green teams, or garden volunteers help manage day-to-day operations. Finished compost can be used right on site for gardens, tree plantings, or native habitat projects. This shared amenity approach makes composting **visible, local, and educational**, showing people the full cycle from scraps to soil.
- **Individual: Backyard composting at homes, businesses, and institutions**
  Backyard composting empowers residents to manage food scraps at the source, with no hauling or trucks required. Many Rivertown households already compost on their own, but wider adoption is still limited by perceived barriers — especially pest worries, lack of knowledge, or yard space. Villages can help grow this model by distributing starter kits,

hosting workshops, training "compost coach" volunteers, and providing clear, easy-to-follow instructions. By normalizing backyard composting, the community builds everyday habits that reinforce broader curbside or drop-off participation over time.

- **Private/Enterprise: Local processing hubs or farms with higher capacity infrastructure**

  This model partners with small farms, garden centers, or local businesses that have the space and know-how to compost larger volumes of food scraps than backyard bins or small park sites can handle. Local processing hubs or farm-based compost sites can accept pre-separated food scraps from drop-off bins, community groups, or even small curbside routes, then reuse the finished compost for soil health, landscaping, or local agriculture. By working with private or nonprofit operators, villages can keep composting flexible, cost-effective, and closer to home while building bridge capacity as participation grows.

How These Fit Into the Larger System

Currently, the Rivertowns divert an average of 228 tons per year through drop-off sites, with only a fraction coming from local garden or backyard composting. Expanding these two community models will help break through barriers — like the perception that composting is inconvenient, messy, or complicated — and reach residents who may never use a drop-off site. Visible pilots, clear how-to resources, and local reuse of finished compost make these approaches practical and inspiring.

Together, open space and backyard composting keep food scraps close to home, reduce strain on County hauling and processing, and build the local knowledge base needed for a larger local processing center down the line. A structured rollout, backed by outreach, clear signage, and community champions, will help the Rivertowns maximize these benefits as they move toward their broader food scraps diversion goals.

The Case for Localized Processing

As the Rivertowns grow their curbside pickup and community composting programs, they will eventually generate enough consistent food scrap volume to make local processing not just feasible, but economically smart. Right now, villages rely on the County's RFSTAD program and regional private processors — but as combined diversion approaches 6,000–8,000 tons per year, hauling fees and tipping costs paid to distant facilities will add up quickly. At that scale, investing in a shared local composting center can become more cost-effective than paying outside facilities to manage the material.

A local food scrap processing center also brings value far beyond waste management. By siting a mid-sized or full-scale composting hub within or near the Rivertowns, the region can close the loop: keeping food scraps local, producing high-quality compost for village parks, tree planting, school gardens, and even local farms. The site itself can double as a community resource and learning hub, hosting workshops on backyard composting, climate-smart landscaping, urban gardening, or suburban farming.

Over time, a local composting center can anchor public-private partnerships, create green jobs, and become a visible symbol of the Rivertowns' commitment to sustainability. Aligning community composting pilots with this longer-term vision ensures that the region doesn't just

divert food scraps — it reinvests them as an asset that strengthens the local environment, economy, and community connections.

Phase 1: Community Composting Pilots

In this first phase, villages will launch low-cost, small-scale composting pilots using underutilized space in local parks, schoolyards, or DPW sites. These pilot sites will be designed to operate right alongside food scrap drop-off bins, giving residents an immediate, visible connection between what they divert and how it's reused. Typical systems could include:

- **Static pile systems** (~50 tons/year, low-cost, no power)
- **Three-bin turning systems** (~60 tons/year, good for volunteers)
- **Aerated static piles (ASP)** (~100 tons/year, faster and more scalable)

Each village could start by dedicating about 750–1,250 sq. ft. for one or two sites. Collectively, these pilots could compost up to 350 tons of food scraps per year, enough to handle nearly all of today's drop-off program volume. This light-touch approach gives villages hands-on experience managing compost locally, provides finished compost for gardens, street trees, and green infrastructure, and creates opportunities for school programs and community workshops — all while taking pressure off County transfer stations and long-haul transport.

- **Advantages:** Builds community engagement and composting skills, creates local compost for gardens and green infrastructure, reduces hauling and pressure on County transfer stations, and supports youth education and school partnerships.
- **Scalability:** Villages could start with 750–1,250 sq. ft. per site, collectively composting up to 350 tons/year — enough to handle nearly all current drop-off volume. Successful pilots can be expanded or replicated in other neighborhoods.
- **Infrastructure:** Small fenced composting areas, minimal site prep, basic equipment like bins, turning tools, signage, and volunteer or part-time management.
- **Financing:** Very low capital costs, largely site preparation and outreach materials; ongoing expenses covered through village budgets, small grants, or partnerships with schools and local nonprofits.

Phase 2: Expanding Community Capacity

As curbside pickup ramps up and food scrap volume increases, villages can expand community composting programs and support residents in backyard composting. Villages can add drop-off sites at parks, schools, and community gardens, and upgrade equipment to small ASP systems or in-vessel units. Volunteers or part-time staff can be trained as "community compost stewards" to manage sites and educate residents. Simultaneously, residents can be encouraged to compost at home through workshops, how-to guides, and a local "community of composters."

- **Advantages:** Builds local composting knowledge, reduces hauling needs, produces compost for community gardens and landscaping.
- **Scalability:** Backyard composting could divert ~511 tons/year (4,000 households); community sites could handle 60–65 tons/year per village, totaling up to 1,000–1,200 tons/year (~10% of all food scraps).

- **Infrastructure:** Additional drop-off sites, upgraded equipment (ASP or in-vessel), secure storage, training programs for volunteer stewards.
- **Financing:** Modest capital for site setup and equipment; ongoing costs for outreach, volunteer coordination, and possible stipends; potential funding from village budgets, county grants, or partnerships with schools and local nonprofits.

"Where Does This Chicken Bone Go?"

Not all food scraps break down the same way — and a well-designed community composting system should account for these differences. For example, a chicken bone is fully compostable but requires more time, higher temperatures, and better aeration than fruit peels or coffee grounds. In a backyard bin or small open pile, meat and bones are generally discouraged because they attract pests and can't reliably reach the temperatures needed to break them down safely. But in larger community or regional composting systems, they can be handled effectively.

- **Backyard Composting:**
  Ideal for fruit and vegetable scraps, coffee grounds, eggshells, leaves, and yard trimmings. These items break down easily with minimal management and don't require high heat.
- **Community Drop-Off with ASP or In-Vessel Systems:**
  Aerated Static Pile (ASP) systems or small in-vessel composters allow for a wider range of food scraps, including cooked food, meat scraps, and bones. Higher temperatures, active aeration, and managed processing time ensure safe decomposition and minimize odors or pests.
- **Municipal or Regional Composting:**
  At the county or regional scale, large-scale facilities can process all food scraps, including chicken bones, meat, dairy, and compostable paper products. These facilities have industrial-scale equipment that achieves the required temperatures for pathogen and odor control.

Case Study: Queens Botanical Garden Compost Project

Source: Queens Botanical Garden

The Queens Botanical Garden (QBG) runs a well-regarded community composting program that combines local drop-off sites with on-site processing using aerated static pile (ASP) systems. Residents drop off food scraps — including tougher items like meat and bones — which are safely processed on-site to create high-quality compost used in the garden's beds, landscaping, and street tree plantings.

What makes QBG's model especially relevant for Phase 2 is how it demonstrates the power of pairing composting with educational and cultural destinations. By siting compost drop-offs and small processing systems at accessible, trusted places — like gardens, parks, or historic estates — the program builds a stronger sense of community ownership and learning. Volunteers and visitors can see exactly how their food scraps are turned into a resource.

Rivertowns villages could adapt this approach by partnering with beloved cultural or historic sites like Lyndhurst Mansion, Philipsburg Manor, or other heritage properties. These sites often have open green space, educational programming, and community goodwill — all key ingredients for hosting drop-off points or small-scale composting systems. Compost produced could help maintain historic landscapes, gardens, and native plantings, while also providing unique opportunities for tours, demonstrations, or school group visits.

A well-placed community composting hub not only diverts more waste than backyard bins alone — it can become an anchor for local education, stewardship, and sustainable land care. By connecting composting with the preservation of iconic cultural sites, villages can grow resident participation and show how food scraps feed both soil and community pride.

Phase 3: Local Processing Pilot Facility

By the time food scrap generation and collection across the Rivertowns exceeds approximately 3,000 tons per year, the community will have built the critical mass needed to justify investing in a local processing facility. At this stage, the volume of diverted organics — driven by widespread curbside pickup, expanded drop-off sites, and robust community composting — makes it economically and operationally feasible to handle food scraps closer to where they are generated.

A local pilot facility would enable the Rivertowns to take the next step toward a closed-loop system by transforming a significant share of food scraps into compost right within the community. Processing locally reduces the distance that waste must travel to regional sites, cutting transportation emissions and costs. It also creates an opportunity to produce a steady supply of finished compost for municipal landscaping, parks, street trees, local farms, and residents.

In addition to its processing role, a local pilot facility can serve as a visible demonstration of the region's commitment to sustainability. A public-facing "compost learning center" could offer tours, workshops, and volunteer opportunities, deepening community understanding of how food scraps are recycled and reused. Together, this phase lays the groundwork for a long-term, scaled-up local processing network that can grow alongside continued increases in food scrap diversion.

- **Advantages:** Produces hyper-local compost for community uses; reduces greenhouse gas emissions and hauling costs; serves as a public hub for education, outreach, and local pride in sustainable waste management.
- **Scalability:** A pilot site could process ~2,000 tons/year initially, with future expansion possible as participation rises.
- **Infrastructure:** Sited on village- or county-owned land; equipped with ASP or enclosed systems for odor and leachate control; includes space for a "compost learning center" and administrative/fleet support for collection operations.

  Financing: Requires significant upfront investment for site development, equipment, and staffing; potential funding sources include county or state grants, climate or solid waste infrastructure programs, and inter-municipal partnerships; operating costs can be offset through tipping fees and the value of the finished compost.

Case Study: Westchester County CompostED Facility (Valhalla, NY)

Source: Westchester County - https://environment.westchestergov.com/processing

CompostED is Westchester County's first small-scale, publicly operated composting and education site — exactly the kind of model that shows how villages can pilot community composting close to home. Located on the Grasslands Campus in Valhalla, this demonstration site uses simple aerated static pile (ASP) technology to process food scraps from local drop-off programs, plus wood chips from County DPW crews.

Why it's relevant:

- Scaled to handle **about 100 tons/year**, matching what a Rivertown pilot could process.
- Operated by County staff with support from Cornell Cooperative Extension.
- Designed for public tours, school field trips, and hands-on learning — reinforcing how local composting ties to youth education and community buy-in.
- Produces finished compost that goes right back to County parks and gardens.

CompostED shows how a modest site (less than an acre for the active pad) can bridge the gap between drop-off bins and larger regional facilities, while giving residents visible proof that their food scraps are put to good use locally.

Phase 4: Full-Scale Composting Center

By Phase 4, the Rivertowns' curbside pickup, drop-off programs, community composting sites, and local partnerships are projected to divert 6,600–7,000 tons of food scraps per year — with even more volume coming online as commercial and institutional generators join the system. At this level, long-haul transportation to distant regional sites becomes costly, inefficient, and out of step with the community's climate goals. A full-scale local composting center becomes not only viable but essential for managing the entire organic waste stream sustainably.

This facility would transform the region's approach to food scraps, handling 8,000+ tons annually with industrial-scale aerated systems that maximize processing efficiency and control odors and stormwater. Sited strategically near major curbside routes, the composting center would minimize transport emissions, lower operating costs, and keep valuable organic material circulating locally.

Beyond its processing role, a full-scale center can anchor a truly circular economy for the Rivertowns. Finished compost can supply local farms, community gardens, municipal landscaping, and green infrastructure projects. The facility can also create green jobs, provide training opportunities, and expand public education on sustainable waste management, soil health, and local food security.

- **Advantages:** Major reduction in greenhouse gas emissions by eliminating the need for long-haul disposal; consistent supply of high-quality local compost for public and private use; creation of green jobs and workforce development pathways; public programming that links composting to climate action, regenerative agriculture, and community resilience.
- **Scalability:** Designed to process 8,000+ tons per year with capacity to grow if neighboring communities join; co-located office space can serve as the hub for a regional waste management or resource recovery agency.
- **Infrastructure:** Requires a 6.5–7 acre site with access to utilities and roads; proximity to major curbside pickup routes is critical to reduce hauling costs; engineered aerated static pile or enclosed composting systems with stormwater and leachate management; supporting infrastructure for fleet operations, staff, and community education spaces.
- **Financing:** Higher capital costs for land acquisition, site development, equipment, and workforce; funding sources could include county and state waste management grants, climate resilience funding, and possible public-private partnerships; operating revenues from tipping fees, finished compost sales, and intermunicipal agreements can help cover long-term costs.

