

Nothing Wasted Plan

Turning Food Waste into Energy, Compost, and Community Opportunity

A Massachusetts initiative for local energy, healthy soils, and lower municipal costs

Prepared for Lori Childs | Expanded policy, business plan, and shared-savings analysis

Executive summary

Nothing Wasted is a voluntary statewide initiative to help municipalities, schools, hospitals, universities, food manufacturers, farms, and other businesses turn unavoidable food scraps into useful compost, soil products, and, where appropriate, locally produced energy. It preserves the original plan's four phases, three processing approaches, municipal incentives, and economic, environmental, and community goals. The expansion adds a business model, Massachusetts and interstate examples, financial tests, and accountability requirements.

The recommended starting point is not a new digester in every town. It is a practical combination of food-waste prevention, safe food recovery, school and institutional collection, convenient community drop-off, and contracts with qualified existing processors. New composting, vermicomposting, or anaerobic-digestion facilities should follow demonstrated demand, engineering review, and a viable operating budget.

The strongest opportunity is to buy and operate together, not build the same system four times. The revised shared-service model compares the same four drop-offs and one six-school cluster at the same 860 annual tons. If the specified procurement and staffing targets are achieved, cooperation lowers five-year costs by approximately **\$70,000–\$131,000 compared with separate programs**. This includes annual efficiency gains and lower startup spending; it is not an observed saving or a guaranteed return.

Using a \$105-per-ton disposal benchmark, modeled mature annual net savings are approximately \$31,600 in the shared base-target case and \$42,400 in the favorable-target case, versus \$20,600 if programs operate separately. Five-year net savings after startup and ramp-up are much smaller: approximately \$8,500 and \$69,300, respectively; slower enrollment can eliminate them. The \$105 benchmark is the cooperative's reported 2025 member-average disposal cost, not a verified marginal 2026 price for any individual town. ([SSRC 2025 annual report](#)¹)

There is a separate, substantial resident opportunity in SSRC's published town-by-town biweekly pricing schedule: at 1,000 qualifying subscribers in each of Hanson, Hanover, Norwell, and Rockland, annual subscription charges would total \$525,000 instead of \$720,000 at the \$180 entry-tier rate, a **\$195,000 annual fee reduction**. This conditional calculation assumes the applicable tier rate covers all subscribers in that town and must be confirmed against the executed contract; it is not a municipal saving or a saving compared with having no compost subscription. The schedule states prices are effective June 1, 2025 through June 30, 2027, so later-year enrollment needs updated pricing. ([SSRC biweekly pricing schedule](#)²)

Separate curbside collection can still cost more than it saves overall. The plan therefore prioritizes existing regional contracts, measured pilots, shared drop-off and school services, and enforceable

¹SSRC 2025 annual report: <https://ssrcoop.info/wp-content/uploads/2026/02/CY25-report-SSRC-amended.pdf>

²SSRC biweekly pricing schedule: <https://ssrcoop.info/wp-content/uploads/2025/05/BEC-Biweekly-pickup-pricing.pdf>

reductions in trash invoices. Participation remains voluntary, and towns retain the choice of service model, spending level, and whether to proceed.

How to use this document

- **Proposed policy:** Recommendations and funding amounts in this document are proposals, not existing appropriations or municipal commitments.
- **Documented evidence:** Case-study claims link to the underlying public records. Historical results and modeled projections are labeled.
- **Illustrative finances:** Model inputs are planning assumptions awaiting local invoices, waste audits, and bids. Grants, energy sales, compost sales, carbon credits, and food-purchasing savings are not assumed in the core operating case.
- **Revision hierarchy:** The initial \$125-per-ton model is retained for transparency and sensitivity testing. The later shared-savings section adds the newly documented \$105 disposal benchmark, a same-tonnage comparison, household discounts, and a research-gap register; use that section for the revised fiscal conclusions.
- **Preserved original:** The original document is reproduced in full in the final appendix. Where its wording is broader than the available evidence, the qualifications in this revised plan govern.

The problem and opportunity

MassDEP's 2025 program and policy assessment reports approximately 930,000 tons of food material still disposed annually, 370,000 tons diverted in 2024, and a 2030 annual diversion goal of 780,000 tons. These figures establish a substantial remaining opportunity; they do not show that every additional ton can be diverted profitably. ([MassDEP assessment](https://www.mass.gov/doc/2025-swmp-program-and-policy-assessment/download)³)

Food waste sent to landfills generates methane, while both landfilling and incineration lose opportunities to recover nutrients; EPA also identifies prevention and food recovery as preferable to managing waste after it occurs. The revised plan therefore addresses food waste sent to either disposal pathway, rather than assuming all Massachusetts trash goes to landfills. ([EPA Wasted Food Scale](https://www.epa.gov/sustainable-management-food/wasted-food-scale)⁴)

The original problem statement remains central: disposal uses capacity, requires transportation, costs money, and discards potential energy and nutrients. The proposed response is to reduce waste first and then choose the lowest-cost, environmentally sound outlet for the remaining material.

Preserve all three processing options

- **Composting:** Support municipal programs, community hubs, regional partnerships, agricultural inputs, landscaping material, and community gardens. Require appropriate feedstocks, contamination controls, and product quality.
- **Vermicomposting:** Retain school demonstrations, municipal pilots, and agricultural partnerships producing worm-based soil amendments. Treat premium product prices and faster processing as hypotheses to test, not guaranteed revenue or performance.
- **Anaerobic digestion:** Retain agricultural digesters, regional energy facilities, and municipal partnerships producing biogas, electricity, useful heat, or renewable natural gas where

³MassDEP assessment: <https://www.mass.gov/doc/2025-swmp-program-and-policy-assessment/download>

⁴EPA Wasted Food Scale: <https://www.epa.gov/sustainable-management-food/wasted-food-scale>

technically and financially justified. Require a separate feasibility review for each energy configuration.

Composting is an aerobic process, whereas anaerobic digestion produces biogas; these are distinct treatment pathways, not interchangeable names for one process. EPA's assessment also distinguishes digestion with beneficial use of digestate from digestion followed by disposal of residuals. ([EPA composting guidance](#)⁵; [EPA Wasted Food Scale](#))

Goals retained and made measurable

Nothing Wasted seeks to reduce disposal and methane emissions, expand appropriate renewable-energy production, improve soil health, reduce municipal costs, create local jobs, and strengthen resilience. Every pilot should report progress against the goals relevant to its design; a compost drop-off should not be expected to generate electricity, and a digester should not claim a marketable soil product without a safe, permitted outlet.

The business plan

Customers, service, and ownership

The first customers would be willing municipalities and public institutions with identifiable waste costs and reliable quantities of recoverable material. Private businesses and hospitals may join compatible routes or regional procurement, but their savings belong to their own budgets unless a contract expressly shares them.

The recommended initial business is a service partnership rather than a speculative processing venture. Towns provide convenient collection access and oversight; school districts manage cafeteria implementation; competitively selected vendors collect and process material; a lead municipality or regional entity coordinates procurement, invoices, and reporting.

- **Municipal value:** Lower the combined cost of trash and organics service where possible, while improving access and reducing disposal.
- **Institutional value:** Reduce excess purchasing and wasted meals, then right-size dumpsters and pickup frequency.
- **Processor value:** Offer predictable, clean feedstock and clear payment terms rather than unverified volume guarantees.
- **Community value:** Return usable nutrients to farms, gardens, and landscapes where product standards allow.
- **Workforce value:** Budget for paid operations, training, equipment maintenance, and safe handling rather than assuming volunteers can sustain essential daily work.

Start with existing capacity

Issue a regional request for information before buying equipment. Ask haulers and processors for separate prices for collection, processing, contamination, rejected loads, container rental, fuel adjustments, and service changes.

⁵EPA composting guidance: <https://www.epa.gov/sustainable-management-food/composting>

Request at least two feasible receiving options where the market allows. A contract must identify the actual processing destination, accepted materials, spare capacity, backup arrangements, and the right to verify weight tickets and downstream disposition.

For new processing capacity, require signed or otherwise credible feedstock commitments, a permitted site, trained operators, a financing plan, realistic product demand, and an adverse-case operating budget. Do not obligate a town to deliver a fixed quantity of food waste if prevention efforts reduce it.

Who receives the financial benefit?

Benefit or payment	Correct budget treatment
Avoided trash tipping fee	Municipal or institutional saving only if the invoice actually falls
Fewer trash pickups or smaller dumpsters	Saving only after an enforceable contract adjustment
Household subscription fee	Household expense and operator revenue; not a public saving
State startup grant	Local financing assistance; still a public expenditure
Compost or energy sales	Revenue of the owner or operator entitled to it under contract
Free compost returned to a town	Count only purchases actually displaced; do not also count a sale
Food-purchasing reduction	Separate procurement saving, verified from purchasing and meal data
Jobs and local spending	Report separately; do not add wages to fiscal savings

Regional governance

Use a written agreement covering the lead entity, cost allocation, procurement authority, liability, contract exit, ownership of equipment, complaint response, and data access. Shared expenses should be allocated using an agreed combination of serviced locations and actual tonnage, rather than an unexplained equal split.

The South Shore Recycling Cooperative's 2025 annual report identifies 18 member towns, including Hanson, Hanover, Norwell, and Rockland, and confirms that it awarded a preferred-vendor food-waste collection contract to Black Earth Compost. This is an existing procurement pathway to investigate first, not an organization that needs to be created from scratch. ([SSRC 2025 annual report](#))

The May 2025 newsletter says Black Earth was the only responsive and responsible bidder and that towns could promote resident subscriptions without town funding. That proves a cooperative procurement occurred, but not that competition produced a particular savings amount; household

fees, service availability, and incremental town administration still need to be accounted for. ([SSRC May 2025 newsletter](#)⁶⁾)

Massachusetts examples and what they establish

These examples demonstrate different parts of the proposed system. They are not an exhaustive roster, and a functioning program is not by itself proof of audited net savings.

Municipal collection and composting

- **Egremont:** A January 2024 Dalton municipal subcommittee report describes an established three-bin community compost operation and reports 80 tons of avoided trash, \$7,688 in disposal savings, \$2,100 in reduced hauls, and \$9,788 total annual savings for calendar 2023. This is a useful small-town precedent, but the report does not deduct a complete operating or capital budget, and its rounded 80 tons at \$96 per ton would equal \$7,680 rather than \$7,688; retain the reported total with that reconciliation caveat. ([Dalton municipal report](#)⁷⁾)
- **Hamilton:** The town describes weekly separate-truck organics collection and delivery to Black Earth Compost, with a backyard-composting exemption process. This demonstrates a mature collection arrangement, but its operating page does not establish a current dollar amount of net savings, and its participation rules are not the voluntary model proposed here. ([Hamilton composting program](#)⁸⁾)
- **Manchester-by-the-Sea:** The town says town-wide kitchen composting began in April 2014, that Black Earth manages its compost site, and that curbside food scraps are processed with yard material. It reports more than \$65,000 in state grants associated with the program, not \$65,000 in operating savings; the town's 2026 trash-contract transition also cautions against using old collection prices. ([Manchester program](#)⁹⁾)
- **Ipswich:** The municipal program offers resident enrollment, a locking 12-gallon collection cart, and access to finished compost. It is a useful opt-in service example, but the reviewed current program page does not establish a complete municipal net-cost calculation, so this plan does not repeat older, inconsistent fee figures as current quotes. ([Ipswich curbside composting](#)¹⁰⁾)

Schools and districts

- **North Andover Public Schools:** The town reports that all eight schools resumed organics collection and had diverted over 65,000 pounds during the 2024–25 school year as of the posted account, using Bootstrap Compost. The reported weight includes food scraps and other accepted organic items; it is not a food-only annual total, and the page does not provide net dollar savings. ([North Andover Green Schools program](#)¹¹⁾)

⁶SSRC May 2025 newsletter: <https://mailchi.mp/7a741431b54c/south-shore-recycling-news-may-2025>

⁷Dalton municipal report: https://dalton-ma.gov/wp-content/uploads/2024/04/Compost_Subcommittee_Report.pdf

⁸Hamilton composting program:

<https://www.hamiltonma.gov/government/department-public-works/trash-organics-recycling-yard-waste-disposal-information/organics-and-recycling-guidelines/>

⁹Manchester program: <https://www.manchester.ma.us/657/Trash-Recycling-and-Compost>

¹⁰Ipswich curbside composting: <https://www.ipswichma.gov/273/Composting>

¹¹North Andover Green Schools program: <https://www.northandoverma.gov/733/Sustainability-Committee>

- **Massachusetts school-finance evidence:** DESE's FY2024 report says all seven interviewed schools or districts observed reduced waste-management costs associated with composting; one anonymous school food authority reported \$33,000 in overall savings from a combined composting and recycling program. That is a self-reported combined-program result, not a named district's independently audited compost-only saving. ([DESE legislative report](#)¹²)
- **Important reporting limitation:** The anonymous example reports 28,052 pounds diverted during September 2023–February 2024, while its cost comparison covers July 2023–February 2024, which the report calls nine months although those dates span eight calendar months. Do not annualize that saving, calculate savings per diverted ton from the mismatched periods, or assign the example to a named district. ([DESE legislative report](#))

Energy and wastewater districts

- **Greater Lawrence Sanitary District:** GLSD states that its food-waste-to-energy project met its facility electricity goal in December 2019 and reports \$3 million a year in energy savings. These are district-reported energy savings, not a verified all-in return after capital, maintenance, debt, and residual management. ([GLSD Project Net Zero](#)¹³; [GLSD organics operations](#)¹⁴)
- **Capital and performance context:** EPA's earlier GLSD assessment used \$20.76 million of expansion capital in 2016 dollars and modeled base-performance payback of 14 years at full capacity and 27 years at partial capacity under its base-cost assumptions. It found no payback below 30 years for the low-performance cases; this is a strong reason not to extrapolate GLSD's energy saving to a small town without engineering and financing analysis. ([EPA GLSD life-cycle study](#)¹⁵)
- **Rockland:** The town's treatment description confirms that sludge digestion produces methane used to heat the digestion system. It does not establish current acceptance of separately collected food scraps, electricity production from those scraps, or a food-waste-program saving; any expansion should be described as a feasibility question, not an existing program. ([Rockland WWTP](#)¹⁶)

Comparable models in other states

The most useful comparisons are nearby communities with town-based government, school systems, winter operations, and regional disposal or processing arrangements. Their laws, subsidies, population density, and existing contracts differ, so this plan transfers operating lessons rather than importing their savings figures.

Connecticut: shared collection and regional pilots

Meriden's four-month, 1,000-household pilot used separate bags for food scraps and trash in the same collection system and diverted more than 13 tons for processing at Quantum Biopower. This

¹²DESE legislative report:

https://malegislature.gov/Reports/30978/FY24%20School%20Food%20Waste%20and%20Consumption_Legislative%20Report%20vf.pdf

¹³GLSD Project Net Zero: <https://glsd.org/project-net-zero/>

¹⁴GLSD organics operations: <https://glsd.org/solid-waste-management/>

¹⁵EPA GLSD life-cycle study: <https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P10118RL.TXT>

¹⁶Rockland WWTP: <https://rockland-ma.gov/693/Rockland-Wastewater-Treatment-Plant-WWTP>

demonstrates co-collection feasibility, not a verified net-saving amount. ([Connecticut DEEP pilot results](#)¹⁷)

Guilford and Madison are useful suburban and coastal comparisons: their program page states that their co-collection pilot has ended and directs residents to continued free transfer-station food-scrap drop-off. The page does not establish why the pilot ended; it should not be presented as either a continuing curbside success or proof of financial failure. ([Guilford–Madison program status](#)¹⁸)

Transferable lesson: Price bag sorting, breakage, contamination, transfer operations, and processor compatibility before assuming co-collection is cheaper. Preserve a low-cost drop-off alternative if a curbside pilot does not continue.

Vermont: regional processing with town collection

A 2018 account of Brattleboro and the Windham Solid Waste Management District reported roughly \$35,000 per year in reduced tipping fees, comparing a \$50-per-ton organics fee with a \$105-per-ton landfill fee. It also described changes to trash pricing and collection frequency; the \$35,000 is historical tip-free savings, not a current all-in net result attributable solely to organics. ([Brattleboro/WSWMD case study](#)¹⁹)

The district’s June 2025 minutes discuss compost-facility expansion expenditures and contamination problems. Those records reinforce the need to budget capital improvements and reject management, rather than assuming a successful regional operation has no continuing costs. ([WSWMD minutes](#)²⁰)

Transferable lesson: A shared processing destination can support several towns, but its financial statements, capital needs, and acceptance rules must be reviewed separately from each town’s collection budget.

Rhode Island: standardize school operations

Portsmouth’s 2024 announcement describes a phased school program that included all third- and fourth-grade lunch periods and all four school prep kitchens in 2023–24, with continued implementation planned for 2024–25. It identifies a shared food-service provider and commercial compost hauler but gives no quantified program saving. ([Portsmouth School District](#)²¹)

North Providence’s USDA project description sets goals of diverting 60 tons, recovering seven tons of edible food, and making school programs cost-neutral by reducing trash-hauling agreements. These are project objectives, not verified achieved savings. ([USDA project description](#)²²)

Transferable lesson: Standardized bins, kitchen practices, student instruction, and food-service contracts can make district-wide operation more practical. Contract reductions, not diversion weight alone, must finance the service.