Long-Term Vision and Recommendations

To maximize the potential of community composting and local processing, the Rivertowns should:

1. **Develop Community Composting Guidelines**
   Provide templates for site design, volunteer management, safety, and signage.
2. **Support Backyard Composting**
   Offer starter kits, workshops, and digital resources; create neighborhood "Compost Coaches" to help others.
3. **Partner with Schools and Libraries**
   Expand school gardens and food systems education tied to composting efforts.

4. **Coordinate Regionally**
   Use the Rivertowns consortium to share equipment, coordinate training, and co-develop infrastructure.
5. **Track Impact and Scale Gradually**
   Use waste audit data and diversion targets to guide when to expand or invest in larger systems.

By building a strong community composting foundation and planning for long-term local processing, the Rivertowns can create a resilient and decentralized organics management system that puts people, place, and sustainability at the center of waste reduction.

Case Study: City of Burlington, Vermont — Intervale Community Compost Center

The **Intervale Center** in Burlington, Vermont, is one of the most recognized examples of a mid-sized city successfully siting and operating a **full-scale local composting facility**. For decades, Burlington built up food scrap diversion through backyard composting, curbside collection, and community drop-off. As participation grew, the volume of collected organics reached a point where it made both economic and environmental sense to process waste closer to home.

At its peak before transitioning to a regional facility, the Intervale Community Compost Center processed over **7,000 tons/year** of food scraps from households, restaurants, institutions, and local farms — almost exactly the scale you're considering for the Rivertowns. It used a **windrow and aerated static pile system**, with strict stormwater management, odor control, and soil health monitoring.

Key Features & Relevance:

- **Local Closed-Loop Model:** Finished compost was used on local farms, community gardens, and in municipal projects, improving regional soil health and supporting sustainable agriculture.
- **Economic Feasibility:** Handling food scraps locally reduced trucking distances and costs for the city and participating haulers.
- **Community Integration:** The site offered tours, educational programs, and demonstration gardens, showing residents how food scraps are turned into valuable compost.
- **Climate Benefits:** The model demonstrated significant GHG savings by diverting food scraps from landfills and shortening hauling distances.

Why It Matters for Phase 4:
This case shows how a **full-scale composting center** can close the loop at a community level when food scrap collection surpasses critical mass. It demonstrates the power of siting near major collection routes, designing for scalability and odor control, and combining processing with education and workforce development.

Overview

Community Composting outlines a step-by-step path for villages to build local processing capacity as food scrap diversion grows. Starting with small, low-cost pilot sites, each phase adds scale, technology, and partnerships to handle more complex waste streams — from simple backyard bins to advanced aerated systems and full-scale local processing centers. By matching the level of infrastructure to the volume of food scraps collected, communities can keep more organics local, reduce long-haul transport and emissions, and produce valuable compost for gardens, parks, and local agriculture.

At each stage, strong community engagement, partnerships with cultural and historic sites, and clear education programs help build trust and resident participation. Over time, this phased approach sets up the Rivertowns to move beyond drop-off bins and backyard piles, demonstrating that local composting is not only feasible but a practical, resilient, and cost-effective strategy for closing the loop on food waste.

Community Composting Matrix

Phase	Program Type	Estimated Tonnage	How It Works	Operations & Vehicles	Estimated Cost
1: Village Pilots	Small-scale local sites	~350 tons/year	Drop-off bins with basic static piles or 3-bin systems in parks/schools.	1–2 small fenced sites per village (750–1,250 sq. ft.).	~$5K–$20K per site (site prep, bins, signage); volunteer or part-time staff.
2: Expanded Community Sites	Upgraded ASP or in-vessel units + backyard composting	~1,000–1,200 tons/year	Multiple drop-off points, larger ASP or in-vessel systems;	2–3 sites per village; possible partnerships with cultural/historic sites.	~$25K–$50K per site (equipment upgrades, outreach, stewardship); modest ongoing operations cost.

			backyard training.		
3: Local Pilot Processing Facility	Small local processing hub	~2,000 tons/year	Village- or county-owned site processes larger volumes from curbside & drop-off.	Pilot site (1–2 acres) with ASP/enclosed systems; public "learning center".	~$750K–$1.2M capital for site, equipment; $100–$250K annual operating; grants/partnerships recommended.
4: Full-Scale Composting Center	Regional composting center & closed loop	~8,000+ tons/year	Full-scale enclosed ASP system, serves curbside, drop-off, commercial organics.	6.5–7 acres near major routes; offices, fleet space, stormwater controls.	~$3–$5M site development & systems; ongoing costs offset by tipping fees, local compost sales.

Reduce: Programs and Policies for Upstream Waste Reduction

The most effective way to manage food scraps is to prevent them from being generated in the first place. Reducing waste at the source not only decreases the volume of organics requiring collection and processing, but also advances broader goals around climate action, household efficiency, and food access. For the Rivertowns to reach their full food scrap diversion potential, it is essential to establish a coordinated strategy that prioritizes both behavioral change and policy innovation.

This strategy must operate on two tracks. First, it must raise community awareness about the scale and impact of food waste while equipping households with practical tools to minimize it. Second, it must leverage municipal authority to establish incentives, mandates, and infrastructure that reinforce waste reduction across households, businesses, and institutions.

The following four pillars form the foundation of the Rivertowns' waste reduction approach:

- **Education and Awareness**: Public campaigns, school curricula, fridge signage, and outreach materials focused on meal planning, expiration date literacy, and food storage best practices.
- **Community Tools and Retail Partnerships**: Programs such as food-sharing platforms, discounted "imperfect produce," and community-wide donation efforts.
- **Institutional and Business Mandates**: Reforms in cafeterias, commercial kitchens, and food service providers to improve inventory management, reduce portion sizes, and track food waste.
- **Regulations and Pricing Reform**: Economic and legal instruments such as pay-as-you-throw (PAYT) models, organics separation ordinances, and procurement policies that prioritize waste minimization.

To implement this effectively, the Rivertowns should pursue a phased strategy that evolves alongside the region's curbside collection and community composting programs.

Phase 1 – Education, Awareness, and Baseline Monitoring

The first phase lays the foundation for long-term food waste prevention by combining broad public education with the development of reliable baseline data. Outreach campaigns will target common household behaviors that lead to unnecessary food waste — including over-purchasing, misunderstanding expiration labels, and improper food storage. Schools will integrate food system and food waste topics into their curricula and launch student-led food waste audits to build awareness early.

At the same time, municipal waste audits will be conducted at drop-off sites, curbside collection routes, and public buildings to quantify current food scrap generation, contamination levels, and participation rates. Tools such as household food waste diaries and digital self-reporting apps will support public engagement while producing actionable data for program design.

The overall goal should be a targeted impact of reducing total food scrap generation by 3–4%, equivalent to approximately 200 tons per year.

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- **Advantages:** Builds community understanding of the scale and cost of food waste; empowers households with practical strategies; generates clear data to guide future policies and investments.
- **Scalability:** Pilots and education programs can be expanded village by village; lessons learned can inform region-wide rollouts.
- **Infrastructure:** Requires development of outreach materials, curriculum modules, school partnerships, food diaries, and basic audit protocols.
- **Financing:** Low-cost compared to later phases; requires modest funding for communications, partnerships with schools, and staff or consultant time to run audits; funding sources could include municipal budgets, County waste diversion grants, or small sustainability grants.

Establishing Baseline Monitoring: Rivertowns Food Scrap Waste Auditing Program

An effective food scrap diversion strategy depends on understanding how much food waste is generated, where it comes from, and what common contaminants or participation barriers exist. To build this knowledge base, the Rivertowns should establish a Food Scrap Waste Auditing Program to generate reliable baseline data and track progress over time.

The program would begin by conducting regular waste audits at existing drop-off sites, public buildings, and along curbside pilot routes. Audits should assess the volume and composition of food scraps collected, identify common non-compostable contaminants, and compare participation rates across neighborhoods. For institutional generators — such as schools, municipal buildings, and commercial kitchens — targeted audits can help pinpoint larger sources of waste and opportunities for reduction.

To engage residents directly, the program can offer household food waste diaries, self-reporting apps, or digital tools that help families track their weekly food waste, understand patterns, and receive customized tips for prevention. Local schools can participate through student-led cafeteria audits and classroom lessons that link waste measurement to real-life climate and food system impacts.

Key elements of an effective auditing program include:

- **Standardized Audit Protocols:** Clear, repeatable methods for measuring volume, weight, and contamination.
- **Regional Coordination:** Villages share data consistently to build a community-wide picture of generation and diversion.
- **Reporting and Feedback:** Regularly published data snapshots that help residents see how their efforts contribute to larger goals.
- **Integration with Policy:** Baseline data directly informs program design, performance targets, and future regulatory decisions.

By committing to baseline monitoring now, the Rivertowns will have the data needed to track year-over-year improvements, secure external funding, and build the case for expanding local processing infrastructure as participation grows.

Case Study: Save the Food San Diego — Community-Driven Waste Reduction

The San Diego Food System Alliance (SDFSA) launched *Save the Food San Diego* as a regional collaboration to help households and institutions reduce food waste at the source. The initiative combined public education, baseline waste tracking, and community partnerships to build awareness and shift day-to-day behaviors.

How It Worked:

- **Education and Awareness:**
  SDFSA ran multi-lingual public campaigns about the environmental and financial impacts of food waste, with simple tips for meal planning, understanding expiration labels, and proper food storage. Materials included fridge signs, shopping guides, and digital reminders.
- **Baseline Monitoring:**
  The Alliance partnered with schools, community centers, and restaurants to run food waste audits. Households could participate through food waste diaries, neighborhood challenges, and community workshops that measured waste at the household level.
- **Community Building:**
  The initiative worked closely with neighborhood organizations, schools, and local media outlets to make food waste reduction a visible, community-led effort — not just an individual task.

This example shows how starting with education, simple monitoring tools, and collaborative audits can create a clear baseline, while empowering residents to see their daily impact. It demonstrates how community pride and trust can grow when households feel supported with practical tools and shared goals — laying the groundwork for deeper policy steps later on.

Phase 2 – Community Tools and Business Partnerships

Building on early awareness and baseline data, Phase 2 shifts from education alone to providing residents and businesses with practical tools and incentives to actively reduce food waste. Municipalities will promote neighborhood food-sharing apps and community donation programs, partner with local grocers to launch "imperfect produce" discounts, and expand access to meal planning resources. Restaurants and food service providers will be encouraged to donate surplus food, offer smaller portion options, and track their kitchen waste to identify reduction opportunities.

This phase should strive to achieve a cumulative food scrap reduction of 6–8%, equivalent to roughly 805 tons total.

- **Advantages:** Provides tangible ways for households and businesses to reduce waste; supports local food security by redirecting surplus food; strengthens collaboration with retailers and the food service sector.
- **Scalability:** Food-sharing and "imperfect produce" programs can expand across villages; successful retail pilots can be replicated region-wide; digital tools can be integrated with other municipal dashboards.
- **Infrastructure:** Community food-sharing platforms, partnerships with grocers and restaurants, updated signage and training materials, simple web tools for progress tracking.

- **Financing:** Modest funding for digital tools, outreach campaigns, and staff time to build retail and business partnerships; costs can be offset by regional waste diversion grants and sponsorships from local grocery chains.