¹⁷Connecticut DEEP pilot results:

<https://portal.ct.gov/DEEP/News-Releases/News-Releases---2022/DEEP-Announces-Nearly-5-Million-in-Sustainable-Materials-Management-Grant-Awards>

¹⁸Guilford–Madison program status: <https://reducethetrashct.com/gmprogramdetails/>

¹⁹Brattleboro/WSWMD case study: <https://resource-recycling.com/recycling/2018/10/01/looking-farther-afield/>

²⁰WSWMD minutes:

<https://windhamsolidwaste.org/board-of-supervisors-minutes/2025/06/board-of-supervisors-meeting-minutes-6-12-25/>

²¹Portsmouth School District: <https://www.portsmouthschoolsri.org/article/1632815>

²²USDA project description: <https://www.nal.usda.gov/research-tools/food-safety-research-projects/get-food-smart-rhode-island>

New York: voluntary service with visible subsidy

Scarsdale offers voluntary registration for weekly food-scrap pickup, with no participation fee, alongside a drop-off option. This is a close operational match to a choice-based residential program, but free participation does not mean free service delivery. ([Scarsdale program](#)²³)

Westchester County's 2026 waste-reduction study reports 26 participating municipalities and 1,164 tons collected through its regional food-scrap program in 2024. The study lists a \$250-per-ton district disposal cost and subsidized municipal pricing comparable to a \$34.14-per-ton MSW fee; that is a subsidy design, not evidence that the full system costs less than trash. ([Westchester County study](#)²⁴)

Transferable lesson: Publish local and total-public costs side by side. A regional grant or subsidy may be a sound policy choice, but it should not be relabeled as operating efficiency.

Initial financial model retained for comparison

Scope and assumptions

This is the initial incremental, pre-financing municipal cash-cost model, retained in constant 2026 planning dollars as a \$125 disposal-price sensitivity case. All rates in this initial model are analyst-selected assumptions, not vendor quotes, appropriations, or prices established by the case studies. The revised regional comparison below uses a documented \$105 historical disposal benchmark and supersedes this initial model as the lead planning illustration. Figures use U.S. short tons of 2,000 pounds; a processor quoting metric tons must be converted before comparison.

The model assumes usable existing collection sites and outsourced processing. It does not include a new processing plant, land purchase, or new municipal collection truck. If any is required, its acquisition, operation, permitting, financing, and replacement costs must be added before approval.

The illustrative \$110–\$150 trash-disposal range, \$40–\$70 processing range, and collection budgets are sensitivity inputs only. Historical municipal examples inform the cost categories and operating choices, not validation of those assumed 2026 rates. Obtain current local bids before using any dollar amount publicly as an expected saving.

Calculation

Annual net operating saving equals gross avoided trash tipping fees, plus contracted trash-hauling reductions, plus verified revenues or displaced purchases, minus all added organics expenses. The expenses include collection, processing, labor, rejects, administration, maintenance, outreach, insurance or testing allowances, and replacement reserves.

In symbols for implementation: net saving = $Q \times D + H + R - [Q \times P + Q \times r \times D + C + L + O]$.

- **Q:** Gross tons collected for organics processing.
- **D:** Avoidable trash disposal price per ton, excluding hauling already counted in H.
- **H:** Actual reduction in trash-hauling or dumpster-service invoices.
- **R:** Verified revenue or displaced purchases; zero in the core model.
- **P:** Processing charge per gross incoming ton, including material later rejected.

²³Scarsdale program: <https://scarsdale.gov/495/Food-Scrap-Recycling>

²⁴Westchester County study:

https://environment.westchestercountyny.gov/images/stories/pdfs/2026/Westchester_County_Waste_Reduction_Study.pdf

- **r:** Rejected share of incoming material.
- **C, L, O:** Added collection, labor, and other annual costs.

Net accepted diversion is $Q \times (1 - r)$. The model credits avoidance on gross collected tons and then charges disposal for rejects; it does not also apply the full disposal credit to only accepted tons, which would deduct rejects twice. Separate rejected-load hauling or minimum penalties must be added if required by bids.

Initial mature annual operating budget at \$125 disposal

Input or result	Town drop-off	Six-school cluster	Optional curbside
Gross tons collected annually	200	60	624
Reject rate	3%	3%	3%
Net accepted tons	194	58.2	605.28
Avoidable trash disposal, per ton	\$125	\$125	\$125
Gross avoided trash tipping	\$25,000	\$7,500	\$78,000
Contracted trash-hauling reduction	\$6,000	\$24,000	\$45,000
Total gross avoided expense	\$31,000	\$31,500	\$123,000
Organics processing at \$50/gross ton	\$10,000	\$3,000	\$31,200
Added organics collection	\$6,500	\$9,000	\$105,000
Added paid labor and administration	\$3,000	\$6,000	\$12,000
Reject disposal	\$750	\$225	\$2,340
Other annual costs and reserves	\$4,000	\$3,000	\$12,000
Total added annual expense	\$24,250	\$21,225	\$162,540
Net annual operating saving / (cost)	\$6,750	\$10,275	(\$39,540)
One-time startup allowance	\$20,000	\$15,000	\$180,000
Mature-operation simple payback	2.96 years	1.46 years	No payback

The school illustration assumes six schools with approximately 3,000 students and 60 tons annually, including kitchen and cafeteria scraps; it is not an enrollment or waste estimate for an identified district. The drop-off target is roughly 1,000 active households averaging 7.7 pounds per week; the curbside case assumes 5,000 eligible households, 3,000 enrolled households, and eight pounds per enrolled household per week for 52 weeks.

The curbside collection allowance is \$35 per enrolled household per year, excluding processing and other listed costs. It is retained only as an unvalidated low-price test, not as a realistic current service quote; the newer Bedford evidence and actual South Shore subscription prices below show why it must not anchor a recommended curbside budget.

What the cost allowances include

- **Drop-off startup, \$20,000:** Containers and secure enclosure, \$8,000; basic site preparation and wash provisions, \$4,000; signs and scales, \$2,000; launch training and outreach, \$3,000; contingency, \$3,000.
- **School startup, \$15,000:** Cafeteria sorting stations, \$6,000; kitchen carts, \$3,000; training and initial audits, \$3,000; contingency, \$3,000.
- **Curbside startup, \$180,000:** Collection carts and kitchen containers, \$150,000; launch logistics and education, \$15,000; contingency, \$15,000. A vendor-supplied cart charge must replace, not duplicate, the same municipal capital expense.
- **Drop-off other annual costs, \$4,000:** Testing/insurance allowance, outreach, cleaning/maintenance, and equipment replacement reserve, each \$1,000.
- **School other annual costs, \$3,000:** Supplies/training, cleaning/maintenance, and replacement reserve, each \$1,000.
- **Curbside other annual costs, \$12,000:** Education/customer materials, \$3,000; cleaning/contingency allowance, \$3,000; replacement reserve, \$6,000.

Collection allowances include transport to the processor. Labor allowances must cover the incremental paid work, not assume free staff capacity; additional staffing, overtime, capital charges, or new permitting costs are added when identified. Replacement reserves remain included as an annual budget set-aside and are not released as end-of-period revenue.

Break-even and adverse cases

Decision test	Calculated result
Drop-off, keeping the full \$6,000 haul reduction	About 106 gross tons annually to cover the modeled fixed costs
Drop-off, with no haul reduction	About 190 gross tons annually; at 200 tons, only \$750 annual saving remains
School cluster, minimum trash-service reduction	\$13,725 annually to break even
School cluster, if trash invoices do not shrink	\$13,725 annual added cost

Decision test	Calculated result
Curbside, required total trash-hauling reduction	\$84,540 annually, versus the assumed \$45,000
Curbside, maximum collection price at other base assumptions	\$21.82 per enrolled household annually, versus the assumed \$35

The drop-off volume threshold assumes the stated haul reduction is actually attainable at that volume; it is not a guarantee that fewer tons always eliminate a trip. School savings are especially dependent on route or dumpster changes, so school and town finance teams must approve those changes before treating them as committed savings.

Drop-off sensitivity input	Adverse	Base	Favorable
Gross tons	100	200	300
Trash disposal per ton	\$110	\$125	\$150
Processing per ton	\$70	\$50	\$40
Reject rate	8%	3%	2%
Trash-hauling reduction	\$0	\$6,000	\$9,000
Organics collection	\$8,500	\$6,500	\$6,500
Added labor/admin	\$4,000	\$3,000	\$3,000
Other costs/reserves	\$6,000	\$4,000	\$4,000
Net annual saving / (cost)	(\$15,380)	\$6,750	\$27,600

These are coordinated scenarios, not confidence intervals or a prediction of the most likely outcome. They show why participation, processing access, contamination, and the existing trash contract matter more than a broad claim that composting always saves money.

Initial five-year package: aggregation, not shared efficiency

For planning only, combine four identical drop-off programs with one separate six-school cluster. This initial table adds programs together but does not reduce costs for cooperation; it is the separate-program comparator, not a calculation of regional efficiency. Household tons and school tons are disjoint; schools are not counted again inside the drop-off volumes. Actual town allocation must be

rebuilt from each municipality's data, and four copies of this example are not a forecast for the four district towns.

Assume 50% of mature tonnage and trash-hauling reductions in operating Year 1, 75% in Year 2, and 100% in Years 3–5. Added collection, labor, and other costs stay at their full annual budgets throughout; per-ton processing and reject costs change with volume. These are operating years after launch, not the statewide policy-phase calendar.

Cash-flow item	Year 0	Year 1	Year 2	Year 3–5, each
Four drop-off programs, operating result	\$0	(\$13,500)	\$6,750	\$27,000
School cluster, operating result	\$0	(\$3,862.50)	\$3,206.25	\$10,275
Combined operating result	\$0	(\$17,362.50)	\$9,956.25	\$37,275
Startup investment	(\$95,000)	\$0	\$0	\$0
Net cash flow, no grants	(\$95,000)	(\$17,362.50)	\$9,956.25	\$37,275

Five-year operating savings total \$104,418.75; after startup, cumulative net savings are \$9,418.75, with simple cash break-even late in Year 5. A purely illustrative grant covering half the startup cost increases local cumulative savings to \$56,918.75, but the state has spent \$47,500, so combined state-and-local savings remain \$9,418.75.

The package needs approximately \$112,363 to cover startup and the modeled first-year operating loss before grants, assuming no timing mismatch beyond annual totals. Set a separate working-capital buffer for reimbursable grants, monthly bills, and delayed savings. A five-year calculation discounted at 5% produces a negative net present value of approximately \$10,433, demonstrating that a small positive cash total is not a robust investment margin.

This model excludes debt and interest, inflation, terminal equipment value, and unverified revenue. Recalculate with financing terms and separate escalation assumptions before authorizing capital; do not use the mature-operation payback numbers as the ramp-up project payback.

Composting facilities, vermicomposting, and digestion

The collection model above does not establish that owning a processor is profitable. Any proposed regional facility needs its own investment model, including tipping revenue, product sales, labor, energy, residual disposal, permits, equipment, debt, and replacement.

For a proposed digester, calculate the break-even annual contribution required from feedstock contracts and net useful energy. As an arithmetic illustration only, \$1 million financed over 15 years at 5% requires roughly \$96,342 annually in level debt payments before maintenance, labor, insurance, and residual management; this is not a digester construction-cost estimate or a quoted loan.

For energy, distinguish metered electricity used on site, exported power, useful heat, and renewable gas. Do not count the same biogas as full electricity revenue and full gas-sales revenue, or value on-site savings at a retail rate for power that is exported at a different price.

The following optional processor-side screen illustrates why those distinctions matter. Every number is an assumed test input, not an engineering estimate; it represents an incremental project at an existing facility, not a standalone facility construction quote, and is not added to the collection model's savings.

Illustrative processor-side input	Annual amount unless stated
Food-waste throughput	10,000 tons
Receiving revenue at \$60/ton	\$600,000
Net useful-energy value after parasitic energy use	\$250,000
Compost, digestate, carbon-credit, and tax-credit revenue	\$0
Labor, maintenance, testing, residuals, insurance, and reserve	(\$550,000)
Contribution available for financing	\$300,000
Assumed incremental capital, one-time	\$5,000,000
Annual debt payment, all capital financed for 20 years at 5%	(\$401,213)
Annual cash after debt	(\$101,213)
Annual cash after debt if a grant pays half the capital	\$99,394

At these assumptions, the no-grant receiving-fee threshold is about \$70.12 per ton, or the project needs a different combination of lower capital cost, lower operating expense, or higher contracted energy value. The grant improves the operator's financing but does not make the capital investment disappear from the public account; revenue collected from participating towns is an expense to those towns and cannot be counted again as a system-wide saving.

For vermicomposting, approve small, capped pilots with recorded labor, winter operating costs, material yield, product tests, and actual buyers. No premium vermicompost revenue, faster processing benefit, carbon-credit revenue, or digester energy revenue is included in the core municipal savings estimate.

Research findings that strengthen and correct the plan

The additional research closes several important gaps: whether a local cooperative contract already exists, whether route density can lower resident prices, whether participation assumptions are

credible, and whether regional staffing and infrastructure have relevant precedents. It does not produce local invoice-level forecasts where the underlying records or bids have not been obtained.

A real South Shore platform, not a hypothetical partnership

- **SSRC preferred vendor:** The cooperative awarded the food-waste preferred-vendor contract in spring 2025, and its subsequent service notice advertises \$115 per six months for weekly service, \$90 per six months for biweekly service, and a \$36 setup charge for a locking container and initial liners. It also advertises a 15% density discount once sufficient households in a town subscribe; some service areas still need more subscribers before service begins. ([SSRC service notice](#)²⁵)
- **Cohasset’s specific threshold:** The town page advertises biweekly service at \$15 per month, a 15% reduction at 245 Cohasset households, and weekly service after 49 households subscribe. This documents an actual density-pricing mechanism, but not permission to combine enrollments from multiple towns to satisfy a town-specific threshold. ([Cohasset program](#)²⁶)
- **Underlying pricing schedule recovered:** SSRC’s published bid schedule provides each town’s enrollment bands and annual biweekly rates of \$180, \$150, \$125, and \$105. The first reduction from \$180 to \$150 is 16.7%, not exactly the 15% in the general notice; use the explicit tiers for scenario arithmetic and obtain the executed contract before treating either public description as an enforceable individual quote. ([SSRC biweekly pricing schedule](#); [SSRC service notice](#))
- **Price reconciliation is essential:** Plymouth’s page lists \$20.99 per month for weekly service and \$15.99 for every-other-week service, which differ from the cooperative notice. Treat the published figures as documented offers with different or unconfirmed terms, not a single verified price for every address; obtain the signed schedule, effective dates, and address-level service confirmation. ([Plymouth program](#)²⁷; [SSRC service notice](#))
- **Independent Massachusetts precedent:** Avon’s program advertises a price reduction of up to 20% once 75 households register, rather than promising that the full reduction has already occurred. This reinforces the volume-pricing mechanism, not a transferable guaranteed discount for another town. ([Avon curbside compost](#)²⁸)
- **Kingston’s staged approach:** SSRC reports that Kingston began with a six-month food-scrap drop-off pilot and then awarded a three-year contract. It is a nearby model for proving demand before making a longer commitment; the cited newsletter does not provide an audited net saving. ([SSRC May 2025 newsletter](#))

The cooperative reports nearly \$191,000 in member savings or earnings across its activities in 2025, but this is not an organics-only result and should not be credited to Nothing Wasted. Its report also mixes fiscal-year labels in its revenue and expense discussion, so this plan does not turn the “benefits are double the cost” description into a precise, independently verified food-waste return on investment. ([SSRC 2025 annual report](#))

²⁵SSRC service notice: <https://mailchi.mp/ssrcoop/curbside-food-waste-pickup-is-available-in-your-town>

²⁶Cohasset program: <https://www.cohassetma.gov/1101/Curbside-Food-Waste-Collection>

²⁷Plymouth program: <https://www.plymouth-ma.gov/1561/Curbside-Food-Waste-Collection>

²⁸Avon curbside compost: <https://www.avon-ma.gov/1937/Curbside-Compost>

Participation and collection cost: Bedford provides a reality check

Bedford’s 2024–2025 pilot targeted 477 households, initially enrolled 67, and reported approximately 14% participation and a 65% set-out rate. Its direct six-month costs were \$9,384, including \$5,264 for collection, while carts came from existing inventory; this is a small opt-in pilot, not a quote for a dense four-town contract. ([Bedford final report](#)²⁹)

The detailed table labels its reported 9.51 pounds as pounds per successful collection stop, which must not be multiplied by all enrolled households every week. Across the six measured dates, 2,404.15 pounds divided by 392 scheduled stops equals approximately 6.13 pounds per scheduled household-week; that calculation incorporates missed set-outs and is a better enrollment-based planning check, though it is not a year-round sample. ([Bedford final report](#))

At that illustrative 6.13-pound rate, a 200-ton annual target would require approximately 1,255 consistently enrolled households, rather than the roughly 1,000 assumed in the original drop-off illustration. Applying a curbside pilot’s yield to drop-off is only a stress test, not a prediction; local drop-off behavior must be measured directly. The first-year target should therefore be set from registrations and weigh tickets, not selected to make the financial model work.