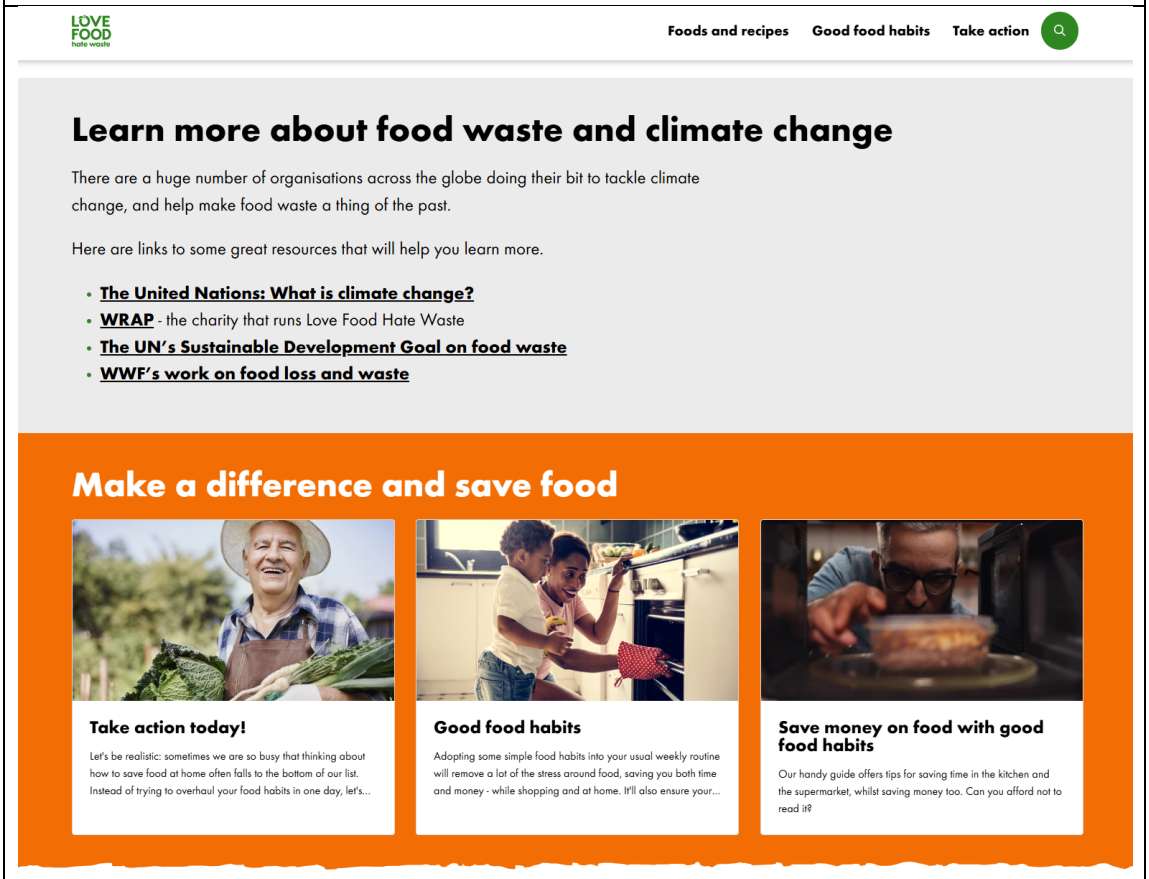
Spotlight: Tools & Partnerships to Power Food Waste Prevention

During Phase 2, the Rivertowns have an opportunity to pilot creative, community-centered tools and partnerships that make waste reduction easier for households and businesses alike. Example ideas include:

- **Neighborhood Food-Sharing Apps:** Digital platforms that connect neighbors to share surplus groceries, prepared meals, or garden produce before they go to waste.
- **Imperfect Produce Retail Programs:** Partnering with local grocers and farmers' markets to sell "ugly" or off-spec fruits and vegetables at a discount, keeping edible food in circulation.
- **Retail Diversion Discounts:** Collaborating with stores to mark down products nearing their sell-by dates, with clear signage to encourage smart purchases.
- **Restaurant & Business Waste Tracking:** Offering free training, simple tracking tools, and incentives for kitchens and cafeterias to measure food waste, adjust portion sizes, and donate safe surplus food.
- **Digital Dashboards:** Sharing progress back with the community through an easy-to-understand dashboard that tracks local diversion impacts and celebrates champions.

By combining local tech tools, creative partnerships, and practical incentives, Phase 2 can build momentum toward deeper waste prevention while supporting local businesses and community food security.

Case Study: Love Food Hate Waste — Practical Tools and Partnerships



Source: Love Food Hate Waste - https://www.lovefoodhatewaste.com/take-action-save-food/our-planet-your-food

Originally launched by the UK's Waste & Resources Action Programme (WRAP), *Love Food Hate Waste* has become a leading example of how cities and regions can combine public education with practical tools and retail partnerships to help residents and businesses prevent food waste.

In **Toronto**, the program has been adapted to include:

- **Retail partnerships** with grocery chains to discount "imperfect produce" and foods approaching sell-by dates.
- **Meal planning and storage resources**, such as fridge magnets, online tools, and smart shopping guides.
- **Business engagement** for restaurants and caterers, offering training on portion control, menu planning, and safe food donation.
- **Community dashboards** and storytelling campaigns to share progress and celebrate local "food waste champions."

LFHW shows how a coordinated Phase 2 approach can go beyond awareness — giving residents hands-on resources to change habits and working closely with local grocers, restaurants, and food service providers. By blending digital tools, incentives, and partnerships, cities can capture measurable reductions in food waste before scraps ever reach a compost bin.

A program like LFHW demonstrates that community tools — when combined with visible retail and business buy-in — can drive significant waste prevention and make residents feel like they're part of a shared local solution.

Phase 3 – Institutional and Business Mandates

As household awareness and community waste prevention tools become embedded in daily habits, Phase 3 focuses on structural reforms within public institutions and larger food waste generators. Schools, municipal offices, hospitals, and food service providers will adopt clear, standardized strategies to reduce food waste at the source. Proven approaches include trayless cafeterias to reduce uneaten food, lean kitchen models that optimize ordering and storage, and portion control policies that align meal sizes with actual consumption.

Large food generators — such as supermarkets, healthcare facilities, and universities — will begin quarterly reporting on their food waste volumes and the steps they are taking to reduce it. Municipal teams will conduct regular audits of high-volume sites and work with each partner to develop tailored action plans and staff training. This phase formalizes waste prevention as a routine business and institutional practice, helping lock in consistent diversion results at scale.

This phase should aim to achieve a cumulative food scrap reduction of 7–10%, equivalent to approximately 1,320 tons.

- **Advantages:** Tackles the largest single points of food waste generation; supports consistent reporting and accountability; builds a culture of prevention within institutions that influence community norms.
- **Scalability:** Reporting requirements and waste prevention strategies can be phased in by sector, starting with public schools and expanding to private institutions, large commercial kitchens, and retail chains.
- **Infrastructure:** Requires development of simple reporting templates, municipal audit teams or consultants, and clear guidance materials for cafeterias, kitchens, and retail managers.
- **Financing:** Modest funding needed for audit staff, technical assistance, and training programs; costs can be covered through municipal budgets, state waste prevention grants, or cost-sharing with participating institutions.

Spotlight: Example Initiatives for Institutional & Business Mandates

As the Rivertowns scale up structural food waste prevention, municipalities and local partners can roll out targeted programs like:

- **Trayless Cafeteria Pilots:** Schools and institutional dining facilities remove trays to reduce uneaten food and portion sizes — a proven strategy to cut plate waste by 20–30%.
- **Quarterly Food Waste Reporting:** Large generators like supermarkets, hospitals, and universities submit simple quarterly reports tracking food waste volumes and progress toward reduction targets.

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- **Lean Kitchen Training:** Free or subsidized training for food service managers on inventory control, smarter purchasing, storage techniques, and donation partnerships.
- **Portion Control Policies:** Establish default portion sizes in cafeterias, schools, and public events to align serving sizes with real consumption patterns.
- **Zero-Waste Certification:** Launch a local "Food Waste Champion" or Zero-Waste Kitchen certification to recognize high-performing businesses and institutions — helping build community pride and drive friendly competition.
- **Food Donation Networks:** Formalize relationships with local food pantries and hunger relief organizations to redirect safe surplus food before it becomes waste.

Case Study: Fork It Over! — Portland's Main Street Business Partnership

Portland's Fork It Over! program connects local restaurants, grocers, schools, and other food businesses with hunger relief organizations to donate surplus edible food that would otherwise go to waste. It combines direct business outreach, technical assistance, and recognition to make donation easy, safe, and part of daily operations.

How It Works:

- **Business Partnerships:** City staff and nonprofit partners work with Main Street businesses — from independent cafés to larger grocery chains — to identify surplus food streams and safe handling practices.
- **Tools & Training:** Simple guidelines, food safety training, and easy donation logistics reduce barriers for busy food service managers.
- **Recognition:** Participating businesses get window decals and are promoted as "Fork It Over! Partners" — showing the community their commitment to fighting waste and food insecurity.
- **Outcomes:** Surplus food goes to local food banks, shelters, and meal sites, while businesses reduce disposal fees and build community goodwill.

Why It Matters for the Rivertowns:

The Fork It Over! model shows how a village or small town can actively support Main Street businesses in preventing food waste — not by regulating first, but by building trust, offering tools, and connecting them to local hunger relief partners. It's a flexible, community-scale strategy that's just as relevant to the Rivertowns' neighborhood shops, bakeries, and small restaurants.

When businesses see that food donation is safe, simple, and celebrated, they're more likely to build it into daily operations — turning Main Street food waste into a resource for the local community.

Phase 4 – Regulatory Levers and Impact Validation

With household behavior change, community tools, and institutional practices fully embedded, Phase 4 focuses on introducing well-calibrated regulatory measures that lock in long-term reductions and ensure continuous improvement. Municipalities could adopt pay-as-you-throw (PAYT) pricing structures, creating a direct economic incentive for households and businesses to minimize waste generation. Large commercial generators should be required to separate organics at the source, supported by clear standards and enforcement. In addition, municipal

procurement contracts will include specific food waste reduction standards — influencing how public agencies and schools purchase, serve, and manage food.

To track progress and demonstrate accountability, system-wide audits will be conducted and summarized in an annual "State of Food Waste" report. This report will help measure the impact of all programs and policies, identify emerging challenges, and guide future policy refinements. Together, these measures position the Rivertowns as leaders in sustainable waste prevention, closing the loop with a fully integrated system.

Final food scrap reduction of 8–13%, for a total cumulative diversion of approximately 2,200 tons from the municipal solid waste stream.

- **Advantages:** Creates consistent, enforceable incentives to reduce waste at every level; ties individual and institutional behavior to real cost signals; provides high-quality data to validate impact and strengthen funding applications.
- **Scalability:** PAYT pricing and separation requirements can be phased in, starting with larger generators and high-participation neighborhoods before expanding community-wide. Standards can be adapted over time based on local capacity and audit results.
- **Infrastructure:** Requires updated billing systems for PAYT models, clear compliance guidelines for organics separation, staff capacity for audits and enforcement, and an annual reporting framework.
- **Financing:** Moderate upfront costs to update billing systems and train staff; potential savings from reduced MSW disposal fees; stable revenue streams from PAYT fees can offset program costs and reinvest in further waste reduction and composting infrastructure.

Spotlight: Municipal Policies & Actions to Reduce Food Scrap Generation

As the Rivertowns advance into Phase 4, local governments have powerful levers to lock in food waste reduction. Example measures include:

- **Pay-As-You-Throw (PAYT):** Implement unit-based pricing for trash disposal so households pay based on how much they throw away — creating a direct incentive to compost, recycle, and reduce waste at the source.
- **Mandatory Organics Separation:** Require large commercial generators, such as supermarkets and institutions, to separate food scraps for composting or donation, with clear contamination thresholds and enforcement pathways.
- **Procurement Standards:** Embed food waste prevention requirements in municipal contracts for schools, events, and facilities — for example, sourcing bulk goods with minimal packaging, prioritizing local supply chains, and setting clear portion control expectations for cafeterias.
- **Zero-Waste Business Recognition:** Create a "Zero Food Waste Certified" or "Food Scrap Champion" program to recognize businesses and institutions that demonstrate best practices and share data transparently.
- **Annual "State of Food Waste" Report:** Institutionalize annual reporting on community-wide food scrap generation, diversion rates, contamination levels, and the effectiveness of programs — using the data to adjust local policies and build community trust.
- **Waste Prevention Ordinances:** Consider local ordinances that set performance benchmarks for waste diversion, with technical support and clear pathways for businesses to comply.

By pairing these local policies with strong outreach and support, municipalities can ensure food scrap generation keeps dropping — maximizing the impact of curbside pickup and local composting investments.

Together, these phases offer a scalable, integrated roadmap for reducing food scraps at the source—amplifying the effectiveness of curbside collection and composting infrastructure, while positioning the Rivertowns as regional leaders in sustainable waste reduction.

Overview

This phased Programs & Policies Matrix demonstrates how the Rivertowns can layer community education, practical tools, business partnerships, and thoughtful local regulation to systematically reduce food scrap generation at the source. Early phases build a strong foundation through public outreach, school curricula, and baseline waste audits — giving residents the knowledge and confidence to change daily habits.

As the program matures, practical tools like neighborhood food-sharing platforms, “imperfect produce” retail discounts, and digital dashboards help households and local businesses make prevention part of everyday life. Structural changes in schools, supermarkets, and restaurants — supported by mandatory reporting and targeted audits — ensure that large generators contribute meaningfully to waste reduction goals.

In the final phase, proven regulatory levers such as pay-as-you-throw pricing, mandatory organics separation, and municipal procurement standards lock in these gains, while system-wide audits and an annual “State of Food Waste” report keep the community informed and engaged. Together, these policies reinforce the curbside pickup and local composting system — positioning the Rivertowns as a model for regional leadership in sustainable food waste prevention.