Annualizing Bedford’s collection expenditure over roughly six months and 66 participants gives approximately \$160 per enrolled household-year for that service line alone. This is a cost warning, not a South Shore bid; whether processing is bundled must be checked before adding a separate tipping charge, and municipal labor and startup costs still need separate treatment. ([Bedford final report](#))

Low-cost drop-off, shared school support, and infrastructure scale

- **Dalton’s published 2025 proposal:** Five 32-gallon totes collected weekly at \$11 per tote produced a proposed \$2,860 annual service cost; the proposal assumed 29 tons diverted at \$120 per ton, or \$3,480 in avoided disposal. Subtraction leaves \$620 before unlisted labor and startup expenses, not \$3,480 of system-wide net saving; using a grant to pay the service bill changes who pays, not that arithmetic. The tonnage is a proposal assumption, not a measured operating result. ([Dalton proposal](#)³⁰)
- **Franklin County school support:** The waste district describes 30 public schools in its 21 member towns, most with composting, and shared technical assistance, training, and school composting resources. This supports the shared-coordinator model, but “no charge to schools” is not evidence of zero district cost or a quantified saving. ([Franklin County school resources](#)³¹)
- **Cape Cod engineering analysis:** The 2021 regional study explicitly found lower unit processing costs at higher capacities and a conceptual \$52–\$320-per-ton range across technologies and scales. It supports evaluating centralized processing instead of multiple small plants, but the range is not a current South Shore price and must not be subtracted end-to-end to manufacture a savings claim. ([Cape Cod regional study](#)³²)

²⁹Bedford final report: <https://www.bedfordma.gov/DocumentCenter/View/5615/2025-Curbside-Organics-Pilot-Final-Report-PDF>

³⁰Dalton proposal: <https://dalton-ma.gov/wp-content/uploads/2025/04/COMPOST-PROPOSAL.pdf>

³¹Franklin County school resources: <https://franklincountywastedistrict.org/p/31/School-Resources>

³²Cape Cod regional study:

https://www.capecodcommission.org/resource-library/file?url=/dept/commission/team/Website_Resources/solidwaste/MSW+Studies/211111++Summary+Report+Cost+Avoidance+and+Long-Term+Future+Plan_Final.pdf

The Cape study's 30,000–60,000-ton facility concepts are much larger than this plan's 860-ton collection illustration. Its multi-million-dollar capital estimates therefore strengthen the recommendation to contract with existing capacity first, rather than treating a small collection pilot as sufficient feedstock for a regional digester. ([Cape Cod regional study](#))

Shared savings: towns acting together versus acting separately

This comparison holds service locations, tonnage, reject rate, and trash-hauling reductions constant, then changes only the costs that cooperation could affect. That isolates the value of working together instead of merely adding four towns' savings and calling the sum a regional benefit.

Revised baseline and what remains assumed

The comparison uses 800 annual household drop-off tons across four sites plus 60 separate school tons, for 860 gross tons and 834.2 accepted tons after 3% rejects. All scenarios assume \$48,000 in enforceable annual trash-hauling reductions at maturity: \$6,000 per drop-off and \$24,000 for the school cluster; none of these reductions has been verified for the named communities.

The disposal benchmark is \$105 per ton, the 2025 average reported for SSRC members, instead of the initial model's unsupported \$125 base. It is a historical reference, not a claim that any town can presently avoid exactly \$105 per diverted ton; contract minimums or bundled billing can make the actual marginal saving lower or zero. ([SSRC 2025 annual report](#))

Processing remains an unquoted \$50 per gross ton in the separate and shared base-target cases, and \$45 in the favorable-target case. Collection, staffing, other expenses, startup reductions, and the \$3,000 regional coordination allowance are explicit procurement targets, not savings demonstrated by the cited case studies. "Base target" means a bid specification to test, not an estimate of the most likely result.

Same-tonnage mature annual budget

Annual item	Separate programs	Shared base target	Shared favorable target
Gross avoided trash disposal, 860 × \$105	\$90,300	\$90,300	\$90,300
Enforceable trash-hauling reductions	\$48,000	\$48,000	\$48,000
Total gross avoided expense	\$138,300	\$138,300	\$138,300
Organics processing	\$43,000	\$43,000	\$38,700
Organics collection and delivery	\$35,000	\$28,000	\$24,500
Incremental paid labor and administration	\$18,000	\$14,000	\$12,000
Other costs and replacement reserves	\$19,000	\$16,000	\$15,000
Additional regional coordination	\$0	\$3,000	\$3,000
Reject disposal, 25.8 × \$105	\$2,709	\$2,709	\$2,709
Total annual added expense	\$117,709	\$106,709	\$95,909
Net annual operating saving	\$20,591	\$31,591	\$42,391
Extra annual saving from cooperation	Baseline	\$11,000	\$21,800
One-time startup cost	\$95,000	\$80,000	\$70,000
Startup cost avoided through cooperation	Baseline	\$15,000	\$25,000

All figures are calculated scenarios before grants, financing, or inflation. They are not town budgets, vendor offers, or audited results; the same 860 tons cannot also be credited to a separate curbside scenario.

Exactly where the incremental savings would come from

- **Coordinated collection:** The base target reduces the separate \$35,000 collection budget by 20%, or \$7,000; the favorable target reduces it by 30%, or \$10,500. Require identical pickup standards and processor delivery in both bids, so a lower price is not achieved simply by cutting service.

- **Shared paid support:** One training package, invoice system, procurement process, and coordinator could reduce incremental paid labor from \$18,000 to \$14,000 or \$12,000. Staff hours merely redeployed without reducing overtime, purchased support, or an incremental hire are capacity benefits, not cash savings.
- **Combined other expenses:** Targets reduce \$19,000 to \$16,000 or \$15,000 by sharing education, testing arrangements, and administration. Preserve the original \$5,000 aggregate equipment-replacement reserve and do not achieve savings by removing safety or maintenance.
- **Regional administration:** Add \$3,000 annually for the joint arrangement after those reductions, rather than assuming coordination is free. Obtain SSRC or lead-town staffing approval; if the actual cost is \$10,000, reduce the modeled saving by another \$7,000 each year.
- **Processing volume price:** The favorable case tests a 10% reduction from \$50 to \$45 per ton, worth \$4,300 annually at 860 tons. The base target takes no processing discount because the research did not establish a current quoted bulk tipping discount for this feedstock.
- **Startup sharing:** The \$15,000 base reduction targets \$6,000 in joint equipment purchasing, \$6,000 in common design/training/launch work, and \$3,000 in shared measurement/signage. The favorable \$25,000 reduction raises these targets to \$10,000, \$10,000, and \$5,000; neither case removes required site preparation, school sorting stations, or the original \$15,000 combined contingency allowance.

Request separate and joint prices from the same bidders, with the same tonnage bands, service levels, destinations, and risk allocation. A bidder's combined price must actually beat the sum of its comparable individual prices; cooperative purchasing does not guarantee a discount, especially where only one vendor bids.

Five-year cash flow and the true shared advantage

Keep the initial model's ramp for comparability: 50% of mature tons and haul reductions in Year 1, 75% in Year 2, and 100% in Years 3–5. Collection, labor, reserves, and coordination remain fully budgeted each year; processing and rejects vary with tons. These are five operating years after launch, not the original statewide phase dates.

Cash-flow result	Separate programs	Shared base target	Shared favorable target
Startup, Year 0	(\$95,000)	(\$80,000)	(\$70,000)
Operating Year 1	(\$25,704.50)	(\$14,704.50)	(\$6,054.50)
Operating Year 2	(\$2,556.75)	\$8,443.25	\$18,168.25
Operating Year 3, and each of Years 4–5	\$20,591	\$31,591	\$42,391
Five-year net after startup	(\$61,488.25)	\$8,511.75	\$69,286.75

Cash-flow result	Separate programs	Shared base target	Shared favorable target
Five-year improvement versus separate programs	Baseline	\$70,000	\$130,775
Five-year net present value at 5%	(\$70,938)	(\$8,314)	\$45,422

The shared base improvement is \$11,000 × five years plus \$15,000 less startup, or \$70,000. The favorable improvement is \$17,500 in annual fixed-cost reductions × five years, plus \$4,300 in mature annual processing savings × 4.25 equivalent full-volume years, plus \$25,000 less startup, or \$130,775. These are improvements relative to separate implementation, not additional amounts to add to the net savings row.

The base target reaches simple cumulative cash break-even during Year 5, but its negative discounted value shows little financial cushion. The favorable target crosses simple cash break-even during Year 4; launch funding before grants is at least approximately \$94,705 for the base target or \$76,055 for the favorable target to cover startup plus the first-year loss, with an additional monthly cash-timing buffer.

Conditions that can erase the savings

Stress test	Financial consequence
Cooperation adds \$3,000 administration but achieves no efficiencies	\$17,591 mature annual saving and a \$76,488 five-year net cost; worse than separate implementation
No enforceable trash-hauling reduction	Shared base becomes a \$16,409 annual cost; favorable becomes a \$5,609 annual cost
Ramp is only 25%, 50%, 75%, 100%, 100%	Five-year net becomes a \$60,932 cost for shared base and a \$3,382 cost for favorable, after startup
Avoidable disposal is \$125 rather than \$105, all else unchanged	Shared base rises to \$48,275 annual and \$79,419 five-year net; favorable rises to \$59,075 annual and \$140,194 five-year net
Extra transport, staff, or compliance expense is \$10,000 annually	Subtract \$10,000 annually and \$50,000 over five years from the relevant model

None of these cases is a confidence interval. Do not advertise only the favorable case, and do not take the \$125 sensitivity as a forecast of future disposal prices; the purpose is to identify the contract and participation conditions a successful program must meet.

How towns and schools would divide the benefit

Use a written cost-allocation schedule rather than promising each town one-quarter of the result. Credit avoided disposal and trash-service reductions to the town or school budget whose invoices actually decline, charge processing by weighed tons, and charge collection by contracted stops or route-hours.

Allocate shared fixed expenses using a proposed 50% service-location share and 50% accepted-tonnage share, with annual true-up and a minimum contribution agreed in advance. This is a proposed rule for negotiation, not an existing SSRC formula; regional school costs must be charged once, through the district or participating town budgets, not both.

For illustration only, an equal four-town distribution of the \$11,000 base cooperation benefit is \$2,750 per town annually, plus \$3,750 each in avoided startup. Actual benefits may differ materially because schools, host sites, existing programs, and hauling contracts differ; reimburse the host's documented incremental expenses before distributing any remaining benefit.