Programs and Policies Matrix

Phase	Program Type	Estimated Tonnage	How It Works	Operations & Vehicles	Estimated Cost
1: Education & Baseline Monitoring	Public education & audits	~200 tons/year (3–4% reduction)	Outreach campaigns on meal planning, storage, labels; school curricula; household diaries; municipal waste audits.	Village-wide outreach materials; school partnerships; staff or consultants conduct audits and maintain baseline data.	~$5K–$25K per village for materials, events, and auditing support; possible county or sustainability grant funding.
2: Community Tools & Business Partnerships	Food-sharing, retail pilots, digital tools	~805 tons total (6–8% reduction cumulative)	Neighborhood food-sharing platforms; "imperfect produce" retail programs; diversion discounts; restaurant training; public dashboards.	Municipal staff build retail partnerships; develop apps/dashboards; run business training; track results.	~$10K–$50K per village for tech tools, outreach, and pilot incentives; partial sponsorships from retailers possible.
3: Institutional & Business Mandates	Large generator reporting & structural changes	~1,320 tons total (7–10% reduction cumulative)	Schools, hospitals, supermarkets adopt trayless cafeterias, lean kitchens, portion control; mandatory quarterly food waste reporting.	Municipal staff conduct audits; provide templates and technical assistance; create compliance and recognition programs.	~$50K–$100K region-wide for staff or consultants; funded through general municipal budgets or waste prevention grants.
4: Regulatory Levers & Impact Validation	PAYT pricing, separation ordinances, annual reporting	~2,200 tons total (8–13% reduction cumulative)	PAYT fee structures; mandatory organics separation for large generators; food waste standards in procurement; annual "State of Food Waste" report.	Municipal teams update billing, develop ordinances, train staff for compliance checks, and manage annual reporting.	Moderate setup costs for billing and enforcement systems; PAYT fees help create a stable funding stream for operations.

Collaborate: Rivertowns Office of Sustainable Waste Management

To ensure long-term success and coordination across the Rivertowns' growing portfolio of food scrap and waste diversion initiatives, the formation of a centralized coordinating entity is recommended. This entity—referred to here as the **Rivertowns Office of Sustainable Waste Management (OSWM)**—would serve as the intermunicipal hub for policy development, public engagement, program oversight, and performance tracking.

As food scrap diversion evolves into a fully integrated system—spanning curbside pickup, community composting, local processing, and waste reduction efforts—village governments will increasingly require a shared body that can unify operations, coordinate grants, and support the design and implementation of innovative, regionally consistent strategies. This office could be structured as an extension of the Rivertowns Food Scraps and Organics Management Authority or created as a standalone Local Development Corporation (LDC), Joint Municipal Service Entity, or a formalized Intermunicipal Agreement (IMA).

Core Functions of the Office

The Office of Sustainable Waste Management would assume the following key roles:

1. **Community Outreach and Education**
    - The OSWM will lead efforts to build public understanding of sustainable waste practices, with a specific focus on increasing participation in food scrap programs. This includes:
    - Partnering with village-level sustainability and waste committees
    - Designing multilingual educational campaigns on food scrap separation, composting, and reduction
    - Supporting school programming and community events
    - Elevating local success stories to build positive feedback loops
2. **Program Management**
    - The office will serve as the operational manager for the Rivertowns' Food Scraps and Organics Waste Management Plan. This includes overseeing:
    - Curbside food scrap collection logistics and route coordination
    - Community composting implementation and site stewardship
    - Waste reduction initiatives, including business engagement and household tools
3. **Monitoring Progress and Impact**
    - Tracking food scrap diversion rates is essential to measuring progress toward the Rivertowns' net-zero organics goal. The OSWM will coordinate:
    - Waste audits and surveys
    - Analysis of MSW tonnage trends and contamination levels
    - Centralized reporting dashboards to share data with village officials, residents, and funding agencies

Rivertowns Food Scraps Study

- Annual "State of Waste" reports to inform policy and program evolution

4. **Intervillage Coordination and Capacity Building**

- A core strength of the OSWM lies in its ability to act as a liaison between the villages—sharing tools, staff, training, and institutional knowledge. It will:
- Align municipal actions with regional waste and climate goals
- Support grant writing, compliance, and reporting across jurisdictions
- Facilitate collective procurement and shared infrastructure use
- Coordinate with County, State, and nonprofit partners to align efforts and secure resources

5. **Policy Research and Advocacy**

- The OSWM will be responsible for exploring, drafting, and building consensus around new local policies and incentives that drive sustainable waste outcomes. This includes:
- Researching national and state-level best practices
- Convening stakeholders to evaluate options such as organics separation mandates, PAYT (Pay-As-You-Throw) models, or diversion performance standards
- Supporting village boards and public officials with model legislation, public engagement materials, and implementation guidance

Role in Implementation Strategy

The creation of the Rivertowns OSWM is a cornerstone of the implementation plan, particularly as the initiative transitions from pilot programs to full-service operations. This entity provides the administrative, technical, and community-facing capacity needed to:

- Scale programs responsibly
- Ensure intermunicipal consistency and equity
- Build a data-driven foundation for long-term sustainability
- Position the Rivertowns to successfully pursue and manage external funding opportunities

By creating this coordinating body, the Rivertowns will not only streamline program delivery but also establish a model for regionalized climate-smart governance in waste and materials management. The OSWM serves as both a backbone institution and an innovation engine—ensuring that the goals of zero waste, climate action, and community resilience are fully integrated into daily municipal operations.

Achieving 80% Diversion

Achieving near-zero food scraps to landfill isn't just about adding curbside bins — it's about building a balanced, community-owned system that works at every stage of the waste stream. The Rivertowns' strategy combines **three core pillars** that work together to reduce generation, recover what's left, and reuse it locally.

First, upstream education and policy programs tackle the problem before it starts. By helping households plan meals better, store food properly, and understand date labels, villages can steadily cut the total amount of food scraps generated. Partnering with retailers, restaurants, and schools to adopt best practices and portion control can push this even further. The charts show that if these tools roll out in phases — from early community education to future separation ordinances and pay-as-you-throw pricing — food scrap generation can shrink by more than 20% by 2045.

Second, community composting provides visible, local reuse. Small neighborhood sites in parks, gardens, and open spaces allow residents to see the cycle in action — scraps dropped off in a bin become compost for trees, rain gardens, or school landscapes. Backyard composting helps too, empowering residents to handle food scraps at the source. Together, these local options reduce pressure on County facilities, keep costs predictable, and build public trust in the system.

Finally, curbside pickup ties it all together. This is what makes participation convenient for every household — renters, seniors, and busy families alike. As more people separate food scraps, the system grows toward a critical mass where it makes sense to process material locally instead of hauling it far away. The charts highlight how a phased curbside rollout moves the region from just **11% diversion today to over 80% by 2045**, protecting the community from rising disposal fees and landfill emissions.

This integrated approach — **reduce, recover, and reuse locally** — doesn't just meet state climate mandates. It turns food scraps into a visible climate solution, strengthens local green spaces, and keeps the environmental and economic benefits right here in the Rivertowns.

Overview of Rivertowns Food Scraps Program Diversion

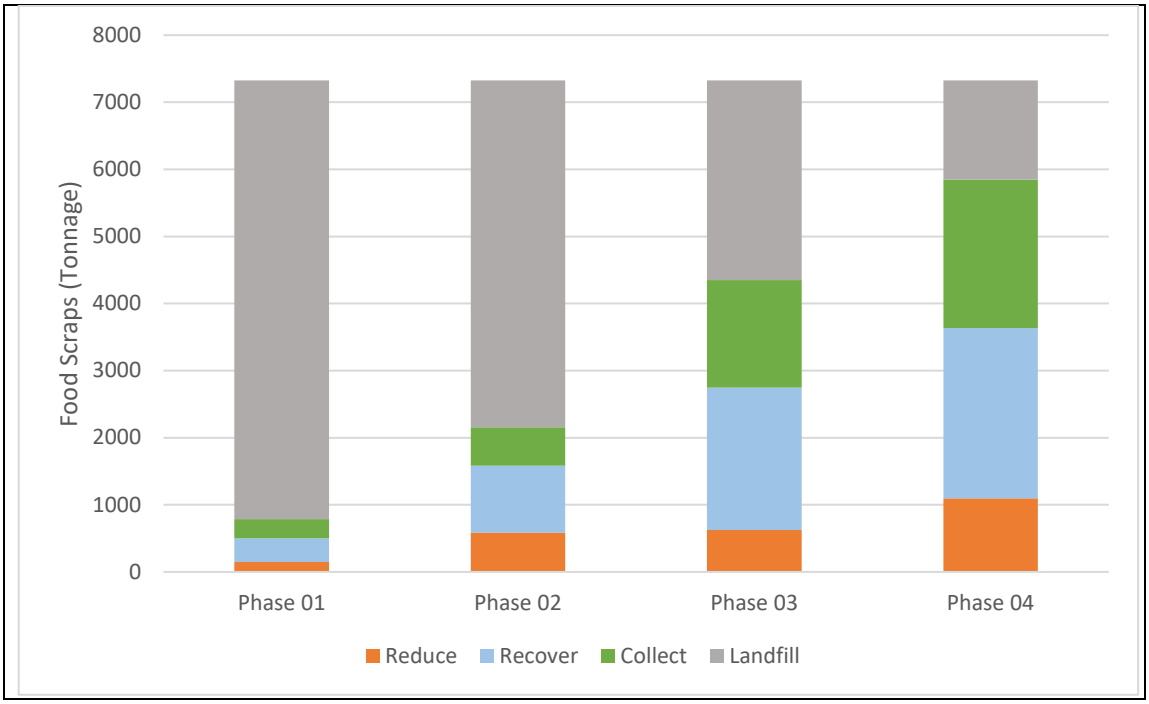
		Phase 1	Phase 2	Phase 3	Phase 4
Total Food Scraps	**Tons Diverted**	**7326.1**	**7326.1**	**7326.1**	**7326.1**
Diversion Target	*Percent*	*10%*	*30%*	*60%*	*80%*
Reduce	**Tons Diverted**	**146.521**	**586.085**	**622.715**	**1098.91**
Policy	*Percent Target*	*2%*	*8%*	*9%*	*15%*
Process	**Tons Diverted**	**356.521**	**995.106**	**2125.52**	**2533.82**
Open Space	*Tons Diverted*	*30*	*37.5*	*42*	*48*
Backyard Composting	*Percent Target*	*2%*	*10%*	*25%*	*30%*
Collection	**Tons Collected**	**285.93**	**574.487**	**1602.24**	**2216**
Collection Target	*Percent Target*		10%	35%	60%
Diverted from Landfill	**Tons Diverted**	**788.972**	**2155.68**	**4350.47**	**5848.73**
Percent Diverted from Landfill	*Percent Target*	10%	30%	60%	80%

Implementation Strategy

Achieving 80% diversion of food scraps from the municipal waste stream will require a sustained, phased effort that evolves alongside community behavior and municipal capacity. This transformation cannot happen overnight. Instead, it demands thoughtful sequencing, ongoing adaptation, and a commitment to building systems that are responsive to both public demand and organizational readiness.

As outlined in the previous chapters, the Rivertowns' food scraps strategy hinges on the coordinated growth of three key programs: **curbside pickup**, **community composting**, and **food waste reduction at the source**. Each of these pillars must mature through multiple phases, shaped by participation rates, infrastructure needs, and institutional learning.

The following phased roadmap lays out how the Rivertowns can implement this strategy effectively, in a way that allows each program to grow organically and reinforce the others over time.



Phase 1: Establish Pilots (2026–2030)

The goal of Phase 1 is to lay the foundation—building awareness, lowering barriers, and piloting programs that establish food scraps as a normal part of daily waste management. This low-risk phase gives each village the flexibility to start small and grow based on local needs.

Core Actions:

- **Collect:** Launch pilot curbside pickup in each village using existing DPW routes
- **Reuse:** Establish initial community composting projects in parks, schools, or gardens
- **Reduce:** Conduct public outreach and school-based campaigns to build awareness
- **Collaborate:** Begin monitoring participation and food scrap generation via baseline audits

› This phase is about building habits, normalizing behavior, and demonstrating early wins that set the stage for future growth.

Phase 2: Grow into Programs (2030–2035)

In Phase 2, pilot efforts transition into full-service programs. Villages will scale up the infrastructure, partnerships, and staffing needed to provide consistent food scrap services across the Rivertowns. This is the stage where the **intermunicipal consortium** will take a central role in coordination and resource sharing.

Core Actions:

› **Collect:** Launch a formal, consortium-managed curbside food scrap collection program (two-route model)

› **Reuse:** Expand community composting efforts at successful pilot sites and add new locations

› **Reduce:** Introduce digital tools, retail partnerships, and education campaigns to increase participation

› **Collaborate:** Build policy and grant capacity to support program growth and inter-village collaboration

This phase focuses on increasing access, reducing friction for participation, and building capacity that can support more ambitious goals in future years.

Phase 3: Scale Programs (2035–2040)

By Phase 3, program participation should reach a critical mass—enough to meaningfully shift how waste is managed across the villages. With rising volumes of food scraps and declining MSW tonnages, municipalities can begin integrating food scrap collection into regular sanitation routes.