A vendor gain-share can be considered only after the town's full baseline and added expenses are verified. If used, apply the negotiated percentage to audited incremental net savings, cap the payment, and deduct it from the public savings model; no gain-share payment is assumed in the tables.

Resident subscription savings: a separate opportunity

The underlying SSRC bid schedule is more specific than the general 15% discount notice. It states biweekly pricing is effective June 1, 2025 through June 30, 2027, with a maximum 5% escalator after June 30, 2027; the tier thresholds below are transcribed for the four district towns. ([SSRC biweekly pricing schedule](#))

Town	Listed minimum households	Tier 1: \$180/year, up to	Tier 2: \$150/year, up to	Tier 3: \$125/year, up to
Hanover	78	390	796	1,576
Hanson	75	375	765	1,515
Norwell	105	523	1,066	2,111
Rockland	50	250	510	1,010

The schedule lists Tier 4 at \$105 per household-year after the Tier 3 band, with no further upper enrollment limit shown. For conservative threshold interpretation, this plan treats a lower-priced tier as beginning above the previous "up to" count; the precise trigger, existing-subscriber treatment, and whether discounts are automatic need written confirmation. ([SSRC biweekly pricing schedule](#))

Illustrative enrollment distribution	Charges at \$180 entry tier	Charges using published town tiers	Annual subscription charges avoided
500 households per town; 2,000 total	\$360,000	\$315,000	\$45,000
1,000 households per town; 4,000 total	\$720,000	\$525,000	\$195,000
1,500 households per town; 6,000 total	\$1,080,000	\$720,000	\$360,000

At 1,000 households per town, Hanover, Hanson, and Rockland fall in the \$125 band, while Norwell falls in the \$150 band. The calculation is $3 \times 1,000 \times \$125 + 1,000 \times \$150 = \$525,000$, compared with $4,000 \times \$180 = \$720,000$; the assumed rate applies to every enrolled household within the qualifying town, not just new enrollees.

These are full-year, unchanged-rate illustrations, not enrollment forecasts or confirmed current discounts. They exclude the advertised \$36 setup fee, replacement liners, and other applicable charges; for 4,000 entirely new subscribers, setup alone would be \$144,000 unless waived or separately funded, and a grant covering it would not erase that public cost. ([SSRC service notice](#))

The schedule makes the opportunity concrete, but the benefit is not automatically caused by adding towns together: the bands are town-specific. Joint outreach and procurement can help communities reach their own bands; a further corridor-wide enrollment discount would be a new term to negotiate, not an existing verified entitlement. ([SSRC biweekly pricing schedule](#))

The general SSRC notice separately advertises a 15% density reduction on \$230 annual weekly service, which would equal \$34.50 per household-year if applicable. This plan does not infer weekly four-tier prices from a biweekly schedule; request the corresponding weekly contract table before making a larger weekly-service savings claim. ([SSRC service notice](#))

Every household calculation compares discounted compost subscriptions with entry-tier compost subscriptions, not with today's total household waste bill. Residents still pay for the new service, and a fixed trash fee may not fall; if the town pays subscriptions instead, the full subscription charge becomes a municipal expense and the municipal model must be rebuilt rather than treating the discount as pure public savings.

Do not add the household table to the municipal drop-off table as a single "taxpayer savings" total. They involve different payers and potentially the same food scraps; a combined portfolio must first assign each household and ton to one collection pathway and deduct all new household and public costs.

Why regional processing belongs in a later business case

Shared infrastructure may avoid duplicated land, equipment, permitting, laboratory work, maintenance, and specialist staffing. A comparison must include additional transfer and delivery costs,

host-community mitigation, reserve capacity, and a backup outlet; proximity to the processor can matter more than a low gate fee.

For any future facility, calculate annualized capital plus operating expense plus transport and residual management, minus verified net sales, divided by accepted tons. Compare one appropriately sized shared facility with genuinely feasible separate facilities at the same total feedstock and service standards; do not compare an oversized regional digester with four tiny compost sites and call the capital difference a saving.

The Cape Cod study supplies a reason to test economies of scale, not a bankable capital saving for this district. Preserve composting, vermicomposting, and digestion as options, but require committed feedstock, written processor or product-market agreements, and engineering costs before claiming a multi-million-dollar benefit. ([Cape Cod regional study](#))

Research gaps: what is resolved and how to finish the rest

The table distinguishes an evidence gap actually closed by research from a local implementation gap that still needs records, a bid, or a pilot. The local records and vendor confirmations below have not been obtained; this plan does not imply interviews were conducted or commitments secured.

Gap	Research result or correction	Required closure before commitment
Is there already a regional contracting platform?	Resolved: SSRC awarded a preferred-vendor contract; all four towns are members, as documented above	Obtain the executed contract, options, current schedule, and authority to use it
Can resident density lower charges?	Published four-town tier schedule and validity period recovered; scenario totals calculated	Reconcile general 15% notice with explicit tier rates; confirm executed terms, discount activation, existing subscribers, and availability
Did the initial model measure cooperation?	Resolved analytically: new comparison isolates \$11,000–\$21,800 annual targeted efficiencies at the same 860 tons	Obtain matching solo and joint bids; replace every target with a priced line
Was \$125 disposal locally grounded?	Partly resolved: SSRC reports \$105 member-average disposal in 2025	Town finance staff supply marginal disposal rate, contract minimums, escalators, and invoices

Gap	Research result or correction	Required closure before commitment
Is household yield credible?	Partly resolved: Bedford's table implies about 6.13 lb per scheduled stop; 9.51 lb is per successful stop	Run local registration and weighed pilot; separate enrollment from actual set-outs
Will fewer tons reduce trash collection bills?	Still open: the \$48,000 regional reduction is assumed and drives much of the result	Written amendment or new bid showing fewer charged pulls, smaller containers, or reduced route cost
Are drop-off and school costs complete?	Cost categories expanded; Dalton and Bedford show why gross avoided disposal is insufficient	Staff time study, custodial and food-service approval, wash/pest/insurance costs, school-calendar service quote
Which processor has spare capacity?	A named South Shore-area facility is identified below; available capacity remains unverified	Written acceptance, permitted feedstocks, available tons, destination, contamination rules, backup outlet
Can a local digester earn the projected energy revenue?	Still open: GLSD is not a Rockland feasibility study	Engineering, interconnection, utility tariff, energy offtake, digestate outlet, debt terms, and lifecycle maintenance
Do grants create net public savings?	Accounting gap resolved: show local and combined-public ledgers separately	Confirm current award eligibility, cycle, match, reimbursement timing, and restrictions
Are environmental and community benefits quantified?	Qualitative rationale retained; no project-specific emissions or job total claimed	Document baseline disposal, actual destinations, transport, leakage, residuals, complaints, and net additional employment

A practical 90-day closure process

- **Days 1–15, records and ownership:** Ask each DPW, town finance office, and participating school district for 24 months of tons, invoices, service schedules, contracts, amendments, equipment inventory, and staffing charges. Identify one responsible budget officer for each saving and map existing drop-off and subscription programs before proposing anything new.

- **Days 16–30, comparable pricing:** Ask SSRC and qualified vendors for the current preferred-vendor schedule and matched individual versus joint quotes. Require prices at 25%, 50%, 75%, and 100% of target tons, collection frequency, minimum charges, fuel adjustments, processing destination, reject rules, containers, washing, term, termination, and discount triggers.
- **Days 31–75, measured pilot:** Where procurement and approvals allow, use a small group of willing sites to record gross and rejected weights, successful set-outs, staff minutes, route distance, school meal-days, and contamination. Treat this as an initial sample; continue seasonal measurement before relying on a full-year forecast.
- **Days 76–90, finance decision:** Replace assumptions with invoices, quotes, and measured ranges; reconcile tonnage across households and schools; publish solo, shared, and no-project alternatives. Approve expansion only if service, environmental, and financial tests are met, or explicitly vote to fund a disclosed net-cost service.

Ready-to-use request scope

The lead entity can use the following scope for a data request or vendor information request; it is a draft for review, not a communication already sent. Procurement staff should choose the legally appropriate process before solicitation.

“Please provide the current cost and service basis for a voluntary food-scrap program serving up to four municipal drop-off sites and a separately identified six-school cluster. Price each municipality separately and the same locations jointly, using identical pickup frequency, seasonal school schedules, accepted materials, containers, washing, processor destination, contamination policy, and reporting. Identify fixed charges, per-stop charges, per-ton charges, minimums, annual escalation, startup charges, and all items included in a bundled price. Provide prices at 215, 430, 645, and 860 total gross tons annually; identify route or site assumptions behind those bands. State what trash-service adjustment would be required to generate a cash saving, and separately identify any household subscription density discount, its threshold, and whether enrollments across municipal boundaries qualify. Document processor authorization, available capacity, backup destination, and quote validity.”

The tonnage bands are test cases, not promised deliveries. Do not sign a take-or-pay obligation for the full 860 tons before participation and contamination data support it.