Core Actions:

› **Collect:** Convert select DPW vehicles into split-service trucks for MSW and food scraps

› **Reuse:** Construct a demonstration-scale **local processing facility** to compost food scraps regionally

› **Reduce:** Use the facility as an educational and operational hub for composting, workforce development, and public programming

› **Collaborate:** Launch incentive programs and establish mandates for food scrap separation (residential, commercial, and institutional)

This stage enables deeper integration of food scrap diversion into municipal operations while reinforcing local control and resilience through processing infrastructure.

Phase 4: Full-Service Programs (2040-2045)

With adoption rates high and program infrastructure matured, the Rivertowns can transition into a fully integrated organics management system. Food scrap separation will become universal, and the consortium will be positioned to codify the program through local regulations and long-term investments.

Core Actions:

- **Collect:** Convert additional DPW vehicles and routes to full-service food scrap pickup
- **Reuse:** Expand the local processing facility to handle all residential and select commercial food scraps (~8,000+ tons/year)
- **Reduce:** Enact local laws requiring food scrap separation and participation in curbside programs
- **Collaborate:** Institutionalize the Rivertowns Food Scraps Authority to manage operations, education, enforcement, and continuous improvement

This final phase marks the culmination of the strategy—a self-sustaining, closed-loop system that transforms waste into community value, while meeting long-term climate, economic, and resilience goals.

Food Scraps Program Phasing Matrix

	Phase 1 (2026-2030)	Phase 2 (2030-2035)	Phase 3 (2035-2040)	Phase 4 (2040-2045)
Diversion Target	10%	40%	60%	80%
Reduce (Education)	Education and Awareness	Community Tools & Community Partnerships	Incentives and Mandates	Regulations and Reforms
Reuse (Composting)	Pilot Community & Backyard Compost Program	Expand Community & Backyard Compost Programs	Pilot Local Processing	Expand Local Processing
Collect (Curbside)	Village Pilot Curbside Pickup Program	Consortium Pickup Program	P1: MSW to Food Scraps Pickup Transition (50%)	P2: MSW to Food Scraps Pickup Transition (100%)

4

Building a Circular Future for the Rivertowns

The Rivertowns Food Scraps Study sets forth a bold and actionable vision for transforming how seven villages manage one of the most significant yet underutilized portions of their waste stream: food scraps. Through rigorous research, community engagement, best-practice case studies, and robust feasibility modeling, the plan shows that the Rivertowns can not only meet New York State's climate targets but also become a regional model for sustainable organics management and circular economy principles.

A Moment of Opportunity

For decades, food scraps have remained the "missing piece" in local recycling and diversion programs. They represent both an overlooked challenge and an untapped opportunity. Left in the municipal solid waste stream, they generate methane in landfills, driving greenhouse gas emissions and accelerating climate change. When instead separated, collected, and processed, food scraps become a powerful local resource—supporting soil health, stormwater management, and resilient green infrastructure.

The Rivertowns have already demonstrated a commitment to sustainability through existing drop-off programs, school composting pilots, and participation in the County's RFSTAD program. Residents care about climate action and have shown that when accessible options exist, they participate. But as the data show, drop-off alone will not get the Rivertowns to their full potential. The current model captures only 3–5% of food scraps generated—a figure that must rise dramatically to meet the region's climate and waste diversion goals.

This moment is an opportunity for the Rivertowns to move beyond the early adoption plateau and take the next steps: integrating curbside pickup, expanding local composting capacity, and building the institutional coordination needed to scale success.

Building Blocks for a Circular System

The study's phased implementation plan is grounded in practical experience and lessons learned from communities across New York and beyond. It recognizes that there is no one-size-fits-all solution. Instead, the path forward is a blend of village-specific pilots, shared regional infrastructure, and policies that shift behaviors upstream. Together, these elements build the resilience needed to withstand future climate and economic shocks.

Key building blocks supported by the four pillars outlined in this plan include:

- **Convenience Through Curbside Pickup:** Making food scrap separation as easy as taking out the trash will be critical to breaking down the barriers that limit participation. When curbside programs are in place, participation rates increase exponentially, as seen in peer communities like Scarsdale, Bethlehem, and Cambridge.
- **Local Processing Through Community Composting:** Small neighborhood composting sites and backyard composting help keep food scraps close to home. This reduces hauling emissions, strengthens community connections, and generates compost that stays local—nourishing public gardens, street trees, rain gardens, and urban farms.
- **Reducing Waste at the Source:** The cheapest, most effective ton is the one that never enters the waste stream. Programs that focus on meal planning, food storage, and retail partnerships for imperfect produce can help households waste less food in the first place.
- **Shared Governance and Regional Collaboration:** No single village can do this alone. By coordinating through an intermunicipal consortium, the Rivertowns can share trucks, transfer sites, policy tools, and staff capacity. This ensures that villages of all sizes benefit equitably from regional economies of scale.
- **Data, Measurement, and Accountability:** Waste audits, baseline data, and clear performance targets keep the effort on track. The study calls for an annual "State of Food Waste" report to build transparency, accountability, and public trust.

Economic, Environmental, and Social Benefits

A fully developed food scraps program will deliver long-term returns across multiple dimensions:

- **Cost Savings:** By diverting organic material, villages reduce MSW tonnage sent to costly landfills. Over time, these avoided tipping fees help offset the cost of new trucks, bins, and local processing infrastructure.
- **Climate Action:** Diverting food scraps cuts methane emissions—one of the most potent greenhouse gases. The Rivertowns' progress contributes directly to New York's Climate Leadership and Community Protection Act goals while showing that small communities can make a big difference.
- **Local Resilience:** Finished compost produced through local and community-scale processing can be reinvested in village parks, street trees, rain gardens, and local agriculture—improving soil health, managing stormwater, and helping neighborhoods adapt to climate impacts. By keeping this resource close to home, the Rivertowns strengthen green infrastructure, support local food systems, and build a more resilient community for everyone.

The Rivertowns Food Scraps Feasibility Study presents a bold, achievable vision for transforming the way seven villages manage organic waste. By laying out a phased roadmap grounded in

community needs, environmental mandates, and operational feasibility, the plan positions the Rivertowns to lead the region in building a circular, low-carbon waste system that works for both residents and the planet.

This strategy is not just about diverting food scraps—it is about building institutional capacity, fostering intermunicipal collaboration, and empowering residents to become active participants in climate solutions. From curbside pickup to local composting infrastructure and upstream waste reduction, each program element reinforces the others to create a self-reinforcing loop of environmental, economic, and social benefits.

While the challenge ahead is significant, the plan demonstrates that the Rivertowns can move from pilot projects to a fully integrated regional system by 2045. With sustained leadership, continued public engagement, and strategic investment, the villages will not only reduce waste and emissions—they will build a model of community resilience, equity, and sustainability for others to follow.

This is the opportunity before the Rivertowns: to turn a fragmented system into a unified one, to turn waste into value, and to show what's possible when small municipalities work together toward a shared climate future.

5

Appendices

Intro Text. Following the chapter name, this style option uses a larger font size and is applied to the first paragraph of the chapter where the text introduces the contents contained within that section. It is encouraged to use this style, especially for large, multi-chapter reports.

Item A – T1 Memo - Rivertowns Food Scraps Existing Conditions and Program Operations

Food scraps programs have become crucial for achieving sustainability both at the national and local levels. As waste production increases and landfill capacities are strained, these programs offer a viable solution to manage organic waste. Organic waste diversion programs such as composting not only reduces methane emissions from landfills but also transforms waste into valuable compost, fostering environmental and economic benefits.

For the Rivertowns, building a food scrap program is essential for becoming a more climate positive community. The diversion of organic waste from landfills can significantly cut emissions and produce compost that enriches the soil. Moreover, implementing such programs can address the challenges posed by limited landfill space and rising waste management costs. By adopting comprehensive food scrap initiatives, the Rivertowns can enhance their sustainability efforts and set a precedent for other communities.

This memorandum is designed to provide a thorough overview of the current conditions and operational framework of food scrap management programs, with a focus on Rivertowns. It explores key policies driving organics management, current waste trends, and the necessary operational framework for successful program implementation. The insights from the Rivertowns Food Scraps and Organics Study are critical for guiding Rivertowns in developing an effective and sustainable food scraps management system.

Key Policies Driving Organics Policy

Key policies driving organics management and policy are essential for guiding efforts to divert organic waste from landfills and promote composting. Numerous states, counties, and cities, including New York State and its counties, have introduced legislation to manage and divert

organics waste, although the scope and enforcement of these policies can vary. Many jurisdictions, especially at the state and local levels, have enacted laws prohibiting the disposal of organic yard waste in landfills, yet food scraps often remain outside the purview of these regulations.

Despite high initial investments and other barriers to implementation, the return on investment from composting programs can be substantial, including reduced landfill tipping fees, decreased waste management costs, and environmental benefits. The development of comprehensive organics management policies at the federal, state, and local levels is crucial for tackling the financial and logistical challenges of expanding composting operations and achieving sustainable waste management. These policies set the framework for effective waste diversion and resource recovery, aligning with broader sustainability goals.

Current Waste Trends

Adopting organics and food scraps programs has become increasingly important for municipalities across the country as a combination of wanting to meet sustainability and climate goals along with shifts in the economics of waste management have focused on how to better divert tonnage out of landfills. Organics waste can range from food scraps to yard materials, and has become a focus point for achieving sustainable waste management due to a combination of heavy tonnage and higher emissions. This waste stream currently comprises a good portion of the landfilled waste in many areas. When landfilled, this waste will produce methane emissions just as any other trash would. However, organics have the potential to be diverted from the landfill through composting, transformed into a rich final product, cutting emissions significantly.

Implementing an additional waste management system has proved difficult for many local and state governments. Barriers to implementation range from high financial investments, lack of public interest, or lack of political will. Many states have adopted some form of legislation to combat these barriers, prohibiting the disposal of organic waste at landfills. But, in many cases, this legislation only applies to yard waste, leaving food scraps out of the policy's scope of influence.

While the initial capital investment can provide "sticker-shock", there is significant existing analysis focused on the return-on-investment (ROI) that composting or food scrap programs can lend. Initial capital investments can include contracting with a hauler and large compost facility, distributing and maintaining food scrap collection receptacles, either at a common location or through curbside service, and managing contamination. However, throughout the life of an effective food scrap collection and composting program, ROI can be realized through instituting pay-as-you-throw programs, sale of finished compost product back to the community, reduction in fuel costs through a hyper-local program structure, and decreased tipping fee cost due to higher diversion rates from the landfill.

Expanding organics management operations has gained traction in many jurisdictions. As populations and waste volumes increase, space for landfill use becomes a major concern in terms of both cost and availability. The variable of cost considers two factors. One is the cost of purchasing more land to increase capacity. Where a landfill expansion may require additional *acres,* implementing a composting program, especially a hyper-local one, may only require *cubic* yards, depending on the material generation of the service area. Secondly, the cost of increasing landfill tipping fees in comparison to those at a recycling center. According to the *Analysis of MSW Landfill Tipping Fees – 2023* report published by the Environmental Research & Education Foundation, all regions of the United States besides the Northeast saw a decrease in landfill

tipping fees in comparison to the rise in national averages over the past few years.[11] The Northeast saw an average fee increase of $8.52 per ton, raising the total cost per ton to an average of $84.44. Increasing landfill tipping fees is prevalent in states and municipalities where availability of physical expansion is not possible. Lack of availability has led to this increase and was meant to disincentivize landfill disposal but has begun to place greater financial stress on municipalities through rising budgets, while the pathways to increased diversion have not been developed at the same pace. Local governments actively pursuing city-wide organics collection programs to address these issues include New York City, the City of Denver, and the City of San Fransisco.

Even with active programs, these case study cities faced barriers on the pathway to implementation. Notably, the interplay between public and private organizations in the waste sector can prove difficult to navigate. Barriers such as availability of waste data managed by private organizations, facility ownership, fleet ownership, hauling contracts, and public scope of influence over the private sector all must be considered in the planning and implementation process.

Federal, State and Local Policy Analysis

Across the United States, local and state governments are grappling with managing and diverting organic waste, such as food scraps and yard materials, from landfills where they produce methane emissions. Despite the financial and logistical barriers, the return on investment from composting programs can be significant, offering benefits like reduced landfill costs and the sale of compost products. Cities like New York, Denver, and San Francisco are leading efforts with initiatives to handle organics management effectively. On the federal level, the EPA and USDA aim to reduce food waste by 50% by 2030, with strategies to prevent food loss, increase recycling rates, and promote public education on composting. In states like New York, ambitious climate goals drive food scrap policies, backed by legislative measures and dedicated funding, to enhance infrastructure and community participation in organics recycling.

Federal Policies

In 2015, the Environmental Protection Agency (EPA) and United States Department of Agriculture (USDA) jointly declared the nation's first goal for food waste reduction. This goal aims to achieve a 50% reduction in 2015 food waste rates by 2030. The declaration of this goal also formalized the committed inter-agency collaboration between the EPA, USDA, and Food and Drug Administration (FDA).

Since declaration of this goal and formalized partnership, a comprehensive baseline for food loss in the United States has not been determined or reported. The agencies note the next step in the effort involves the creation of this comprehensive baseline assessment, analyzing the life cycle of food in the United States from production to disposal.

Despite the lack of a baseline in food *loss*, there is a baseline for food *waste* throughout the sector. The EPA did report an average food waste rate of 349 pounds per person in 2019 and an average rate of 329 pounds per person in the baseline year of 2016. This figure is comprised of the food waste lost throughout the food supply chain by way of landfilling, combustion, composting, and anaerobic digestion. Residential households total to about 40% of food waste

[11] *Analysis of MSW Landfill Tipping Fees – 2023;* Environmental Research & Education Foundation

generation with other major generators being restaurants and supermarkets, office buildings, food wholesalers, schools, and hotels. Overall, the goal for food waste reduction equals out to an ultimate 164 pounds of food waste per person per year.

In 2024, the EPA released *The National Strategy for Reducing Food Loss and Waste and Recycling Organics*. The strategy outlines four main objectives: (1) preventing food loss, (2) preventing food waste, (3) increasing the recycling rate for all organic waste, and (4) supporting policies that incentivize and encourage the prevention of food loss and waste organics and recycling. [12]

Each objective is outlined with accompanying strategies that range from focusing on agricultural and waste management practices and supporting further research and academic study on the phases of food processing. Implementation is expected to result in the reduction of methane emissions, financial savings for businesses and residents, and healthier, cleaner communities.

Accompanying nationwide recommendations and strategies, the EPA also serves as a robust and reliable source of information on the who, what, when, and why of composting. The EPA provides public education materials, a library of implemented best practices around the nation, and regionally tailored guidance on composting and increased waste diversion.

The availability of competitive federal grant programs has and will continue to affect change in the waste sector. Agencies such as the EPA, the Department of Energy (DOE), and the Department of Defense (DoD) all have current and upcoming application opportunities. These programs can directly be related to waste management improvements and education, or they can be broadly focused on resilience. However, even with this available funding, the federal government possesses significant influence over the projects that are selected for implementation, ultimately affecting best practices, available programming, and infrastructure improvements around the country.

New York State Policies

As previously mentioned, New York State is progressive in its approach to food scrap policies, aligning them with its ambitious climate goals to reduce emissions by 85% by 2050 and achieve carbon neutrality. Key legislative measures such as the Climate Leadership and Community Protection Act (CLCPA)[13] and the 2022 Food Donation and Food Scraps Recycling Law[14] form a robust framework for advancing food scrap recycling and organics diversion programs. These policies mandate large food generators to donate excess edible food and recycle the remainder, leading to significant infrastructure investments and increased community participation. The CLCPA promotes a circular economy by encouraging the reuse of organic materials and providing financial and technical resources to municipalities. The New York State Department of Environmental Conservation (NYSDEC) supports these efforts through dedicated organics management funding programs, resulting in expanded composting facilities and enhanced food scraps management practices across the state.

The CLCPA serves as a critical framework for advancing food scrap recycling and organics diversion programs in New York State municipalities. Recognizing the role of organic waste in greenhouse gas (GHG) emissions, the CLCPA focuses on reducing methane from landfills by supporting the diversion, reuse, and recycling of food scraps. Key provisions such as the 2022

[12] *National Strategy for Reducing Food Loss and Waste and Recycling Organics, June 2024*

[13] New York State. (n.d.). *New York's Climate Leadership & Community Protection Act*. Retrieved December 1, 2024, from https://climate.ny.gov/

[14] New York State Department of Environmental Conservation. (2022). *2022 report to the Governor and Legislature on the New York State Food Donation and Food Scraps Recycling Law*. Retrieved from https://extapps.dec.ny.gov/docs/materials_minerals_pdf/2022foodannualreport.pdf

Rivertowns Food Scraps Study

Food Donation and Food Scraps Recycling Law mandate large food generators to donate edible food and recycle the remainder, setting a foundation for municipalities to implement complementary programs.

Municipalities are leveraging the CLCPA's financial and technical resources to develop infrastructure for composting and anaerobic digestion. The legislation encourages expanding capacity to handle organics from residential and commercial sources while progressively lowering the threshold for mandatory food scrap recycling. Public outreach and education initiatives mandated by the CLCPA further support local governments in engaging communities, particularly underserved populations, to increase participation in food scrap programs.

In addition to emissions reductions, the CLCPA promotes a circular economy by encouraging the reuse of organic materials, such as compost, biogas, and digestate. This approach ensures economic viability and provides municipalities with pathways to achieve sustainability goals while addressing methane mitigation. As municipalities scale their programs in response to CLCPA requirements, they play a pivotal role in transforming waste management practices, reducing landfill reliance, and building resilient, low-carbon communities.

As mentioned above, in 2022, New York State passed the Food Donation and Food Scraps Recycling Law, which mandates that 1) all designated food scraps generators (DFCGs) donate excess edible food "to the extent possible" and 2) all designated food scraps generators within 25 miles of an organics recycler that have available capacity (composting facility, anaerobic digester, etc.) separate food scraps and transport them to an organics recycling facility. Designated food scraps generators include businesses, non-profits, and government entities that generate an annual average of two tons of wasted food per week or more. These include supermarkets, food service establishments, universities, hotels, food processors, correctional facilities, and entertainment venues. Beginning in March of 2023, DFCGs were also required by the Food Donation and Food Scraps Recycling Law to submit an annual report that includes the amount of food donated and recycled, as well as the organics recyclers and transporters used.

The adoption of the Food Donation and Food Scraps Recycling Law has driven the expansion of composting facilities and infrastructure across New York State and has resulted in an increased effort by New York communities and businesses to engage in organics waste reduction practices. From 2021 to 2022, food donations by designated food scraps generators increased by 60% and food scraps recycling by DFCGs increased by 529%. In response, New York State municipalities and private companies have invested in new technologies and infrastructure to manage the increased food scraps tonnage in need of processing.

A key aspect to the successful implementation of the Food Donation and Food Scraps Recycling Law has been the rollout of NYSDEC funding for critical partnerships with the Center for EcoTechnology (CET), Feeding New York State, and New York State Pollution Prevention Institute (NYSP2I). Funding from the NYSDEC has facilitated the build out of key New York State programs that provide technical and financial assistance to businesses and communities interested in food scraps management. These programs include CET's Rethink Food Waste New York, Feeding NYS's Food Recovery Program, the NYSP2I Food Waste Reduction and Diversion Reimbursement Program, and other technical assistance programs and education through NYSP2I.

Historically, the NYSDEC has funded recycling projects, including organics recycling, under the existing State's Municipal Waste Reduction and Recycling (MWRR) Program. However, with a growing State focus on food scraps management and the resulting increase in food scraps recycling due to the adoption of the Food Donation and Food Scraps Recycling Law, the NYSDEC

has since developed a dedicated organics management funding program for municipalities. These funds can be used towards efforts to increase residential food scraps recycling or to establish new or expand existing food scraps recycling programs and facilities. According to the *2023 New York State Food Donation and Food Scraps Recycling Law Report* written to the New York State Governor and Legislature, the NYSDEC has awarded a total of $6.05 million in organics management grant funding to 50 municipal projects. Opportunities for funding for organics management-related projects can still be distributed through the MWRR program as well as through the NYSDEC's Climate Smart Communities Certification program.

The NYSDEC's Climate Smart Communities (CSC) Certification Program[15] is an initiative designed to help local governments address climate change and reduce greenhouse gas emissions. An important aspect of the program is the management and reduction of organic waste. Municipalities participating in the CSC Certification Program can earn points by incorporating various organics-related actions under Pledge Element 5. There are seven specific certification actions associated with organics and food scraps: developing an organics management plan, implementing an organic waste program for government buildings, distributing compost bins for residents, conducting a waste reduction education campaign, establishing a residential organic waste program, participating in the WasteWise Program (an EPA initiative), and performing a government solid waste audit.

Westchester County Program and Initiatives

Westchester County has a robust base of programming and policy regarding materials diversion, specifically food scrap management and composting. Generally, recycling is mandated by law. The Westchester County website notes that if recyclables and general waste are mixed, the waste will not be disposed of, and educational materials will be left with the resident. There are further regulations mandating the standardized signage for either single or dual stream recycling. The County has also made significant investments in their material recovery facility by retrofitting with new technology that has allowed for the expansion of accepted materials like plastics.

In the space of food scraps and organics, the County has partnered with Cornell Waste Management Institute to provide consistent materials and education on the County scale. Complementing these educational materials is the CompostED facility in Valhalla, New York, which is the first small-scale food scrap composting demonstration and education site. The CompostED facility situated on the Grasslands Campus in Valhalla, was built in December 2020 and officially opened on Earth Day, April 22, 2021.[16] It processes up to two tons of food scraps weekly, serving as an educational hub for residents, students, and municipal officials. Visitors learn about the environmental benefits and processes of composting and explore how local municipalities can integrate food scraps into existing organic yard waste composting sites.[17] CompostED employs an Aerated Static Pile (ASP) composting system, which enhances the decomposition process by blowing air into the piles through an aeration floor. This method maintains aerobic conditions, reduces odors, and accelerates composting, making it suitable for

[15] New York State Department of Environmental Conservation. (2022). *2022 report to the Governor and Legislature on the New York State Food Donation and Food Scraps Recycling Law*. Retrieved from https://extapps.dec.ny.gov/docs/materials_minerals_pdf/2022foodannualreport.pdf

[16] Westchester County Department of Environmental Facilities. (2021, April 21). *County Executive Latimer Celebrates Earth Day with the Opening of New County Compost and Education Center*. Retrieved from https://www.westchestergov.com/home/all-press-releases/8913-county-executive-latimer-celebrates-earth-day-with-the-opening-of-new-county-compost-education-center

[17] Westchester County Department of Environmental Facilities. (n.d.). *CompostED*. Retrieved December 1, 2024, from https://environment.westchestergov.com/composted

processing high-energy feedstock like food waste.[18] The facility has processed over 116 tons of food waste from partners such as local food pantries, such as Feeding Westchester, Meals on Main Street, and Hope Community Services. The composte produced is distributed to organizations that cultivate food for donation, such as Our New Way Garden, Hilltop Hanover Farm, and Dig Farm, as well as County residents during community compost giveback events.[19] By providing hands-on learning experiences and serving as a model for local composting initiatives, CompostED plays a crucial role in Westchester County's efforts to divert food waste from the waste stream and promote sustainable practices.

In 2020, the Residential Food Scrap Transportation and Disposal (RFSTAD) program was established with the mission to assist municipalities seeking to start or maintain a food scraps collection program in the county. The program works by offering municipalities a subsidized rate for the transportation and disposal of food scraps collected through a drop-off or residential curbside program. This programmatic structure combines the bulking and transportation of food scraps, cutting carbon emissions, while providing cost-savings for the enrolled municipalities. Dobbs-Ferry, Elmsford, Irvington, Tarrytown, Sleepy Hollow, Irvington are among those enrolled in the program, demonstrating a regional commitment to effective food scrap recycling and environmental stewardship.[20]

Participating municipalities oversee the collection of residential food scraps through either drop-off or curbside programs. The County then arranges for the transportation and disposal of the collected food scraps to an organics recycler at a subsidized rate, making the process cost-neutral or even cost-saving compared to traditional solid waste disposal. [21]

As of late September 2024, 28 municipalities are enrolled in RFSTAD, collectively managing over 1,100 tons of food waste annually—a figure that continues to grow as more municipalities join the program.[22] By consolidating the transport of food scraps, RFSTAD not only reduces costs but also cuts carbon emissions, aligning with broader environmental sustainability goals.