Advocacy Language

Recommended short explanation

“Towns should not have to pay four times to solve the same problem. Nothing Wasted would help willing communities buy services together, share training and equipment, and negotiate collection routes that cost less. In our planning model, a four-town partnership could lower five-year costs by roughly \$70,000 to \$131,000 compared with each community setting up the same services separately, if the specified contract and staffing targets are achieved. Those are possibilities to test with bids, not guaranteed savings.”

Resident-focused opportunity

“There is already a local example of how participation can bring prices down: the South Shore cooperative publishes lower food-scrap pickup rates as more households in a town subscribe. At 1,000 qualifying households in each of our four towns, its published biweekly tiers would mean \$195,000 less

in combined annual subscription charges than the entry-tier price, subject to confirmation of the contract terms. We should help communities reach those enrollment levels and negotiate better terms, while being clear that residents would still pay \$525,000 collectively for that service and that these are not tax savings.” ([SSRC biweekly pricing schedule](#))

Financial safeguards to say alongside the opportunity

- **Municipal net versus shared advantage:** The \$70,000–\$131,000 figure measures lower five-year cost than separate implementation. It is not the same as the modeled \$8,500–\$69,300 five-year net saving compared with continuing the baseline trash service.
- **No automatic tax reduction:** A program may reduce a department’s costs without reducing tax bills or fixed household trash fees. State the recipient budget and the mechanism before saying who saves.
- **No guaranteed six-figure municipal annual saving:** This model does not establish that claim for the four towns. The six-figure household example requires thousands of qualifying subscribers and is a reduction in a new service’s fee, not a proven reduction in total household spending.
- **No unfunded promise:** If contract changes, adequate enrollment, processor capacity, or shared-service efficiencies do not materialize, resize or stop the project rather than calling a subsidy a saving.

Application to Hanson, Hanover, Norwell, and Rockland

Treat these communities as potential partners, not committed participants. Start by identifying existing programs and service contracts so Nothing Wasted strengthens rather than duplicates local work.

Community	What the reviewed evidence establishes	Recommended first step
Hanson	Black Earth’s service directory says “Preregister to Start Service.” The town site lists “Food Waste Collection,” but the reviewed material does not establish a separate operating municipal drop-off or its financial result. (Vendor directory ³³ ; Hanson transfer station ³⁴)	Confirm preregistration count and route launch; verify whether the town’s listing describes subscriptions or a separate drop-off
Hanover	The vendor directory says “Preregister to Start Service.” The town identifies its transfer station and Ames Way brush/compost area, not proof that the latter accepts food scraps. (Vendor directory ; Hanover public works ³⁵)	Compare activating the existing subscription pathway with a properly sited food-scrap drop-off; keep yard-waste operations distinct

³³Vendor directory: <https://blackearthcompost.com/service-area-directory/>

³⁴Hanson transfer station: <https://www.hanson-ma.gov/transfer-station>

³⁵Hanover public works: <https://www.hanover-ma.gov/public-works/pages/transfer-station>

Community	What the reviewed evidence establishes	Recommended first step
Norwell	The vendor directory says “Actively Serving,” establishing a private subscription pathway. The DPW yard-waste page alone does not establish a separate municipal food-scrap service. (Vendor directory ; Norwell DPW ³⁶)	Obtain active subscription count, current tier, and address availability before proposing a duplicate route
Rockland	The vendor directory says “Preregister to Start Service.” The wastewater plant describes sludge-gas heat recovery, not proof of separately collected food-scrap acceptance. (Vendor directory ; Rockland WWTP)	Test demand for the existing preferred-vendor pathway; evaluate any wastewater partnership separately with plant operators

A first pilot should include willing schools and municipal sites with controllable contracts and staff support. Regional school districts must approve participation and cost allocation through their own governance; the legislative district boundary is not an operating or school-finance boundary.

Black Earth lists a compost facility at 146 Tihonet Road in Wareham, providing a concrete South Shore-area receiving-site lead rather than an unspecified processor. Its page says the Wareham site is not open to visitors; listing the facility does not establish public food-scrap drop-off, reserved capacity, a gate price, or the destination of these towns’ material. ([Black Earth facility locations](#)³⁷)

Ask the vendor for the actual receiving destination and written capacity commitment for both drop-off and school loads, including backup arrangements; do not direct residents to the processing site. Obtain alternative qualified processor responses where feasible so the program does not confuse one known vendor with a completed competitive capacity assessment.

Implementation plan

Phase 1: Statewide organics assessment, Year 1

Retain the original statewide assessment of regional food-waste generation, compost capacity, digestion capacity, potential sites, markets for compost and biogas, and municipal savings opportunities. Maintain the original special focus on schools, hospitals, universities, food manufacturers, and municipal facilities.

Expand the assessment to include existing programs, actual spare processing capacity, contamination standards, transport distance, waste-contract renewal dates, food prevention and recovery, and demand for finished products. Publish model procurement documents and a common financial template.

Before a local pilot, assemble at least 12 months of invoices and weight tickets, examine seasonal variation, conduct representative waste audits, and map where costs and savings fall. Confirm the

³⁶Norwell DPW: <https://norwelldpw.com/recycling>

³⁷Black Earth facility locations: <https://www.blackearthcompost.com/locations>

facilities, permits, and staffing necessary for the specific project rather than treating a yard-waste site as automatically suitable for food waste.

Phase 2: Community demonstrations, Years 2–3

Retain municipal compost programs, community hubs, regional compost partnerships, school vermicomposting, municipal worm-processing pilots, agricultural partnerships, regional energy facilities, agricultural digesters, and municipal energy partnerships. Launch them at different scales according to readiness rather than requiring every pilot to include every technology.

Begin with schools, institutional kitchens, and convenient drop-off sites where an actual waste-contract reduction can be tested. Run at least a full operating year for seasonality, and compare results with a documented baseline adjusted for meal counts, service coverage, and disposal-price changes.

Projects must measure all five original metrics: cost savings, energy production where applicable, waste diversion, emissions reductions, and job creation. Add net accepted tons, participation, contamination, complaints, cost per accepted ton, actual product use, and operating reliability.

Phase 3: Infrastructure expansion, Years 3–5

Retain support for regional compost facilities, organics transfer sites, community hubs, anaerobic digestion, and food-waste collection infrastructure. Prioritize existing industrial properties and underused municipal facilities only where they meet technical, environmental, and neighborhood requirements.

Preserve support for Environmental Justice communities seeking economic-development opportunities, while requiring meaningful local participation, cumulative-impact review, truck-routing analysis, odor protection, and community benefit. These communities should not be treated as default locations for facilities that others do not want.

Scale only after verified performance and a funded operating plan. If a project does not save money but has worthwhile environmental or access benefits, require an explicit public decision identifying the annual subsidy rather than mislabeling it as a cost-saving project.

Phase 4: Municipal incentives and partnerships

Retain optional technical assistance, planning grants, infrastructure support, and proposed climate-funding preferences. These incentives can operate throughout the program rather than waiting until the final year.

No new participation mandate is created by this proposal. Communities choose the solution that works for them; existing legal obligations still apply.

Funding and legislative role

Massachusetts already has a commercial organics disposal ban covering businesses and institutions generating a half-ton or more weekly, effective at that threshold since November 2022. Voluntary participation in Nothing Wasted does not waive that requirement. ([MassDEP commercial food-material ban](https://www.mass.gov/guides/commercial-food-material-disposal-ban)³⁸)

MassDEP’s reviewed assessment describes further expansion of the food-waste ban as a subject of 2026 stakeholder discussion. This plan does not represent a residential 2030 ban as an already-enacted

³⁸MassDEP commercial food-material ban: <https://www.mass.gov/guides/commercial-food-material-disposal-ban>

requirement; verify subsequent rulemaking before any legislative filing or public legal summary.
([MassDEP assessment](#))

Build on existing programs

The 2026 SMRP grant details list \$20,000–\$100,000 for waste-reduction projects and \$20,000–\$250,000 for organics-capacity projects, with at least 85% of an organics-capacity request devoted to capital. The listed application deadline was June 1, 2026, which has passed; treat these as an established funding mechanism and prior-cycle terms, not an open offer or committed award.
([MassDEP grant details](#)³⁹)

Those rules reinforce the need to distinguish a capital grant from ongoing collection and staffing costs. They also require checking eligibility and reimbursement timing before assigning any assumed grant to a project budget. ([MassDEP grant details](#))

Proposed statewide demonstration envelope

Consider an initial three-year authorization of up to \$5 million, subject to appropriation, coordinated with existing programs rather than duplicating them. This is a proposed policy budget, not an estimate of existing funding or a claim that \$5 million will pay for statewide buildout.

Proposed use	Three-year allowance
State/regional assessment and technical assistance	\$750,000
Local planning and contract audits, up to 20 at \$25,000	\$500,000
Collection, school, and drop-off demonstrations, up to 20 at \$100,000	\$2,000,000
Competitively selected processing upgrades	\$1,000,000
Independent evaluation, quality assurance, and public reporting	\$500,000
Program administration and contingency	\$250,000
Total proposed envelope	\$5,000,000

Awards would be ceilings, not automatic entitlements. Require cost sharing where feasible, allow a justified lower match for communities with limited fiscal capacity, and prevent reimbursement of the same expense by multiple grants.