Organic Yard Waste Program

Established in 1998, Westchester County's Organic Yard Waste Program enables municipalities to participate through a program-specific inter-municipal agreement (IMA). Municipalities can choose to host an organic yard waste site; however, to benefit from direct collection at their municipal yard, the host municipality must permit other IMA municipalities to deliver organic yard waste to the site. The program subsidizes the per-ton cost of organic yard waste, making it less than the cost of disposing of solid waste, thereby encouraging participation. The collected yard waste is transported by subcontractors of the material recovery facility to commercial composting facilities. In 2021, participating municipalities collected 97,906 tons of yard waste. Municipalities currently hosting an Organic Yard Waste site include Briarcliff Manor, Cortlandt, Croton, Eastchester, Greenburgh, Harrison, Irvington, Larchmont, the Village and Town of

[18] Westchester County Department of Environmental Facilities. (n.d.). *CompostED*. Retrieved December 1, 2024, from https://environment.westchestergov.com/processing

[19] Westchester County Department of Environmental Facilities. (n.d.). *Partnerships Sourcing Food Waste*. Retrieved December 1, 2024, from https://environment.westchestergov.com/partnerships-sourcing-food-waste

[20] Westchester County Department of Environmental Facilities. (n.d.). *Food Waste*. Retrieved December 1, 2024, from https://environment.westchestergov.com/residents/food-waste

[21] Westchester County Department of Environmental Facilities. (n.d.). *Residential Food Scrap Transportation and Disposal Program (RFSTAD)*. Retrieved December 1, 2024, from https://environment.westchestergov.com/food-waste/residential-food-scrap-transportation-and-disposal-program-rfstad

[22] Westchester County Department of Communications. (2024, September 23). *New Rochelle Joins Westchester County's Residential Food Scrap Transportation and Disposal Program (RFSTAD)*. Retrieved from https://www.westchestergov.com/home/all-press-releases/10253-new-rochelle-joins-westchester-county-s-residential-food-scrap-transportation-and-disposal-program-rfstad

Mamaroneck, Mount Kisco, Mount Vernon, New Rochelle, Ossining Village, Peekskill, Port Chester, Rye City, Scarsdale, Sleepy Hollow, Tarrytown, White Plains, and Yonkers.[23]

[23] Westchester County Department of Environmental Facilities. (n.d.). *Organic Yard Waste Program*. Retrieved December 1, 2024, from https://environment.westchestergov.com/residents/yard-waste

Rivertowns Food Scraps Programs

The Rivertowns Food Scraps Programs stand as a testament to the region's commitment to sustainable waste management and environmental stewardship. By fostering collaboration among municipalities and engaging community members, these programs aim to reduce landfill waste and promote the recycling of organic materials. Through various initiatives, such as drop-off sites, curbside pickups, and educational centers, the Rivertowns are paving the way for a greener future. This overview chapter delves into the diverse food scraps programs across the Rivertowns, highlighting their successes and exploring potential advancements in the coming years.

Village of Hastings on Hudson

Overview

Hastings-on-Hudson has implemented a food scrap recycling program as part of its broader commitment to sustainability and waste reduction. Initiated in 2018, the program is centered at the Village's Department of Public Works (DPW) facility located at 12 Southside Avenue, near the Metro-North tracks.

Food Scrap Program

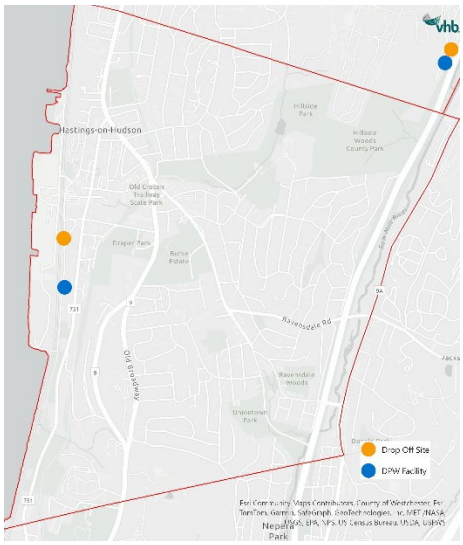
- **Location and Accessibility**: The drop-off site contains 12–15 large bins available daily for residents. However, the site's remote location, further from the village, and the narrow two-way access road pose accessibility challenges for many residents.
- **Accepted Materials**: The program accepts a wide variety of organic materials, including fruits, vegetables, meat, dairy, and compostable service ware.
- **Participation**: Strong community engagement has contributed to the program's success. Private carters also assist by picking up curbside compost and bringing it to the drop-off site. The program is starting to reach a challenge in terms of growing momentum in increasing participation. There is also concern that tonnage at drop off sites will decrease as private food scrap carters will need to drop of food scraps at the county facility instead of the village's drop off site.
- **Processing**: Food scraps are collected weekly by CRP, the Westchester County RFSTAD contractor, and transported to a processing facility, likely in Cortlandt.
- **Curbside Composting:** In addition to the drop-off program, Hudson Composting provides curbside pickup for residents, offering a more convenient alternative. Initially a grassroots effort, the service has grown into a formal operation certified as a Westchester County vendor.
- **School Composting Initiatives:** The Hastings-on-Hudson school district runs its own composting programs, further engaging the community and promoting education about food waste diversion.

DPW Sanitation Operational & Capacity

Hastings On Hudson's Department of Public Works Sanitation is well equipped to handle current waste collection needs for the village. The village provides waste collection for both residents and commercial businesses with private haulers providing support.

- **Routes and Equipment**: The DPW manages three waste collection routes using standard MAC rear-loader garbage trucks equipped with 25-yard lead packers. Steep hills throughout the village complicate operations, particularly when using barrel lifts for heavy toters.
- **Services Provided**: The DPW collects solid waste, recycling, and e-waste from residential and commercial properties. Large private institutions, such as Stop & Shop and Andrus on Hudson, are serviced by private haulers.
- **Facility Location and Flood Risk:** The DPW facility, located near the Hudson River, has experienced significant flooding due to its proximity to water and limited stormwater infrastructure. Although upgrades have been made to mitigate flood risks, challenges remain.

Food Scraps Drop-Off Site at Village DPW



Map of Village Food Scraps Drop-Off Sites and DPW Facilities

Village of Dobbs Ferry

Overview

Dobbs Ferry has implemented a food scrap recycling program as part of its sustainability efforts to reduce landfill waste. The program centers around a drop-off site at the Village DPW near Rivertowns Commons, which also serves neighboring Ardsley residents.

Food Scrap Drop-Off Program

- **Location and Accessibility**:
  - The drop-off site provides 12–15 large bins for residents.
  - Improved signage is needed to enhance wayfinding and accessibility.
  - There is interest in additional locations closer to residents, such as the high school and the new fire station.
- **Collection and Processing**:

Rivertowns Food Scraps Study

- Food scraps are collected weekly by CRP, Westchester County's contractor, and transported to a processing facility.
- Residents are encouraged to bring all food scraps, including fruits, vegetables, meat, dairy, bread, and compostable materials.
- Common issues like odor and bugs occur, but no significant animal complaints have been reported.

- **Participation**:
  - The program serves both Dobbs Ferry and Ardsley residents.
  - Community engagement is high, but challenges persist with maintaining participation as Hudson Composting, now a county carter, may divert food scraps to county facilities instead of village drop-off sites.
- **Community Initiatives**:
  - Dewaste Dobbs, a local community group, promotes sustainable waste practices.
  - The Springhurst Elementary School has been able to grow a successful composting program. The school's program has been able to engage students in sustainable waste management by diverting food scraps from the cafeteria into compost bins. The program, initiated in partnership with parents and teachers, focuses on educating students about environmental stewardship while reducing the school's landfill contributions. With dedicated volunteers and the support of the school community, Springhurst has successfully created a model for integrating hands-on environmental education into daily school activities.[24]
- **Challenges:**
  - Challenges include managing odors and pests, though animal issues are minimal.

DPW Sanitation and Operations

- **Waste Collection Services**:
  - The DPW collects solid waste, recycling, and e-waste for residential and commercial properties, including restaurants.
  - Large institutions such as Children's Village and Mercy University are serviced by private haulers.
  - Restaurants currently do not participate in food scrap recycling programs due to operational concerns.
- **Collection Routes**:
  - Three waste collection routes are managed using standard MAC dump trucks.
  - Three Ford F-350 satellite trucks handle collection in narrow roads and cul-de-sacs.
- **Facility and Fleet**:
  - The DPW facility is located at 2 Stanley Avenue by the Saw Mill River Parkway.

[24] "Springhurst Elementary School turns food scraps into compost." *The Journal News*, 30 May 2017. https://www.lohud.com/story/news/education/2017/05/30/composting-springhurst/335785001/.

- The DPW operates out of a modern facility with sufficient capacity for current operations.

Food Scraps Drop-Off Site by Village DPW

Map of Village Food Scraps Drop-Off Sites and DPW Facilities

Village of Ardsley

Overview

The Village of Ardsley actively collaborates with neighboring municipalities and regional programs to enhance sustainability and waste diversion. While it currently lacks a dedicated food scrap drop-off site within the village, residents benefit from nearby facilities and robust waste management operations overseen by the DPW. Recent investments in infrastructure and community engagement reflect Ardsley's commitment to improving sustainability initiatives.

Food Scrap Program

- **Regional Facilities**:
  - Residents can use the Dobbs Ferry DPW Site (2 Stanley Avenue) and the Greenburgh DPW Site (100 Old Sprain Road).
  - These facilities accept a wide range of food scraps, including fruits, vegetables, meat, dairy, and compostable materials like coffee grounds and paper napkins.
- **Participation Encouragement**:
  - Starter kits, including bins and compostable bags, are sold through the Greenburgh Nature Center to promote participation.
- **Future Expansion**:
  - A potential local drop-off site for the Village of Ardsley to consider would be the previous DPW site located on Elm Street.
- **Challenges**
  - The reliance on out-of-village facilities creates barriers for some residents, emphasizing the need for convenient local options.
  - Progress is limited by resource constraints and the lack of volunteers for the Climate Smart Task Force.

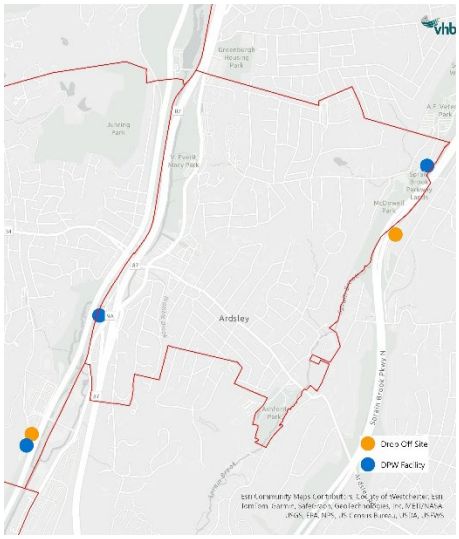
Waste Collection Services

- **Residential and Commercial Routes:**
    - The DPW manages two waste collection routes using standard garbage trucks. Year-round organics collection is available for yard waste.
- **E-Waste Collection:**
    - An on-demand system for e-waste collection streamlines services and improves accessibility for residents.

Facility and Infrastructure

- **New DPW Facility:**
    - Located at 220 Heatherdell Road, the new facility is designed to improve operational efficiency and accommodate future needs.
    - This state-of-the-art center will enhance the village's waste management capabilities while supporting sustainability efforts.
- **Current Capacity:**
    - The village's fleet and infrastructure are sufficient for existing operations.
    - Any significant program expansions, particularly in organics or food scrap recycling, will require additional resources and strategic planning.

Home Starter kits distributed at the Village Town Hall



Map of Pick Up and Drop Offs

Village of Irvington

Overview

The Village of Irvington has demonstrated a strong commitment to sustainability through its robust waste management and food scrap recycling initiatives. Since 2018, Irvington's food scrap program has provided residents with opportunities to reduce organic waste and contribute to environmental preservation. Managed collaboratively by the DPW and the Irvington Environmental Committee, the program aligns with broader efforts across the Rivertowns to improve waste diversion, reduce greenhouse gas emissions, and foster community engagement. These initiatives reflect the village's proactive approach to addressing the growing challenges of waste management in a sustainable and community-focused manner.

Food Scraps Program

- **Location and Accessibility:**
    - The primary drop-off site includes 15–20 large bins located in a restricted area behind the Main Street Elementary School on 101 Main Street. The bins are located towards the back of the school by the parking lot. This area is often used as part of the recreational play space during the school day. Due to Public access is limited during school hours for safety and logistical reasons.
    - To enhance accessibility, volunteers relocate bins to the curb during the weekend farmers' market, promoting participation.
    - Food scrap recycling kits, including a countertop pail and a storage bin, are available for $20 at the village office and farmers' market.
- **Accepted Materials:**
    - Residents can recycle a wide range of organics, including fruits, vegetables, meat, bones, dairy, bread, pasta, and other cooked foods.
- **Processing:**
    - Food scraps are collected weekly by Suburban Carting, a contractor under the Westchester County RFSTAD program.
    - Collected scraps are transported to the Montrose facility for processing.
- **Curbside Composting:**
    - Hudson Compost Services offers a curbside pickup option for residents at $5 per week, providing a convenient alternative for those unable to access the drop-off site.
- **Community Engagement**
    - Environmental Committee Leadership: The Irvington Environmental Committee is a key champion of the program, leading efforts to maintain and expand participation.
    - School Initiatives: Local middle schools have initiated their own food scrap collection programs, reflecting growing community interest and engagement.
- **Challenges and Future Opportunities**

- **Accessibility Limitations**: The program faces challenges in identifying additional drop-off locations to improve convenience for residents.
- **Waste Separation**: Effective waste separation remains an ongoing priority to ensure the success of the program.
- **Community Growth**: Increased interest from schools and the broader community offers opportunities to expand the program and strengthen its impact.

DPW Sanitation and Operations

Waste Collection Services

- **Routes and Frequency**:
  - The DPW operates two sanitation routes using Mack LR rear-loader garbage trucks with a 25-cubic-yard capacity.
  - Residential waste is collected twice weekly.
  - Downtown properties are serviced five days a week to address higher waste generation.
- **Commercial and Restaurant Services**:
  - Restaurants are included in general waste collection but do not currently participate in the food scraps recycling program, reportedly due to resistance to changes in operational practices.