The \$5 million envelope is a separate state policy expenditure and is not included in the small regional illustration’s savings. A statewide return-on-investment claim would require the actual portfolio of projects, administrative costs, and all state and local expenditures.

³⁹MassDEP grant details:

<https://www.mass.gov/doc/details-waste-reductionorganics-capacityhousehold-hazardous-waste-facility/download>

What a state representative can do

- **Authorize and fund:** Seek appropriations and grant authority for voluntary projects with explicit operating plans.
- **Improve implementation:** Support common procurement templates, agency coordination, technical assistance, and transparent performance reporting.
- **Protect accountability:** Require published all-in costs, grant dependence, contamination results, and independent evaluation.
- **Respect local authority:** Leave municipal participation, site approval, school implementation, and contracts with the responsible local bodies.
- **Avoid technology mandates:** Fund demonstrated outcomes rather than prescribing digestion, worms, or curbside collection everywhere.

Environmental, community, and safety safeguards

Preserve the original objectives of lower methane emissions, renewable energy, healthier soils, carbon storage, less landfill use, and climate resilience. Present them as intended outcomes requiring measurement, not automatic results of every technology or facility.

EPA's framework favors prevention, donation, and upcycling before downstream treatment and distinguishes direct delivery to a digester from sending food through sewers. The plan should not encourage residents to use garbage disposals as a food-scrap collection system. ([EPA Wasted Food Scale](#))

- **Food security:** Use safe share tables and donation partnerships before processing edible food. Obtain local food-safety guidance and record quantities separately from composting.
- **Contamination:** Specify accepted items by receiving facility, teach sorting, inspect bins, and document reject rates. Exclude packaging not expressly accepted.
- **Neighbors and workers:** Require sealed containers, cleaning, pest control, odor response, safe lifting, traffic management, and paid training.
- **Water and soils:** Review runoff, leachate, nutrient management, product maturity, pathogens, PFAS and other relevant contaminants, and the permitted end use.
- **Digestate and biosolids:** Do not assume material mixed with sewage sludge is equivalent to clean food-scrap compost or automatically suitable for school gardens. Require a separate quality and regulatory determination.
- **Energy systems:** Assess gas leakage, flares, useful heat demand, equipment downtime, grid interconnection, air permits, and any design needed to operate during outages.
- **Fair access:** Provide usable options for renters, multifamily properties, seniors, residents without cars, and people who need translated or accessible instructions.
- **Community benefit:** Preserve support for farms, community gardens, school sustainability education, local maintenance work, and regional economic development.

Climate calculations should identify the actual baseline disposal destination, transport distance, processing emissions, energy use, methane leakage where relevant, and residual fate. Report physical outcomes and modeled greenhouse-gas estimates separately; do not count carbon sequestration or avoided emissions as revenue without a verified payment mechanism.

Accountability and decision rules

Publish quarterly operational results and an annual reconciled financial statement for each pilot. Compare expenses and savings across the town, school, processor, household, and state perspectives so that shifting costs between budgets is visible.

Measure	Required evidence
Accepted diversion	Processor weight tickets less documented rejects
Cost saving	Baseline and pilot invoices, normalized for changed prices and service
Participation	Active users or measured set-outs, not enrollment alone
School results	Meal counts, purchasing, food recovery, kitchen and cafeteria weights
Energy	Metered production, on-site use, exports, and useful heat separately
Product benefit	Tests, deliveries, sales, or actual displaced purchases
Workforce	Paid hours, training, retained positions, and actual new hires
Environmental performance	Documented methods and assumptions; complaints and corrective actions

Expansion should require 12 months of reliable data, a credible three-year operating budget, a confirmed receiving destination, and an acceptable risk review. A cost-saving designation requires positive all-in financial results over an appropriate investment horizon, not simply lower tipping fees.

The first 90 days of local preparation should produce a contract and invoice inventory, representative waste audit, existing-program map, processor and hauler responses, school staffing plan, and revised low/base/high financial model. Before a public savings claim, the responsible finance officer should confirm the baseline, avoided-cost mechanism, added expenses, grant assumptions, and approval status.

The bottom line

Food waste should not be treated only as a liability. With the right collection systems, contracts, safeguards, and partners, it can support useful energy, healthy soils, lower costs, and local opportunity.

Nothing Wasted should offer communities practical choices and financial help, then expand what works. Its promise is to make better use of resources and demonstrate value with public evidence, not to guarantee that every compost bin or digester pays for itself.

Nothing Wasted: Turning Food Waste into Energy, Compost, and Community Opportunity.

Appendix: original plan retained in full

The following text preserves the complete original plan supplied for this revision; only formatting is normalized. It is retained as a record, not as an independently verified statement of every benefit. In particular, the revised sections qualify guaranteed emissions outcomes, reduced vermicomposting times, energy resilience, and the assumption that all food waste is landfilled.

Nothing Wasted Plan

Turning Food Waste into Energy, Compost, and Community Opportunity

A Massachusetts Initiative for Local Energy, Healthy Soils, and Lower Municipal Costs

Executive Summary

Every year Massachusetts disposes of hundreds of thousands of tons of food scraps and organic waste. Much of that material ends up in landfills where it decomposes and releases methane, a greenhouse gas many times more potent than carbon dioxide.

At the same time, communities are seeking ways to lower disposal costs, strengthen energy resilience, improve soil health, and create local jobs.

Nothing Wasted is a voluntary statewide initiative that helps municipalities, businesses, and institutions convert food and organic waste into renewable energy, compost, and valuable soil products through composting, vermicomposting, and anaerobic digestion.

Instead of paying to throw organic materials away, communities can put them to work.

The Problem

Food and organic waste represent one of the largest portions of the waste stream.

When buried in landfills, these materials:

- Generate methane emissions
- Increase disposal costs
- Consume valuable landfill space
- Require expensive transportation
- Waste potential energy and nutrients

Communities lose opportunities to create local value from materials they already collect.

The Opportunity

Organic waste can become:

Renewable Energy

Through anaerobic digestion:

- Biogas production
- Electricity generation
- Renewable natural gas
- Local energy resilience

Compost

Through traditional composting:

- Soil enhancement
- Landscaping materials
- Agricultural inputs
- Community gardening support

Vermicomposting Products

Through worm-based processing:

- High-value soil amendments
- Improved soil fertility
- Reduced processing times
- Specialty agricultural products

Goals

Nothing Wasted seeks to:

- Reduce food waste sent to landfills
- Lower methane emissions
- Expand local renewable energy production
- Improve soil health
- Reduce municipal disposal costs
- Create local jobs
- Strengthen community resilience

Implementation Plan

Phase 1: Statewide Organics Assessment (Year 1)

The Commonwealth will evaluate:

- Food waste generation by region
- Existing composting facilities
- Anaerobic digestion capacity
- Potential processing sites
- Market opportunities for compost and biogas
- Municipal cost savings opportunities

Special focus will be placed on:

- Schools
- Hospitals
- Universities
- Food manufacturers
- Municipal facilities

Phase 2: Community Demonstration Projects (Years 2–3)

Launch voluntary pilot projects supporting:

Composting

- Municipal compost programs
- Community compost hubs
- Regional compost partnerships

Vermicomposting

- School-based projects
- Municipal pilot facilities
- Agricultural partnerships

Anaerobic Digestion

- Regional energy facilities
- Agricultural digesters
- Municipal energy partnerships

Projects will measure:

- Cost savings
- Energy production
- Waste diversion rates
- Emissions reductions
- Job creation

Phase 3: Expand Infrastructure (Years 3–5)

Support development of:

- Regional compost facilities
- Organics transfer sites
- Community compost hubs
- Anaerobic digestion projects
- Food waste collection systems

Priority will be given to:

- Existing industrial properties
- Underutilized municipal facilities
- Environmental Justice communities seeking economic development opportunities

Phase 4: Municipal Incentives and Partnerships

Participating communities may receive:

- Technical assistance
- Planning grants
- Infrastructure funding support

- Climate funding preferences

Participation remains voluntary.

No new mandates.

Communities choose the solutions that work best for them.

Economic Benefits

Nothing Wasted can:

- Lower disposal costs
- Generate renewable energy revenues
- Create compost markets
- Support local agriculture
- Create jobs in operations and maintenance
- Keep more dollars circulating locally

Environmental Benefits

The initiative will:

- Reduce methane emissions
- Increase renewable energy production
- Improve soil health
- Support carbon sequestration
- Reduce landfill use
- Strengthen climate resilience

Community Benefits

Nothing Wasted supports:

- Community gardens
- Local farms
- School sustainability programs
- Municipal energy resilience
- Regional economic development

The Bottom Line

Food waste should not be a liability.

With the right investments and partnerships, it can become a source of energy, healthy soils, lower municipal costs, and local economic opportunity.

Nothing Wasted transforms food scraps and organic materials into valuable community resources.

Nothing Wasted: Turning Food Waste into Energy, Compost, and Community Opportunity.