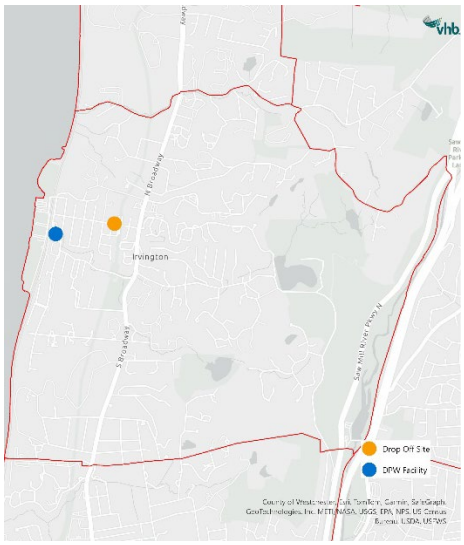
Facility and Fleet

- **DPW Facility**:
  - The facility is strategically located near the train station and is well-equipped to support current operations.
  - It houses a range of equipment, including waste collection vehicles and light-duty electric vehicles.

Infrastructure:

- The existing infrastructure is sufficient for current demands but may require upgrades to accommodate program expansions, such as curbside food scrap pickup or increased community participation.

Food Scraps Drop-Off Site by Elementary School



Map of Village Food Scraps Drop-Off Site and DPW Facilities

Village of Tarrytown

Overview

The Village of Tarrytown integrates sustainability into its waste management practices through a robust food scrap recycling program and the efforts of its DPW. The program provides residents with accessible options to reduce organic waste while addressing challenges such as waste commingling, odors, and contractor errors. Tarrytown is also expanding its efforts by engaging schools, supporting public event recycling, and exploring fleet modernization. These initiatives underscore the village's commitment to environmental stewardship and operational efficiency, ensuring its waste management practices align with broader sustainability goals.

Food Scraps Program

- **Location and Accessibility**:
    - The drop-off site features 12–15 96-gallon toters.
    - Accessible to residents throughout the week, the site collects a wide range of food scraps, including fruits, vegetables, dairy, and meat.
- **Participation Tools**:
    - Starter kits, including compostable bags and storage bins, are available for purchase to encourage resident participation.
- **Processing**:
    - Food scraps are collected weekly through the Residential Food Scrap Transportation and Disposal (RFSTAD) program.
    - CRP, the Westchester County RFSTAD contractor, transports the scraps to their processing facility in Cortlandt (2 Bayview Rd, Cortlandt, NY 10567).
- **Community Engagement and Expansion Efforts**

Rivertowns Food Scraps Study

- **School Participation**: Tarrytown and Sleepy Hollow schools have begun implementing composting programs, fostering early education on sustainability.
- **Event Integration**: The village is exploring ways to incorporate food scrap recycling into large events held in its parks, which generate significant organic waste.

- **Challenges**:
  - Common issues include odors, pests, and occasional contractor errors during collections, such as leaving debris behind.
  - Regular maintenance and sawdust application are used to control odors and mitigate these challenges.

DPW Sanitation and Operational Capacity

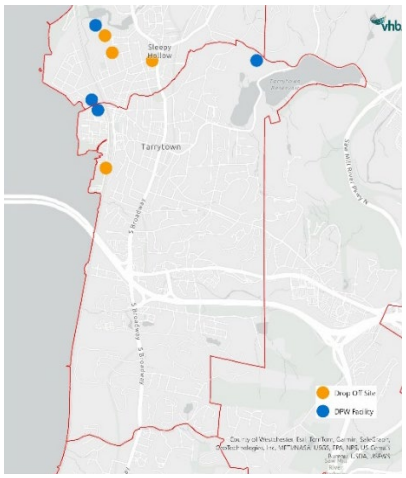
Waste Collection Services

- **Routes and Equipment**:
  - The DPW operates four collection routes using MAC rear-loader garbage trucks and chaser trucks for narrow streets and specialized pickups.
  - Solid waste is collected once per week, supplemented by recycling and bulky waste collection services.
- **Organics Yard**:
  - The village operates an organics yard that processes yard waste collected by the DPW and private contractors. The yard is located on Towerhill Road, just east of the Village of Tarrytown Water Pump Station.
  - The facility charges a tipping fee for private contractors and sells compost produced on-site.

Fleet and Infrastructure

- **Fleet Maintenance and Sustainability Goals**:
  - The DPW fleet is well-maintained and sufficient for current operational demands.
  - Fleet electrification faces challenges due to limited charging infrastructure and the high cost of medium-duty electric vehicles.
- **Facility**:
  - The DPW operates from a spacious facility that meets current operational needs.

Food Scraps Drop-Off Site by Tarrytown Station and Waterfront



Map of Village Food Scraps Drop-Off Sites and DPW Facilities

Village of Sleepy Hollow

Overview

The Village of Sleepy Hollow has taken significant steps toward sustainability by establishing a food scrap recycling program and leveraging its DPW to support broader environmental goals. The program caters to a dense and diverse population, emphasizing accessibility and community engagement. Collaboration with schools, community organizations, and private vendors has allowed Sleepy Hollow to create a model that integrates waste diversion into the village's operational framework. These efforts reflect the village's commitment to reducing landfill waste, lowering greenhouse gas emissions, and fostering a culture of environmental responsibility.

Food Scraps Program

- **Locations and Capacity**:
    - Three drop-off sites serve the community:
        - DPW Laydown Yard: Ten bins.
        - Village Hall Municipal Lot: Two bins.
        - Senior Center Municipal Lot: Two bins.
    - Downtown sites receive frequent pickups and sawdust applications to mitigate odors and pests.
- **Participation Tools**:
    - Organics kits are available for purchase at drop-off sites to encourage resident participation.
- **Processing**:
    - Food scraps are collected weekly by CRP through the Residential Food Scrap Transportation and Disposal (RFSTAD) program.
    - Additional curbside pickup services are provided by Hudson Composting.
- **Community Engagement and Expansion:**

- John Paulding Elementary School has taken a leading role in adopting food scrap recycling, actively involving students in composting activities. Morris School is also progressively increasing its participation in these initiatives. These efforts are part of the village's broader commitment to waste reduction and environmental stewardship.
- In Sleepy Hollow, community-led initiatives have significantly boosted participation in the village's food scrap recycling program. The Sleepy Hollow Environmental Advisory Committee (SHEAC) has been instrumental in launching the program, establishing drop-off sites, and organizing educational events to raise awareness about composting benefits. Collaborating with SHEAC, the Climate Smart Community (CSC) Task Force focuses on reducing greenhouse gas emissions and enhancing climate resilience. Their joint efforts include creating a Climate Action Plan and promoting sustainable practices, such as food scrap recycling, within the community.

DPW Sanitation and Operational Capacity

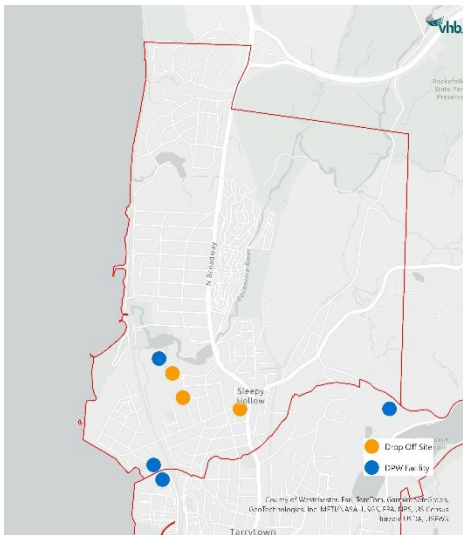
Waste Collection Services

- **Routes and Operations**:
  - The DPW operates two primary trash pickup routes, each serviced twice weekly by standard garbage trucks.
  - Satellite trucks are deployed for specialized routes, navigating narrow streets and densely populated areas.
- **Commercial Services**:
  - The DPW provides waste collection services for downtown restaurants and food businesses.
  - Despite these services, commercial entities have not yet adopted food scrap recycling, presenting an opportunity for expanded program engagement.
- **Cost Challenges**:
  - Rising county tipping fees remain an ongoing challenge, emphasizing the need for cost-effective waste diversion strategies, such as increased recycling and composting.

Facility and Fleet

- **Current Capacity**:
  - The DPW's infrastructure effectively supports current operations, meeting the needs of both residential and commercial waste management.

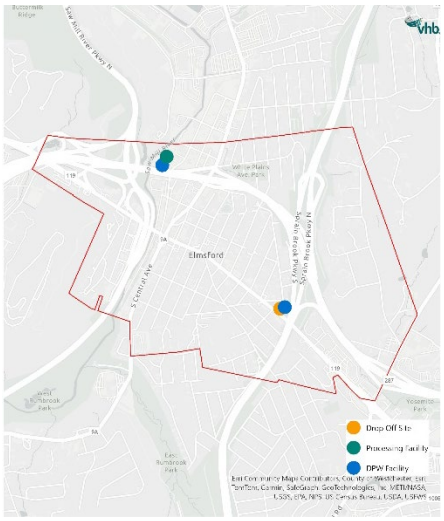
Food Scraps Drop-Off Site by Senior Center Parking



Map of Village Food Scraps Drop-Off Sites and DPW Facilities

Village of Elmsford

Food Scraps Drop-Off Site by Village Water Department



Map of Village Food Scraps Drop-Off Sites and DPW Facilities

Overview

The Village of Elmsford, the smallest of the Rivertowns, has steadily advanced its waste management practices through the introduction of a food scrap recycling program and ongoing efforts by its DPW. While limited in size, the village demonstrates a growing commitment to sustainability by addressing community concerns and expanding its waste diversion initiatives. These efforts reflect Elmsford's dedication to creating a more efficient and environmentally responsible waste management system.

Food Scraps Program

- **Location and Capacity:**

- The drop-off site is near the Village Water Department facilities and includes 40 bins.
- Bins are emptied every Wednesday to maintain site cleanliness and capacity.

- **Processing:**
  - Collected food scraps are transported to a facility in Yonkers, adding logistical complexity and costs due to the long hauling distance.
- **Community Engagement**
  - **Climate Smart Task Force:** Established 1.5 years ago, the Climate Smart Task Force has been pivotal in promoting resident education about the food scrap program. The task force has also led outreach efforts and is exploring opportunities for program expansion.
- **Opportunities for Expansion:**
  - The task force plans to target public schools as a critical next step in increasing participation and fostering community-wide engagement.
- **Participation and Challenges:**
  - Odor and pest issues have been a recurring challenge, requiring substantial financial investment from the village for management.
  - Residents have expressed interest in a curbside collection option, but low engagement from private haulers, such as Hudson Composting, has limited implementation.

DPW Sanitation & Operations

The Elmsford DPW provides regular waste collection services, including separate pickups for garbage, recycling, and organics. The village operates three dedicated trucks—one for each material type—with pickup schedules spread across different days. This system, while comprehensive, creates a complex calendar for residents to follow.

Trash is collected twice weekly, but the DPW has expressed interest in reducing collection to once a week. Achieving this goal would require procuring an additional disposal truck and hiring an additional team to manage the workload efficiently.

Fleet limitations and long-haul distances for food scrap disposal present ongoing challenges for the village's waste management operations. Despite these obstacles, the DPW remains committed to exploring opportunities for improvement. The Climate Smart Task Force continues to play a pivotal role in advancing waste diversion goals, and the community momentum around sustainability offers a promising path forward.

Key Findings

Although the Rivertowns all have unique experiences with the establishment of food scraps management programming, the seven Villages have shared similar successes and challenges on their journeys to implementation. These commonalities serve as a bridge between each unique experience, creating common goals and approaches for future programming, while leveraging the individual successes and strengths of each existing program.

All of the Villages have individual food scrap drop off programs. These programs usually include a village-specific drop-off location, however, some neighboring Villages, like Ardsley and Sleep Hollow, share their infrastructure. Generally, most programs have promising participation rates

and resident interest, demonstrating the need to continue and create more robust efforts. Across the villages, there have been common challenges in placing and maintaining drop-off sites. Location convenience, access, signage, and hours of operations have all proved to be important factors affecting resident participation. Villages have also reported nuisance issues of smell and pests to be common. Another challenge reported is the contamination rate in dropped off material, with other waste streams being mixed with food scrap drop offs.

In terms of capacity, each Village has limited opportunity to expand physical infrastructure such as fleet and facilities due to the high financial investment and suitable land respectively. Many of the Villages participating in this project are also RFSTAD members which has served as a useful tool in building capacity. Fleet electrification also stands at various points of progress throughout each Village; however, electrification of heavy-duty vehicles has been a universal obstacle. Obstacles specifically include high capital costs or lack of powerful charging infrastructure needed.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